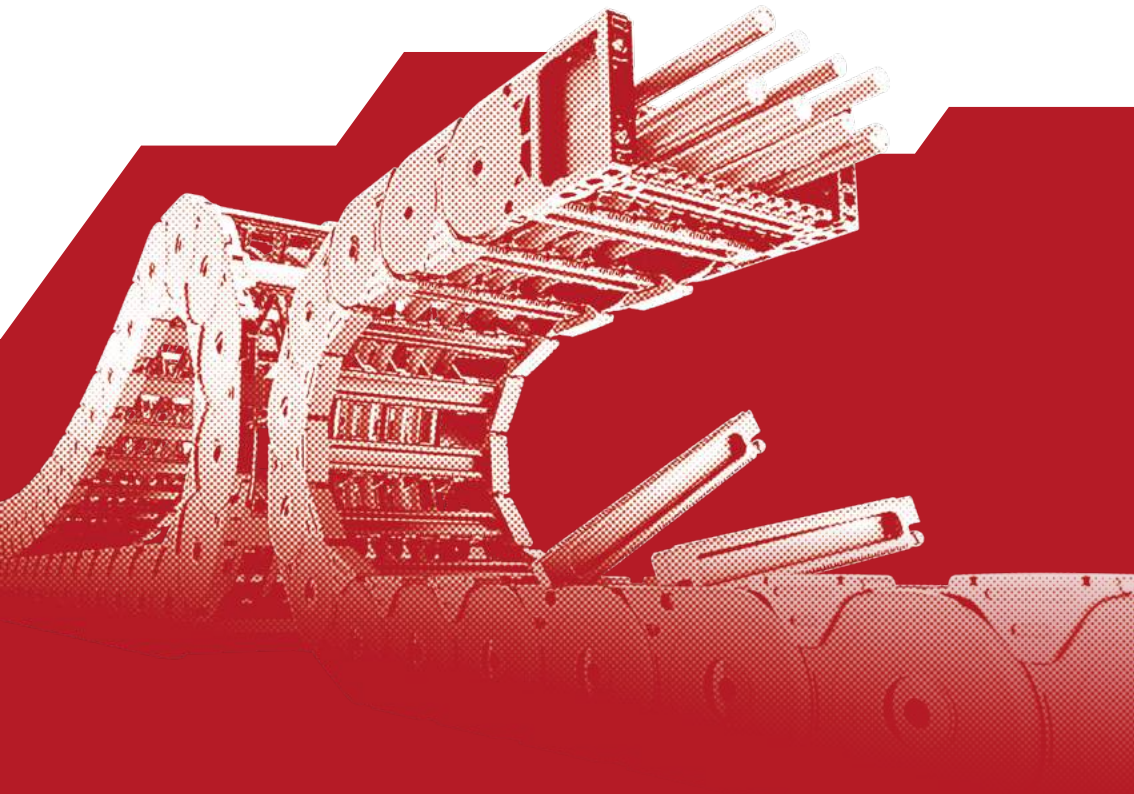
Innovation in Motion
TSUBAKI

KABELSCHLEPP
TSUBAKI KABELSCHLEPP



THE COMPLETE
KABELSCHLEPP

Your personal contact

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Over 65 years of innovations and thousands of realized applications

In 1953, the Waldrich Maschinenfabrik registered a global patent for a steel „unsupported cable carrier to protect moving cables and hoses". The visionary company owner Dr. Oskar Waldrich recognized the invention's potential and established his own subsidiary for the new product in 1954: KABELSCHLEPP. Since this launch, the company has been ensuring the continuous further development of the applications involving this machine component – constantly with new product concepts, innovative materials and extensive customer service.

TSUBAKI KABELSCHLEPP is currently a global player with international representatives and subsidiaries in more than 70 countries and cable carrier systems are a permanent component of almost every machine. Our innovative solutions have proven themselves worldwide in the most diverse industries – and in fact, no longer just in the classical application areas such as machine tools, crane systems, washing lines and medical and laboratory technology, but also in industrial robots, high-sea oil drilling platforms and space travel. Our experts develop individual products even for complex and unusual fields of usage. In this process, the application defines the material – in addition to steel cable carriers, plastic and hybrid systems are also available. This allows for a wide range of products which can be used for countless applications. There is even an ideal solution for individual challenges – in standard widths or adapted to customer requirements on a millimeter grid. The range of products and accessories comprises over 100,000 variants. These include, for example, strain reliefs, divider systems, channels, hoses, cables, connectors and ready-to-install complete systems.

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KABELSCHLEPP and TSUBAKI – together what fits together

TSUBAKI KABELSCHLEPP is integrated into the TSUBAKI Group since 2010 and made responsible for managing the worldwide Cable Carrier Systems business.

For more than 55 years, both companies have been close cooperative partners. With this integration, we will leverage our successful working relationship in one strategic enterprise.

This global enterprise offers numerous advantages:

- An even larger product portfolio to select from
- Global yet locally supported – vast network of more than 40 international subsidiaries
- Global manufacturing operations allow for shorter delivery times
- Combined R&D resources allow for quick and innovative product development

KABELSCHLEPP + TSUBAKI = MORE

MORE Product Solutions

An expanded product portfolio of TSUBAKI products and KABELSCHLEPP cable carrier systems.

MORE Innovations

A combined global R&D with even more resources ensures a quicker response to our customer's needs.

MORE Regional Service

A combined TSUBAKI and KABELSCHLEPP sales force provides added local support.
KABELSCHLEPP® products are also now available through the TSUBAKI network of distributors.

MORE Global Support

A unified global sales and support network extends to over 70 countries around the world, providing service and support when and where you need it most.

MORE Value

Together we will continue to prove our reputation as one of the industry's "Best Value" supplier in the industry.

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Project and development competence

KABELSCHLEPP has been a synonym for innovation since the company was founded. More than 65 years of experience in flexible and efficient development and manufacturing structures make TSUBAKI KABELSCHLEPP a competent partner for customized special solutions and standard products. The demands on development and manufacturing are increasing steadily.

Products are developed worldwide for specific customer and application requirements and form the foundation for our continuously growing experience and technical competence. In combination with modern simulation tools, test methods and manufacturing processes, this experience allows us to develop efficient development processes – especially for individual project solutions. In close coordination with our customers and their requirements, we optimize all processes for meeting the technical and production requirements as well as factors such as functionality and design of the product. That saves production times and costs.

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Tailored customer solutions

Customized cable carriers not only feature innovative technology, they also offer convincing ergonomics and design aspects. DTO (designed to order) – under a separate type designation, TSUBAKI KABELSCHLEPP develops individual systems for virtually any area of application. Development always focuses on ergonomics, functionality, economic efficiency and customer benefit.

Concept, design and development, project planning

» Customized solutions based on customer requirements
» Know-how from the inventor of cable carriers
» Decades of experience in the development and design of new systems

Design engineering

» CAD modeling on state-of-the-art systems
» Simulations and tests on virtual prototypes based on computer-aided model data
» Calculation and evaluation

Prototyping

» In-house 3D printing
» Vacuum casting
» Additive manufacturing of new systems

Validation, testing

» Tests on product-specific test benches according to customer specifications
» State-of-the-art product simulation processes, FMEA and moldflow analyses

Production, assembly

» Automated individual/series production and assembly
» Permanent quality control during production and assembly

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Service that you can rely on

Our service team can design and assemble your cable carrier system even for applications with extreme assembly conditions.

» Complete assembly with guide channels
» Uncoiling of harnessed cable carrier systems with long travel lengths
» Assembly at great heights (e. g. crane systems)

The specialists of our service center provide you with the support that you need. You will see: With TSUBAKI KABELSCHLEPP, you make a decision in favour not only of a cable carrier, but of a totally harmonised system.

Certified Quality Management

We are a reliable partner for a number of industries where special attention is paid to durability and quality. Therefore, we have defined strict requirements for the safety, functionality and performance of our products. Both, internal tests and certificates from independent testing institutes prove that our products and processes comply with these quality standards.

MANAGEMENT SYSTEM CERTIFICATION
DNV
ISO 9001 · ISO 14001

TÜV Rheinland Product Safety
BAUART GEPRÜFT
TYPE APPROVED

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Ecology & Economy

We are advancing the development of environmentally friendly products to conserve the environment and reduce the environmental impact of our operations by improving the efficiency of production activities and developing products that effectively
lower energy consumption.

These products help customers reduce energy consumption and improve the economic aspects of their operations. Long-Term objective is to significantly reduce CO_2 emissions.

Further information can be found at
tsubaki-kabelschlepp.com

The Tsubaki Eco Link logo is used only on products that satisfy the standards for environmental friendliness set by the Tsubaki Group.

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TSUBAKI KABELSCHLEPP | Product portfolio

Cable carrier

TSUBAKI KABELSCHLEPP supplies steel, highgrade stainless steel and solid plastic cable carriers and plastic cable carriers with aluminium stays (Hybrid cable carriers), in standard sizes or tailormade to an individual customer's requirements in millimetre units.

Cables for cable carriers

TRAXLINE® electrical cables were specially developed, optimized and tested for use in cable carrier systems. Even in the most exacting application conditions, they provide the reliability that matters – and at reasonable prices.



- Solid plastic cable carriers with fixed chain widths
- Hybrid cable carriers with variable chain widths
- Covered solid plastic, and hybrid cable carriers
- Cable carriers for 3D applications
- Steel cable carriers
- Covered steel cable carriers

- Control cables
- Power cables
- Data cables
- BUS-/FOC-/Coaxial cables
- System cables
- Power One Heavy Duty High voltage cable

Ready-to-assemble cable carrier system

Under the name TOTALTRAX® TSUBAKI KABELSCHLEPP supplies complete, fully-harnessed cable carrier systems. According to our customers' requirements we can supply harnessed cable carriers with the cables already inserted up to a full complex system.

Machine housings

High speeds, quick machining cycles, cooling water and chips: Machine tools represent a dangerous environment for people. This is why all machine tools are contained in nearly „impenetrable" housings.



- Consulting
- Planning
- Design
- Cable carriers
- Power- and Control cables
- Complete guarantee

- Hydraulic hoses
- Pneumatic hoses
- Plug-and-socket connectors
- Assembly plates
- Complete assembly of all components

- Wall modules
- Windows modules
- Corner modules
- Roof modules
- Sliding doors
- Folding doors

- Lift gates
- Roll gates

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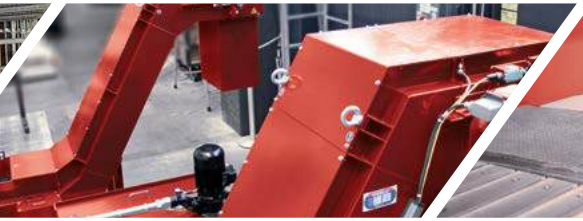
Conveyor Systems

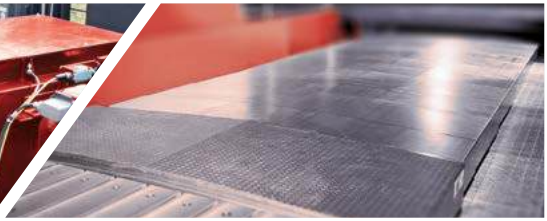
For transporting chips / shavings, trimmings, metal scrap, forgings, moulded parts and plastic components KABELSCHLEPP can supply bespoke, client-specific conveyor systems.



- Conveyor Systems
- Hinged belt conveyors
- Scraper conveyors
- Belt conveyors

Guideway Protection Systems

Fully developed, safe systems that protect guideways, spindles and axles from contamination and damage. Our guideway protection solutions thus avoid expensive down times and facilitate optimal production processes.



- Telescopic covers
- Way wipers on guideways
- Link apron covers
- Bellows
- Conical spring covers
- Roll-up covers

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Industry Solutions

Our cable carrier systems have been deployed successfully in a variety of industries around the world for over 50 years. We now offer Standard applications as cusomised solutions, taylormade for the individual needs of your industry ex stock. Your industry sector is not in the list? Get in touch with us directly - our industry experts will be happy to help!



Steelworks and Rolling Mills

At the hotspot of metallurgy

Glowing workpieces, extreme temperatures, enormous loads – our cable carriers really do hard work in metallurgy. They are robust, heat resistant and lubricant free and protect reliably cables and hoses from the most extreme conditions. Our product range covers almost all possible applications along the value chain of metal production and processing. Hundreds of realized projects in steelworks and rolling mills prove that this is one of our core areas of expertise.

Mining & Drilling

Treasure hunters, watch out!

Thousand of tons of soil need to be moved or hundreds of meters deep need to be drilled to get to the precious mineral resources. Heavy machinery excavates and drills towards the underground deposits. Man and machine must perform at their maximum. These are exactly the extreme conditions where our heavy duty cable carriers are doing their best job. They are robust and durable and protect reliably sensitive cables on heavy machinery while they withstand vibrations, dust and dirt.

Work Platforms & Material Handling Vehicles

We lift you up!

A workplace at lofty heights somewhere between heaven and earth – whether for pruning trees, for maintenance or repair under the roof of a production hall or in firefighting. Special vehicles with lifting technology or telescopic booms take workers up to their extraordinary workplaces. On board: our cable carriers. From lifting to telescopic movements, from movable beams to rotary movements – our products follow smoothly all required movements. At the same time they reliably protect signal and control cables, electric cables and hydraulic hoses.

Up and down – again and again. Lifting, stacking, picking – industrial trucks are indispensable in intralogistics. Our products for guiding cables follow each lifting movement. Our cable carriers are robust and durable and are perfectly designed for such permanent use applications. Different types of forklift trucks ensure all horizontal, in-house transport. No matter which type you use – we support you maintaining your flow of goods.

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Agriculture

Not only do we make cows happy...!

Sensors automatically determine how much fertilizer needs to go into the soil. Cows decide themselves when they want to be milked by a milking robot. Modern farming is automated – agriculture has become a high-tech industry. However, the rough operating conditions have remained. Wherever sensitive technology needs to be protected, our cable carriers are in demand. Their fields of application are as diverse as the range of agriculture itself – from milking robots to farm machines, from aquacultures to smart farming.

Furniture Industry

There is no second chance for a first impression

Attractive premises, designed by architects – our cable carriers also have to cut a good figure into interiors. As everyone knows, beauty is in the eye of the beholder. In this case our Protum Office has even convinced the jury's critical eyes – and received the IF Design Award. With its special design it perfectly fits into a tastefully designed environment. Being stylish and functional at the same time it safely holds all cable. Thus, it ensures not only tidiness but also an overall appealing appearance – from designed offices to service desks, from operations centers to media boards in educational institutions.

Telescopes

We'll get you the moon and the stars!

As old as mankind – looking up at the stars. So technologically advanced – looking (and listening) into the endless vastness of space. Only possible with specially developed telescopes. They are the result of intensive cooperation between research institutes and specialist companies.

We have many years of experience in this extremely demanding field between science and technology. Our cable carriers do a fantastic job in many different research institutes across the globe. Whether locking systems for giant domes or precisely aligning parabolic mirrors and optical telescopes through rotating and swiveling – our cable carriers smoothly move these applications containing such highly sensitive technology.

Medical Technology

A clean affair!

EOur solutions for clean rooms, especially for medical applications, are a clean affair. Using state-of-the-art technology has become essential in modern medicine – in diagnostics, therapy and care. Meeting highest hygienic standards is top priority.

We offer solutions for a wide range of equipment for imaging diagnostics, for analysis and laboratory equipment, as well as surgery and treatment tables and chairs. Precise alignment, exact positioning or comfortable storage of patients – only possible through multiple, electrical adjustments. Our cable carriers make all this possible: functional, low-vibration, reliable, IP54* certified – and, if desired, with an extra touch of design.

* Refers to type series TKA55 with Bi 50 – 175.
More information on certification: tsubaki-kabelschlepp.com/tka-ip54

Cleanroom

Cleanliness in its pure form

Maximum purity and hygiene! Consistent separation of polluted and clean environment. These are the demanding requirements for producing food and medicinal products. From pharmaceutical industry through medical technology to high-tech industry – all of them require an especially low-particle environment and "technical cleanliness" for their production processes. It comes as no surprise that clean rooms, processes and products are a must! Because any contamination leads to costly incidents, scrap or useless laboratory results.

Our special cleanroom solutions are particularly designed for such hygiene-sensitive production areas. They are abrasion-resistant and low-vibration and thus, keep the number of airborne particles at technically possible minimum. Certified as "cleanroom-suitable", our cable carriers meet all standards of the various cleanroom classes up to cleanroom class 1.



The suitable cable carrier for your application

Find the suitable cable carrier for your specific application with all the relevant information and a direct contact online at **tsubaki-kabelschlepp.com/branchen** or in our special industry flyers.

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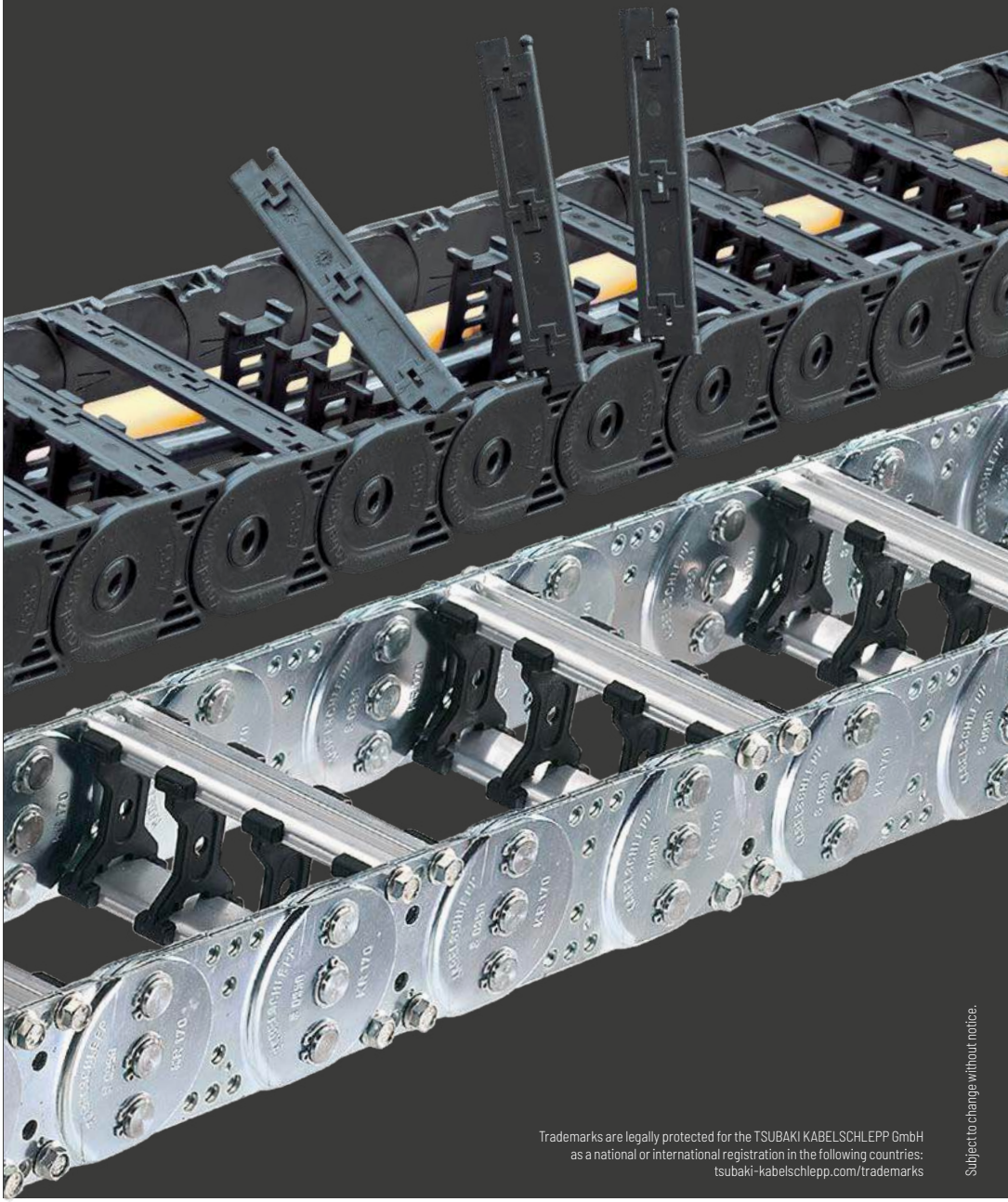
Cable carriers



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Content

01 **Cable carriers overview** ..... Page **16**

» Guideline for fast product selection
» All series, types and stay variants at a glance

02 **Selection by inner height** ..... Page **40**

» All cable carrier structured according to inner height

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Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
BASIC-LINE											
MONO series											
		**MONO 0132**	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
		MONO 0130	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
		MONO 0134	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
		MONO 0182	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
		MONO 0180	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
		MONO 0184	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
		MONO 0202	11	15	6 – 20	13 – 27	–	20	18 – 50	1.25	8.5
QuickTrax® series											
		**QT0250. 030**	17.6	23	30 – 50	60	–	25	28 – 100	4	14
		QT0250. 040	17.6	23	30 – 50	60	–	25	28 – 100	4	14
		QT0320. 030	20	25.5	15 – 65	27 – 77	–	32	28 – 125	3	16
		QT0320. 040	20	25.5	15 – 65	27 – 77	–	32	28 – 125	3	16
UNIFLEX *Advanced* series											
		**UA1250.020**	17.5	23	30 – 50	60	–	25	28 – 100	4	14
		UA1320.020	20	25.5	15 – 65	27 – 77	–	32	28 – 125	3.0	16
		UA1455.020	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
		UA1455.030	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
		UA1455.040	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
		UA1555.020	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30
		UA1555.030	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30
		UA1555.040	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30

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Cable carrier | Cable carrier overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1.15	10	50	40	3	30	–	–	–	–	•	•	–	112
1.15	10	50	40	3	30	–	–	–	–	•	•	–	113
1.15	10	50	–	–	–	–	–	–	–	•	•	–	114
1.5	10	50	70	3	30	–	–	–	–	•	•	–	118
1.5	10	50	70	3	30	–	–	–	–	•	•	–	119
1.5	10	50	–	–	–	–	–	–	–	•	•	–	120
1.95	10	50	70	3	30	–	–	–	–	•	•	•	124
1.6	10	50	60	3	30	•	•	–	–	•	•	•	134
1.6	10	50	–	–	–	•	•	–	–	•	•	•	135
2.9	10	50	80	2.5	25	•	•	–	–	•	•	•	140
2.9	10	50	–	–	–	•	•	–	–	•	•	•	141
1.6	10	50	60	3	30	•	–	–	–	•	•	•	152
2.9	10	50	80	2.5	25	•	–	–	–	•	•	•	158
4.8	10	50	120	2.5	20	•	–	–	•	•	•	•	164
4.8	10	50	120	2.5	20	•	•	–	•	•	•	•	165
4.8	10	50	–	–	–	•	•	–	•	•	•	•	166
6.3	9	45	125	3	20	•	–	–	•	•	•	•	174
6.3	9	45	125	3	20	•	•	–	•	•	•	•	175
6.3	9	45	–	–	–	•	•	–	•	•	•	•	176

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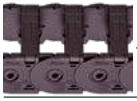
Cable carrier | Cable carrier overview

Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
BASIC-LINE											
UNIFLEX *Advanced* series											
		**UA1665.020**	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		UA1665.030	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		UA1665.040	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		UA1665.RMAI	44 (114-189)	60 (170-245)	125 – 200	147 – 222	–	66.5	200 – 300	15	35/151
		UA1665.RMAO	44 (114-189)	60 (170-245)	125 – 200	147 – 222	–	66.5	75 – 300	15	35/151
		UA1775.020	56	77	100 – 400	126 – 276	–	77.5	90 – 340	45	44
		UA1775.030	56	77	100 – 400	126 – 276	–	77.5	90 – 340	45	44
		UA1775.040	56	77	100 – 400	126 – 276	–	77.5	90 – 340	45	44
		UA1995.020	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
		UA1995.030	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
		UA1995.040	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
		UA1995.070	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
TKP35 series											
		**TKP35.030**	32	40	16 – 50	26 – 62	–	35	48 – 125	2	25
		TKP35.040	32	40	25 – 50	37 – 62	–	35	48 – 125	2	25
TKK series											
		**TKK39.020**	39	50	39 – 99	60 – 120	–	39	46 – 95	10	31
		TKK39.040	39	50	39 – 99	60 – 120	–	39	46 – 95	10	31

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Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
7	8	40	150	3	15	•	–	–	•	•	•	•	184
7	8	40	150	3	15	•	•	–	•	•	•	•	185
7	8	40	–	–	–	•	•	–	•	•	•	•	186
7	8	40	150	3	15	•	•	–	•	•	•	–	188
7	8	40	150	3	15	•	•	–	•	•	•	–	190
6.8	10	35	200	3	8	•	–	–	•	•	•	•	198
6.8	10	35	200	3	8	•	•	–	•	•	•	•	199
6.8	10	35	200	3	8	•	•	–	•	•	•	•	200
9	10	25	200	8	20	•	–	–	•	•	•	•	206
9	10	25	200	8	20	•	•	–	•	•	•	•	207
9	10	25	200	8	20	•	•	–	•	•	•	•	208
9	10	25	200	8	20	•	•	–	•	•	•	•	209
2.3	5	20	–	–	–	•	•	–	–	•	•	•	220
2.3	5	20	–	–	–	•	•	–	–	•	•	•	221
4.8	3	9	120	2.5	9	•	•	–	–	•	•	•	230
4.8	3	9	–	–	–	•	•	–	–	•	•	•	231

Subject to change without notice.

Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
							X mm				
BASIC-LINE*PLUS*											
EasyTrax® series											
		**ET0115.040**	4.6	8	7	11	–	11.5	10	0.4	3.5
		ET0250.030	16.5	23	30 – 50	60	–	25	28 – 100	4	13
		ET0250.040	16.5	23	30 – 50	60	–	25	28 – 100	4	13
		ET0320.030	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
		ET0320.040	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
		ET1455.030	25	36	25 – 78	94	–	45.5	52 – 200	6	20
		ET1455.040	25	36	25 – 78	94	–	45.5	52 – 200	6	20
PROTUM® series											
		**P0240 GS**	10	23	50	54	–	24	–	–	8
		P0400 GS	21.5	34	50	55	–	40	–	–	8
		P0400 GS	21.5	53.5	50	55	–	40	–	–	8

Subject to change without notice.

Cable carrier | Cable carrier overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**Travel length** ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**TS0**	**TS1**	**TS2**	**TS3**	**vertical hanging or standing**	**lying on the side**	**rotating arrangement**	
0.68	3	10	–	–	–	–	–	–	–	•	–	–	244
1.6	10	50	60	3	30	•	•	–	–	•	–	•	248
1.6	10	50	–	–	–	•	•	–	–	•	–	•	249
2.9	10	50	80	2.5	25	•	–	–	–	•	–	•	254
2.9	10	50	–	–	–	•	–	–	–	•	–	•	255
4.8	10	50	–	–	–	–	–	–	–	•	–	•	260
4.8	10	50	–	–	–	–	–	–	–	•	–	•	261
–	–	–	–	–	–	–	–	–	–	(•)	–	–	271
–	–	–	–	–	–	–	–	–	–	(•)	–	–	286
–	–	–	–	–	–	–	–	–	–	(•)	–	–	286

Subject to change without notice.

VARIO-LINE

K series



Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
		KC0650 RS	38	57.5	75 – 400	103 – 428	1	65	75 – 300	20	30
		KC0650 LG	36	57.5	75 – 600	103 – 628	1	65	75 – 300	20	32
		KC0650 RMAI	38 (200)	57.5 (224)	200 – 400	234 – 428	1	65	175 – 300	20	160
		KC0650 RMAO	38 (200)	57.5 (224)	200 – 400	234 – 428	1	65	75 – 300	20	160
		KE0650 RE	42	57.5	68 – 268	96 – 296	8	65	75 – 300	20	33
		KC0900 RS	58	78.5	100 – 400	131 – 431	1	90	130 – 385	30	46
		KC0900 RV	58	78.5	100 – 500	131 – 531	1	90	130 – 385	30	46
		KC0900 RM	54	78.5	100 – 600	131 – 631	1	90	130 – 385	30	43
		KC0900 LG	50	78.5	100 – 700	131 – 731	1	90	130 – 385	30	42
		KC0900 RMAI	58 (200)	78.5 (224)	200 – 500	231 – 531	1	90	150 – 385	30	160
		KC0900 RMAO	58 (200)	78.5 (224)	200 – 500	231 – 531	1	90	130 – 385	30	160
		KC0900 RMR	51	78.5	100 – 600	131 – 631	1	90	130 – 385	30	41
		KE0900 RE	58	78.5	81 – 561	112 – 592	16	90	130 – 385	30	46

UNIFLEX *Advanced* series



		UA1995 RSH 020	80	110	66 – 600	96 – 630	1	99.5	150 – 500	50	64
		UA1995 RSH 030	80	110	66 – 600	96 – 630	1	99.5	150 – 500	50	64
		UA1995 RSH 040	80	110	66 – 600	96 – 630	1	99.5	150 – 500	50	64
		UA1995 RSH 070	80	110	66 – 600	96 – 630	1	99.5	150 – 500	50	64

* Further information on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
4.8	8	40	220	2	3	•	•	•	•	•	•	•	308
4.8	8	40	220	2	3	–	–	–	–	•	•	•	312
4.8	8	40	220	2	3	•	–	–	–	•	•	–	314
4.8	8	40	220	2	3	•	–	–	–	•	•	–	316
4.8	8	40	220	2	3	•	•	–	•	•	•	•	318
8.4	6	30	260	2	3	•	•	•	•	•	•	•	326
8.4	6	30	260	2	3	•	•	•	•	•	•	•	330
8.4	6	30	260	2	3	•	•	–	–	•	•	•	*
8.4	6	30	260	2	3	–	–	–	–	•	•	•	334
8.4	6	30	260	2	3	•	–	–	–	•	•	–	336
8.4	6	30	260	2	3	•	–	–	–	•	•	–	338
8.4	6	30	260	2	3	•	–	–	–	•	•	•	*
8.4	6	30	260	2	3	•	•	•	•	•	•	•	340
9	10	25	200	8	20	•	–	–	•	•	•	•	350
9	10	25	200	8	20	•	•	–	•	•	•	•	351
9	10	25	200	8	20	•	•	–	•	•	•	•	352
9	10	25	200	8	20	•	•	–	•	•	•	•	353

Subject to change without notice.

VARIO-LINE

M series



Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
		MC0320 RS 01	19	27.5	25 – 280	36 – 291	1	32	37 – 200	2.5	15
		MC0320 RS 02	19	27.5	25 – 280	36 – 291	1	32	37 – 200	2.5	15
		ME0320 RE	19	27.5	25 – 189	36 – 200	4	32	37 – 200	2.5	15
		MK0475 RD 01	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
		MK0475 RD 02	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
		MC0650 RS	38	57	75 – 400	109 – 434	1	65	75 – 350	25	30
		MC0650 LG	36	57	75 – 500	109 – 534	1	65	75 – 350	25	29
		MC0650 RMAI	38 (200)	57 (224)	200 – 400	234 – 434	1	65	220 – 350	25	–
		MC0650 RMAO	38 (200)	57 (224)	200 – 400	234 – 434	1	65	75 – 350	25	–
		ME0650 RE	42	57	50 – 266	84 – 300	8	65	75 – 350	25	33
		MK0650 RD	42	57	50 – 266	84 – 300	8	65	75 – 350	25	33
		MC0950 RS	58	80	75 – 400	114 – 439	1	95	140 – 380	35	46
		MC0950 RV	58	80	75 – 500	114 – 539	1	95	140 – 380	35	46
		MC0950 RM	54	80	75 – 600	114 – 639	1	95	140 – 380	35	43
		MC0950 LG	50	80	75 – 600	114 – 639	1	95	140 – 380	35	38
		MC0950 RMAI	58 (200)	80 (224)	200 – 500	239 – 539	1	95	170 – 380	35	–
		MC0950 RMAO	58 (200)	80 (224)	200 – 500	239 – 539	1	95	140 – 380	35	–
		MC0950 RMR	51	80	75 – 600	114 – 639	1	95	140 – 380	35	46
		ME0950 RE	58	80	45 – 557	84 – 596	16	95	140 – 380	35	46
		MK0950 RD	58	80	45 – 557	84 – 596	16	95	140 – 380	35	46

* Further information on reques.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	366
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	366
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	368
2.7	10	50	–	–	–	•	•	•	–	•	•	•	374
2.7	10	50	–	–	–	•	•	•	–	•	•	•	376
4.8	10	40	220	8	20	•	•	•	•	•	•	•	384
4.8	10	40	220	8	20	–	–	–	–	•	•	•	388
4.8	10	40	220	8	20	•	–	–	–	•	•	–	390
4.8	10	40	220	8	20	•	–	–	–	•	•	–	392
4.8	10	40	220	8	20	•	•	–	•	•	•	•	394
4.8	10	40	220	8	20	•	•	–	•	•	•	•	395
7.4	10	30	260	8	20	•	•	•	•	•	•	•	404
7.4	10	30	260	8	20	•	•	•	•	•	–	•	408
7.4	10	30	260	8	20	•	•	•	–	•	•	•	412
7.4	10	30	260	8	20	–	–	–	–	•	•	•	414
7.4	10	30	260	8	20	•	–	–	–	•	•	–	416
7.4	10	30	260	8	20	•	–	–	–	•	•	–	418
7.4	10	30	260	8	20	•	–	–	–	•	•	•	420
7.4	10	30	260	8	20	•	•	•	•	•	•	•	422
7.4	10	30	260	8	20	•	•	•	•	•	•	•	423

Subject to change without notice.

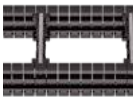
Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
							X mm				
VARIO-LINE											
M series											
		**MC1250 RS**	72	96	75 – 400	120 – 445	1	125	180 – 500	65	61
		MC1250 RV	72	96	100 – 600	145 – 645	1	125	180 – 500	65	61
		MC1250 RM	69	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		MC1250 LG	76	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		MC1250 RMAI	72 (200)	96 (226)	200 – 800	245 – 845	1	125	180 – 500	65	–
		MC1250 RMAO	72 (200)	96 (226)	200 – 800	245 – 845	1	125	180 – 500	65	–
		MC1250 RMR	66	96	100 – 800	145 – 845	1	125	180 – 500	65	54
		ME1250 RE	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
		MK1250 RD	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
		MC1300 RMF	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		MC1300 RMS	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		MC1300 LG	98	120	100 – 800	150 – 850	1	130	150 – 500	70	74
TKHP® series											
		**TKHP85 RMF**	58	84	100 – 800	154 – 854	1	85	240 – 400	30	46
		TKHP90 RMF	92	117	100 – 800	170 – 870	1	90	250 – 500	100	73
		TKHP85-R RMF **TKHP85-RSD RMF**	58	84.5	100 – 800	154 – 854	1	85	240 – 400	60	46
		TKHP90-R RMF **TKHP90-RSD RMF**	92	117.5	100 – 800	170 – 870	1	90	250 – 500	100	73

* Further information on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
9.7	10	25	320	8	20	•	•	–	•	•	•	•	432
9.7	10	25	320	8	20	•	•	•	•	•	–	•	436
9.7	10	25	320	8	20	•	•	•	–	•	•	•	440
9.7	10	25	320	8	20	–	–	–	–	•	•	•	442
9.7	10	25	320	8	20	•	–	–	–	•	•	–	444
9.7	10	25	320	8	20	•	–	–	–	•	•	–	446
9.7	10	25	320	8	20	•	–	–	–	•	•	•	448
9.7	10	25	320	8	20	•	•	•	•	•	•	•	450
9.7	10	25	320	8	20	•	•	•	•	•	•	•	451
10.8	10	25	350	8	20	•	•	–	•				458
10.8	10	25	350	8	20	•	•	–	•	•	•	•	460
10.8	10	25	350	8	20	–	–	–	–	•	•	•	462
5.9	5	20	200	5	2.5	•	•	–	–	•	–	–	470
13.5	8	20	–	–	–	•	•	–	–	•	–	–	476
–	–	–	1200	5	50	•	•	–	–	–	–	–	482
–	–	–	1500	10	50	•	•	–	–	–	–	–	488

Subject to change without notice.

Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
VARIO-LINE											
XL series											
		**XLC1650 RM**	108	140	200 – 1000	268 – 1068	1	165	250 – 550	65	86
		XLC1650 LG	110	140	200 – 1000	268 – 1068	1	165	250 – 550	65	88
		XLC1650 RMR	108	140	200 – 1000	268 – 1068	1	165	250 – 550	65	84
QUANTUM© series											
		**Q040 RE**	28	40	28 – 284	68 – 324	8	15	60 – 180	2.5	22
		Q060 RS	38	60	38 – 500	90 – 552	1	20	100 – 300	5	30
		Q060 RE	42	60	68 – 276	120 – 328	8	20	100 – 300	5	33
		Q080 RS	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		Q080 RV	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		Q080 RE	58	80	58 – 570	130 – 642	16	25	170 – 500	8	46
		Q100 RS	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		Q100 RV	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		Q100 RE	72	98	74 – 570	156 – 652	16	30	180 – 600	12	57
TKR series											
		**TKR0150.030**	22	27.5	20 – 60	34 – 74	–	15	40 – 75	2	17.5
		TKR0200.030	28	37	40 – 120	56 – 136	–	20	55 – 150	2.5	22
		TKR0260.030	40	54	50 – 200	76 – 226	–	26	75 – 150	8	32
		TKR0280.030	52	66	50 – 200	80 – 230	–	28	75 – 200	10	41
		TKR0370 RE	28	35	40 – 80	59 – 99	–	37	55 – 100	2.4	25

* Further information on request.

** For values > 20 m/s2, please contact us, we are happy to advise you.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
11.75	4	25	350	2	2 – 3	•	–	–	•	•	•	•	498
11.75	4	25	350	2	2 – 3	–	–	–	–	•	•	•	*
11.75	4	25	350	2	2 – 3	•	–	–	–	•	•	•	*
3.2	40	300	30	2	3	•	•	•	–	•	•	–	508
5	30	160	50	3	2 – 3	•	•	•	•	•	•	–	514
5	30	160	50	3	2 – 3	•	•	–	•	•	•	–	518
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	524
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	528
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	532
7.8	20	70	95	3	2 – 3	•	•	–	•	•	•	–	538
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	542
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	546
1.75	5	200**	–	–	–	•	•	–	–	•	–	–	556
2.75	5	200**	–	–	–	•	•	–	–	•	–	–	562
3.9	5	200**	–	–	–	•	•	–	•	•	–	–	568
4.9	5	200**	–	–	–	•	•	–	•	•	–	–	574
2.8	5	200**	–	–	–	•	•	–	–	•	–	–	580

Subject to change without notice.

TUBES-PLASTIC

TKA series



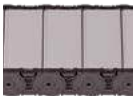
Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
		TKA30.060	20.5	28.5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
		TKA30.080	20.5	28.5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
		TKA38.060	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
		TKA38.080	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
		TKA45.060	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28.5
		TKA45.080	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28.5
		TKA55.060	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36
		TKA55.080	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36

UAT series



		UAT1555.080	50	69	75 – 175	Bi + 21	–	55.5	100 – 300	15	40

MT series



		MT0475 RMD 01	26	39	33 – 180	41 – 197	1	47.5	75 – 300	3	20
		MT0475 RMD 02	26	39	33 – 180	41 – 197	1	47.5	75 – 300	3	20
		MT0475 RDD 01	26	39	24 – 280	41 – 297	8	47.5	75 – 300	3	20
		MT0475 RDD 02	26	39	24 – 280	41 – 297	8	47.5	75 – 300	3	20
		MT0650 RMD	38.5	57	100 – 500	134 – 534	1	65	115 – 350	25	30
		MT0650 RDD	38.5	57	50 – 258	84 – 292	8	65	95 – 350	25	30

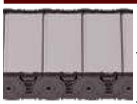
Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
3.5	10	50	80	2.5	25	•	•	–	–	•	•	–	592
3.5	10	50	80	2.5	25	•	•	–	–	•	•	–	593
3.9	10	50	120	2.5	20	•	•	–	–	•	•	–	598
3.9	10	50	120	2.5	20	•	•	–	–	•	•	–	599
4.7	9	45	125	3	20	•	•	–	•	•	•	–	604
4.7	9	45	125	3	20	•	•	–	•	•	•	–	605
6.5	8	40	150	3	15	•	•	–	•	•	•	–	612
6.5	8	40	150	3	15	•	•	–	•	•	•	–	613
6.5	8	40	150	3	15	•	•	–	–	•	•	–	624
2.7	10	50	–	–	–	•	•	–	–	•	•	–	634
2.7	10	50	–	–	–	•	•	–	–	•	•	–	636
2.7	10	50	–	–	–	•	•	•	–	•	•	–	638
2.7	10	50	–	–	–	•	•	•	–	•	•	–	640
4.8	10	35	170	8	20	•	•	–	–	•	•	–	646
4.8	10	35	170	8	20	•	•	–	–	•	•	–	648

Subject to change without notice.

TUBES-PLASTIC

MT series



Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
MT		MT0950 RMD	54.5	80	100 – 600	139 – 639	1	95	200 – 380	35	43
MT		MT0950 RDD	54.5	80	77 – 349	116 – 388	16	95	140 – 380	35	43
MT		MT1250 RMD	68.5	96	150 – 800	195 – 845	1	125	260 – 500	65	61
MT		MT1250 RDD	68.5	96	103 – 359	148 – 404	16	125	220 – 500	65	61
MT		MT1300 RMD	87	120	100 – 800	150 – 850	1	130	240 – 500	70	69

XLT series



Series	Opening variant	Type	h_i [mm]	B_i [mm]	D_a [mm]	t [mm]	KR [mm]	Radial link rotation on 1 m length [°]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]	Page
XLT		XLT1650 RMD	105	140	200 – 1000	268 – 1068	1	165	300 – 550	65	84

3D-LINE

ROBOTRAX® System



Series	Opening variant	Type	h_i [mm]	B_i [mm]	D_a [mm]	t [mm]	KR [mm]	Radial link rotation on 1 m length [°]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]	Page
3D		R040	10	27	40	21.5	70 [75]	± 450	0.7	8.5	690
3D		R056	14	39	56	32	90 [105]	± 300	1.1	11	690
3D		R075	22	52	75	40	125 [140]	± 215	4	18	690
3D		R085	24	54	85	40	130 [170]	± 215	5	20	690
3D		R100	31	64	100	40	130 [175]	± 215	6	27	690

Values in [ ] apply when using protectors

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
7.4	10	25	230	8	20	•	•	•	–	•	•	–	654
7.4	10	25	230	8	20	•	•	•	•	•	•	–	656
9.7	10	20	270	8	20	•	•	•	–	•	•	–	662
9.7	10	20	270	8	20	•	•	•	•	•	•	–	664
10.8	10	20	300	8	20	•	•	–	•	•	•	–	670
11.75	4	25	350	2	2 – 3	•	–	–	•	•	•	–	680

Series	Opening variant	Type	h_i [mm]	B_i [mm]	D_a [mm]	t [mm]	KR [mm]	Radial link rotation on 1 m length [°]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]	Page
3D-LINE											
ROBOTRAX® System											
		R140X	48	74	140	50	125 [225]	± 200	10	42	691

Subject to change without notice.

Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
STEEL-LINE											
LS/LSX series											
		LS/LSX1050 RS 2	58	80	84 – 384	100 – 400	1	105	105 – 430	35	46
		LS/LSX1050 RV	58	80	84 – 584	100 – 600	1	105	105 – 430	35	46
		LS/LSX1050 RR	54	80	84 – 484	100 – 500	1	105	105 – 430	35	43
		LS/LSX1050 LG	48	80	54 – 554	100 – 600	1	105	105 – 430	35	38
		LS/LSX1050 RMAI	58 (200)	80 (226)	184 – 384	200 – 400	1	105	195 – 430	35	–
		LS/LSX1050 RMAO	58 (200)	80 (226)	184 – 384	200 – 400	1	105	105 – 430	35	–
S/SX series											
		S/SX0650 RS 1	31	50	65 – 265	100 – 300	1	65	75 – 400	30	24
		S/SX0650 RS 2	31	50	69 – 369	100 – 400	1	65	75 – 400	30	24
		S/SX0650 RR	26	50	69 – 369	100 – 400	1	65	75 – 400	30	20
		S/SX0650 LG	34	50	35 – 465	70 – 500	1	65	75 – 400	30	26
		S/SX0650 RMAI	31 (200)	50 (224)	155 – 355	200 – 400	1	65	200 – 400	30	–
		S/SX0650 RMAO	31 (200)	50 (224)	155 – 355	200 – 400	1	65	75 – 400	30	–
		S/SX0950 RS 1	46	68	107 – 257	150 – 300	1	95	125 – 600	45	36
		S/SX0950 RS 2	46	68	113 – 363	150 – 400	1	95	125 – 600	45	36
		S/SX0950 RM	43	68	88 – 563	125 – 600	1	95	125 – 600	45	34
		S/SX0950 RR	42	68	115 – 465	150 – 500	1	95	125 – 600	45	33
		S/SX0950 LG	48	68	82 – 557	125 – 600	1	95	125 – 600	45	38
		S/SX0950 RMR	40	68	108 – 558	150 – 600	1	95	125 – 600	45	32

* Further information on request.
** Depending on the specific application, additional gliding elements or rollers are required.
*** Application-specific, values on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
9.5	5	10	–	–	–	•	•	•	•	•	–	–	722
9.5	5	10	–	–	–	•	•	•	•	•	–	–	726
9.5	5	10	–	–	–	•	•	–	–	•	–	–	730
9.5	5	10	–	–	–	–	–	–	–	•	–	–	732
9.5	5	10	–	–	–	•	–	–	–	•	–	–	734
9.5	5	10	–	–	–	•	–	–	–	•	–	–	736
5.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	750
5.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	752
5.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	754
5.8	2.5	5	***	1	2	–	–	–	–	•	•**	•**	756
5.8	2.5	5	***	1	2	•	–	–	–	•	•**	–	*
5.8	2.5	5	***	1	2	•	–	–	–	•	•**	–	*
8.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	760
8.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	762
8.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	764
8.8	2.5	5	***	1	2	•	•	–	–	•	•**	•**	766
8.8	2.5	5	***	1	2	–	–	–	–	•	•**	•**	768
8.8	2.5	5	***	1	2	•	–	–	–	•	•**	•**	*

Subject to change without notice.

STEEL-LINE

S/SX series



Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
		S/SX1250 RS1	72	94	152 – 352	200 – 400	1	125	145 – 1000	50	57
		S/SX1250 RS2	72	94	156 – 456	200 – 500	1	125	145 – 1000	50	57
		S/SX1250 RV	72	94	154 – 554	200 – 600	1	125	145 – 1000	50	57
		S/SX1250 RM	69	94	151 – 751	200 – 800	1	125	145 – 1000	50	55
		S/SX1250 RR	66	94	160 – 560	200 – 600	1	125	145 – 1000	50	52
		S/SX1250 LG	76	94	82 – 752	130 – 800	1	125	145 – 1000	50	59
		S/SX1250 RMAI	72 (200)	94 (226)	154 – 554	200 – 600	1	125	200 – 1000	50	–
		S/SX1250 RMAO	72 (200)	94 (226)	154 – 554	200 – 600	1	125	145 – 1000	50	–
		S/SX1250 RMR	66	94	153 – 753	200 – 800	1	125	145 – 1000	50	52
		S/SX1800 RM	108	140	188 – 938	250 – 1000	1	180	265 – 1300	60	86
		S/SX1800 RR	104	140	201 – 751	250 – 800	1	180	265 – 1300	60	83
		S/SX1800 LG	110	140	121 – 941	180 – 1000	1	180	265 – 1300	60	88
		S/SX2500 RM	183	220	175 – 1125	250 – 1200	1	250	365 – 1395	100	146
		S/SX2500 LG	180	220	174 – 1124	250 – 1200	1	250	365 – 1395	100	144
		S/SX3200 LG	220	300	181 – 1416	250 – 1500	1	320	470 – 1785	150	176
		S/SX5000	150	200	133 – 1083	250 – 1200	1	200	500 – 1200	100	–
		S/SX6000	240	300	177 – 1377	300 – 1500	1	320	700 – 1500	150	–
		S/SX7000	370	450	200 – 1650	350 – 1800	1	450	900 – 2400	600	–
		S/SX8000	578	600	200 – 1650	350 – 1800	1	550	900 – 2400	800	–
		S/SX9000	Custom sizes from a cable carrier width of 350 mm								

* Further information on request.
** Depending on the specific application, additional gliding elements or rollers are required.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
13.5	2.5	5	***	1	2	•	•	–	–	•	•**	•**	774
13.5	2.5	5	***	1	2	•	•	–	–	•	•**	•**	778
13.5	2.5	5	***	1	2	•	•	•	•	•	•**	•**	782
13.5	2.5	5	***	1	2	•	•	•	–	•	•**	•**	786
13.5	2.5	5	***	1	2	•	•	–	–	•	•**	•**	788
13.5	2.5	5	***	1	2	–	–	–	–	•	•**	•**	790
13.5	2.5	5	***	1	2	•	–	–	–	•	•**	–	*
13.5	2.5	5	***	1	2	•	–	–	–	•	•**	–	*
13.5	2.5	5	***	1	2	•	–	–	–	•	•**	•**	*
17.8	2	3	***	0.8	2	•	•	–	•	•	•**	•**	796
17.8	2	3	***	0.8	2	•	•	–	–	•	•**	•**	798
17.8	2	3	***	0.8	2	–	–	–	–	•	•**	•**	800
23.7	1	3	–	–	–	•	•	•	–	•	•**	•**	806
23.7	1	3	–	–	–	–	–	–	–	•	•**	•**	808
24	1	2.5	–	–	–	–	–	–	–	•	•**	•**	812
12	2	3	–	–	–	–	•	–	–	•	•**	•**	816
16.7	1.5	2	–	–	–	–	•	–	–	•	•**	•**	817
24.9	0.05	0.3	–	–	–	–	•	–	–	•	•**	•**	818
24.9	0.05	0.3	–	–	–	–	•	–	–	•	•**	•**	819
													822

*** Application-specific, values on request.

Subject to change without notice.

TUBES-STEEL

S/SX Tubes series



Series	Opening variant	Type	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
		S/SX0650 RMD	30	50	65 – 465	100 – 500	1	65	115 – 300	30	24
		S/SX0950 RMD	44	68	88 – 563	125 – 600	1	95	170 – 600	45	35
		S/SX1250 RMD	69	94	101 – 751	150 – 800	1	125	200 – 1000	50	55
		S/SX1800 RMD	104	140	188 – 938	250 – 1000	1	180	320 – 1405	60	83

* Depending on the specific application, additional gliding elements or rollers are required.
** Application-specific, values on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
5.8	2.5	5	**	1	2	•	•	–	–	•*	•*	–	832
8.8	2.5	5	**	1	2	•	•	–	–	•*	•*	–	838
13.5	2.5	5	**	1	2	•	•	•	–	•	•	–	844
17.8	2	3	**	0.8	2	•	•	–	•	•	•	–	850

Subject to change without notice.

Cable carrier | Selection by inner height

h_i [mm]	Cable-d_{max} [mm]	B_i [mm]	Type	Page
4,6 – 10 mm				
4.6	3.5	7	ET0115.040	244
10	8	6 – 20	MONO 0132	112
10	8	6 – 20	MONO 0130	113
10	8	6 – 20	MONO 0134	114
10	8	50	P0240 GS	271
10	8.5	27	R040	690
11 – 15 mm				
11	8.5	6 – 20	MONO 0202	124
14	11	39	R056	690
15	12	10 – 40	MONO 0182	118
15	12	10 – 40	MONO 0180	119
15	12	10 – 40	MONO 0184	120
16.5 – 20.5 mm				
16.5	13	20 – 80	ET0250.030	248
16.5	13	20 – 80	ET0250.040	249
17.5	14	20 – 80	UA1250.020	152
17.6	14	20 – 80	QT0250.030	134
17.6	14	20 – 80	QT0250.040	135
18	14	15 – 65	ET0320.030	254
18	14	15 – 65	ET0320.040	255
19	15	25 – 280	MC0320 RS 01	366
19	15	25 – 280	MC0320 RS 02	366
19	15	25 – 189	ME0320 RE	368
20	16	15 – 65	QT0320.030	140
20	16	15 – 65	QT0320.040	141
20	16	15 – 65	UA0320.020	158
20.5	16	15 – 65	TKA30.060	592
20.5	16	15 – 65	TKA30.080	593
21.5	8	50	P0400 GS	286
22 – 30 mm				
22	17.5	20 – 60	TKR0150.030	556
22	18	52	R075	690
24	20	54	R085	690
25	20	25 – 78	ET1455.030	260
25	20	25 – 78	ET1455.040	261
26	20.5	25 – 130	UA1455.020	164
26	20.5	25 – 130	UA1455.030	165
26	20.5	25 – 130	UA1455.040	166
26	20	25 – 130	TKA38.060	598
26	20	25 – 130	TKA38.080	599
26	20	33 – 180	MT0475 RMD 1	634
26	20	33 – 180	MT0475 RMD 2	636
26	20	24 – 280	MT0475 RDD 1	638
26	20	24 – 280	MT0475 RDD 2	640
26	20	69 – 369	S/SX0650 RR	754
28	22	24 – 280	MK0475 RD 1	374
28	22	24 – 280	MK0475 RD 2	376
28	22	28 – 284	Q040 RE	508
28	22	40 – 120	TKR0200.030	562
28	22	40 – 80	TKR0370 RE	580
30	24	65 – 465	S/SX0650 RMD	832
31 – 40 mm				
31	27	64	R100	690
31	24	65 – 265	S/SX0650 RS 1	750
31	24	69 – 369	S/SX0650 RS 2	752
32	25	16 – 50	TKP35.030	220
32	25	25 – 50	TKP35.040	221
36	32	75 – 600	KC0650 LG	312
36	29	75 – 600	MC0650 LG	388
36	28.5	50 – 150	TKA45.060	604
36	28.5	50 – 150	TKA45.080	605
36	26	35 – 465	S/SX0650 LG	756
38	30	50 – 150	UA1555.020	174
38	30	50 – 150	UA1555.030	175
38	30	50 – 150	UA1555.040	176
38	30	75 – 400	KC0650 RS	308
38	30	75 – 400	MC0650 RS	384
38	30	38 – 500	Q060 RS	514
38.5	30	100 – 500	MT0650 RMD	646
38.5	30	50 – 258	MT0650 RDD	648
39	31	39 – 99	TKK39.020	230
39	31	39 – 99	TKK39.040	231
40	32	50 – 200	TKR0260.030	568
40	32	108 – 558	S/SX0950 RMR	*
42 – 48 mm				
42	33	68 – 268	KE0650 RE	318
42	33	50 – 266	ME0650 RE	394
42	33	50 – 266	MK0650 RD	395
42	33	68 – 276	Q060 RE	518
42	33	115 – 465	S/SX0950 RR	766
43	34	88 – 563	S/SX0950 RM	764
44	35	50 – 250	UA1665.020	184
44	35	50 – 250	UA1665.030	185
44	35	50 – 250	UA1665.040	186
44	35	88 – 563	S/SX0950 RMD	838
45	36	50 – 250	TKA55.060	612
45	36	50 – 250	TKA55.080	613
46	36	107 – 257	S/SX0950 RS 1	760
46	36	113 – 363	S/SX0950 RS 2	752
47	42	126,5	R140	691
48	38	82 – 582	LS/LSX1050 LG	732
50 – 58 mm				
50	42	100 – 700	KC0900 LG	334
50	38	75 – 600	MC0950 LG	414
50	40	75 – 175	UAT1555.080	624
48	38	82 – 557	S/SX0950 LG	768
51	41	100 – 600	KC0900 RMR	*

Subject to change without notice.

Cable carrier | Selection by inner height

h_i [mm]	Cable-d_{max} [mm]	B_i [mm]	Type	Page
51	46	75 – 600	MC0950 RMR	420
52	41	50 – 200	TKR0280.030	574
54	43	100 – 600	KC0900 RM	*
54	43	75 – 600	MC0950 RM	412
54	43	84 – 484	LS/LSX1050 RR	730
54.5	43	100 – 600	MT0950 RMD	654
54.5	43	77 – 349	MT0950 RDD	656
56	44	100 – 400	UA1775.020	198
56	44	100 – 400	UA1775.030	199
56	44	100 – 400	UA1775.040	200
58	46	100 – 400	KC0900 RS	326
58	46	100 – 500	KC0900 RV	330
58	46	81 – 561	KE0900 RE	340
58	46	75 – 400	MC0950 RS	404
58	46	75 – 500	MC0950 RV	408
58	46	45 – 557	ME0950 RE	422
58	46	45 – 557	MK0950 RD	423
58	46	100 – 800	TKHP85 RMF	470
58	46	100 – 800	TKHP85-R RMF	482
58	46	100 – 800	TKHP85-RSD RMF	482
58	46	50 – 600	Q080 RS	524
58	46	50 – 600	Q080 RV	528
58	46	58 – 570	Q080 RE	532
58	46	84 – 384	LS/LSX1050 RS2	722
58	46	84 – 584	LS/LSX1050 RV	726
60 – 80 mm				
66	54	100 – 800	MC1250 RMR	448
66	52	160 – 560	S/SX1250 RR	788
66	52	153 – 753	S/SX1250 RMR	*
68.5	61	150 – 800	MT1250 RMD	662
68.5	61	103 – 359	MT1250 RDD	664
69	59	100 – 800	MC1250 RM	440
69	55	151 – 751	S/SX1250 RM	786
69	55	101 – 751	S/SX1250 RMD	844
72	61	75 – 400	MC1250 RS	432
72	61	100 – 600	MC1250 RV	408
72	61	71 – 551	ME1250 RE	450
72	61	71 – 551	MK1250 RD	451
72	57	70 – 600	Q100 RS	538
72	57	70 – 600	Q100 RV	542
72	57	74 – 570	Q100 RE	546
72	57	152 – 352	S/SX1250 RS 1	774
72	57	156 – 456	S/SX1250 RS 2	778
72	57	154 – 554	S/SX1250 RV	782
74	59	100 – 800	MC1250 LG	442
76	59	82 – 752	S/SX1250 LG	790
80	64	85 – 400	UA1995.020	206
80	64	85 – 400	UA1995.030	207
80	64	85 – 250	UA1995.040	208
80	64	85 – 250	UA1995.070	209
80	64	66 – 600	UA1995 RSH 020	350
80	64	66 – 600	UA1995 RSH 030	351
80	64	66 – 600	UA1995 RSH 040	352
80	64	66 – 600	UA1995 RSH 070	353
87 – 108 mm				
87	75	100 – 800	MC1300 RMF	458
87	75	100 – 800	MC1300 RMS	460
87	69	100 – 800	MT1300 RMD	670
92	74	100 – 800	MC1300 LG	462
92	73	100 – 800	TKHP90 RMF	476
92	73	100 – 800	TKHP90-R RMF	488
92	73	100 – 800	TKHP90-RSD RMF	488
104	83	201 – 751	S/SX1800 RR	798
104	83	188 – 938	S/SX1800 RMD	850
105	84	200 – 1000	XLT1650 RMD	680
108	86	200 – 1000	XLC1650 RM	498
108	84	200 – 1000	XLC1650 RMR	*
108	86	188 – 938	S/SX1800 RM	796
110 – 220 mm				
110	88	200 – 1000	XLC1650 LG	*
110	88	121 – 941	S/SX1800 LG	800
150	–	133 – 1083	S/SX5000 RSV	816
180	144	174 – 1124	S/SX2500 LG	808
183	146	175 – 1125	S/SX2500 RM	806
189	151	125 – 200	UA1665 RMAI	188
189	151	125 – 200	UA1665 RMAO	190
200	160	200 – 400	KC0650 RMAI	314
200	160	200 – 400	KC0650 RMAO	316
200	160	200 – 500	KC0900 RMAI	336
200	160	200 – 500	KC0900 RMAO	338
200	–	200 – 400	MC0650 RMAI	390
200	–	200 – 400	MC0650 RMAO	392
200	–	200 – 500	MC0950 RMAI	416
200	–	200 – 500	MC0950 RMAO	418
200	–	200 – 800	MC1250 RMAI	444
200	–	200 – 800	MC1250 RMAO	446
200	–	184 – 384	LS/LSX1050 RMAI	734
200	–	184 – 384	LS/LSX1050 RMAO	736
200	–	155 – 355	S/SX0650 RMAI	*
200	–	155 – 355	S/SX0650 RMAO	*
200	–	154 – 554	S/SX1250 RMAI	*
200	–	154 – 554	S/SX1250 RMAO	*
220	176	166 – 1416	S/SX3200 LG	812
240 – 578 mm				
240	–	177 – 1377	S/SX6000 RSV	817
370	–	200 – 1650	S/SX7000 RSV	818
578	–	200 – 1650	S/SX8000 RSV	819

* Further information on request.

Subject to change without notice.

Cable carrier configuration



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» Connection variants

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» Area of application for multi-band cable carriers

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01 Cable carrier design

1.1 Solid plastic, hybrid and steel cable carriers

Our product portfolio offers one of the largest modular systems for cable carrier systems within the industry with regard to material and type variants. Depending on the series and cable carrier type, the cable carriers have different designs.

Solid plastic cable carriers

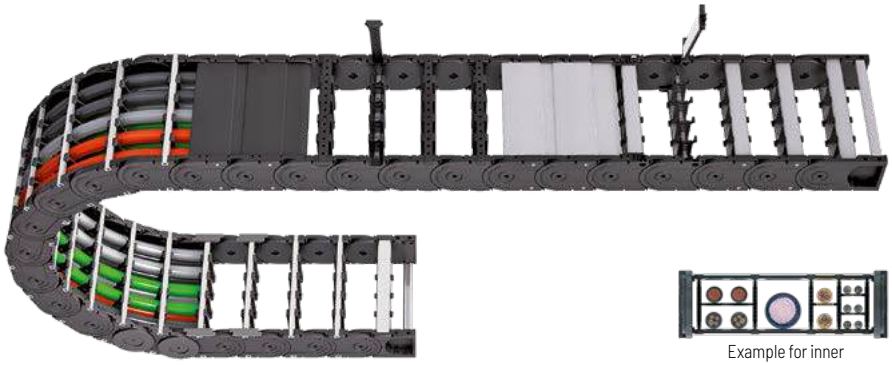
TSUBAKI KABELSCHLEPP offers a great variety of different solid plastic cable carriers with predefined widths. All cable carriers combine robustness and reliability with an attractive price-performance ratio. Fast and easy installation of cables and hoses is another advantage of these cable carriers.



Example for inner distribution

Hybrid cable carriers

Hybrid cable carriers from KABELSCHLEPP® offer a high level of variability for cable carrier widths and separation options within the cable carrier. This allows reliable and efficient partitioning even for complex cable configurations. Hoses and cables with larger diameters can also be accommodated and guided.



Example for inner distribution

Subject to change without notice.

Steel cable carriers

Special applications require the use of special cable carriers. Our steel and stainless steel cable carriers are ideal for extreme heat or other extremely rough ambient conditions, such as in mining, in the steel industry or in the oil industry. Standardized separating options offer best possible protection for cables and hoses even under strong mechanical strain.



Example for inner distribution

Cable carriers consisting of side bands

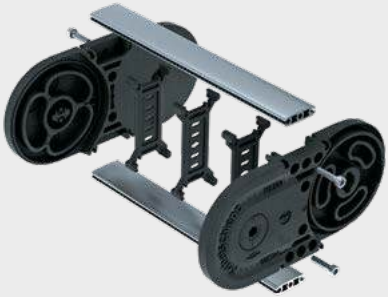
Band carriers consist of two parallel side bands which are connected with different stay and cover variants. These cable carrier types made of plastic, aluminum or steel offer more variability compared to one-part versions, even for large widths – depending on the stay variant even in a 1 mm grid and more separation options within the cable space.

This allows reliable and efficient partitioning even for complex cable configurations, including with individual hole stays. Hoses and cables with large diameters can also be accommodated and guided without problems. Closed systems provide even better protection.

One-part cable carriers

On one-part cable-carriers, the body section consists of a single component. Crossbars, lamella or covers are mounted on the cable carrier body separately or manufactured directly together with the chain link.

Our basic range comprises a variety of different product types with predefined cable carrier widths. All cable carriers combine robustness and reliability with an attractive price-performance ratio. Fast and easy installation of cables and hoses is another advantage of these cable carriers. Covered and completely enclosed product types ensure optimum protection of the cables and hoses against chips and other coarse contamination.





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BASIC-LINE

Solid plastic cable carriers with fixed widths



- Cost-effective solutions for standard applications
- Types and designs with fixed or opening crossbars
- Numerous types and designs available from stock immediately
- Fast cable laying
- Ideal for short travel lengths and high travel speeds
- Types for long travel lengths available

BASIC-LINE*PLUS*

Solid plastic cable carriers with fixed widths



- Cost-effective solutions for standard applications
- Easy pulling/pressing of the cables into the cable carrier
- Very fast cable laying
- Numerous types and designs available from stock immediately
- Ideal for short travel lengths and high travel speeds

3D-LINE

Cable carriers for 3D applications



- Ideal for maximum freedom of movement in 3D applications
- Three-dimensional swivel and rotation movements, for example on robots for use from robot base to robot wrist
- Extend the service life of cables in 3D applications through defined minimum bending radius and separation and guiding of the cables
- For extremely high tensile forces and accelerations

STEEL-LINE

Steel cable carriers for extreme applications



- Robust design for high mechanical loads
- High additional loads and extensive unsupported lengths possible
- Ideal for extreme and rough environmental conditions
- Heat-resistant

Subject to change without notice.

Cable carrier configuration | Cable carrier design

VARIO-LINE

Cable carriers with variable chain widths



- Aluminum stays available in 1 mm width sections
- Plastic stays available in 4, 8 or 16 mm width sections (depending on type)
- Easy and quick to open inside and outside
- Light, extremely robust or linkless series
- Cable carriers for complex applications

TUBES-PLASTIC

Covered solid plastic and hybrid cable carriers



- Covered cable carriers with plastic or aluminum cover systems
- Aluminum cover systems in 1 mm width sections
- To protect cables and hoses against chips or dirt
- Easy and quick to open inside and outside

TUBES-STEEL

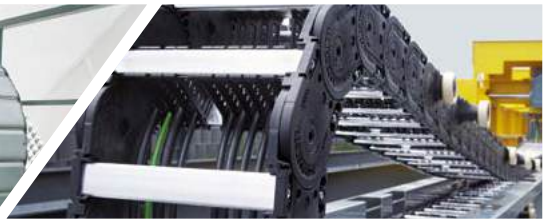
Covered steel cable carriers for extreme applications



- Robust design for high mechanical loads
- High additional loads and extensive unsupported lengths possible
- Ideal for extreme and rough environmental conditions
- Heat-resistant

ACCESSORIES

for cable carriers



Our extensive range of accessories for a variety of different applications turn cable carriers into complete cable carrier systems. In addition to chutes and channels, support elements and guiding elements, we offer application-specific products such as driver connections or opening tools.

Subject to change without notice.

1.2 Pitch and inner height as characteristic parameters for cable carriers

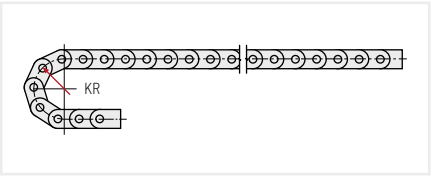
Pitch and inner height are essential components of application-specific solutions. Depending on the installation space of your application, these have to be configured individually. The chapter "Cable carriers" from page 14 offers an overview of the configuration options, depending on the cable carrier type.

1.3 Explanation of KR and RKR as well as KR/RKR

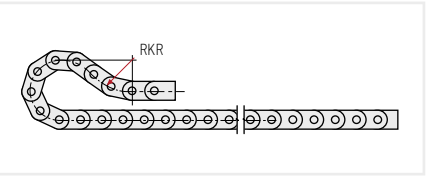
A cable carrier can be deflected at a defined bending radius (KR). A reverse bending radius (RKR) is the formation of a radius (preferably on the driver of a cable carrier) in the opposite direction to the actual KR of the remaining cable carrier. This variant is used, for example, for reducing the cable carrier overhand in the thrust end position (station length).

This version is used for gliding cable carriers with long travel lengths, among other applications. Depending on the cable carrier type, we offer standardized models with so-called GO modules. The cable carrier can also be deflected in both swivel directions (KR/RKR), e.g. for circular arrangements.

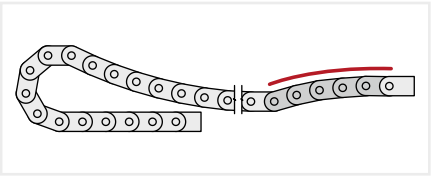
KR (bending radius)



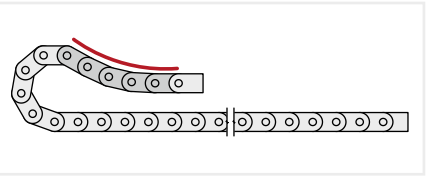
RKR (reverse bending radius)



GO module



Pull position



Push position



TSUBAKI KABELSCHLEPP technical support

If you have any questions about the configuration of cable carriers or technical details, please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

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02 Stay variants

2.1 Overview

The stay variants available for each cable carrier series can be found in the overview of the associated catalog chapter or in the "Cable carriers" chapter from page 14.



Aluminum stay RS | Hybrid cable carriers

Narrow frame stay "The standard"

» Extremely quick to open and close
» Aluminum profile bars for light to medium loads. Assembly without screws.
» Available customized in **1 mm grid**.
» **Inside/outside:** release by turning by 90°.



Aluminum stay RS 1 | Steel cable carriers

Narrow frame stay "The standard"

» Extremely quick to open and close
» Aluminum profile bars for light to medium loads. Assembly with screws.
» Available customized in **1 mm grid**.
» **Outside:** release by turning by 90°.
» **Inside:** threaded joint easy to release.



Aluminum stay RS 2 | Steel cable carriers

Frame stay narrow, bolted

» Quick to open and close.
» Aluminum profile bars for light to medium loads. Assembly with screws.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Aluminum stay RV | Hybrid cable carriers

Frame stay, reinforced

» Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
» Available customized in **1 mm grid**.
» **Outside/inside:** release by turning by 90°.

Subject to change without notice.

Cable carrier configuration | Stay variants



Aluminum stay RV | Steel cable carriers

Frame stay, reinforced

» Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay RM

Frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Aluminum stay LG

Hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit (aluminum stay LU).
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Aluminum stay RMF

Frame stay, solid with optional fixing bar

» Aluminum profile bars for heavy loads and large cable carrier widths. Simple threaded joint.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Aluminum stay RMS

Frame stay solid with ball joint

» Aluminum profile bars with plastic ball joint. Assembly without screws.
» Opening and detachable on both sides in any position.
» Available customized in 1 mm grid.
» **Inside/outside:** Opening and detachable.

Subject to change without notice.

Cable carrier configuration | Stay variants



Aluminum stay RMA

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Aluminum stay RMR

Frame rolling stay

» Aluminum profile bars with rotating plastic rolling stay for highest requirements with gentle cable guiding. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Steel stay RR

Frame stay, tube version

» Steel rolling stays with gentle cable support and plastic dividers. With plastic or steel dividers, depending on cable carrier type. Ideal for using media hoses with soft jackets. Simple threaded joint.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint detachable.



Aluminum stay RSH

Frame screw-in stay

» Aluminum profile bars for light and medium loads. Assembly without screws.
» Available customized in 1 **mm grid**.
» **Outside/inside:** release by turning.



Aluminum cover RMD | Hybrid cable carriers

Cover with hinge in the outer radius "standard"

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **1 mm grid**.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.

Subject to change without notice.

Cable carrier configuration | Stay variants



Aluminum cover RMD | Steel cable carriers

Aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» Available customized in **1 mm grid**.
» **Inside/outside:** threaded joint easy to release.



Plastic stay RE

Frame screw-in stay

» Plastic profile bars for light and medium loads. Assembly without screws.
» Available customized in **4, 8 or 16 mm grid** depending on type.
» **Outside/inside:** release by turning by 90°.



Plastic stay RE

Frame screw-in stay

» Plastic profile bars for light and medium loads. Assembly without screws.
» Available in fixed widths depending on type.
» **Outside/inside:** release by turning by 90°.



Plastic stay RD

Frame stay with hinge

» Plastic profile bars with hinge for light and medium loads. Assembly without screws.
» Available customized in **8 or 16 mm grid** depending on type.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



Plastic cover RD

Cover with hinge in the outer radius "standard"

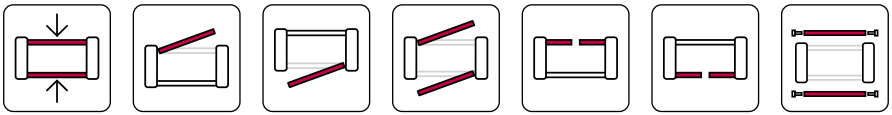
» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **8 or 16 mm grid** depending on type.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.

Subject to change without notice.

2.2 Opening options

The stays in the cable carriers can be opened in different ways, depending on the stay variant. Detailed information can be found in the overview of the stay variants from page 49 and in the respective catalog chapters for the cable carrier types.

Overview of opening principles



Cannot be opened | Opens outside | Opens inside | Opens inward/ outside | Opening slot outside | Opening slot inside | Bolted inside/ outside

2.3 Explanation of fully stayed and half-stayed

Depending on the version, a different number of stays can be mounted on the number of chain links in our cable carriers. Essentially, there are two versions:

Half-stayed (HS)



Most cable carriers are supplied half-stayed as a standard (stay of every 2nd link). This excludes closed cable carriers where no half-stayed version is available and versions where chain link and stay form a unit.

The half-stayed cable carrier versions still offer a very high level of stability thanks to a sturdy connection between the stays and the link plates. In addition to the cost advantage due to fewer components, this also results in reduced assembly time.

Fully-stayed (VS)



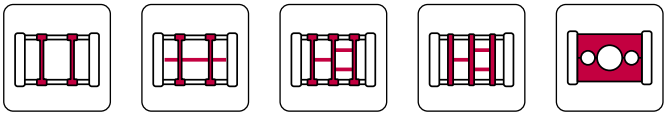
As the dividers are also mounted on every 2nd chain link as a standard, the same structure for the inner distribution as in a fully-stayed cable carrier can be used on a half-stayed version. After examination of the application at hand, we may recommend using fully-stayed cable carriers when installing very thin cables or when using very narrow cable carriers to improve side stability.

Subject to change without notice.

03 Divider systems

3.1 Overview

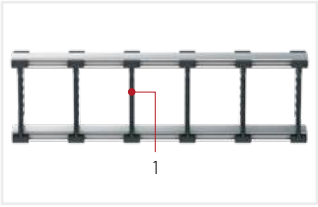
Divider and height separation serve to separate cables in the cable carrier cross section. These can be arranged evenly next to each other, on top of each other and offset.



TS0 TS1 TS2 TS3 Hole stay

As a standard, the divider system is mounted at every 2nd chain link.

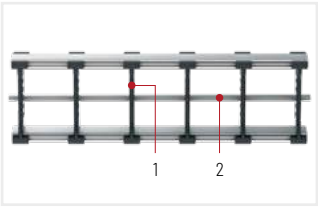
3.2 Explanation of the systems



Divider system TS0

without height separation

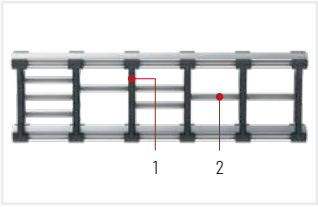
Dividers for vertical separation [1] can be installed between all types of stay variants. The efficiently separate the cables to prevent friction between different jacket materials. This provides best possible protection for cables and insulation.



Divider system TS1

with continuous height separation

In addition to the vertical separation with dividers [1], the inner height is divided into several levels with a horizontal height separation [2] across the entire inner width, systematically layer by layer. This creates order and a clear structure for multiple cables with a similar cross section.

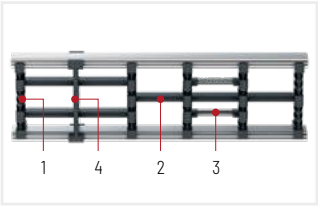


Divider system TS2

with partial height separation

This divider system allows all combinations of vertical separation with dividers [1] and partial horizontal height separation [2] made of aluminum in a 1 mm grid.

Subject to change without notice.



Divider system TS3

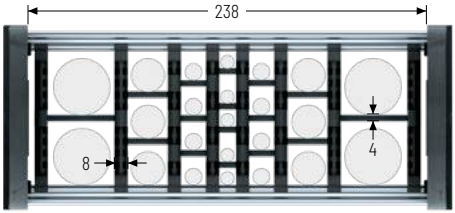
with height separation made of plastic partitions

This divider system allows all combinations of vertical separation with dividers [1] and partial horizontal partitions made of plastic [2] or optionally of aluminum [3] in a 3 mm grid. These can also be retrofitted or changed by rearranging.

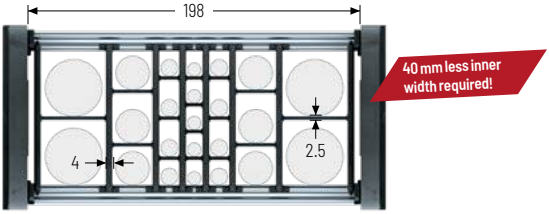
The twin divider [4] additionally provides the option of subsequent vertical separation.

Modern TS3 divider systems reduce the packaging space required for this to a minimum, providing more cable space.

Width comparison

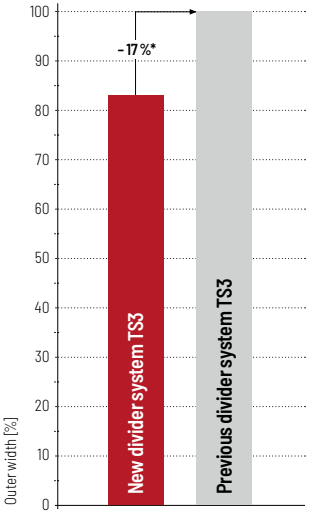


Previous divider system TS3 with stay variant RSH/RE

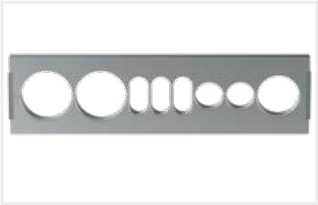


Significant space saving with same filling capacity through the new divider system TS3 with stay variant RSH/RE

Width optimization through adapted dividers



* For inner width B_i = 238 mm with stay variant RE



Cable routing with hole stays

Stay variant LG

Individually manufactured hole stays allow the inner distribution to be ideally adapted to your cables. The hole stays can be guided in the neutral bending line. Cable carriers with aluminum stays can therefore be ordered customized to the millimeter.

The hole stay system is also very easy to assemble because the cable openings are freely accessible by removing the top part.

Subject to change without notice.

04 Connection variants

4.1 Explanation of UMB, plastic end connectors and steel end connectors

Depending on the cable carrier type and specific application, we offer different end connectors for fastening your cable carrier to your plant sections.

- **Driver connection:** Fastening to moving machine or plant parts.
- **Fixed point connection:** Fastening to static machine or plant parts or the floor.



Universal end connectors (UMB), plastic

The universal end connectors (UMB) can be connected from the top, from below at the face side or – depending on the type – at the side. An accommodation for strain relief with C-rails and LineFix clamps or strain relief combs is integrated. Universal end connectors are made of solid plastic without metal bushes.



One-part end connectors, plastic

One-part end connectors made of solid plastic can be arranged on the cable carrier in different variants depending on the customer fastening. They are optionally available with integrated strain relief.



Multi-part end connectors, plastic/steel

Link plate section made of solid plastic, steel end connector. The multi-part end connectors can be connected from the top, from underneath or at the face side, depending on the type. Depending on the cable carrier type, strain reliefs with separate C-rail or strain relief comb can be integrated.

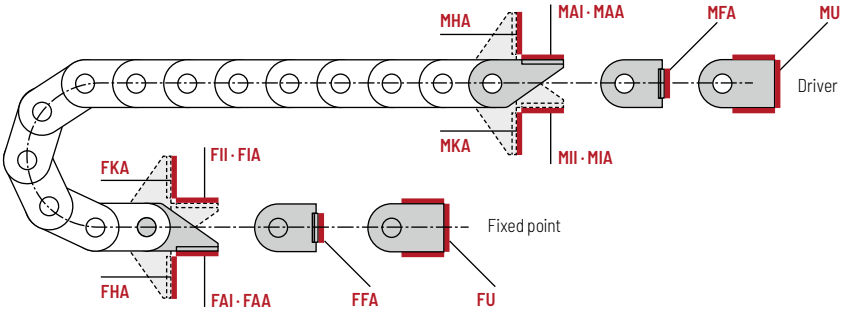


Multi-part end connectors, steel

End connectors made of steel. The multi-part end connectors can be connected from the top or from underneath, depending on the type. Depending on the cable carrier type, strain reliefs with separate C-rail can be integrated.

Subject to change without notice.

4.2 Connection variants

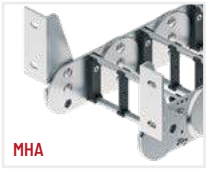














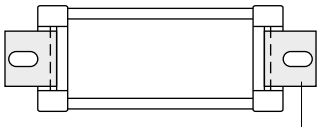




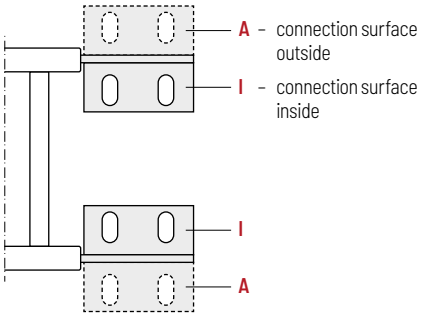
Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside
F – flange connection

Connection surface
I – connection surface inside
A – connection surface outside



F – flange connection



As a standard, the end connectors are installed with the threaded joint (connection type) to the outside and the connection surface to the inside (FAI/MAI).

Subject to change without notice.

05 Strain relief elements

5.1 Overview and explanation of strain relief options

The strain relief for the cables depends on cable type, length of the cable carrier and installation position. Depending on the cable carrier type and specific application, we offer different strain relief options.



LineFix® clamps

These clamps can be positioned next to each other with a C-rail. The C-rail is integrated into the end connector or has to be fastened separately in front of it.

Detailed information can be found in chapter Accessories from page 926..



Strain relief combs

Strain relief combs can be used to connect the cables to the existing teeth with cable ties. The strain relief combs are integrated into the end connector or have to be fastened separately in front of it.

Detailed information can be found in chapter Accessories from page 930.



SZL strain reliefs

The SZL strain reliefs hold the cables with half shells and fix them in position with detachable clamps. The C-rail is integrated into the end connector or has to be fastened separately in front of it.

Detailed information can be found in chapter Accessories from page 932.



Block clamps

Block clamps are usually used for hoses and hold these with two half shells bolted together, which can be attached to a C-rail. The C-rail is integrated into the end connector or has to be fastened separately in front of it.

Detailed information can be found in chapter Accessories from page 926..

More on the use of strain reliefs and assembly information can be found in the configuration guidelines from page 62.

Subject to change without notice.

06 Gliding elements

6.1 Use of glide shoes

We offer different solutions for a substantially extended service life of the cable carrier in case of long travel lengths in gliding operation.



Replaceable glide shoes made of plastic

The replaceable glide shoes are a very cost-efficient solution as only the glide shoes and not the complete cable carrier have to be replaced when worn. An abrasion resistant material is used for travel speeds > 2.5 m/s and high additional loads.

OFFROAD glide shoes with 80 % greater wearing volume is also available for the types M0650-M1300. We recommend their use for extreme ambient conditions (for especially abrasive substances such as sand, dust, corundum).



Slide discs

If the cable carrier is positioned so it is rotated by 90° (gliding on the outside of the side band), slide discs snapped onto the side optimize the friction and wear situation.



Molded slide runners

These ensure a long service life of the cable carrier for long travel lengths and high additional loads.

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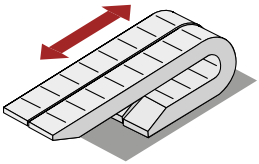
07 Multi-band cable carriers

7.1 Area of application for multi-band cable carriers



High additional loads and longest possible service lives are a challenging combination for the design engineering of cable carriers. Many applications are subject to extreme ambient conditions, requiring special solutions. If the max. permitted width or load for the cable carrier are exceeded, multi-band cable carriers are used where additional side bands are installed between the two outer side bands.

Cable carriers in multi-band design made from plastic or steel can manage significantly higher loads compared to the conventional version. The use of aluminum frame stays allows implementation of precision-fit cable carrier widths with high stability. The most common structures are three-band and four-band cable carriers.





The cable-carriers with double-band design are designed for a particularly long service life, such as the types LS/LSX1050 and MC1300. In this design, an additional side band is bolted to the existing one.

This results in maximum stability, allowing the double-band cable carrier to double its load capacity.

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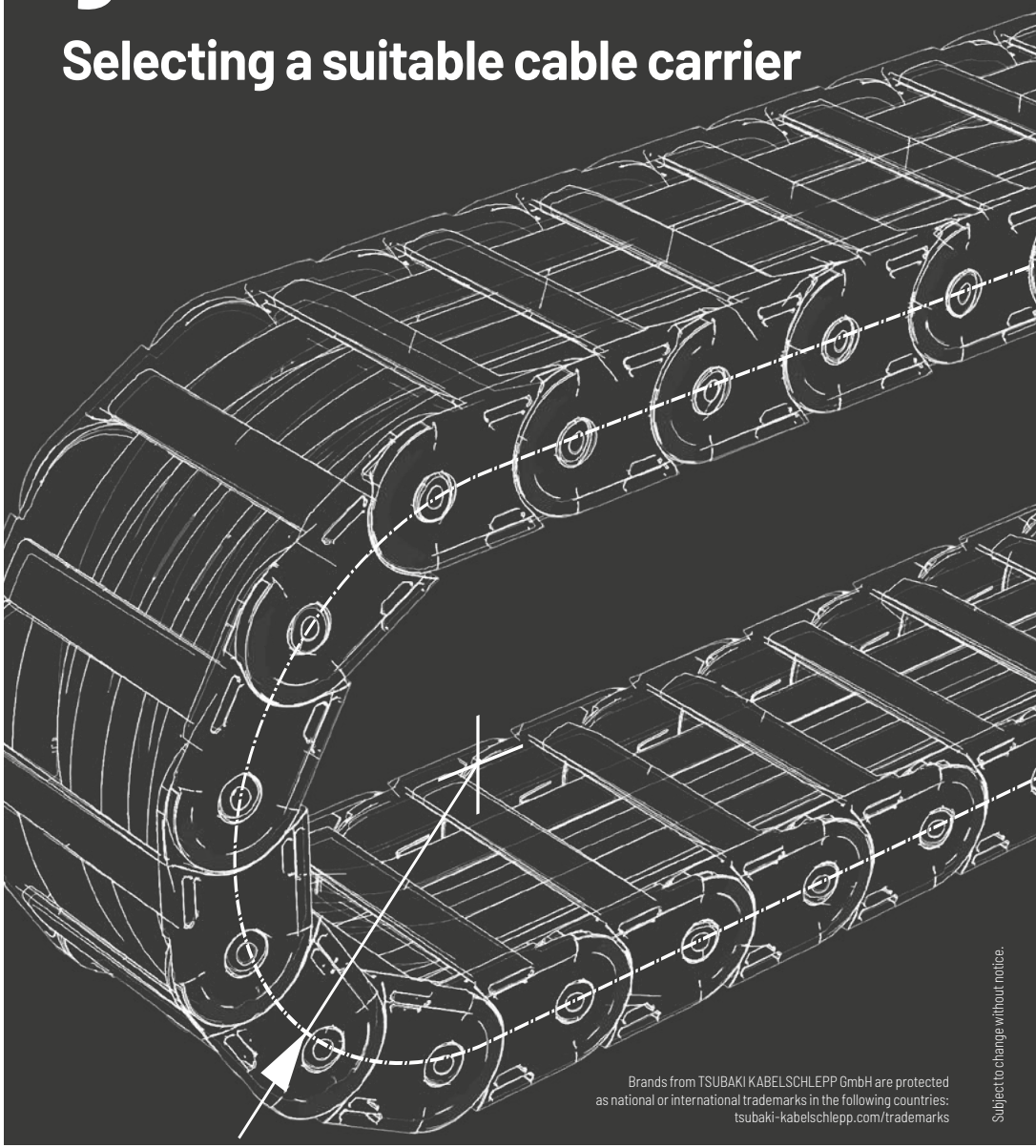
Configuration guidelines

Selecting a suitable cable carrier



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» Selecting the suitable version
» Defining the cable carrier size
» Determining the cable carrier length (L_k)
» Connection height, pretension & installation height
» Consideration of stability
» Consideration of relative displacement

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» General guidelines
» Placement of pressure hoses
» Strain relief
» Strain relief for gliding cable carriers

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» Examples for your application

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01 Selecting a suitable cable carrier

1.1 Required basic data for determination

The cable carrier is selected based on different factors which have to be considered in combination. The following parameters should therefore be already available when starting to select a cable carrier:

- **Installation of cables and hoses**
  (Number and diameters of the installed cables and hoses as well as the cable weight including media (kg/m), required minimum bending radius)
- **Dynamic parameters**
  (Travel speed, acceleration/deceleration, desired motion cycles)
- **Motion sequence**
  (For which type of motion is the cable carrier used?)
- **Installation situation**
  (How much space is available? Installation width? Installation height?)
- **Operating temperature**
- **Contamination and degree of contamination**
  (Which type of contamination? Which amount?)
- **Application-specific ambient influences**
  (e.g. chips, oil, moisture, chemicals)

1.2 Selecting a suitable version

TSUBAKI KABELSCHLEPP offers a variety of cable carriers for all areas of application. The suitable product can be roughly determined with the available basic data.

Selecting the suitable material: side bands made of steel or plastic?

In addition to the environmental conditions, the selection of the suitable material is determined by the dynamic parameters and the load on the cable carrier. Plastic cable carriers have become established in many areas of application over the years. The application should always be examined in detail beforehand, though. The following table shows the operating parameters as a configuration tool for the suitable cable carrier material:

Operating conditions	Plastic	Steel
Travel speed > 2 m/s	+	–*
Travel cycle > 1 million	+	–*
Continuous temperature		
< – 40° C	–**	+
– 40° C to +100° C	+	+
> + 100° C	–**	+
Acidic environment	–	+***
Radioactive radiation	–	+***

Operating conditions	Plastic	Steel
Vacuum	–	+***
Extremely rough operating conditions (e.g. heavy industry, mining, drilling)	•	+
Very high mechanical load	•	+

\+ very suitable
• suitable
– not suitable

* possible as custom version
** special material available
*** stainless steel version available

Our technical support can provide help for critical applications: **technik@kabelschlepp.de**

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Selecting the cable protection: open or closed cable carrier?

The selection of the suitable cable carriers can be further limited with the question whether the guided cables require additional protection (e.g. against foreign bodies) and whether a cable carrier with a cover system is practical.

The following table is a simple guideline; the exact choice should be determined after detailed examination of the specific application. In many cases, closed cable carriers are also used to hide the cables for visual reasons.

For very large accumulations of fine contamination (e.g. dust or sand), especially in combination with moisture, we advise against using the cover systems. This affects the function of the overlapping covers substantially.

Cover systems are available for steel and plastic cable carriers.

Operating conditions	Open cable carriers	Covered cable carriers
Coarse contamination (e.g. chips, metal parts, glass splinters)	•	+
Hot chips/metal spatter	–	+*
Visual protection (hiding the cables)	–	+
Very high incidence of fine contamination (e.g. sand, dust, scale)	•/+	–
Very fine contamination and moisture (e.g. moist dust)	•/+	–

\+ very suitable
• suitable
– not suitable

* Also possible as steel band cover, see page 936
Special materials for covers on plastic cable carriers possible

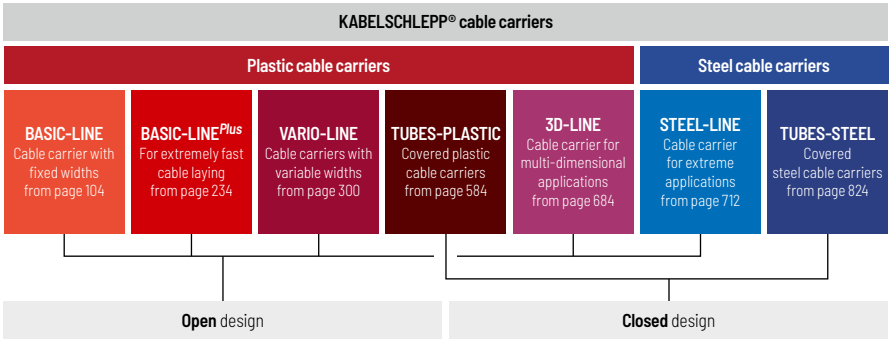


Example:
Cover system with chips



Negative example:
Cover system with high dust accumulation

According to the specification plastic/steel and open/closed, you can select the suitable cable carriers according to the following diagram in the respective catalog chapter:



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1.3 Defining the cable carrier size

The number and diameter of the cables to be installed play a major role here. Very often, the dimensions of the installation space for using a cable carrier are very limited. Both these prerequisites therefore have to be balanced.

The basic data of the cables to be installed are required for the further configuration of the cable carrier:

- Type (cable or hose)
- Outer diameter (d)
- Cable weight incl. media (q_z)
- Minimum bending radius (KR_{min})

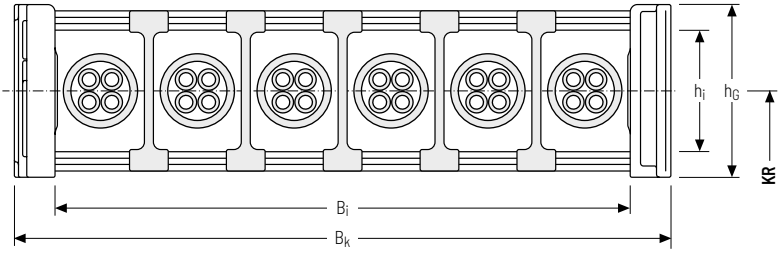
Please select a cable carrier with a sufficient inner height (see page 40). Adequate space on the side for placing the cables should also be planned for the initial configuration. They have to be arranged freely in the cross section of the cable carrier. The following minimum values for the required space apply:

Cables: 1.1 x d (for diameter d < 20 mm, minimum required space: d + 2 mm)

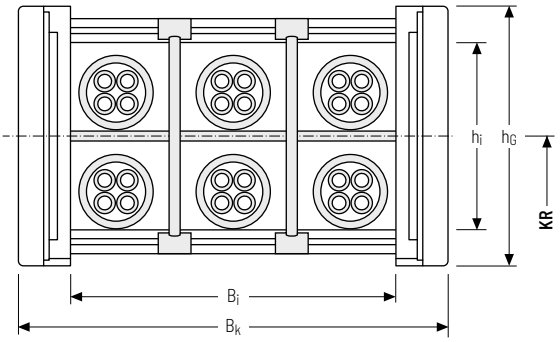
Hoses: 1.2 x d (for diameter d < 20 mm, minimum required space: d + 4 mm)

More information for installing cables can be found in chapter Placement guidelines on page 72.

The first draft for a so-called stay pattern can then look as follows, for example:



It is possible that the cable carrier becomes too wide with regard to the permitted installation dimension. In this case, a larger cable carrier can be used in combination with one of the divider systems. The placement could then look as follows, for example:



For the installation of cables in the cable carrier, please also take the selected installation variant into account (see page 76) which can have additional implications for loading the cable carrier. The different available stay variants (e.g. hole stay, tube stay) also allow different variations to suit the application.

This initial draft still has to be verified with regard to the further configuration of the cable carrier in the following (e.g. unsupported use).

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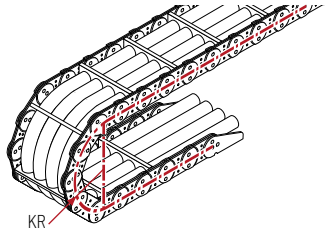
Determining the bending radius KR

The chapter for the selected cable carrier contains the sizes of the available bending radii. The selection of the bending radii depends on the cables used. The information from the cable manufacturer regarding the dynamically moving minimum bending radius have to be taken into account for this.



The selected bending radius of the cable carrier has to be equal to or greater than the largest minimum bending radius of the cables to be installed.

We recommend using KABELSCHLEPP® cables which were specially designed for use in cable carriers.

1.4 Determining the cable carrier length L_K for simple linear travel

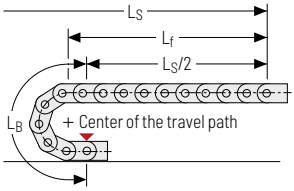
It is practical to place the fixed point connection at the center of the travel path. This provides the shortest connection between fixed and movable driver point and therefore the most economical cable carrier and cable length. Of course your cable carrier can also be installed with a fixed point outside of the center of the travel path. The calculation follows these examples:

For *fixed point at the center* of travel path L_S, the following applies for cable carrier length L_K:

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t



The length of carrier in bend L_B is determined according to the selected cable carrier type:

Type	Length of carrier in bend L_B
Plastic cable carriers	$L_B = KR \times \pi + 2 \times t$
LS/LSX series	$L_B = KR \times \pi + 2 \times t$
S/SX series	$L_B = KR \times \pi + 4 \times t$
QUANTUM® series	$L_B = KR \times \pi + 12 \times t$
TKR series	$L_B = KR \times \pi + 2...4 \times t$

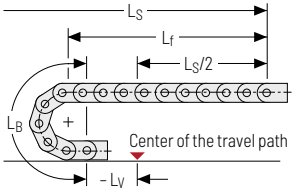
The calculated values can be found in the tables in the respective individual chapters.

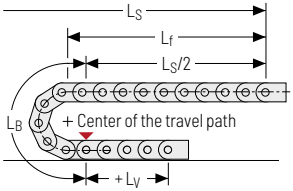
For *fixed point outside of the center* of travel path L_S, the following applies for cable carrier length L_K:

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B + |L_V|$$

Cable carrier length L_k rounded to pitch t





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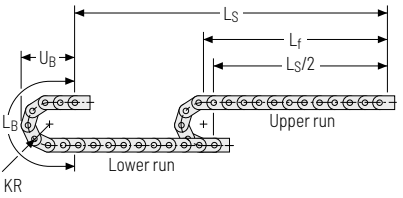
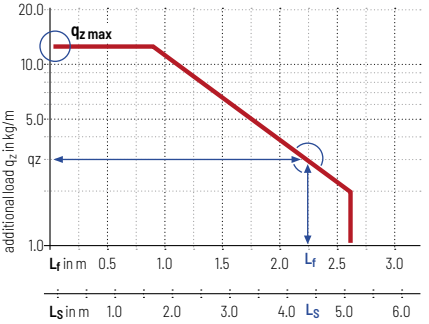
Verification of the load values for unsupported arrangement

The term "unsupported arrangement" describes the condition when the upper run moves parallel to the lower run across the entire horizontal travel length.



The unsupported arrangement is the most common use of cable carriers. The unsupported length L_f resulting from the travel length, and its load on the cable carrier is determined with the cable weight to be guided q_z from the load diagram.

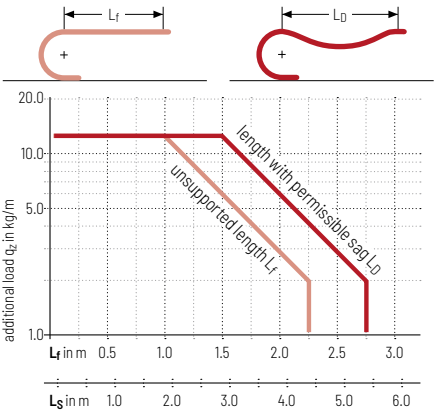
The load diagram therefore marks the area of the unsupported length L_f in which the cable carrier has no appreciable sagging or, in reverse conclusion, the maximum cable weight at which the cable carrier does not yet sag. If the travel length or the cable weight increases above the value stated in the diagram, the cable carrier starts to sag.



The specific load diagrams can be found in the individual chapters. Please note that the diagrams were determined with a specific intrinsic cable carrier weight. This means that the usable additional load can be reduced for large cable carrier widths or for cover systems.

Furthermore, the upper value q_z in the diagram indicates the maximum additional load of the cable carrier.
This value must not be exceeded.

The figure on the left shows an example for a load diagram with the most important parameters for determining the respective cable carrier load.



According to definition, the unsupported length L_f is the length at which the upper run of the cable carrier has no appreciable sag.

For steel cable carriers, sagging is not permitted as a rule. The higher flexibility of the plastic cable carriers allow a slight increase of the additional load or of the unsupported length. As a rule, we advise against this *unsupported arrangement with permitted sag* L_D for reasons of dynamics and appearance.

Increased wear of the links also has to be expected. It cannot be ruled out, however, that in individual cases a solution may have to be implemented in this way at low travel speeds. In this case, please request the corresponding values from us.

We will be happy to advise you.

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Exceeded the load diagram?

There are several options if the unsupported length of the cable carrier is exceeded:

» Selecting a more sturdy cable carrier with a longer unsupported length and higher additional load

» Using a multi-band carrier for increasing the additional load

» Supporting the upper run after the fixed point:
depending on the dynamic parameters, this arrangement can practically double the travel length. We are happy to help with configuring a suitable support structure.

» For very long travel lengths, the cable carrier has to be configured as gliding or rolling.

More information on these installation variants can be found from page 76.

The overall length of the cable carrier

The cable carrier length L_K does not include the length l_1 of the end connectors. To be able to determine the correct required cable and hose length, the value L_{EF} is required. This is calculated as follows:

Overall length cable carrier L_{EF}

$L_{EF} = L_K + l_1$ Driver connection + l_1 Fixed point connector

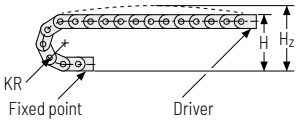
1.5 Connection height, pretension & installation height

Kabelschlepp cable carriers are manufactured with pretension as a standard in order to implement the most extensive unsupported length possible. This produces an elevation of the upper run in the area of the unsupported length and is already considered in the load diagram.

The pretension increases the installation height of the cable carrier to the total value H_z. The connection height H and the installation height H_z are determined for each cable carrier type according to the following guidelines.

Connection height H and installation height H_z for plastic cable carriers

The values for determining the connection height H can be found in the respective individual chapters. They are generally determined as follows:



Installation height H_z is also listed in the respective individual chapters as an allowance for the pretension, specifically for each cable carrier.

Type	Connection height H
Plastic cable carriers*	$H = 2\,KR + h_G$
M1300 series	$H = 2\,KR + 1{,}5\,h_G$
TKHP90 series	$H = 2\,KR + 1{,}5\,h_G$
Q040 series	$H_{min} = 2\,KR + 45$ mm
Q060 series	$H_{min} = 2\,KR + 88$ mm
Q080 series	$H_{min} = 2\,KR + 117$ mm
Q100 series	$H_{min} = 2\,KR + 143$ mm
TKR0150 series	$H = 2\,KR + 40$ mm
TKR0200 series	$H = 2\,KR + 72$ mm
TKR0370 series	$H = 2\,KR + 70$ mm
TKR0260 series	$H = 2\,KR + 88$ mm
TKR0280 series	$H = 2\,KR + 102$ mm

* not for M1300/TKHP90

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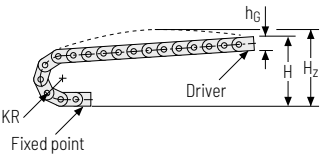
Installation height H_z for steel cable carriers

Due to the higher stability of steel cable carriers, the pretension z can already be taken into account on unsupported arrangements by slightly increasing the connection height H. This is based on the following calculation:

Connection height H for systems *without* support (unsupported)

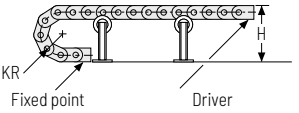
$H = 2\,KR + 1.5\,h_G$



If the unsupported length is increased with support rollers or a continuous support frame, the upper run has to be placed parallel to the support plane.

Connection height H for systems *with* support

$H = 2\,KR + h_G$



To be sure, another verification of the installation height H_z should be carried out for steel cable carriers depending on the pretension and cable carrier length. The following rule of thumb applies:

Installation height H_z

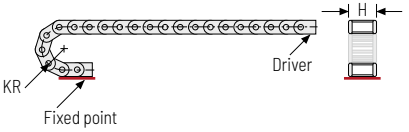
$H_z = H + z$

Pretension
$z \approx 10$ mm/m cable carrier length

For example, the installation height H_z for a cable carrier length of $L_k = 5000$ mm increases by 50 mm. Depending on the installation variant, it is still necessary to operate the cable carrier without or with reduced pretension. This is possible on almost all types.

1.6 Consideration of stability

In the tension end position, the stability of the cable carrier must be considered. For extensive unsupported lengths, the remaining small support area at the fixed point can reduce the stability for very narrow cable carriers. Accordingly, the ratio between bending radius KR and outer cable carrier width Bk should always be taken into account for dimensioning of the cable carrier.



Support area

If the outer cable carrier width on an extensive unsupported length is significantly smaller than the required bending radius, the option of a lateral support should be considered if stability seems at risk. In this case, please contact our technical support.

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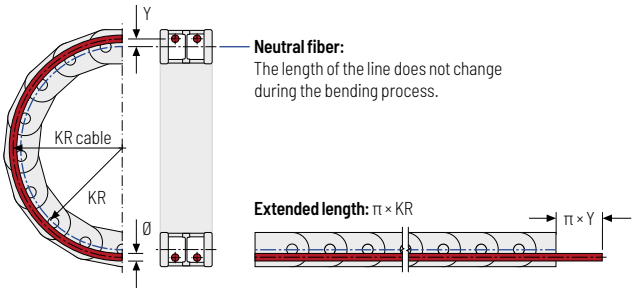
1.7 Consideration of relative displacement

An arrangement where the cables are placed next to each other and separately should be preferred. This arrangement is recommended to keep the relative displacement of the cables as low as possible.



Length of neutral fiber

$L = \pi \times KR$

Length of relat. displacement

$\Delta L = \pi \times Y$

Due to the off-center placement, the cables move in the cable carrier by the value of the relative displacement. This can cause increased cable wear on the stays.



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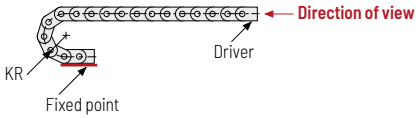
02 Placement guidelines for cables and hoses

Cable carriers are designed to protect moving energy lines and data lines which can be guided together in a variety of combinations. The following chapters list the guidelines which ensure configuration of the cable carrier system for maximum service life.

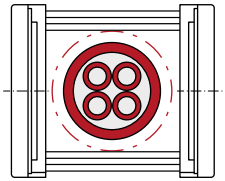
2.1 General guidelines

A "direction of view" is defined to allow a clear definition of the position of the cables in the cable carrier. For Kabelschlepp cable carriers, the view is always into the driver.



Only cables which are suitable for use in cable carriers should be used, e.g. TRAXLINE® cables.

Cables and hoses have to be able to move freely in the cable carrier. They must not be attached or tied together.



The following guide values apply for dimensioning the required clearance:

» **For round cables:**
10 % of the diameter*

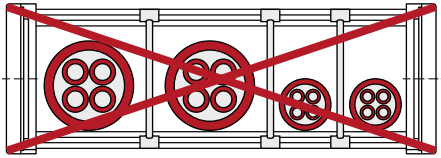
» **For flat cables:**
10 % of the cable width/thickness each

» **For hoses:**
20 % of the diameter for pressure hoses**
10 % - 20 % for unpressured/low-pressure hoses*

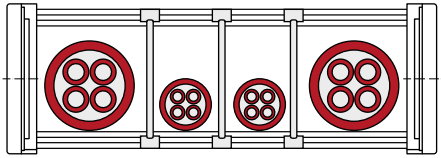
* For diameter d < 20 mm, min. space requirement: d + 2 mm
** For diameter d < 20 mm, min. space requirement: d + 4 mm

Weight distribution for installation

For the installation of cables and hoses, please ensure that the cable weight is symmetrically distributed across the width of the cable carrier. Even loading can help the cable carrier to achieve its maximum service life.



Poor weight distribution

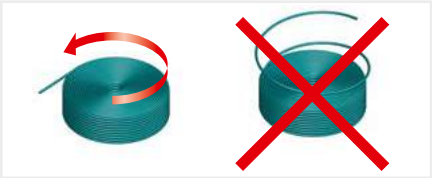


Good weight distribution

Subject to change without notice.

No cable loops

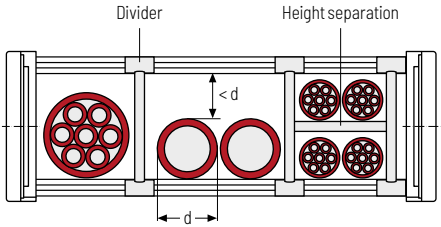
When cutting the cables for installation in the cable carrier, remove the cable from the coil tangentially and not in loops.



Do not twist cables

When cutting the cables for installation in the cable carrier, unwind the cable from the drum without twisting it.

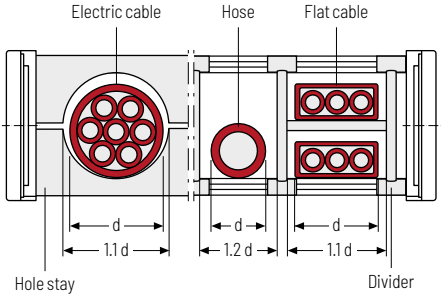




Separating multiple cables

Adjacent cables with strongly differing diameters should be separated by dividers. Directly adjacent placement of cables with strongly differing diameters has to be avoided.

If this is unavoidable, ensure that the remaining clearance height is smaller than the smallest cable diameter. This is the only way to prevent the cables from becoming tangled.

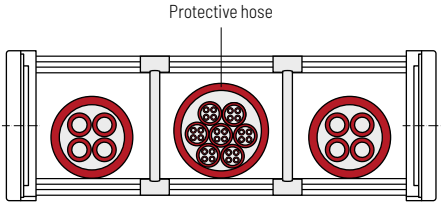


Multiple layers

When placing cables in multiple layers, we recommend installing a height separation between the individual layers for electric cables.

Individually manufactured hole stays or partitions through dividers prevent adjacent cables from rubbing against each other. In many cases, it is beneficial to place each cable in a separate chamber.

A height separation always has to be installed between multiple layers of flat cables.



Collating in protective hoses

Thin hi-flex cables with low bending strength have to be loosely bundled and sorted in a protective hose. The cross section of the protective hose has to be significantly larger than the sum of the individual cable cross sections.

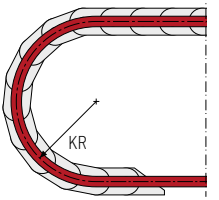
As a guideline for determining the cross section: each cable takes up approx. 10 % of its diameter as a clearance all around.

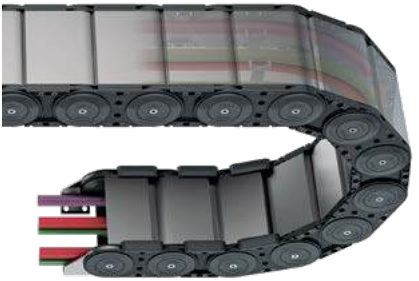
Subject to change without notice.

It always has to be ensured that the cables can run through the bending radius KR without any tensions or force.

They have to move freely lengthwise and must not exert any towing forces on the cable carrier in the bend.

For multiple layer, the cables have to be placed in such a way that they also have enough clearance between them in the cable carrier bend.



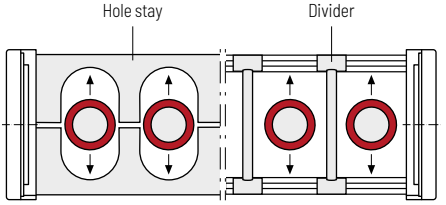


Installing cables and hoses in closed cable carriers

For large numbers of electric cables in covered cable carriers or in energy conduits, the current carrying capacity of the cables has to be configured according to the applicable standards, regulations and recommendations so that the maximum permissible temperatures for the corresponding cable materials and the cable carrier material are not exceeded.

For your configuration, please note that this is a closed system.

2.2 Placement of pressure hoses

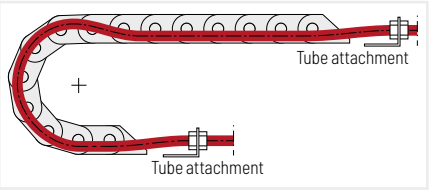


The following applies regardless of the partitioning type of the stay cross section:
Pressure hoses have to be able to move freely because they expand or contract during pressure changes!

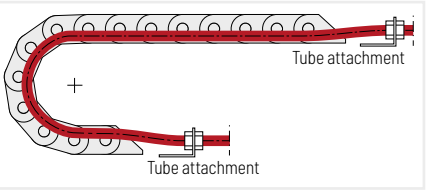
Expansion or contraction can be compensated in the bending radius area. The required clearance can be calculated depending on the proportional change (manufacturer's information).

If technically possible, we recommend placing each pressure hose in a separate chamber.

Pressure hoses are often attached to a tube directly before the driver and fixed point connection. Length differences, which result from the pressure change but also from manufacturing tolerances during installation of the hoses, can result in increased wear in the area of the bending radius.



Hose too long



Hose too short

For your configuration, please take into account a suitable length compensation for the hoses so they can run through the bending radius without tensions or force. It is often sufficient to provide a loop before the fixed point to compensate for the hose length.

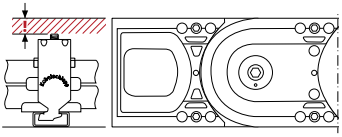
Subject to change without notice.

2.3 Strain relief

The strain relief for the cables depends on cable type, length of the cable carrier and installation variant. Generally, it has to be ensured that the retention force is applied on the largest possible area of the outer jacket so that the cables are not crushed while also preventing displacement of the cables.

» Within the **unsupported area** of the cable carrier, electric cables should preferably be equipped with a strain relief on the driver and on the fixed point. For short travel lengths and smaller cable diameters, we recommend the use of strain relief combs and cable ties for this application. LineFix clamps can also be used for larger cable carriers which use a C-rail.

» **Longer travel lengths**, which require gliding operation of the cable carrier, should also be equipped with strain relief on the driver and on the fixed point. Secure strain relief, e.g. with LineFix clamps, has to be provided especially at the driver connection where push and pull forces are present. When using the strain relief at the fixed point of a gliding cable carrier, it primarily has to be ensured that the installed height of the strain relief is significantly smaller than the chain link height h_G in order to prevent a collision. For slow travel speeds, it is often sufficient to provide fixation with a strain relief comb and cable ties on the fixed point of gliding cable carriers.



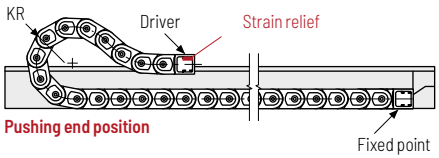
» For vertically operating cable carriers, the cables also have to be provided with a strain relief on the driver and on the fixed point. For hanging cable carriers with very long travel lengths and high cable weights, it can be practical to install a double strain relief arrangement on both sides.

» Pressure hoses which will not be bolted on in direct proximity to the driver or fixed point also have to be provided with a strain relief, in the same way as the cables. We recommend the robust block clamps for this case.

2.3.1 Strain relief for gliding cable carriers

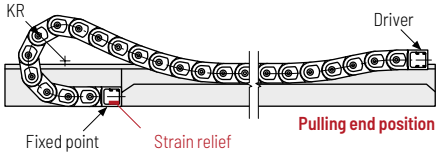
Strain relief on the driver cable carrier end

After moving the cable carrier driver (moving cable carrier end) to the **pushing end position**, the cables are provided with a strain relief at the moving cable carrier end.



Correct cable length in the cable carrier

After moving the cable carrier driver (moving cable carrier end) to the **pulling end position** of the cable carrier, the cables are checked for tension-free length in the bend and, if necessary, "fed further into the cable carrier".



Strain relief on the fixed point cable carrier end

With this tension-free "inserted length", the cables are finally provided with a strain relief at the fixed point cable carrier end.

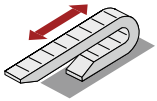
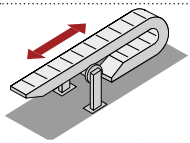
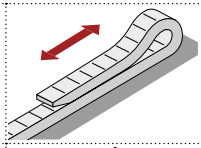
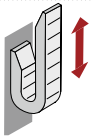
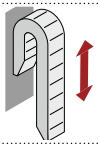
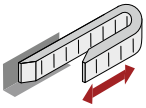
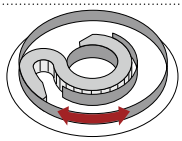
Test operation of the cable carrier: After an initial test run, check the tension-free cable routing and, if necessary, adjust the strain relief at the fixed point.



Subject to change without notice.

03 Installation variants

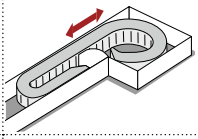
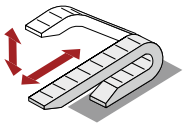
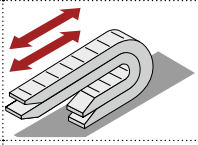
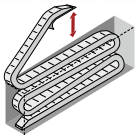
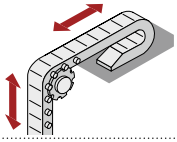
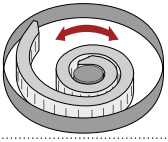
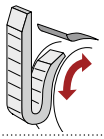
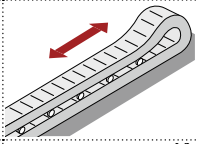
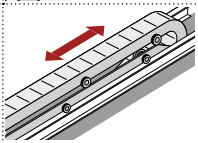
Overview of installation variants

Code	Symbol	Designation	Plastic cable carriers	Plastic tubes	Steel cable carriers	Steel tubes	Page
INV 1		Horizontal arrangement, unsupported	•	•	•	•	78
INV 2		Horizontal arrangement, with support	° / –	° / –	•	•	79
INV 3		Horizontal arrangement, gliding in guide channel	•	•	•	•	80
INV 4		Vertical arrangement, hanging	•	•	•	•	81
INV 5		Vertical arrangement, standing	•	•	•	•	82
INV 6		Horizontal arrangement, rotated 90° (straight)	•	•	°	°	83
INV 7		Horizontal arrangement, rotated 90° (circular)	°	–	°	–	85

• Standard version
° Customized
– Not possible

Subject to change without notice.

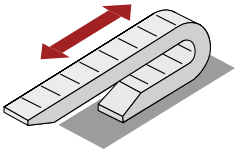
Configuration guidelines | Installation variants

Code	Symbol	Designation	Plastic cable carriers	Plastic tubes	Steel cable carriers	Steel tubes	Page
INV 8		Horizontal arrangement, rotated 90° (rolled)	•	•	○	○	87
INV 9		Horizontal-vertical combined arrangement	•	•	•	•	87
INV 10		Unsupported arrangement, nested	•	•	•	•	87
INV 11		Zig-zag arrangement	○	○	○	○	88
INV 12		Vertical arrangement, hanging with support bolt	–	–	○	○ / –	88
INV 13		Horizontal arrangement, curled	•	•	○	○ / –	89
INV 14		Vertically rotating arrangement, hanging	○	–	○	–	89
INV 15		Roller chain	•	○	–	–	89
INV 16		Arrangement with continuous support structure	○	○	○	○	90

Subject to change without notice.

INV 1

Horizontal arrangement, unsupported



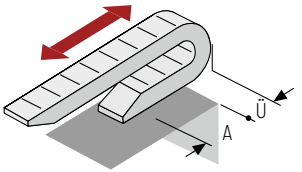
For unsupported arrangement, the driver connection of the cable carrier is attached to the movable system part and moves with it in the horizontal direction.

The upper run of the cable carrier is free, i.e. without support and without sag, parallel above the fully supported lower run.

The formulas and configuration information for this installation variant can be found in the chapter "Determining the cable carrier length L_k for simple linear travel" on page 67.

Special case

Horizontal arrangement, unsupported with overhang



The lower run of the cable carrier is not supported across the entire length. We are happy to calculate the required dimensions A + Ü for your individual application.

Please contact us for individual project planning for your specific application. We will be happy to help.



Rule of thumb

$\ddot{U}_{max} \leq \frac{L_f}{4}$



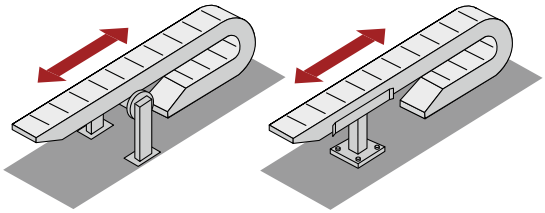
TSUBAKI KABELSCHLEPP technical support

If you have any questions about cable carriers or technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

Subject to change without notice.

INV 2

Horizontal arrangement with support



If the unsupported length of the cable carrier is exceeded, the upper run can be supported.

We recommend using the next larger type instead of a cable carrier with support(s), if the installation situation allows this.

Support for the upper run is generally possible for almost all cable carriers. The support stand used for plastic cable carriers always has to be equipped with start-up bevels. The upper run should be supported as far as possible.

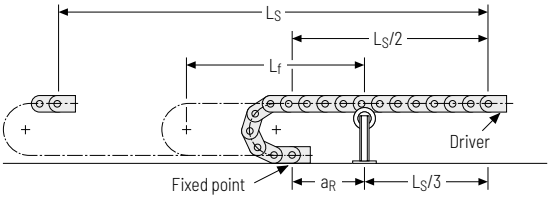
Arrangement of the support

Due to the flexible material and the potential sag, however, there are limitations on the use of supports for plastic cable carriers. The following section therefore examines the arrangement of the support for **steel cable carriers with support rollers**:

Arrangement with one support roller:

for $L_S < 3\,L_f$ $\quad a_R = \frac{L_S}{6}$

The distance of the support from the fixed point is approx. 1/6 of the travel length!

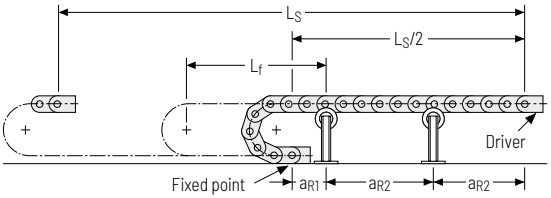


Arrangement with two support rollers:

for $L_S < 4\,L_f$ $\quad a_{R1} = 300$ mm

$a_{R2} = \frac{L_S}{4} - 150$ mm

First support 300 mm behind the fixed point, second support at the center of the remaining unsupported length!



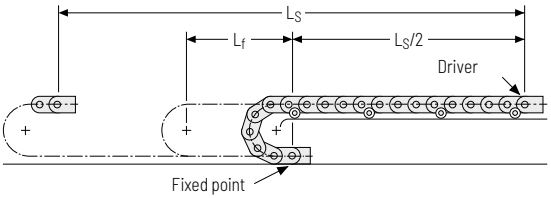
A travel speed of 1 m/s should not be exceeded. When using support rollers, the length Lf should only be 80 % of the value resulting from the load diagram, if possible.

Special version with lateral rollers:

for $L_S < 4\,L_f$

To utilize the maximum possible travel length in an unsupported arrangement with stationary support structure.

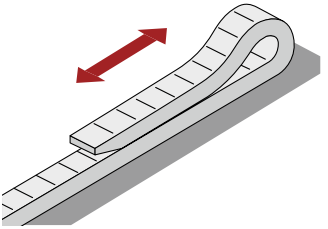
The lateral track rollers are mounted on the chain links. An even running surface has to be ensured, with a support tray provided if necessary.



Subject to change without notice.

INV 3

Horizontal arrangement, gliding in the guide channel



The upper run of the cable carrier **glides** on the lower run or on a gliding surface of the associated guide channel.

Application: For long travel lengths which cannot be implemented as unsupported arrangements.

Condition: The cable carrier must be guided in a channel, though!

Different cable carrier types provide the option of using glide shoes on the inner radius. These are manufactured from a special sliding and wear-resistant plastic. This allows the sliding friction factor to be reduced to a value of $\mu < 0.2$.

For steel cable carriers, the use of these elements is mandatory to prevent gliding of "steel on steel". The travel speed, however, should not exceed 1 m/s for gliding steel cable carriers. For steel cable carriers, the glide shoes are bolted onto the side band.

For plastic cable carriers, the glide shoes are simply clipped on the inner radius and can therefore easily be replaced if necessary.





To reduce wear and increase the service life, we recommend using the abrasion resistant glide shoes for gliding applications. For travel speeds > 2.5 m/s, however, glide shoes should always be used.

Arrangement of the cable carrier

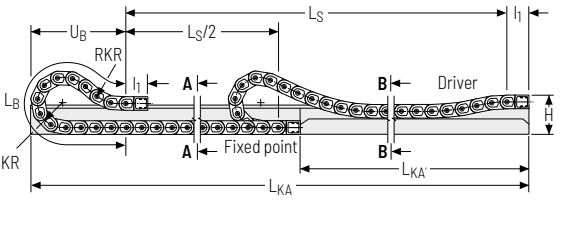
Single-sided arrangement with lowered driver connection and reverse bending radius (standard)

The cable carrier length is always calculated with the same formula as for the unsupported arrangement:

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t



For the standard arrangement of the cable carrier, the driver connection is reduced for load reasons:

Connection height H

$H = 3\ h_G$

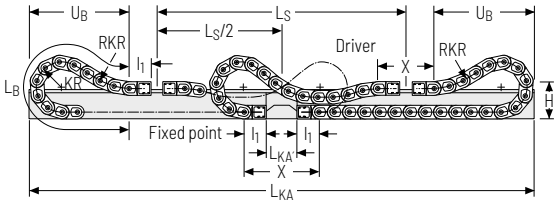
The length of carrier in bend L_B is increased by the lower driver connection and the resulting cable carrier extension. To keep this elevation of the length of carrier in bend as small as possible, chain links with reverse bending radius (RKR) are used on the driver connection as a standard. This results in a slight S-shape for the bend in the thrust end position.
The respective values for LB can be found in the respective individual chapters for the cable carriers.

Subject to change without notice.

For the configuration of this installation variant we recommend the simple way of determining the cable carrier length using our Configurator at online-engineer.de or requesting support from our support team.

Opposite arrangement with lowered driver connection and reverse bending radius

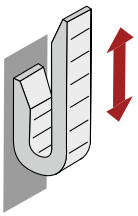
If the cable carrier is wider than the available space due to a very large number of cables, a second cable carrier can be used, running in the opposite direction. This almost halves the total width because the cables can be distributed among both cable carriers.



The cable carrier length is then determined in the same way as for single-sided arrangements. For only one moving consuming unit and a joint travel path, both cable carrier lengths have to be the same. As both cable carriers run in a guide channel, it must be ensured that they have the same outer width. More information and the details for dimensioning the guide channel can be found in chapter Support trays and guide channels on page 866.

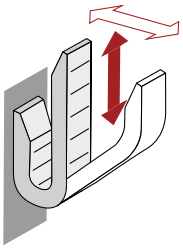
INV 4

Vertical arrangement, hanging



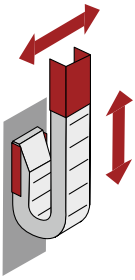
Direction of movement:
only vertical

For a purely vertical movement process, the cable carrier can be mounted without special lateral support.



Direction of movement:
vertical/horizontal combined

For a combined vertical/horizontal movement process, the cable carrier can be mounted without special lateral support.



Direction of movement:
only vertical

If the entire system moves at a right angle to and/or alongside the hanging cable carrier, an additional lateral guide has to be mounted.

Please observe the guidelines for placement of cables in cable carriers from TSUBAKI KABELSCHLEPP, s. page 72.

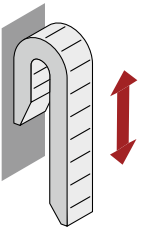
It is practical to install the cable carrier **without or with only little pretension**.
As no direct load occurs in the hanging arrangement, pretension causes the cable carrier to bulge outwards from the pretension. In addition to the visual aspect, this significantly increases the installation dimensions.

The **cables have to be fixed** to the driver and fixed point in such a way that their weight and the resulting dynamic load are absorbed only be the strain relief. Determining the cable carrier length see page 67.

Subject to change without notice.

INV 5

Vertical arrangement, standing

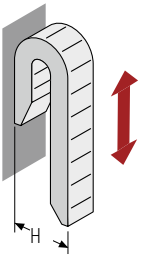


The cable carrier is mounted in such a way that parallel running of active run and passive run is ensured.

Determining the cable carrier length see page 67.

End connectors

The end connectors have to be mounted on the machine part (fixed point/driver) in such a way that the cable carrier cannot bend outwards, i.e. the connection must be **rigid**.



Connection height H

$H = 2\,KR + h_G$

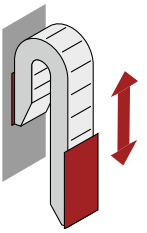
The distance between fixed point and driver connection corresponds to the selected bending radius.

Support

The cable carrier generally has to be supported on the outside at the fixed point and at the driver.

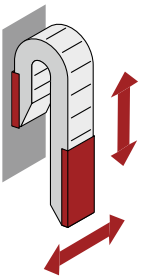
The length of the support has to be defined depending on the additional load, the fill level, the travel length and the selected cable carrier.

Depending on the version of the support, the cable carriers are very often used with a slight pretension. If a short cable carrier does not require any support and if there is sufficient installation space, the standard pretension can be used. Use without pretension may result in the cable carrier bending. This is therefore not advisable.



Direction of movement

Often, the complete unit additionally moves at a right angle to the vertical standing cable carrier. In this case, the cable carrier additionally has to be guided laterally.

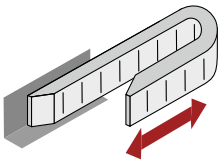


As a rule, only relatively short travel lengths can be implemented with the standing arrangement. If possible, the cable carrier should alternatively be used in a hanging arrangement. For this installation variant, the load on the overall system is significantly lower than with a standing arrangement.

Subject to change without notice.

INV 6

Horizontal arrangement, rotated 90° (straight)

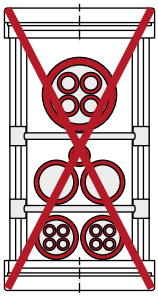


The cable carrier used in normal horizontal direction is rotated by 90°, i.e. it glides on its outside or on special slide discs on a tray or in a channel. This arrangement can be implemented with almost all cable carrier types.

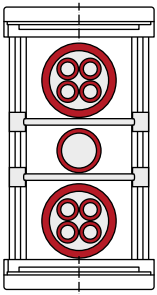
Application: Generally, cable carriers "rotated 90°" are used when the installation situation is primarily short on space with respect to height, preventing normal horizontal installation.

The installed cables have to be guided in the cross section of the cable carrier with **fixed separating elements** or in a **hole stay**, clearly separated from each other. This is the only way to prevent damage in the long run.

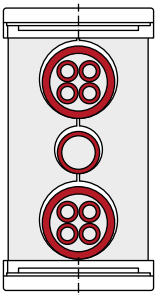
The technically best solution is the hole stay which provides the most secure guiding for the cables.



Frame stay with movable dividers



Frame stay with fixed dividers



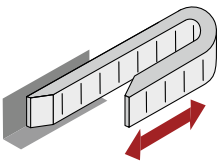
Best possible separation of cables in a hole stay

Systems for short travel lengths (with/without support)

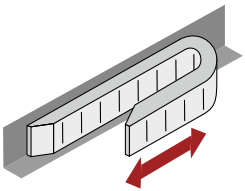
The cable carriers can be used **unsupported** in the horizontal arrangement "rotated 90°" to a limited extent. The permitted unsupported length depends on the following parameters for this installation variant as well:

- additional load q_z
- bending radius KR
- connection option
- travel length L_S
- cable carrier width B_k

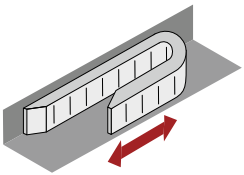
If the additional load and the unsupported length are too high, the cable carrier has to be supported on one side or overall.



System without support



System with single-sided support



System with overall support

Subject to change without notice.

System for long travel lengths (gliding in a guide channel)

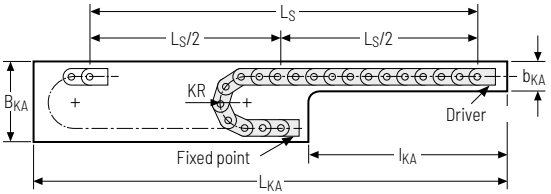
Plastic cable carriers can be used for travel lengths far over 100 m with the arrangement "rotated 90° – straight".

Over a period of more than 65 years, we have built multiple systems with the arrangement **"single-sided"** or **"opposite"** with or without special auxiliary fixtures.

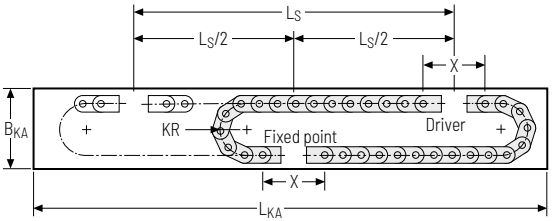
Single-sided arrangement
(with stepped guide channel)

b_{KA} = channel width of narrow section

l_{KA} = length of narrowed channel



Opposite arrangement

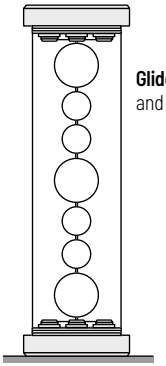


The cable carrier "rotated 90°" for long travel lengths **must** be guided in a channel. The material and texture of the channel base must be selected so they ensure low-wear travel with the lowest possible friction forces.

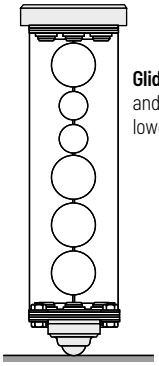
For long travel lengths, the cable carriers are used without pretension.

For **steel cable carriers**, corresponding gliding and guiding elements are mounted on the outside and/or inside of the side band, preventing grinding along the channel walls and ensuring smooth running of the system.

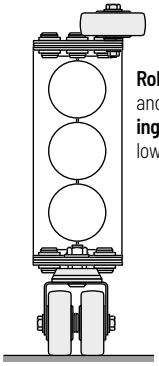
Support and guiding elements (combination examples):



Gliders on upper and lower side band



Gliders on the top and **domes** on the lower side band

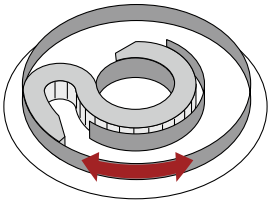


Rollers on the top and **double steering rollers** on the lower side band

Subject to change without notice.

INV 7

Horizontal arrangement, rotated 90° (circular)



For this arrangement, the cable carrier rotated 90° is connected to machine parts which carry out a circular movement.

The combination of bending radius KR and reverse bending radius RKR causes the cable carrier to move in two circular directions in a targeted and defined manner.

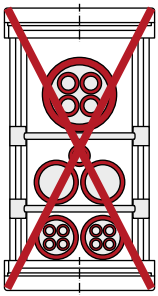
The cable carrier system is connected to the inner and outer rings of a guide channel. The rotating ring (inside or outside) is the driver connection.

Application: Generally, cable carriers in this arrangement always have to be guided in a channel. The driver can be positioned inside or outside.

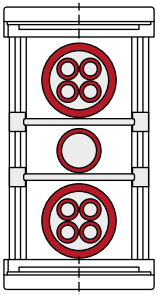
A special chain link design is required to allow the cable carrier to execute a circular movement.

The installed cables have to be guided in the cross section of the cable carrier with **fixed separating elements** or in a **hole stay**, clearly separated from each other. This is the only way to prevent damage in the long run.

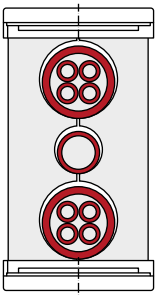
The technically best solution is the hole stay which provides the most secure guiding for the cables.



Frame stay with movable dividers



Frame stay with fixed dividers



Best possible separation of cables in a hole stay

Due to the strong relative displacement and the continuously changing radius ratios, cables should only be installed in one layer to ensure maximum service life.

For **steel cable carriers**, corresponding gliding and guiding elements are mounted on the outside and/or inside of the side band, preventing grinding along the channel walls and ensuring smooth running of the system see page 84).



TSUBAKI KABELSCHLEPP technical support

If you have any questions about cable carriers or technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

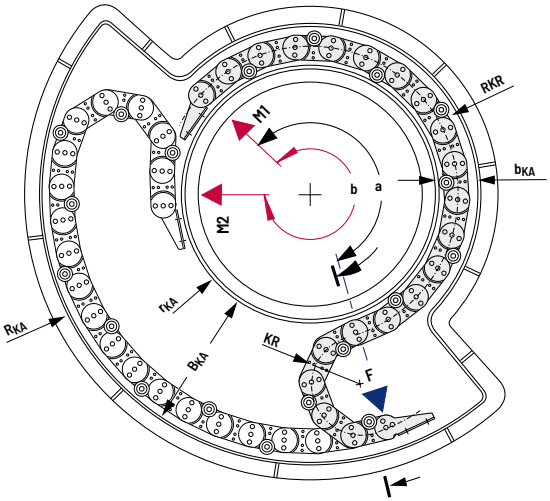
Subject to change without notice.

Configuration guidelines | Installation variants

Single-sided arrangement
with offset guide channel (schematic diagram)

The cable carrier system shown here has the driver on the inner radius. There are also frequent applications where the driver has to be positioned on the outer radius.

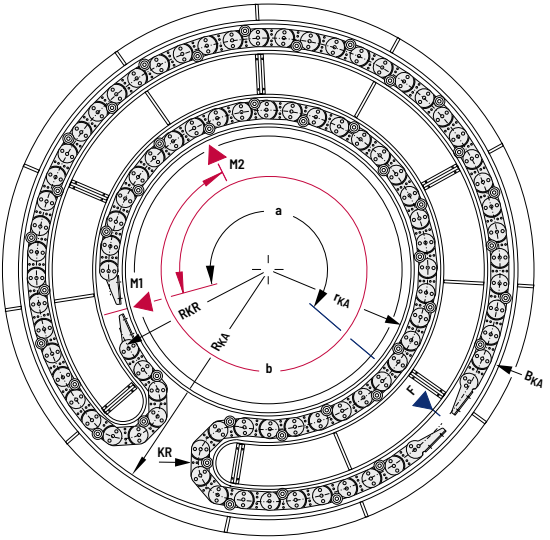
To ensure sufficient guiding of the cable carrier in this case, moving guide plates are required for larger angles of rotation. As this version is more complex, the "inside rotating circular arrangement" should be preferred.



Opposite arrangement
with guide carriage
(schematic diagram)

For opposite arrangements, a moving support fixture or a guide carriage has to be positioned in the channel due to the combination of KR and RKR.

Coupling of multiple circular systems is possible for angles of rotation over 500°.



Abbreviated symbols:

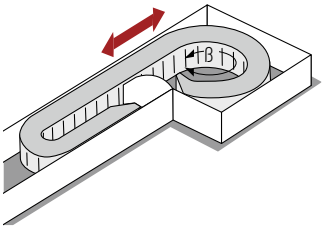
a	= fixed point angle
b	= travel length
B_E	= width of cable carrier
b_{KA}	= channel width of narrow section
B_{KA}	= channel width
H_E	= height of cable carrier
H_{KA}	= height of the guide channel
r_{KA}	= channel radius - inside
R_{KA}	= channel radius - outside
F	= fixed point
M1	= driver end position 1
M2	= driver end position 2

Due to the variety of configuration options for this installation variant, we recommend contacting our technical support. We require the following parameters for preparing a solution:

- » inner diameter
- » outer diameter
- » travel length (angle of rotation)
- » single-sided or opposite arrangement?
- » driver on inner or outer radius? (inner radius preferred for single-sided arrangement)
- » restrictions for the installation space? (e.g. installation height)
- » cable list
- » environmental conditions (e.g. chips, dirt)

Subject to change without notice.

INV 8
Horizontal arrangement, rotated 90° (rolled)

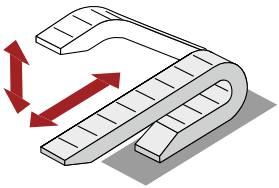


For this arrangement, the cable carrier rotated 90° is connected to a consuming unit which carries out a circular movement. The travel length "β" is indicated in degrees!

Application: The application is designed for circular movements which are wound on a rotating body. This type of cable carrier is preferred for smaller systems, usually with large movement angles.

A standard cable carrier is used. A reverse bending radius is not required. The winding of the carrier limits the angle of rotation to approx. β = 270°. For the implementation of larger angles of rotation, additional guide plates are required to prevent a collision on the driver. This application is practically a combination of installation variants 6 and 7. Accordingly, similar configuration criteria are used.

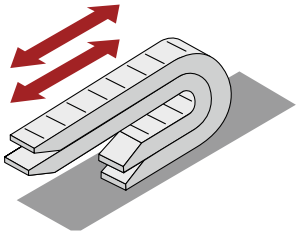
INV 9
Horizontal-vertical combined arrangement



Our cable carriers can also be used for combined horizontal/vertical movements.

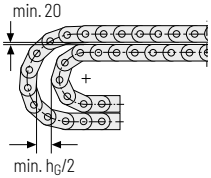
This arrangement requires no special technical preconditions, but calculation of the cable carrier length is more complex and should be carried out by our technical support.

INV 10
Unsupported arrangement, nested



This arrangement is possible for all cable carriers. If the available space do not permit installation of a cable carrier due to the required width, the system can be configured in a **nested** arrangement.

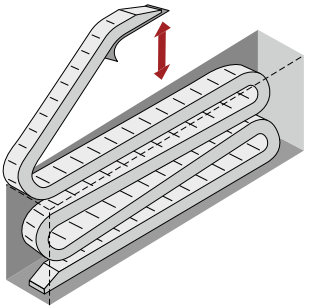
For smooth running, it has to be ensured that both cable carriers can move freely. This means sufficient distance between the upper run (min. 20 mm, depending on cable carrier type) and the carrier bends (min. half of chain link height).



For long steel cable carriers there is an option for positioning guide plates at the side band of the outer carrier to ensure alignment of the inner carrier.

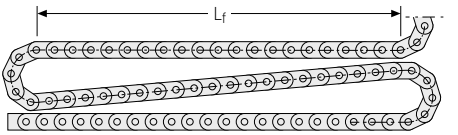
Subject to change without notice.

INV 11
Zig-zag arrangement



For some areas of application (e.g. stage and storage systems), it is often not possible to use a vertical hanging or standing cable carrier due to space restrictions. The so-called zig-zag arrangement is used in these cases.

As several bends fold on top of one another, the cable carrier has to be guided in all directions and therefore settles into a type of basket or sheet steel housing.

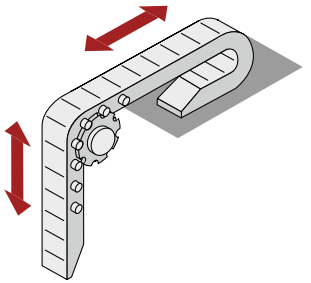


The following parameters are required for dimensioning the system:

- travel length
- travel speed
- cables installed
- minimum bending radius of guided cables
- maximum permitted height
- maximum permitted basket dimensions (length, width)

When dimensioning the basket length, ensure that the unsupported length L_f of the selected cable carrier is not exceeded. Depending on the length and weight of the cable carrier, supporting the bend on the driver with a bent plate is a measure which has a positive effect on the service life.

INV 12
Vertical arrangement, hanging with support bolt



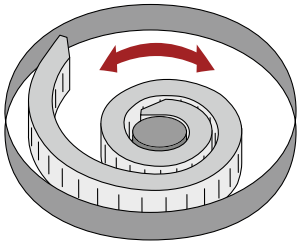
The vertical arrangement of the cable carrier with additional support elements offers the option of using the cable carrier as a lifting element for the attached system parts (e.g. operating panels, manipulators).

The cable carrier is driven via chain wheels. The pitch circle diameter has to be equal to or greater than the selected bending radius of the cable carrier. The drive is motorized or via a counterweight.

Due to the great number of configuration aspects, we would ask you to contact our technical support.

Subject to change without notice.

INV 13
Horizontal arrangement, curled

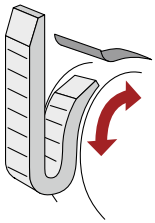


In some cases, a large angle of rotation cannot be implemented with one of the usual applications for circular movements. In these cases, an examination with regard to the options for curling up the cable carrier is recommended.

A standard cable carrier can be used, but a relatively large installation space is required for curling up the configuration.

The rotation in this application is limited by a maximum double wrapping of the inner diameter. Multiple wrappings cause the cable carrier to jam.

INV 14
Vertically rotating arrangement, hanging

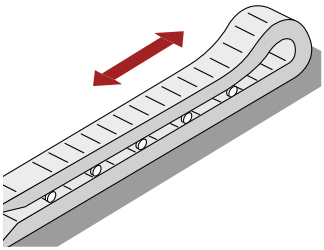


This installation variant is often used for swiveled drums and turning devices.

The part rotating around the diameter requires chain links with KR and RKR in this area.

If the angle of rotation is over 180° (depending on the arrangement), an additional guide plate is required on the outer radius to prevent the cable carrier from tipping over.

INV 15
Roller chain



Roller chains are primarily used where very long travel lengths lead to very high push and pull forces and gliding cable carriers reach their limits. The TKHP® series with integrated roller was developed for this purpose. This is a cable carrier where the design in combination with an optimized guide channel ensures 100 % roller operation over the entire travel length. This results in minimum mechanical load and a low noise level.

This makes the system suitable not only for extremely long travel lengths, but also for travel speeds of 5 m/s.

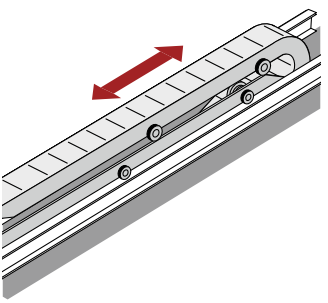
The TKHP series can be completely wound onto a reel and is therefore ideal for complete solutions with inserted cables for long travel lengths.

Dimensioning is similarly easy as for a gliding cable carrier. For effective and fast implementation, especially for large projects, we can offer our expert help.

Subject to change without notice.

INV 16

Arrangement with continuous support structure



While this installation variant is also possible for plastic cable carriers, it is primarily used for steel cable carriers.

If the technical conditions no longer permit the use of a gliding cable carrier or a cable carrier with support rollers with regard to travel length, acceleration or speed, a so-called cable carrier unit with a continuous moving support structure can be used.

Cable carrier units are particularly suitable for use with large travel lengths and high travel speeds under rough operating conditions and heavy loads. There is a variety of different versions of this installation variant. As an example, we present the most used type 225 here.

Due to the complexity, this type of cable carrier system should be dimensioned in cooperation with our engineers.

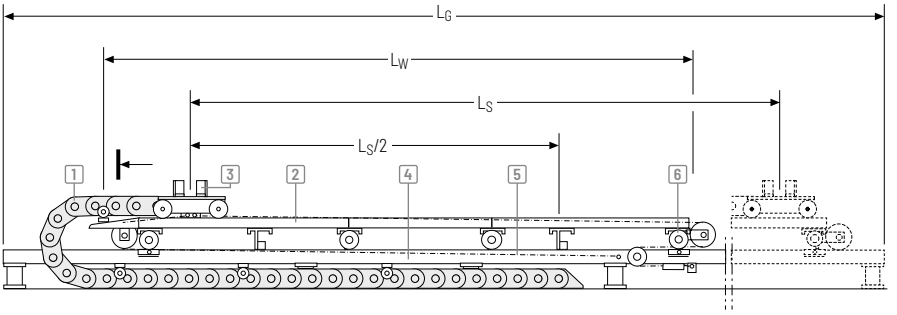
Cable carrier installation type 225

The cable carrier installation is either configured as a single-sided system with one cable carrier installation or as an opposite arrangement with two cable carriers.

A carriage guided on rollers in a running frame supports the cable carriers along their entire length. The support structure is moved in both directions with a cable pull system which is attached to the rolling carriage system. Due to the roller support and roller guiding of the cable carriers on the support carriage and of the support carriage on the running frame, only minimal friction forces are generated in the system. Systems with the following limit values have been supplied so far:

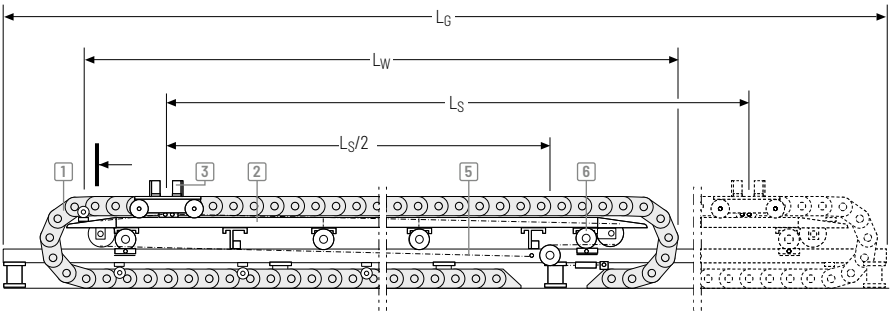
- » longest travel length: $L_{S\,max.}$ = 222 m
- » highest travel speed: v_{max} = 4 m/s
- » greatest travel acceleration: a_{max} = 8 m/s²

Single-sided arrangement
(schematic diagram)

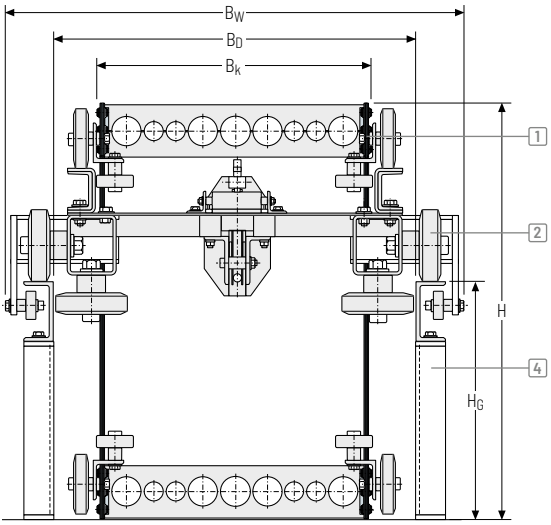


Subject to change without notice.

Opposite arrangement
(schematic diagram)



Cross section of the cable carrier installation



Abbreviated symbols:

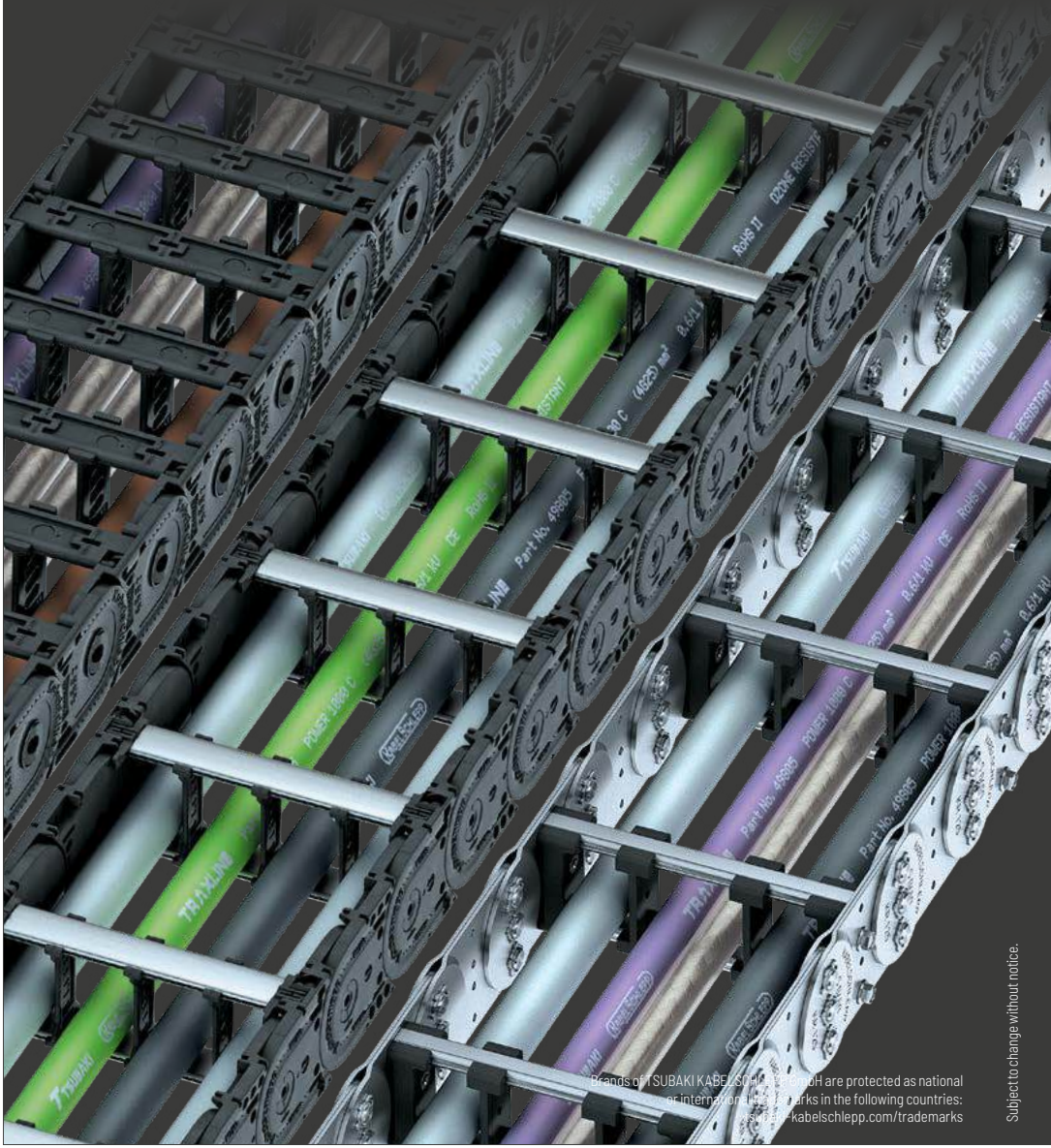
B_D = clear width in the running frame
B_G = running frame width
B_k = cable carrier width
B_W = support carriage width (max. width)
H = installation height of the cable carrier(s)
H_G = running frame height
L_G = running frame length
L_S = travel length
L_W = support carriage length

The cable carrier installation type 225 consists of the following assemblies:

1 **Cable carrier(s)** with laterally attached track rollers and guide rollers
2 **Support carriage** with track rollers and guide rollers supporting across the entire length
3 **Rolling carriage system** with track rollers and guide rollers
4 **Running frame**
5 **Steel cable**
6 **Cable tensioning roller**
7 **Tensioning device**

Subject to change without notice.

Materials information



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Content

01 **Plastics** ..... page **94**
- » Standard materials
- » Special materials
- » Material code
- » Colors
- » Chemical resistance
- » Environmental conditions

02 **Metals** ..... page **99**
- » Steel and aluminum properties
- » Area of application according to product series

03 **Application temperatures** ..... page **100**
- » Application temperatures according to material

04 **Tribology** ..... page **101**
- » Cost savings from low jacket abrasion

05 **ATEX/ESD** ..... page **102**
- » Protection against explosions
- » Conductive ESD cable carriers

Subject to change without notice.

Material selection

The composition of different materials allows customers to select the individual cable carrier for their application.

The selection of the right material is often linked to the following parameters:

- Friction values
- Friction partners
- Ambient temperature
- Robustness
- Optics
- Noise emission
- Contamination
- Humidity

01 Plastics

1.1 Standard materials

The standard plastic used for most of our product is a PA6 GF35.

This material has the best price-performance ratio, confirmed by countless internal tests and by our customers, to meet the requirements for modern cable carriers.



The use for standard products is structured as follows (information refers to the side bands and other components, see p. 95):

Series	Plastic for main components
BASIC-LINE	
MONO series	PA6 GF35
QuickTrax® series	PA6 GF35 + PA6
UNIFLEX Advanced series	PA6 GF35
TKP35 series	PA6 GF30
TKK series	PA6 GF35
BASIC-LINE*PLUS*	
EasyTrax® series	PA6 GF35 + PA6
PROTUM® series	PA6 + TPE
VARIO-LINE	
K series	PA6 GF35
UNIFLEX Advanced series	PA6 GF35

Series	Plastic for main components
VARIO-LINE	
M series	PA6 GF35
XL series	PA6 GF35
QUANTUM® series	PP
TKR series	PA66
PLASTIC-TUBES	
TKA series	PA6 GF35
MT series	PA6 GF35
XLT series	PA6 GF35
3D-LINE	
ROBOTRAX® system	POM

Subject to change without notice.

1.2 Special materials

Special materials are modified plastics which are suitable for applications outside the standard. There are different variants for a variety of different requirements. The following table can help with the selection of the correct material for the application at hand. It has to be noted that not all materials can be used in all products. Please contact us.

Plastic type	Property	Code
PA6 GF35	Standard material for common applications Performance range according to material data sheet	7422 7370
PA6.6 GF	Special material for ATEX application following ATEX Directive 2014/34/EU	7400
PA66 GF50	Standard material for UMB	7419
POM	Standard material for ROBOTRAX®	7412
PA6 GF30	Impact-strength-modified special material for use in cold environments	7488
PA46 GF30	Modified special material for use in hot temperature areas	7341
PA66 GF25	Modified special material with special requirements for fire behavior (V0)	7414
PA66 CF	Modified special material with conducting properties for voltage (ESD)	7366

1.3 Material code

Codes are assigned to each plastic to differentiate between the different plastic materials. The code has four digits and can be identified as a simplified code on most plastic components. This is embossed into the component on a material dial at the side of the chain links of the cable carrier.

Code	Coding	Material
7422	AD	PA6 GF35



Example of material dial

Subject to change without notice.

1.4 Colors

The price is always based on the colour black. In addition, there are other individual colours in our assortment, which are manufactured article-related and belong to the standard. For all other colours additional costs, minimum quantities and delivery times have to be considered.

Colours which are not included in the table are, if technically possible, individually calculated according to article and quantity. All technical values regarding stability and material properties apply only to black versions. Coloured cable carriers and articles made of special material have changed properties and are not always available in all colours for technical reasons.

	RAL-Farbbezeichnung	Code	ähnlich RAL-Nr.	Grundmaterial
	Sulfur yellow	7380	1016	7423
	Signal red	7342	3001	7423
	Ruby red	7384	3003	7423
	Traffic blue	7373	5013	7423
	Sky blue	7494	5015	7423
	Night blue	7344	5022	7423
	Turquoise green	7343	6016	7423
	Squirrel gray	7377	7000	7423
	Iron grey	7339	7011	7423
	Light Grey	7378	7035	7423
	Agate grey	7372	7038	7423
	Window gray	7497	7040	7423
	Traffic grey A	7367	7042	7423
	Traffic grey A	7495	7042	7423
	Tele grey 1	7354	7045	7423
	Signal white	7371	9003	7423
	Jet black	7336	9005	7423
	White aluminum	7397	9006	7423
	Pure Whiie	7353	9010	7423
	Traffic White	7486	9016	7423

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1.5 Chemical resistance of the standard material KS 7422

This resistance table shows that the use of plastic cable carriers is not recommended for any acidic media.

In these cases, we recommend using our proven stainless steel cable carriers!

Abbreviated symbols:

- resistant
- limited resistance
- not resistant
- soluble

GL = saturated aqueous solution

H = standard commercial grade

TR = technically pure

Medium	Mass percentage	Temperature in °C	Resistance
Acetone	TR		●
Formic acid	10		⊗
Ammonia (liquid)	TR	+70	■
Ammonia		+20	●
Petrol	H	+85	●
Benzene	H		●
Bitumen	H		●
Boric acid (aqueous)	H		●
Butyric acid (aqueous)	20		●
Calcium chloride (aqueous)	GL	+23	●
Chlorine, hydrocarbon			●
Chlorine, chlorinated water	H		⊗
Chromic acid (aqueous)	10		⊗
Diesel oil	H		●
Acetic acid (aqueous conc.)	95		⊗
Acetic acid (aqueous)	10		■
Ethanol	40		●
Ethyl acetate	TR		●
Paint and varnish			●
Grease and wax	H		●
Liquid gas (DIN 51622)			●
Hydrofluorocarbons			●
Formaldehyde and polymac.	TR		●
Formaldehyde (aqueous)	30		■
Hydraulic oil	H		●
Potash lye	10		●
Potassium chloride (aqueous)	10		●
Potassium nitrate (aqueous)	10		●
Methyl acetate	TR		●
Milk	H		●
Lactic acid (aqueous)	10		●
Lactic acid	90		⊗
Mineral oil	H		●
Sodium carbonate (aqueous)	10		●
Oil/cooking oil, lubricating oil	H		●
Oleic acid	H		●
Paraffin, paraffin oil	H		●
Polyester resin	H		●
Propane, propene	TR		●
Mercury	TR		●
Hydrochloric acid (aqueous)	> 20		⬢
Hydrochloric acid	2		⊗
Lubricant, cooking grease	H		●
Vaseline	H		●
Tartartic acid (aqueous)	10		●
Tartartic acid	50		■
Xylene	TR		●
Sulfuric acid	98		⬢

More information on request.

Please contact us!

Subject to change without notice.

1.6 Ambient conditions for standard materials



Weather

The plastic used by TSUBAKI KABELSCHLEPP is ideal for outdoor use. The mechanical properties of the cable carriers are not affected.

7422 is UV resistant!



Radiation resistance

Depending on the intensity, plastic cable carriers can also be used conditionally under the influence of radioactive radiation. If possible, we recommend the use of steel cable carriers.

Please consult us in any case!



Burning behavior

The plastic used by TSUBAKI KABELSCHLEPP was tested as per UL 94.

More information on request. **Please contact us!**

1.7 Ambient conditions for special purpose materials



High-temperature resistance

Our special purpose material 7341 is high-temperature resistant and therefore ideal for use in high-temperature areas. Please contact us, as not all special purpose materials are available for all cable carrier types and temperature ranges.

More information on request. **Please contact us!**

Thermal properties	Permissible temperature range
Continuous ambient temperature	+20 to +150 °C
Up to max. 5000 hours	up to +185 °C
Short-term	up to +285 °C



Cold store resistance

Our special purpose material 7488 is low-temperature resistant and therefore ideal for use in cold stores and extremely low temperatures.

More information on request. **Please contact us!**

Thermal properties	Permissible temperature range
Continuous ambient temperature	-50 to +40 °C

These cable carriers can only be manufactured in the color yellowish/white (transparent).

Subject to change without notice.

02 Metals

2.1 Steel and aluminum properties

Type	Use	Code
Steel		
Galvanized steel	All applications which do not require any special corrosion protection, especially for general machinery and plants, as well as in areas of application where plastic cable carriers are not permitted due to their load capacity, strain, elasticity and ambient conditions (link plates, channel parts, connecting elements, connections, etc.)	St vz
Hardened steel, black coated		Sb
Stainless steel similar to 1.4301; AISI304	Same areas of application as galvanized steel, but with special requirements for corrosion resistance (link plates, channel parts, connecting elements, connections)	ER1
Stainless steel similar to 1.4571; 1.4404; AISI316Ti; AISI316L	Same areas of application such as galvanized steel, but with special suitability for ambient conditions with salt concentration, e.g.: ports, food compatibility (link plates, channel parts, connecting elements, connections)	ER 1S
Stainless steel similar to 1.4462; 318LN	High strength for applications in the chemical and petrochemical industry, offshore, textile industry, cellulose production, dyeworks, paint industry, synthetic resin industry, rubber industry, shipbuilding	ER 2
Light alloy		
Aluminum alloy	Perfect gliding partner for cables and hoses, very good cold resistance and salt-water resistance (stays, hole stays, height separations)	Al

2.2 Area of application according to product series

Some products and product groups consist of a variety of different materials. The use for the metals is structured as follows (information refers to the side bands and other components):

Series	Main metal components
STEEL-LINE	
LS series	Sb
LSX series	ER1
S series	St vz
SX series	ER1, ER1S, ER2
Metal stays, covers	Al

Subject to change without notice.

03 Application temperatures

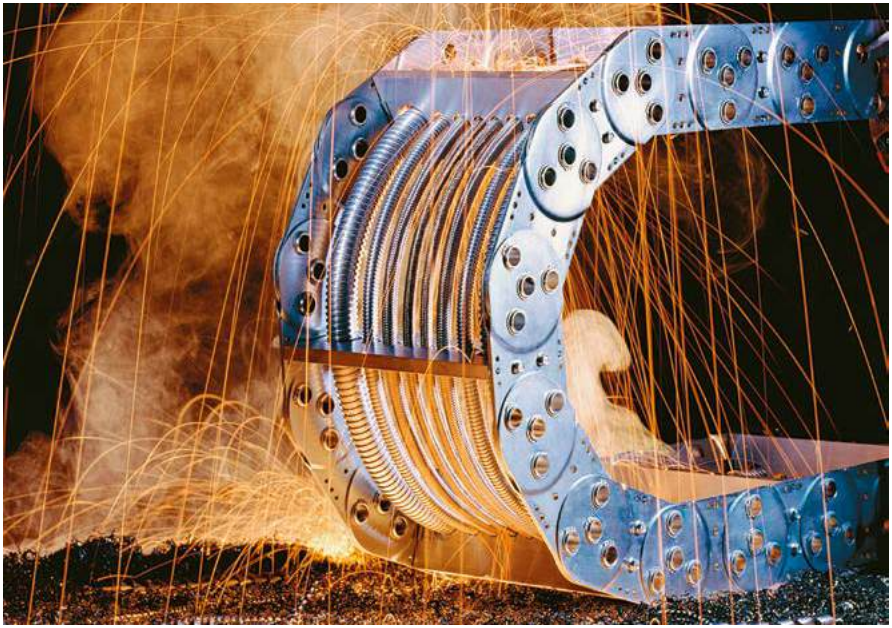
Our materials have different application temperatures. The following table shows the application temperatures for the most frequently used materials.

Material	Upper continuous application temperature	Lower continuous application temperature
PA6 GF35	+100 °C	– 30 °C
Galvanized steel	+210 °C	– 40 °C
ER1	+500 °C	– 80 °C
ER1S	+550 °C	– 80 °C
ER2	+250 °C	-100 °C
Aluminum	+140 °C	– 80 °C



TSUBAKI KABELSCHLEPP technical support

If you have any questions about cable carriers or technical details, please contact our technical support at technik@kabelschlepp.de. We will be happy to help you.



Subject to change without notice.

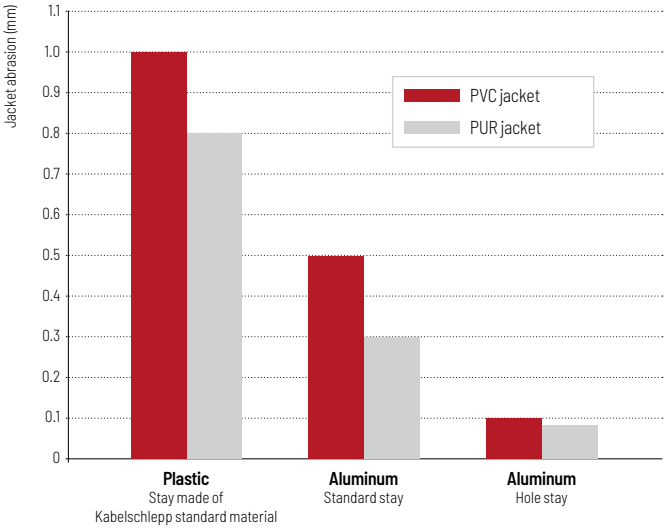
04 Tribology

Low jacket abrasion is an essential prerequisite for a long service life of the cables in a cable carrier. In addition to the jacket material, the stay material as the support surface for the cables affects jacket abrasion. We have analyzed the abrasion on different cables with different stay materials in extensive tests.

Aluminum stays proved to be a gentle support for the cable jackets. This result does not depend on the cable manufacturer and applies to all jacket materials tested. Jacket abrasion is of minor importance for many standard applications. Simple solid plastic cable carriers from BASIC-LINE and BASIC-LINE*PLUS* can be used without problems in these cases.

For more challenging applications with large relative movements between stay and cable, the outer cable jacket is subject to a high level of wear through abrasion. In these cases, we recommend using cable carriers with aluminum stays to increase the service life of the cables.

Save costs through lower jacket abrasion on cables



Abrasion from 3 million movement cycles and a relative displacement between stay and cable of 10 mm.

In addition to reducing abrasion, aluminum is ideal as a stay material due to its high strength and low intrinsic weight. Cable carrier widths up to 1000 mm can be achieved without putting special strain on the cable carrier through additional weight.



Subject to change without notice.

05 ATEX / ESD

5.1 Protection against explosions

The Atex 2014/34/EU is the applicable EU explosion protection directive which must be fulfilled by devices and protection systems for use in explosive atmospheres. This also requires the prevention of explosive electrostatic discharge (ESD).

One method for preventing explosive ESD is a sufficiently low surface resistance of the affected component. Low surface resistance of a material acts like an electric short circuit and leads to a charge compensation of charged surfaces. This means that no explosion can be triggered in an explosive atmosphere.

Our special material 7400 was tested and certified by the National Metrology Institute of Germany (PTB) in Braunschweig. The surface resistance of less than 10^6 Ω is clearly below the maximum limit value of 10^9 Ω required in applicable regulations. This means that this material can be used for all devices and protection systems in explosive atmospheres without limitations.

Please contact us if you require KABELSCHLEPP cable carriers for use in explosive atmospheres. In addition to competent advice, we can provide you with all documentation required by the ATEX Directive, such as Declaration of Conformity, operating instructions, etc.



Our explosion-protected cable carriers can be used for all devices which are covered by the ATEX Directive 2014/34/EU.

5.2 Conductive ESD cable carriers

Electrostatic discharge (ESD) is a hazard when manufacturing and processing electronic components. If no adequate protection is provided, damage can occur. The requirements for materials, tools and therefore also cable carriers are defined in the ESD standard DIN EN 61340.

Our proven ESD cable carriers, which are made of our special material 7366, meet the requirements of the ESD standards with regard to conductance and resistance behavior.

Increasing miniaturization for semiconductor components leads to greater ESD sensitivity and therefore requires better ESD protection.

This requires a lower surface resistance of the plastic cable carriers used for handling and assembly.



Our ESD cable carriers meet the requirements of the ESD standards DIN EN 61340-5-1 and DIN EN 61340-5-2.



Subject to change without notice.

Low surface resistance through nanotubes

Our ESD material is modified through nano technology and equipped with carbon nanotubes, among other things.

Carbon nanotubes are used as a functional filler. Due to their graphitic surface structure they have a high electric conductance. Cable carriers made from this material have a surface resistance of ≤ 10^5 Ω which far exceeds the values required by the ESD standard.

Carbon nanotubes have a diameter of only a few nanometers and a length of up to a few millimeters.

Cable carriers with nanotubes

- Low surface resistance: ≤ 10^5 Ω
- Significantly exceed the values required by the ESD standard
- Areas of application: chip handling, semiconductor manufacturing, electronics manufacturing, solar technology

Higher conductance of the complete cable carrier

The large specific surface and the extremely even distribution of the nanotubes in the material achieves good conductance even at the contact points between the chain links and therefore across the entire cable carrier length. A resistance of ≤ 10^5 Ω was measured on a KABELSCHLEPP cable carrier of type UA 1455.030.078.052 with a length of 88 links (= 4 m).

Quality with factory certificate

Each ESD cable carrier with nanotubes technology is supplied with a KABELSCHLEPP factory certificate to certify its quality.

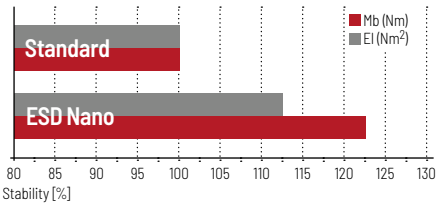


High stability

The modification of the fiberglass-reinforced material with nanotubes makes the cable carriers even sturdier.

The nanotubes have a sixth of the weight of steel but their tensile strength is multiple times higher.

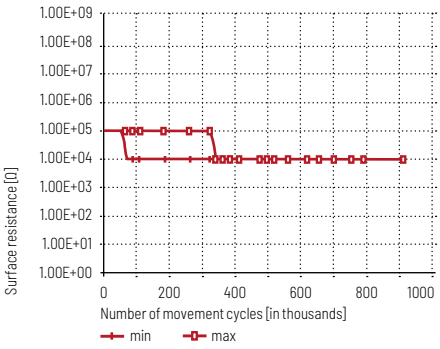
This also increases the mechanical properties while retaining the high elasticity of the cable carriers made of ESD material. This effect is also applied successfully in numerous sports equipment, e.g. tennis rackets, bicycles and golf clubs.



High conductance even after one hundred thousand movement cycles

The test shows that the surface resistance of the complete cable carrier decreases during the running-in phase and then remains constant at 10 k Ω.

Surface resistance
ET UA 1455.030.078.052-4004 with ESD material



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BASIC-LINE

Solid plastic cable carriers with fixed chain widths

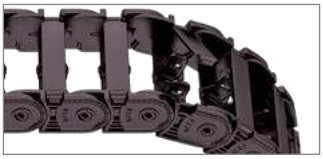
The BASIC LINE comprises a variety of different product types with pre-defined cable carrier widths. All combine robustness and reliability with an attractive price-performance ratio. Fast and easy installation of cables and hoses is another distinguishing feature of these cable carriers.

- » Cost-effective solutions for standard applications
- » Types and designs with fixed or opening crossbars
- » Numerous types and designs available immediately from our warehouse
- » Fast installation of cables and hoses
- » Ideal for short travel lengths and high travel speeds
- » Types for long travel lengths available



MONO series ..... Page **106**

Cable carriers for standard applications



QuickTrax® series ..... Page **126**

Compact and cost-effective cable carriers in two-component technology



UNIFLEX Advanced series ..... Page **144**

Light, quiet all-rounder with a wide range of applications

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration. Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!





TKP35 series ..... Page **214**

Robust all-rounder with variable inner distribution



TKK series ..... Page **224**

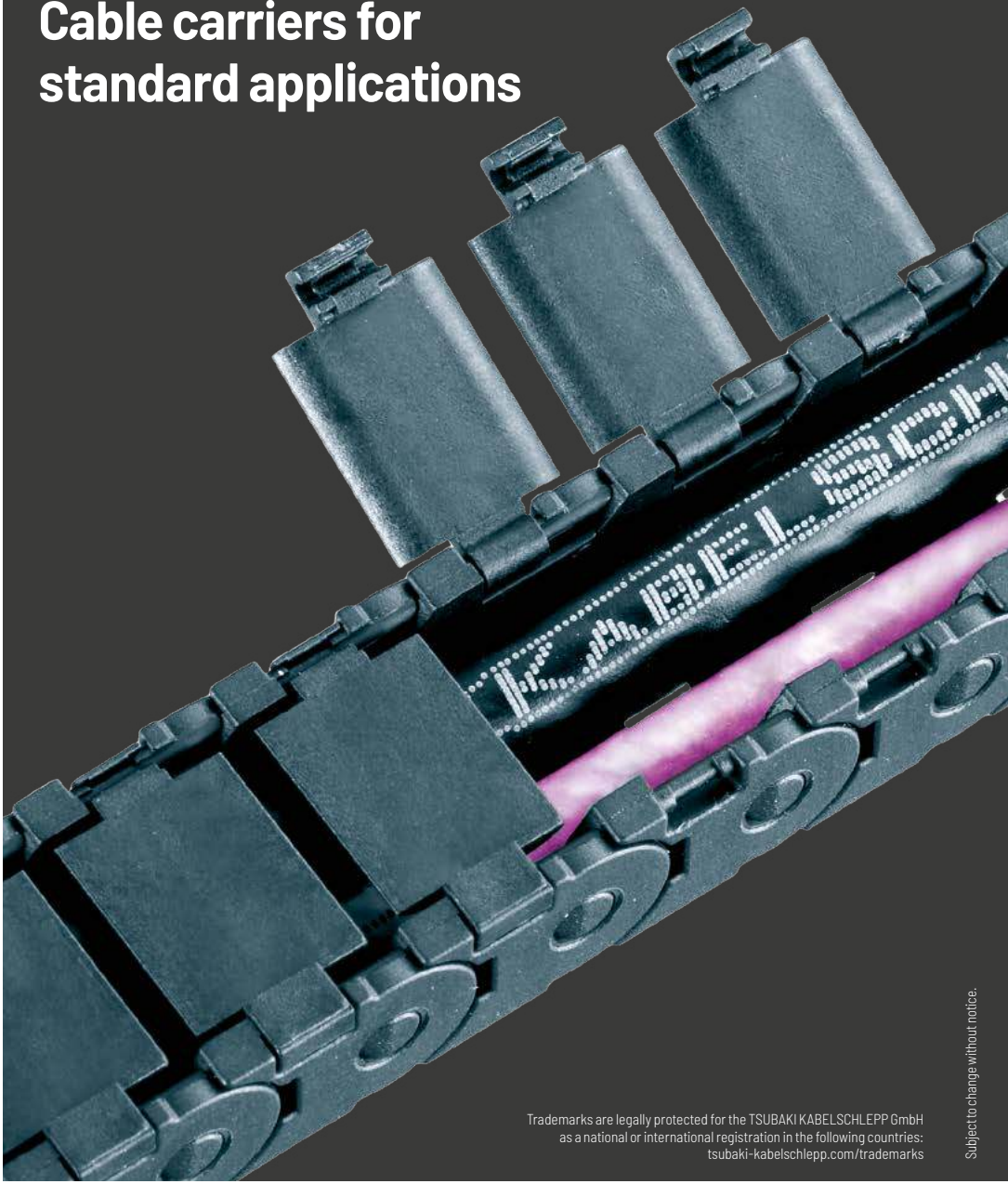
Dirt-repellent cabel carriers made of plastic

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

MONO series

Cable carriers for standard applications



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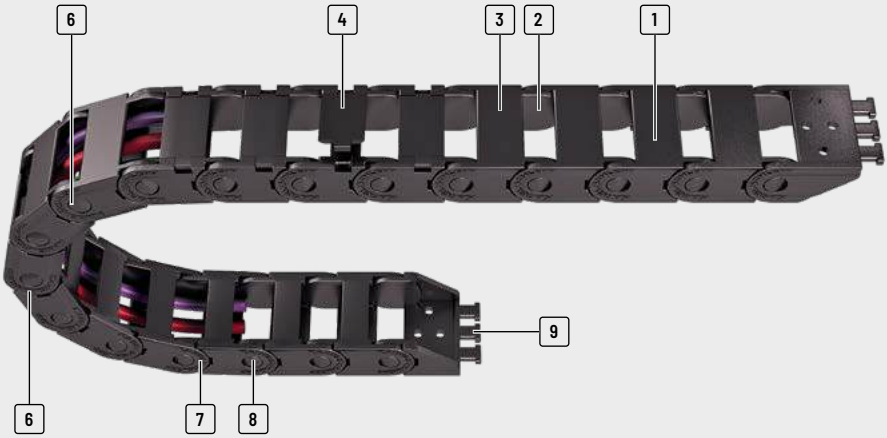


1 Plastic chain links
2 Inside space is gentle on the cables – no interfering edges
3 Types with single-part links
4 Types with opening crossbars
5 High torsional rigidity through large link surface
6 Extensive unsupported length and high additional loads through optimised stroke system
7 Easy to shorten and extend
8 Long service life through large bolt hole connection
9 End connectors with integrated strain relief

Features

- » Cost-effective cable carrier
- » Easy and fast installation
- » Many types available immediately ex-stock world wide
- » Long service life
- » Great unsupported lengths compared to the unit size
- » High torsional rigidity
- » Easy to install





Small types for narrow installation spaces



Fast shortening/extending with push-to-connect chain links



Different connection variants through simple reconnecting of the end connectors

Subject to change without notice.

MONO series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
MONO 0130/..32/..34											
		0132	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
		0130	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
		0134	10	12.5	6 – 20	12 – 26	–	13	20 – 37	0.5	8
MONO 0180/..82/..84											
		0182	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
		0180	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
		0184	15	18	10 – 40	18 – 48	–	18	28 – 50	1	12
MONO 0202											
		0202	11	15	6 – 20	13 – 27	–	20	18 – 50	1.25	8.5

Subject to change without notice.

MONO series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1.15	10	50	40	3	30	–	–	–	–	•	•	–	112
1.15	10	50	40	3	30	–	–	–	–	•	•	–	113
1.15	10	50	–	–	–	–	–	–	–	•	•	–	114
1.5	10	50	70	3	30	–	–	–	–	•	•	–	118
1.5	10	50	70	3	30	–	–	–	–	•	•	–	119
1.5	10	50	–	–	–	–	–	–	–	•	•	–	120
1.95	10	50	70	3	30	–	–	–	–	•	•	•	124

Subject to change without notice.

0130/..32/..34

Pitch
13 mm

Inner height
10 mm

Inner widths
6 – 20 mm

Bending radii
20 – 37 mm

Types



Type 0132 page 112

Closed frame (design 020)
» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.



Type 0130 page 113

Frame with outside opening crossbars (design 030)
» Weight optimised plastic frame with high torsional rigidity.
» Openable at any position.
» **Outside:** openable.



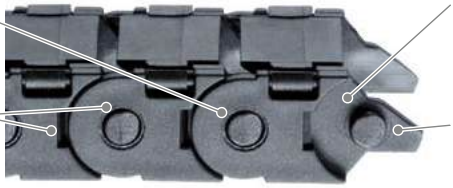
Type 0134 page 114

Frame with inside opening crossbars (design 040)
» Weight optimised plastic frame with high torsional rigidity.
» Openable at any position.
» **Inside:** openable.

Optimised cable carrier geometry:

Easy to shorten and extend

Long service life through large bolt hole connection

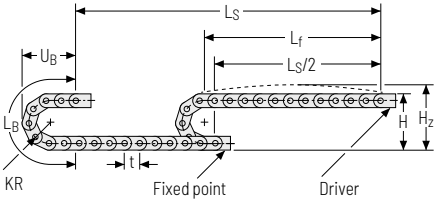


High torsional rigidity through large link surface

Extensive unsupported length and high additional loads through optimised stroke system

Subject to change without notice.

Unsupported arrangement

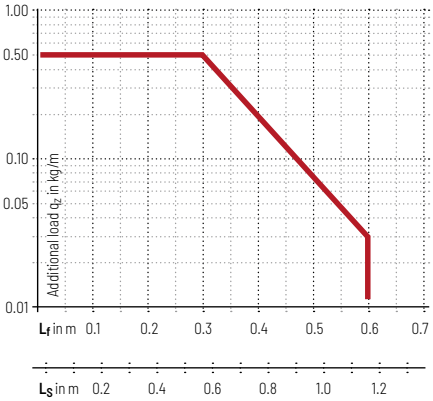


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
20	52.5	62.5	89	40
28	68.5	78.5	114	48
37	86.5	96.5	142	57

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.16 kg/m with B_i 15 mm. For other inner widths, the maximum additional load changes.



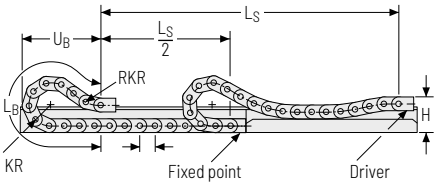
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.15 m

Additional load
up to 0.5 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 40 m

Additional load
up to 0.5 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only designs 020 and 030 can be used for a gliding arrangement.

Subject to change without notice.

0132 | Dimensions · Technical data

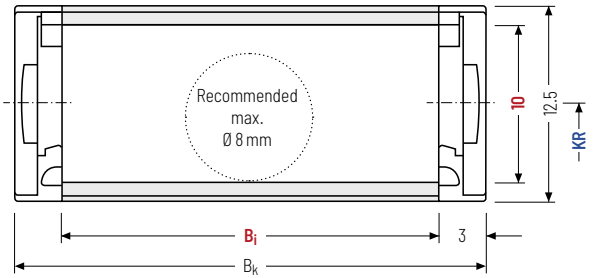
Type 0132 – closed frame



» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 6 – 20 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]			q_k [kg/m]
10	12.5	6	10	15	20	B_i + 6	20	28	37	0.091 – 0.162

Order example

MONO	.	0132	.	15	.	28	-	390	VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

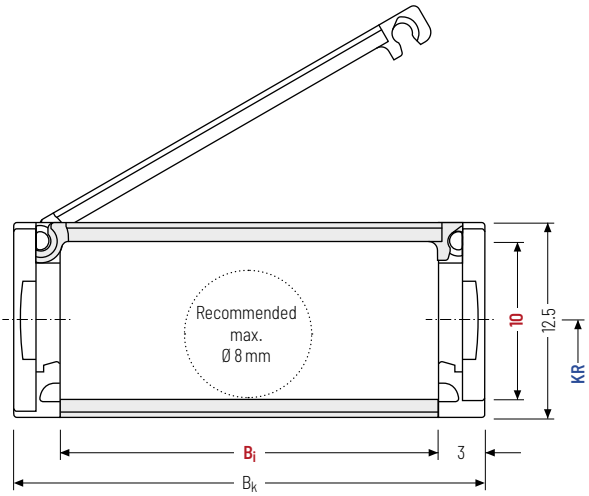
Type 0130 –
with outside opening crossbars

- Weight optimised plastic frame with high torsional rigidity.
- Openable at any position.
- **Outside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 6 – 20 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]			q_k [kg/m]
10	12.5	6	10	15	20	B_i + 6	20	28	37	0.097 – 0.178

Order example

MONO	.	0130	.	15	.	28	-	390		VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

0134 | Dimensions · Technical data

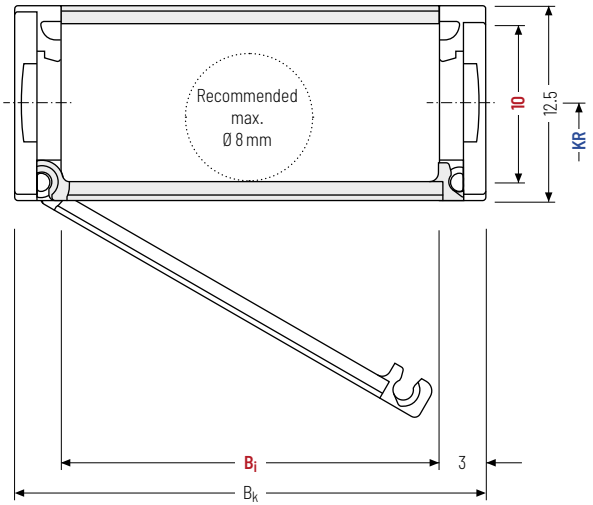
Type 0134 –
with inside opening crossbars

» Weight optimised plastic frame with high torsional rigidity.
» Openable at any position.
» **Outside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 6 – 20 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type.
Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]			q_k [kg/m]
10	12.5	6	10	15	20	B_i + 6	20	28	37	0.099 – 0.132

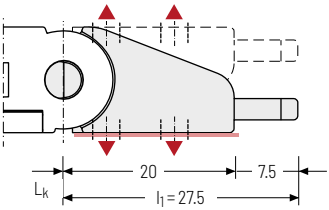
Order example

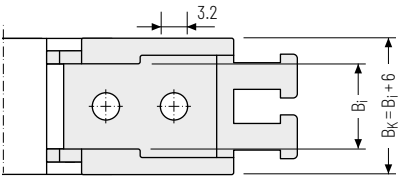
MONO	.	0134	.	15	.	28	-	390	VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Single-part end connectors – plastic
(with integrated strain relief)

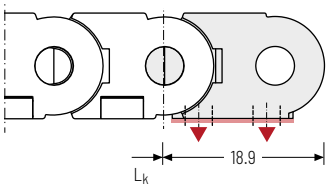
The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.

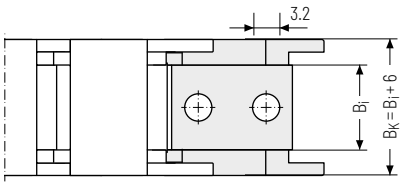




Single-part end connectors – plastic

The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.

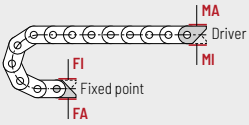




▲ Assembly options

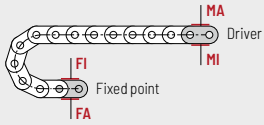
Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Depending on the design, the connection angles can be swivelled up to 12 °.

Subject to change without notice.

0180/..82/..84

Pitch
18 mm

Inner height
15 mm

Inner widths
10 – 40 mm

Bending radii
28 – 50 mm

Types



Type 0182 page 118

Closed frame (design 020)
» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.



Type 0180 page 119

Frame with outside opening crossbars (design 030)
» Weight optimised plastic frame with high torsional rigidity.
» Openable at any position.
» **Outside:** openable.



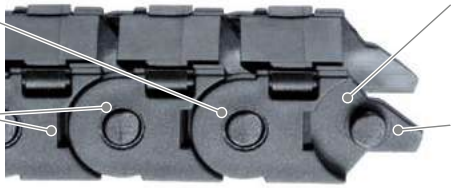
Type 0184 page 120

Frame with inside opening crossbars (design 040)
» Weight optimised plastic frame with high torsional rigidity.
» Openable at any position.
» **Inside:** openable.

Optimised cable carrier geometry:

Easy to shorten and extend

Long service life through large bolt hole connection

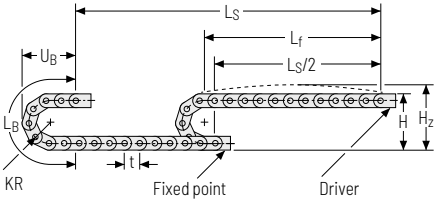


High torsional rigidity through large link surface

Extensive unsupported length and high additional loads through optimised stroke system

Subject to change without notice.

Unsupported arrangement

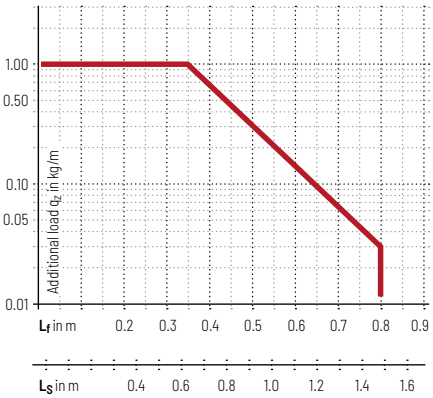


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
28	74	89	124	55
37	92	107	153	64
50	118	133	194	77

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.25 kg/m with B_i 10 mm. For other inner widths, the maximum additional load changes.



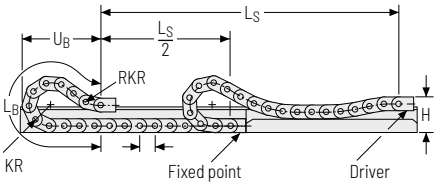
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.5 m

Additional load
up to 1.0 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 70 m

Additional load
up to 1.0 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only designs 020 and 030 can be used for a gliding arrangement.

Subject to change without notice.

0182 | Dimensions · Technical data

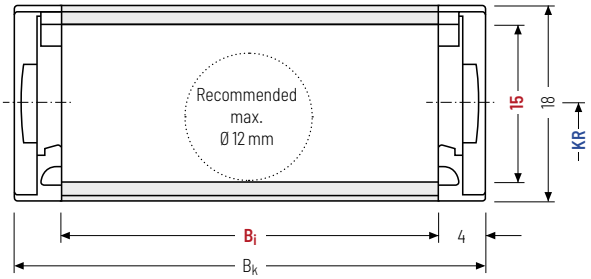
Type 0182 – closed frame

» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 10 – 40 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]			q_k [kg/m]
15	18	10	15	20	30	40	$B_i + 8$	28	37	50	0.123 – 0.186

Order example

MONO	.	0182	.	30	.	37	-	720	VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

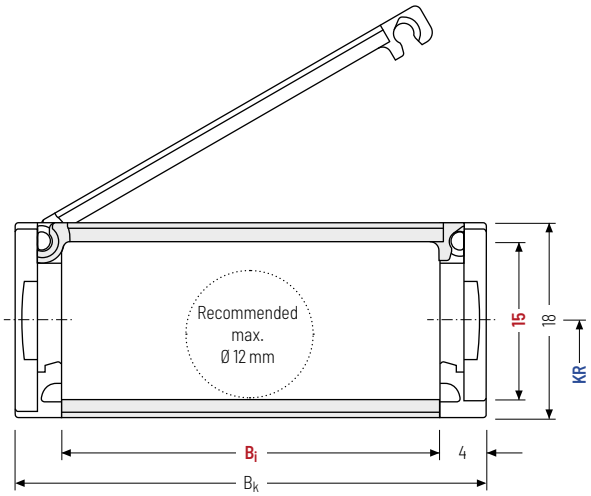
Type 0180 –
with outside opening crossbars

- Weight optimised plastic frame with high torsional rigidity.
- Openable at any position.
- **Outside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 10 – 40 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]			q_k [kg/m]
15	18	10	15	20	30	40	B_i + 8	28	37	50	0.169 – 0.252

Order example

MONO	.	0180	.	30	.	37	-	720		VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

0184 | Dimensions · Technical data

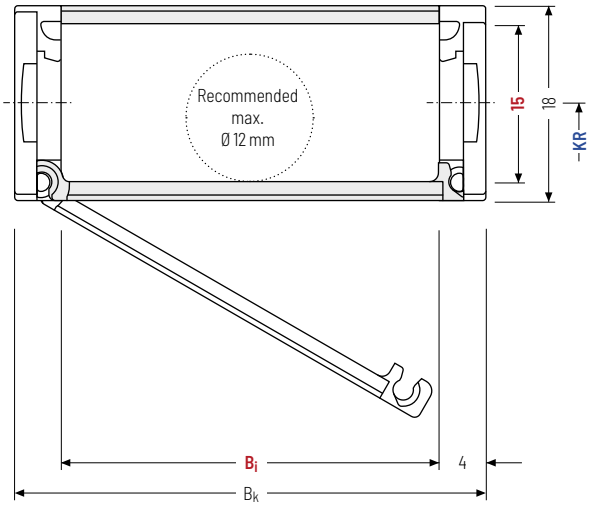
Type 0184 –
with inside opening crossbars

- Weight optimised plastic frame with high torsional rigidity.
- Openable at any position.
- **Inside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 10 – 40 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]			q_k [kg/m]
15	18	10	15	20	30	40	B_i + 8	28	37	50	0.133

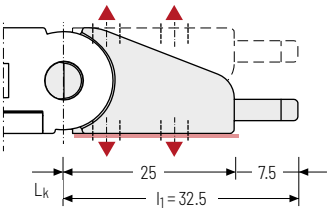
Order example

MONO	.	0184	.	15	.	37	-	720		VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

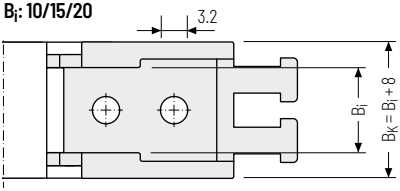
Subject to change without notice.

Single-part end connectors – plastic
(with integrated strain relief)

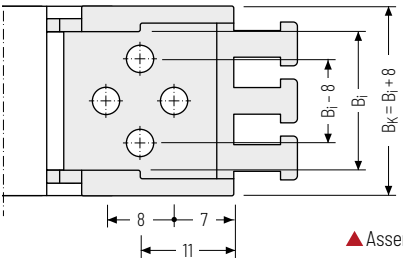
The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



B_i: 10/15/20

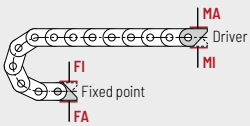


B_i: 30/40



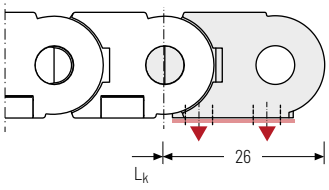
Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

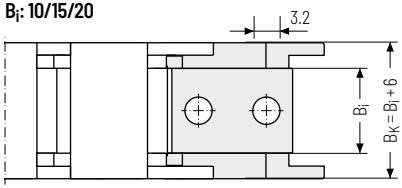


Single-part end connectors – plastic

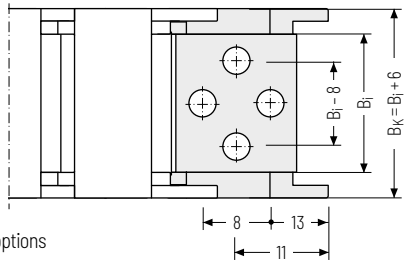
The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



B_i: 10/15/20



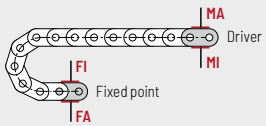
B_i: 30/40



▲ Assembly options

Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

0202

Pitch
20 mm

Inner height
11 mm

Inner widths
6 – 20 mm

Bending radii
18 – 50 mm

Types



Type 0202 page **124**

Closed frame (design 020)

» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.

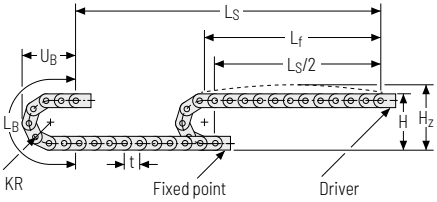
Fast cable laying – 0202 slotted version

The slotted variant of the MONO 0202 allows fast and easy pressing in of cables without opening the cable carrier. That saves time and therefore money. It is particularly suitable for cables with pre-assembled connectors. Please contact us!



Subject to change without notice.

Unsupported arrangement

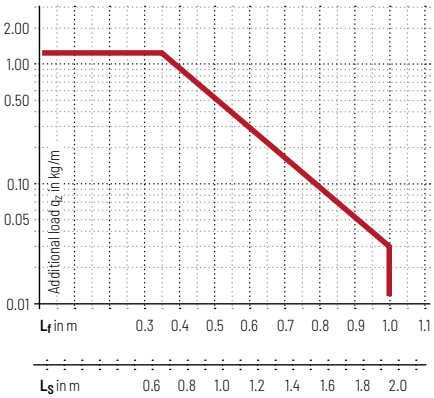


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
18	51	61	97	45,5
28	71	81	128	55,5
38	91	101	160	65,5
50	115	125	198	77,5

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.18 kg/m with B_i 10 mm. For other inner widths, the maximum additional load changes.



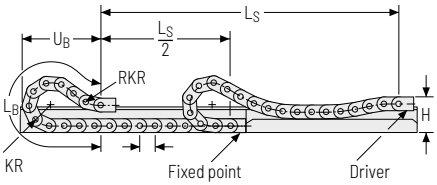
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.95 m

Additional load
up to 1.25 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 70 m

Additional load
up to 1.25 kg/m

The gliding cable carrier must be guided in a channel.
See p. 866.

Subject to change without notice.

0202 | Dimensions · Technical data

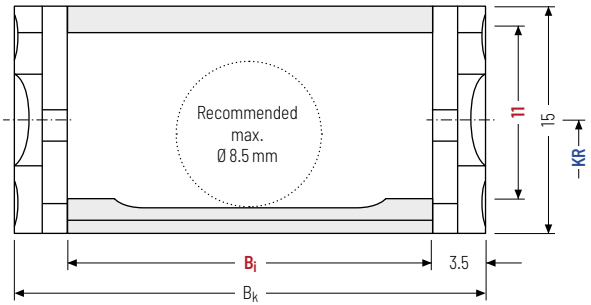
Type 0202 – closed frame

» Weight optimised, closed plastic frame with high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 6 – 20 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]				q_k [kg/m]
11	15	6	10	15	20	B_i + 7	18	28	38	50	0.14 – 0.17

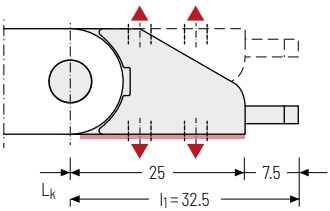
Order example

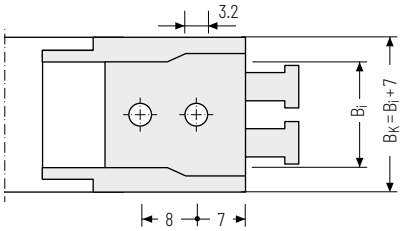
MONO	.	0202	.	10	.	28	-	460	VS
Series		Type		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

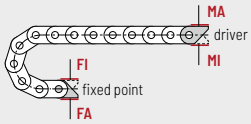
Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

QuickTrax® series

Compact and cost-effective cable carriers in two-component technology



TSUBAKI ECO LINK

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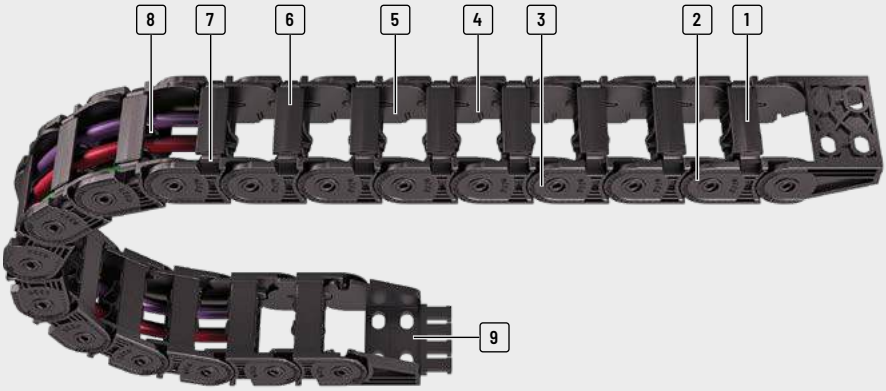


1 Sturdy 2-component design: hard chain body, flexible film hinge
2 Plastic chain links
3 Extensive unsupported length
4 Inside space is gentle on the cables – no interfering edges
5 Very quiet through integrated noise damping
6 Quick and easy to open
7 Inside/outside openable
8 Dividers and height separations for cable separation
9 Single-part end connectors with and without integratable strain relief

Features

» Extremely fast and easy cable laying thanks to crossbar with film hinge
» Each chain link consists of two different materials:
– Hard chain body made of glass-fibre reinforced material
– Crossbar with flexible film hinge made of elastic special plastic
» Sturdy cable carrier design
» High torsional rigidity
» Very quiet through integrated noise damping
» Extensive unsupported length


Easy to open...


...even without tools


High side stability


Reliable cable separation

Subject to change without notice.

Cable carrier design

Solid plastic cable carriers: chain links and end connectors made of plastic

Each chain link consists of two different materials:

» Hard cable carrier body made of glass fiber-reinforced material

» Flexible lamellae made of elastic plastic

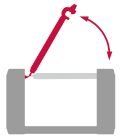


The two-component technology of the QuickTrax®

The two-component technology of the **QuickTrax®** combines two seemingly incompatible features: **Stability and flexibility**.

Cable carriers need to be extremely sturdy, with extensive unsupported length. At the same time, cables need to be inserted easily for fast cable laying.

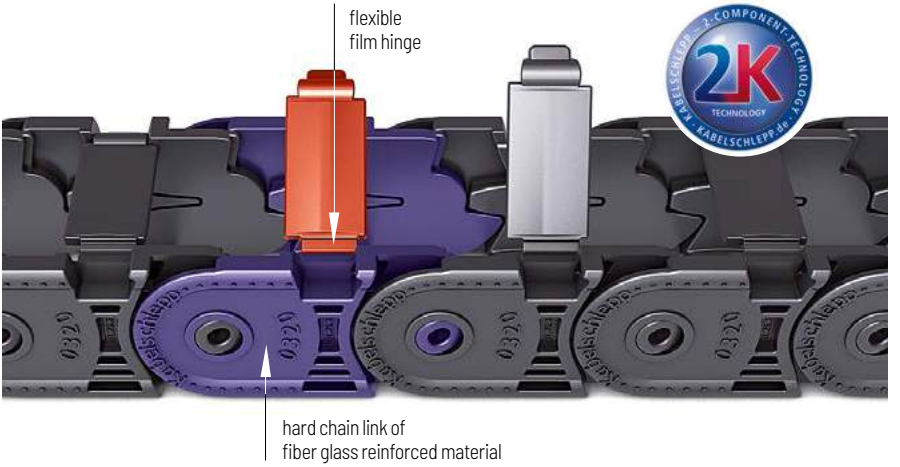
The **QuickTrax®** meets these requirements thanks to its innovative design and material combination of a hard cable carrier body made from glass fiber-reinforced material and crossbars with a film hinge made from rigid special plastic.



high flexibility



high stability



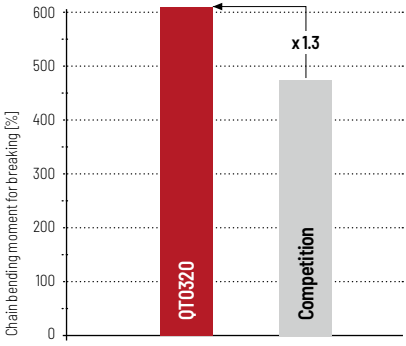
Subject to change without notice.

QuickTrax® series | Comparison Test

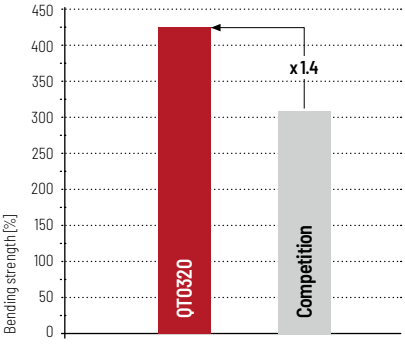
Comparison of dimensions

Manufacturer	h_i [mm]	h_G [mm]	t [mm]	Identical connection hole pattern
QuickTrax®	20.0	25.5	32.0	yes
Competitive product	17.5	23.0	30.5	yes

Comparison of bending moment

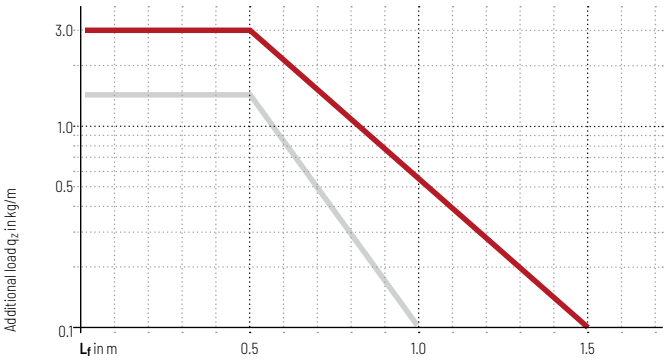


Comparison of bending strength

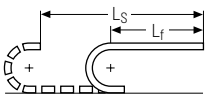


Load diagram

for unsupported length depending on additional load



Unsupported length L_f



QT0320
Competitive product

Advantages over competitive product

- » 20 % longer unsupported length compared to competitive product
- » 33 % greater additional load through use of fiber glass reinforced plastic
- » Greater inner height
- » Low noise operation due to internal damping system
- » High side stability through locking in the stroke system
- » Dividers can be used for cable separation

Subject to change without notice.

QuickTrax® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
QT0250											
		030	17.6	23	30 – 50	60	–	25	28 – 100	4	14
		040	17.6	23	30 – 50	60	–	25	28 – 100	4	14
QT0320											
		030	20	25,5	15 – 65	27 – 77	–	32	28 – 125	3	16
		040	20	25,5	15 – 65	27 – 77	–	32	28 – 125	3	16

Subject to change without notice.

QuickTrax® series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1.6	10	50	60	3	30	•	•	–	–	•	•	•	134
1.6	10	50	–	–	–	•	•	–	–	•	•	•	135
2.9	10	50	80	2.5	25	•	•	–	–	•	•	•	140
2.9	10	50	–	–	–	•	•	–	–	•	•	•	141

Subject to change without notice.

QT0250

Pitch
25 mm

Inner height
17,6 mm

Inner widths
30 – 50 mm

Bending radii
28 – 100 mm

Stay variants



Design 030 ..... page **134**

Frame with outside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbar can be opened at any position on one side.
» **Outside:** openable.



Design 040 ..... page **135**

Frame with inside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbar can be opened at any position on one side.
» **Inside:** openable.

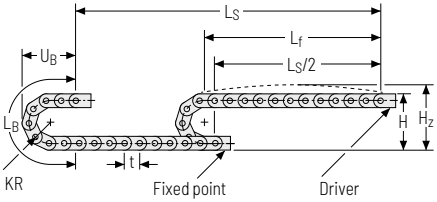


UNIFLEX Advanced

For a non-opening cable carrier with 17.5 mm inner height we recommend the series UNIFLEX Advanced
UA1250 from page 150.

Subject to change without notice.

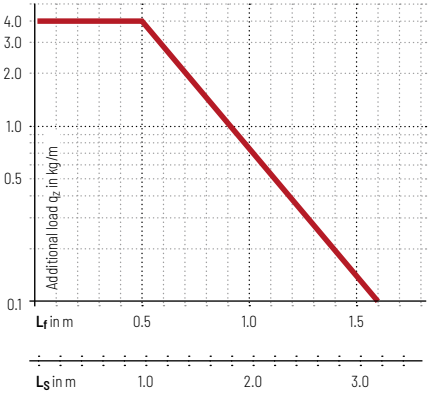
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	79	104	138	65
38	99	124	169	75
45	113	138	191	82
60	143	168	238	97
75	173	198	286	112
100	223	248	364	137

Load diagram for unsupported length
depending on the additional load.

Intrinsic cable carrier weight q_K = 0.36 kg/m with B_i 50 mm. For other inner widths, the maximum additional load changes.



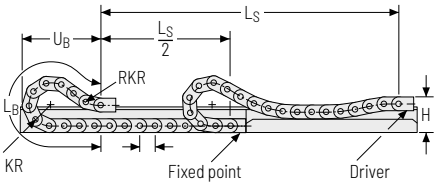
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.6 m

Additional load
up to 4 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 60 m

Additional load
up to 4 kg/m

The gliding cable carrier must be guided in a channel.
See p. 866.

Only design 030 can be used for a gliding arrangement.

Subject to change without notice.

QT0250.030 | Dimensions · Technical data

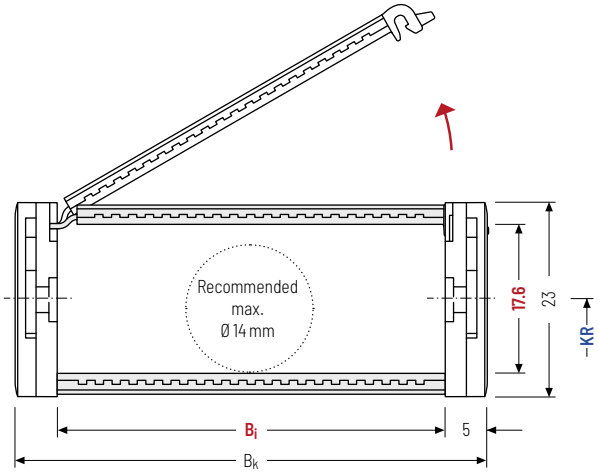
Stay variant 030 –
with outside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbars can be opened at any position on one side
» **Outside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 30 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]		B_k [mm]	KR [mm]						q_k [kg/m]
17.6	23	**30**	**50**	B_i + 10	**28**	**38**	**45**	**60**	**75**	**100**	0.32 – 0.36

Order example

QT0250	.	030	.	50	.	75	-	1.100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

QT0250.040 | Dimensions · Technical data

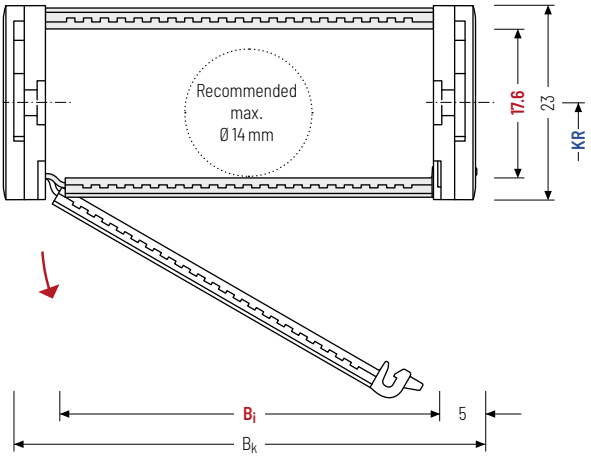
Stay variant 040 –
with inside opening crossbars

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Crossbars can be opened at any position on one side
- **Inside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 30 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]		B_k [mm]	KR [mm]						q_k [kg/m]
17.6	23	30	50	B_i + 10	28	38	45	60	75	100	0.32 – 0.36

Order example

QT0250	.	040	.	50	.	75	-	1.100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

QT0250 | Inner distribution | TS0 · TS1

Divider systems

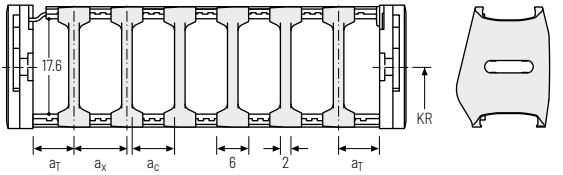
The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay through rotation.
The arresting cams snap into the catch profiles in the covers **(version B)**.

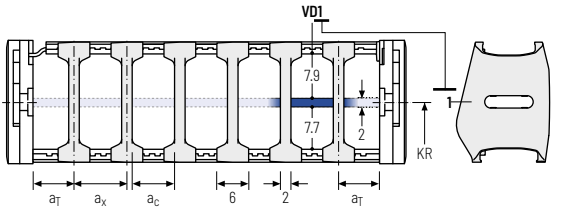
Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	3	6	4	–	–
B	3	6	4	2	–



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	3	6	4	–	2
B	3	6	4	2	2



Order example



TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system (TS0, TS1,...), the version, and the number of dividers per cross section [n_T].

When using divider systems with height separation (TS1), please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.



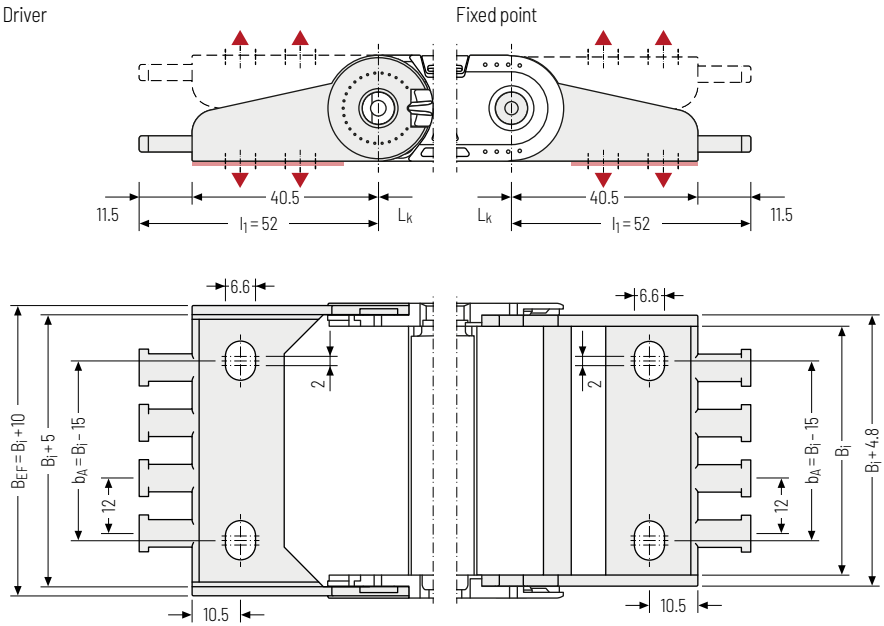
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

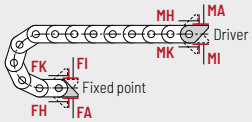
Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
30	40	2
50	60	4



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

QT0320

Pitch
32 mm

Inner height
20 mm

Inner widths
15 – 65 mm

Bending radii
28 – 125 mm

Stay variants



Design 030 ..... page **140**

Frame with outside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbar can be opened at any position on one side.
» **Outside:** openable.



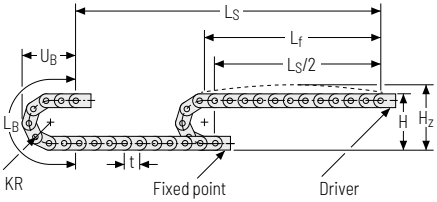
Design 040 ..... page **141**

Frame with inside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbar can be opened at any position on one side.
» **Inside:** openable.

Subject to change without notice.

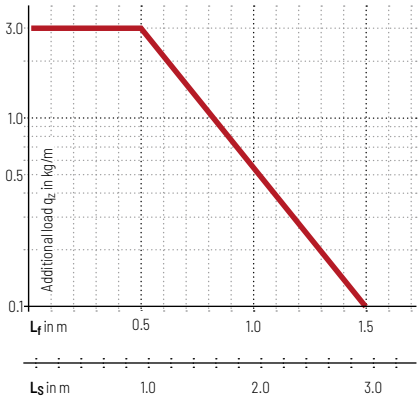
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	81.5	101.5	152	73
38	101.5	121.5	184	83
48	121.5	141.5	215	93
75	175.5	195.5	300	120
100	225.5	245.5	379	145
125	275.5	295.5	457	170

Load diagram for unsupported length
depending on the additional load.

Intrinsic cable carrier weight q_K = 0.40 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



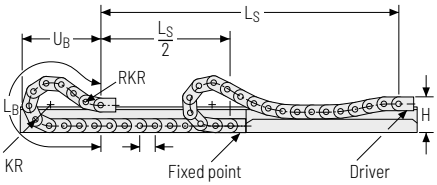
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.9 m

Additional load
up to 3 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 3 kg/m

The gliding cable carrier must be guided in a channel.
See p. 866.

Only design 030 can be used for a gliding arrangement.

Subject to change without notice.

QT0320.030 | Dimensions · Technical data

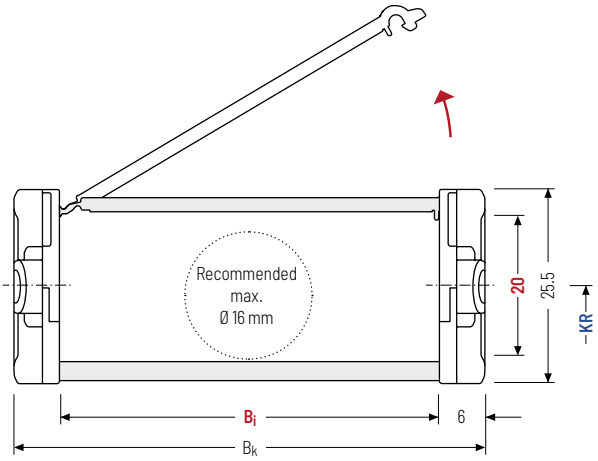
Stay variant 030 –
with outside opening crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbars can be opened at any position on one side
» **Outside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]						q_k [kg/m]
20	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

QT0320	.	030	.	50	.	100	-	1,280		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

QT0320.040 | Dimensions · Technical data

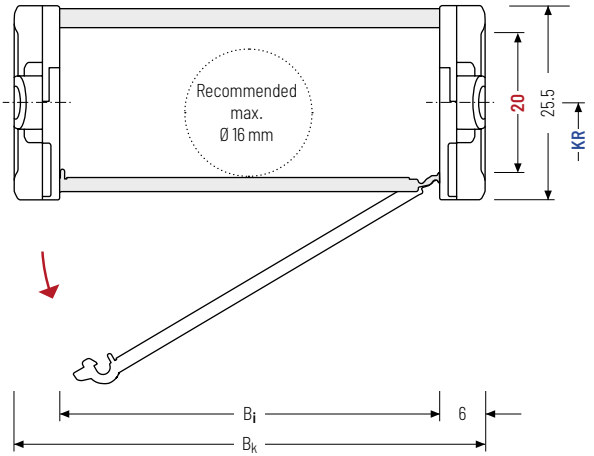
Stay variant 040 –
with inside opening crossbars

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Crossbars can be opened at any position on one side
- **Inside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]						q_k [kg/m]
20	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

QT0320	.	040	.	50	.	100	-	1,280		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

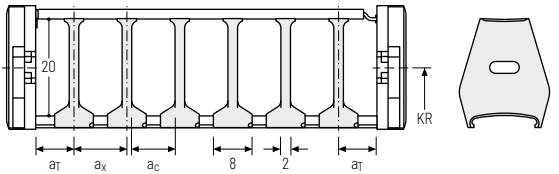
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	8	6	–

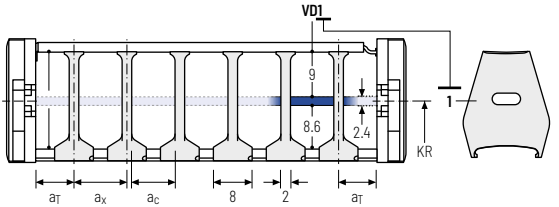
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	8	6	2

The dividers can be moved in the cross section.



Order example



TS1 . A . 3 - VD0 ⋮ - VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system (TS0, TS1,...), the version, and the number of dividers per cross section [n_T].

When using divider systems with height separation (TS1), please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.



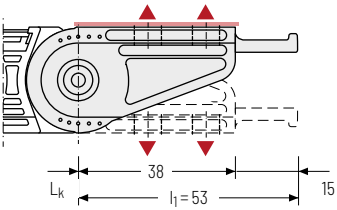
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

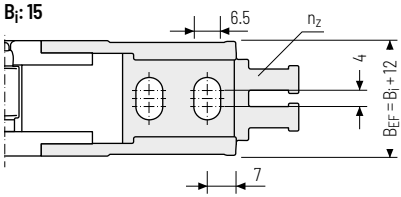
Subject to change without notice.

Single-part end connectors – plastic (with integrated strain relief)

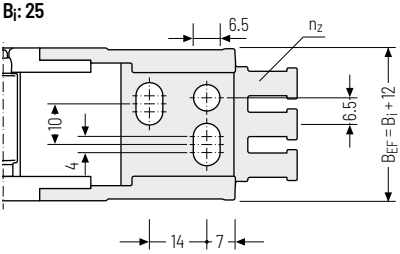
The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



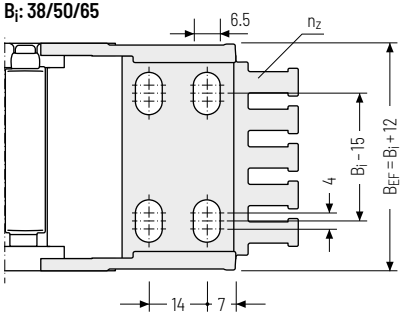
B_i: 15



B_i: 25



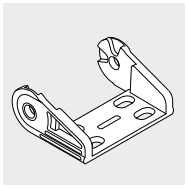
B_i: 38/50/65



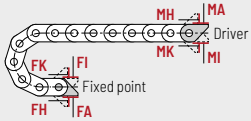
▲ Assembly options

The end connectors can not be swivelled.

B_i [mm]	B_{EF} [mm]	n_z
15	27	2
25	37	3
38	50	4
50	62	5
65	77	6



The end connectors are also available as an option **without** integrated strain relief. Please state when ordering.



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

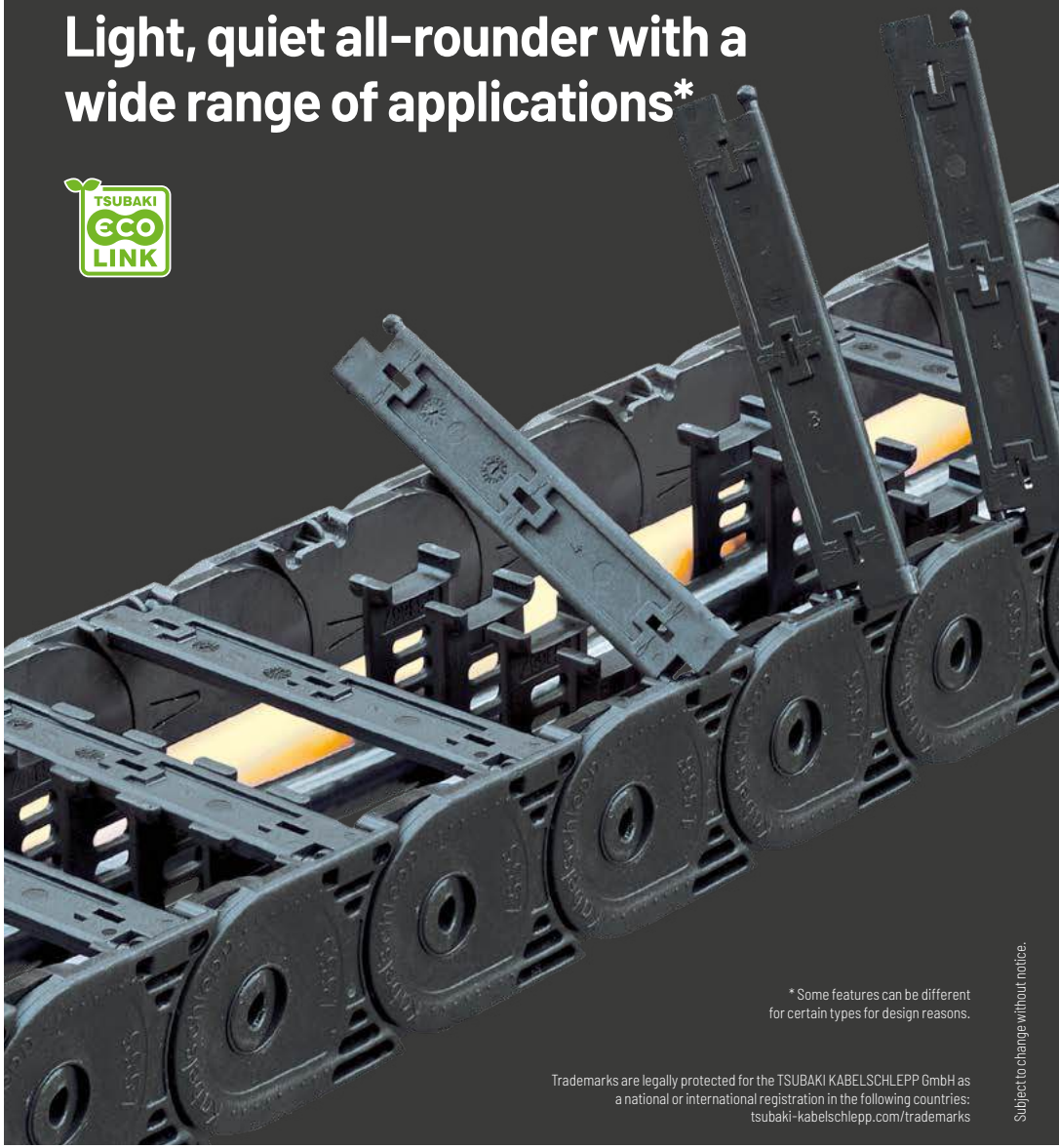
Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

UNIFLEX *Advanced* **series**

Light, quiet all-rounder with a wide range of applications*



* Some features can be different for certain types for design reasons.

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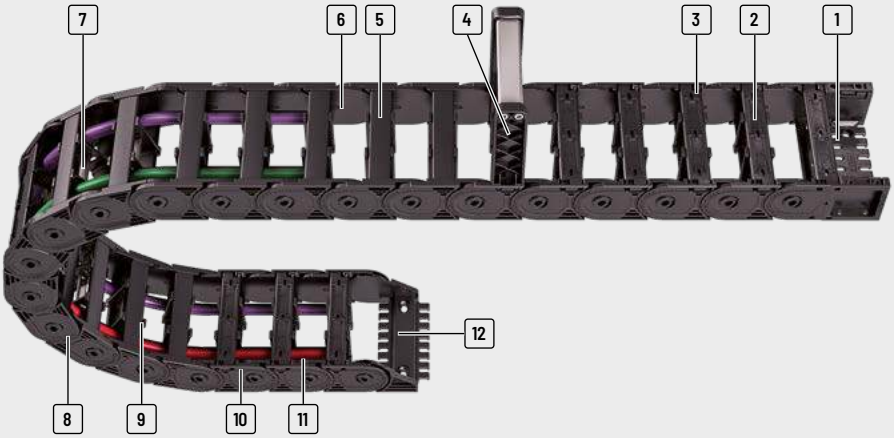
Subject to change without notice.



1 Universal mounting bracket (UMB) with integratable strain relief comb

2 Designs with inside or outside opening stays

3 Extremely fast and easy to open due to ball joint mechanism

4 Top-mounted frame stay

5 Single-part links (type 020)

6 Favourable ratio of inner to outer width

7 Many separation options for the cables

8 Robust double-stroke system for long unsupported lengths

9 Easy divider fixing

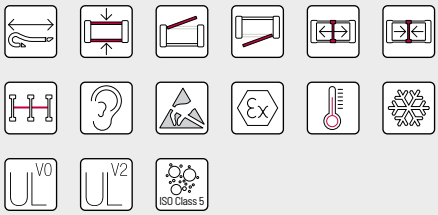
10 Very quiet through integrated noise damping

11 Lateral wear surfaces

12 Single-part end connectors with integratable strain relief comb

Features

» Extensive unsupported lengths
» High torsional rigidity
» Good ratio of inner to outer width
» Numerous custom material types for custom applications available
» Easy assembly and fast cable laying
» Assembly tools available
» Stays with ball joint opening on both sides
» Many possibilities for internal subdivision
» Wear surfaces for gliding applications with extended travel lengths





Fixable dividers for arrangements rotated by 90° and applications with high lateral accelerations – no additional spacers required





Lateral wear surfaces – for long service life for applications where the carrier is rotated through 90°



Simple fixing of strain relief comb or C-Rail in the connector

Subject to change without notice.

UNIFLEX Advanced series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
UA1250											
		020	17.5	23	30 – 50	60	–	25	28 – 100	4	14
UA1320											
		020	20	25.5	15 – 65	27 – 77	–	32	28 – 125	3.0	16
UA1455											
		020	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
		030	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
		040	26	36	25 – 130	41 – 146	–	45.5	52 – 200	6	20.5
UA1555											
		020	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30
		030	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30
		040	38	50	50 – 150	68 – 168	–	55.5	63 – 200	10	30
UA1665											
		020	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		030	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		040	44	60	50 – 250	72 – 272	–	66.5	75 – 300	15	35
		RMAI	44 (114-189)	60 (170-245)	125 – 200	147 – 222	1	66,5	200 – 300	15	35/151
		RMAO	44 (114-189)	60 (170-245)	125 – 200	147 – 222	1	66.5	75 – 300	15	35/151

Subject to change without notice.

UNIFLEX Advanced series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1,6	10	50	60	3	30	•	–	–	–	•	•	•	152
2.9	10	50	80	2.5	25	•	–	–	–	•	•	•	158
4.8	10	50	120	2.5	20	•	–	–	•	•	•	•	164
4.8	10	50	120	2.5	20	•	•	–	•	•	•	•	165
4.8	10	50	–	–	–	•	•	–	•	•	•	•	166
6.3	9	45	125	3	20	•	–	–	•	•	•	•	174
6.3	9	45	125	3	20	•	•	–	•	•	•	•	175
6.3	9	45	–	–	–	•	•	–	•	•	•	•	176
7	8	40	150	3	15	•	–	–	•	•	•	•	184
7	8	40	150	3	15	•	•	–	•	•	•	•	185
7	8	40	–	–	–	•	•	–	•	•	•	•	186
7	8	40	150	3	15	•	•	–	•	•	•	–	188
7	8	40	150	3	15	•	•	–	•	•	•	–	190

Subject to change without notice.

UNIFLEX Advanced series | Overview

Type		Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
UA1775												
			020	56	77	100 – 400	126 – 476	–	77.5	90 – 340	25	44
			030	56	77	100 – 400	126 – 476	–	77.5	90 – 340	25	44
			040	56	77	100 – 400	126 – 476	–	77.5	90 – 340	25	44
UA1995												
			020	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
			030	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
			040	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64
			070	80	110	85 – 250	115 – 280	–	99.5	150 – 500	50	64

Subject to change without notice.

UNIFLEX Advanced series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
6.8	10	35	200	3	8	•	–	–	•	•	•	•	198
6.8	10	35	200	3	8	•	•	–	•	•	•	•	199
6.8	10	35	200	3	8	•	•	–	•	•	•	•	200
9	10	25	200	8	20	•	–	–	•	•	•	•	206
9	10	25	200	8	20	•	•	–	•	•	•	•	207
9	10	25	200	8	20	•	•	–	•	•	•	•	208
9	10	25	200	8	20	•	•	–	•	•	•	•	209

Subject to change without notice.

UA1250

Pitch
25 mm

Inner height
17,5 mm

Inner widths
30 – 50 mm

Bending radii
28 – 100 mm

Stay variants



Design 020 ..... page **158**

Closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



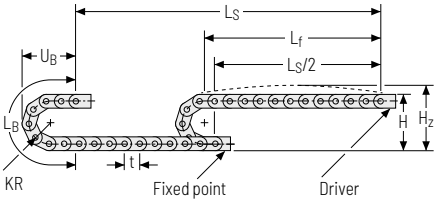
QuickTrax® | EasyTrax®

For an openable cable carrier with 16.5 – 17.6 mm inner height we recommend the series QuickTrax® 0250 or EasyTrax® 0250
QT0250 from page 132 and **ET0250 from page 246.**

Subject to change without notice.

UA1250 | Installation dim. | Unsupported

Unsupported arrangement

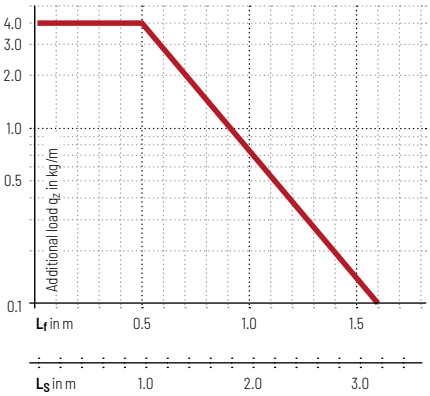


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	79	104	138	65
38	99	124	169	75
45	113	138	191	82
60	143	168	238	97
75	173	198	286	112
100	223	248	364	137

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.36 kg/m with B_i 50 mm. For other inner widths, the maximum additional load changes.



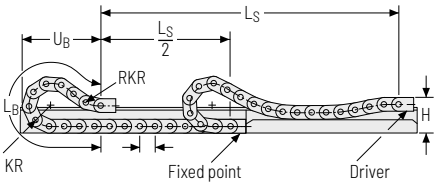
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.6 m

Additional load
up to 4 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 60 m

Additional load
up to 4kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Subject to change without notice.

UA1250.020 | Dimensions · Technical data

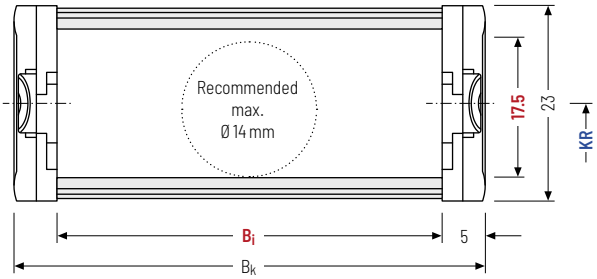
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 30 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]		B_k [mm]	KR [mm]						q_k [kg/m]
17.5	23	30	50	B_i + 10	28	38	45	60	75	100	0.32 – 0.36

Order example

UA1250	.	020	.	50	.	75	-	1100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1250.020 | Inner distribution | TS0

Divider systems

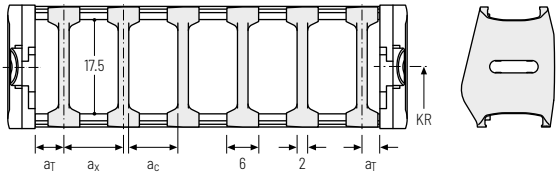
The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay through rotation.
The arresting cams snap into the catch profiles in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3	6	4	–	–
B	3	6	4	2	–



Order example

TS0 . A . 3

Divider system | Version | n_T

Please state the designation of the divider system (TS0), the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

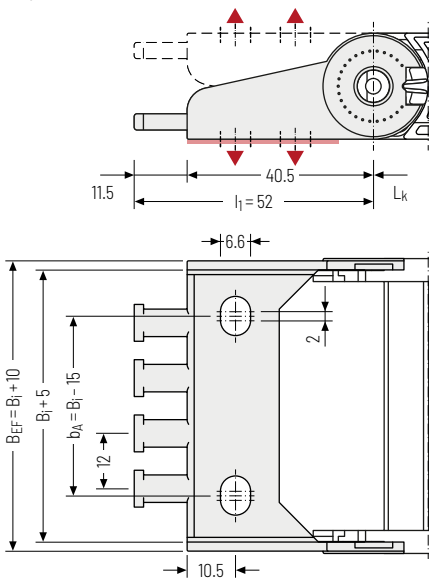
Subject to change without notice.

UA1250 | End connectors

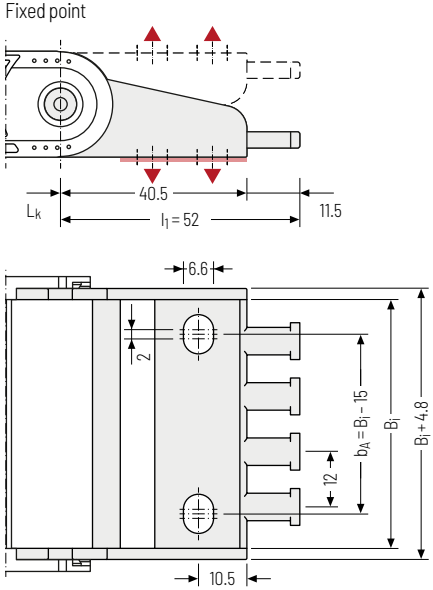
Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.

Driver

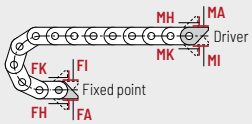


Fixed point



▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
30	40	2
50	60	4



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

Subject to change without notice.



UA1320

Pitch
32 mm

Inner height
20 mm

Inner widths
15 – 65 mm

Bending radii
28 – 125 mm

Stay variants



Design 020 ..... page **158**

Closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.

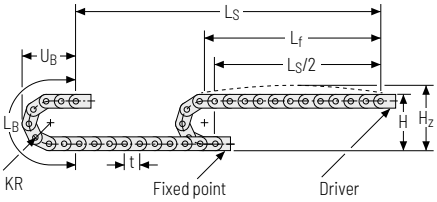


QuickTrax® | EasyTrax®

For an openable cable carrier with 18 – 20 mm inner height we recommend the series QuickTrax® 0320 or EasyTrax® 0320 **QT0320 from page 138** and **ET0320 from page 252.**

Subject to change without notice.

Unsupported arrangement

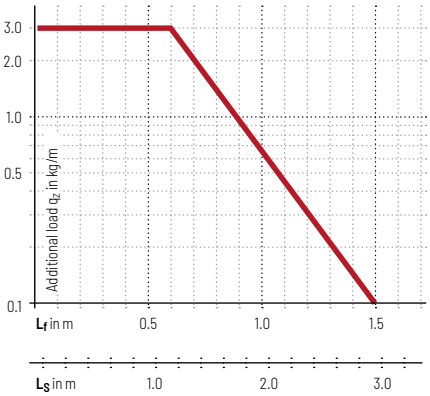


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	81.5	98.5	152	73
38	101.5	118.5	184	83
48	121.5	138.5	215	93
75	175.5	192.5	300	120
100	225.5	242.5	379	145
125	275.5	292.5	457	170

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.40 kg/m with B_i 50 mm. For other inner widths, the maximum additional load changes.



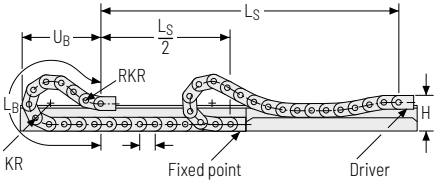
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.9 m

Additional load
up to 3 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 3 kg/m

The gliding cable carrier must be guided in a channel.
See p. 866.

Subject to change without notice.

UA1320.020 | Dimensions · Technical data

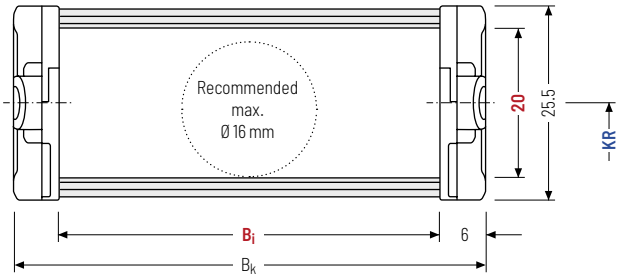
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]						q_k [kg/m]
20	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.36 – 0.48

Order example

UA1320	.	020	.	50	.	100	-	960		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1320.020 | Inner distribution | TS0

Divider systems

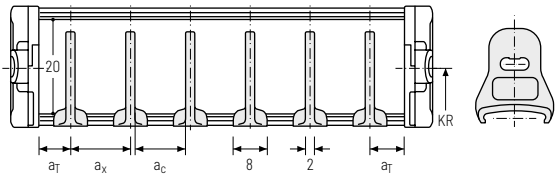
The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	8	6	–

The dividers can be moved in the cross section.



Order example

TS0 . A . 3

Divider system | Version | nT

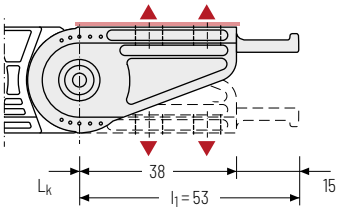
Please state the designation of the divider system **(TS0)**, the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

Subject to change without notice.

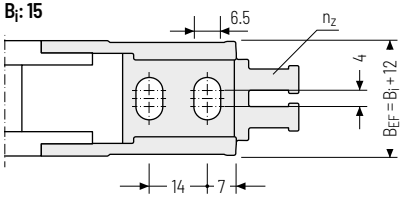
UA1320 | End connectors

Single-part end connectors – plastic (with integrated strain relief)

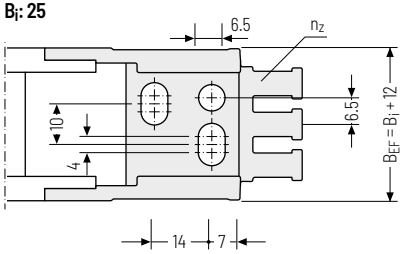
The plastic end connectors can be connected from above or below. The connection type can be changed by altering the position of the end connector.



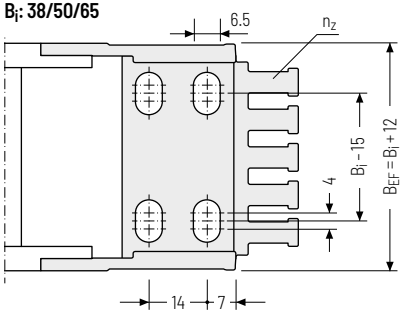
B_i: 15



B_i: 25

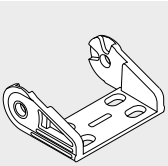


B_i: 38/50/65

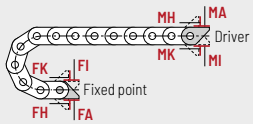


▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
15	27	2
25	37	3
38	50	4
50	62	5
65	77	6



The end connectors are also available as an option **without** integrated strain relief. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.



UA1455

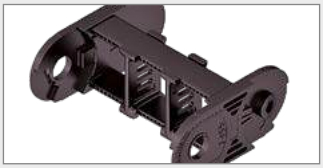
Pitch
45.5 mm

Inner height
26 mm

Inner widths
25 – 130 mm

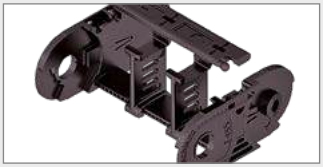
Bending radii
52 – 200 mm

Stay variants



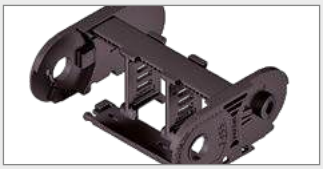
Design 020 ..... page **164**

Closed frame
» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Design 030 ..... page **165**

Frame with outside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** openable and detachable.



Design 040 ..... page **166**

Frame with inside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** openable and detachable.

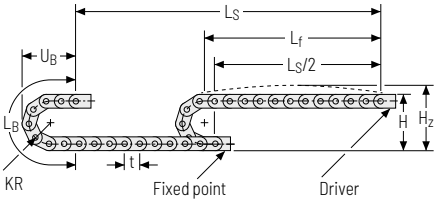


EasyTrax®

For an openable cable carrier with 25 mm inner height we recommend the series EasyTrax® 1455
ET1455 from page 258.

Subject to change without notice.

Unsupported arrangement

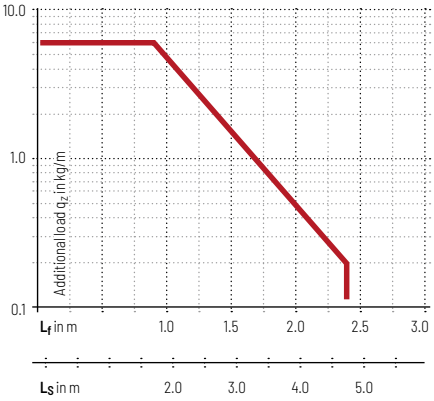


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
52	140	165	255	116
65	166	191	296	129
95	226	251	390	159
125	286	311	484	189
150	336	361	563	214
180	396	421	657	244
200	436	461	720	264

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.75 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



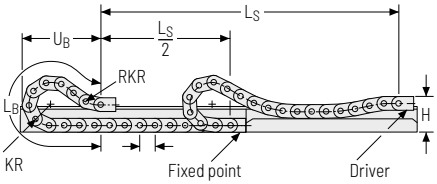
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 4.8 m

Additional load
up to 6 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
52	108	225	780	377
65	108	225	825	389
95	108	225	1007	450
125	108	225	1189	508
150	108	225	1371	573
180	108	225	1599	655
200	108	225	1781	723

Speed
up to 2.5 m/s

Acceleration
up to 20 m/s²

Travel length
up to 120 m

Additional load
up to 6 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

Only designs 020 and 030 can be used for a gliding arrangement.

Subject to change without notice.

UA1455.020 | Dimensions · Technical data

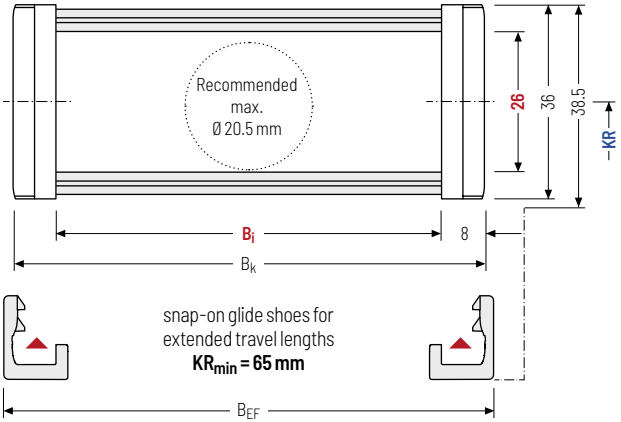
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 130 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t



Special version for support legs of commercial vehicles

Special versions for the safe guiding and separating of rigid hydraulic hoses and electric cables in a limited space in extendable support feet of commercial vehicles on request.

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
26	36	38.5	25	38	58	B_i + 16	B_i + 19	52	65	95	125	0.71 – 1.12
			78	103	130			150	180	200		

Order example

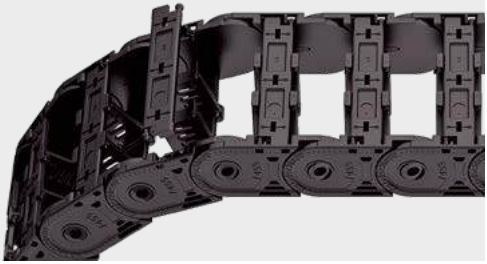
UA1455	.	020	.	78	.	150	-	1456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1455.030 | Dimensions · Technical data

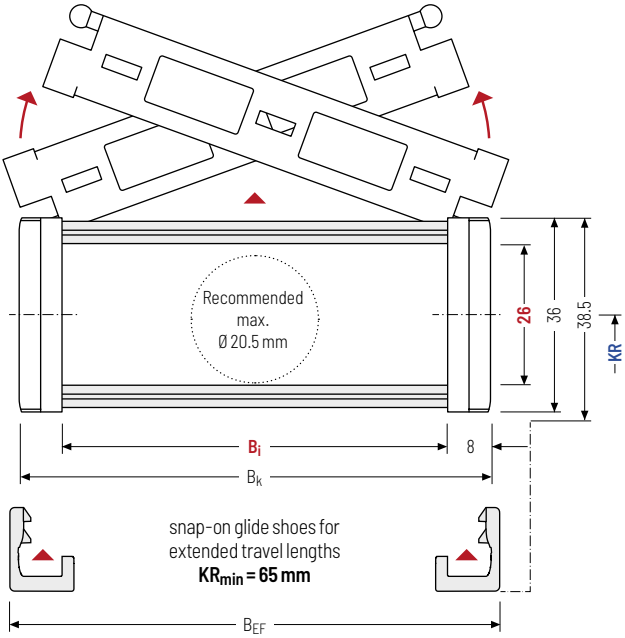
Stay variant 030 – with outside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Outside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 130 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
26	36	38.5	25 78	38 103	58 130	$B_i + 16$	$B_i + 19$	52 150	65 180	95 200	125	0.73 – 1.10

Order example

UA1455	.	030	.	78	.	150	-	1456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1455.040 | Dimensions · Technical data

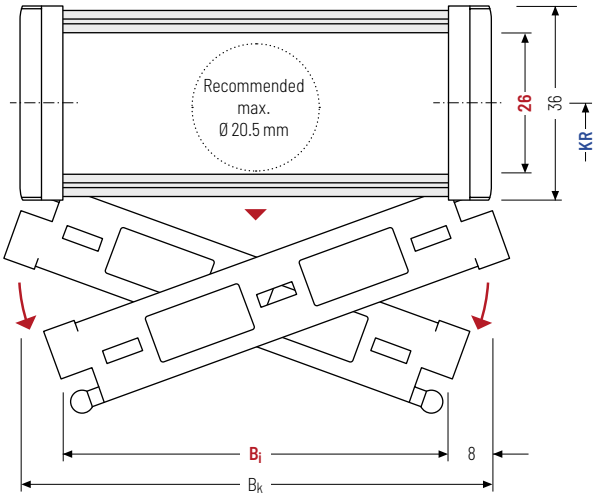
Stay variant 040 – with inside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Inside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 130 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
26	36	25	38	58	B_i + 16	52	65	95	125	0.73 – 1.10
		78	103	130		150	180	200		

Order example

UA1455	.	040	.	78	.	150	-	1456	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

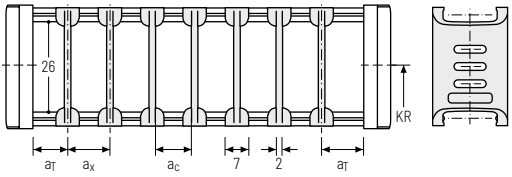
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.
The locking cams click into place in the locking grids in the stays **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	3.5	7	5	–	–
B*	4/5**	7.5	5.5	2.5	–

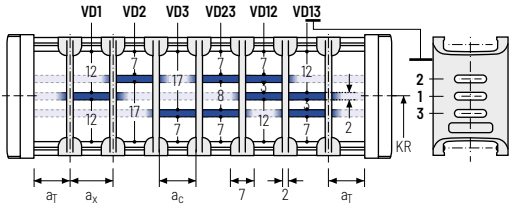
Number of dividers for design 020 depending on B_i
* not for design 020
** 4 mm for B_i 38 – 103; 5 mm for B_i 25, 130



Divider system TS1 with continuous height separation*

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	3.5	20	7	5	–	2
B	4/5**	20	7.5	5.5	2.5	2

* not for design 020
** 4 mm for B_i 38 – 103; 5 mm for B_i 25, 130

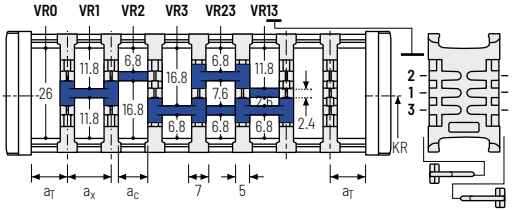


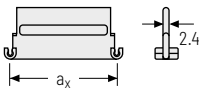
Divider system TS3 with height separation consisting of plastic section subdivisions*

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	3.5	15	10	2

* not for design 020

The dividers are fixed with the section subdivision. The entire divider system can be moved in the cross section.





a_x (centre distance of dividers) [mm]									
a_C (usable width of inner chamber) [mm]									
15	**20**	**25**	**30**	**35**	**40**	**45**	**55**	**65**	**75**
10	15	20	25	30	35	40	50	60	70

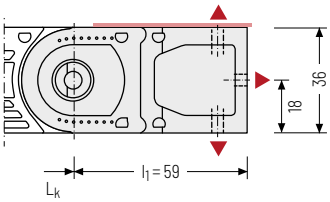
Order example

TS3	. A	. 2	. K1 … K4	. 34 … 38	– VR1 … VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

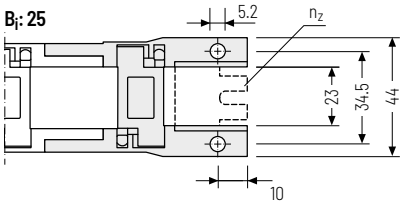
Subject to change without notice.

Universal end connectors UMB – plastic (standard)

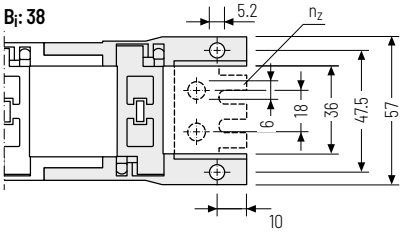
The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.



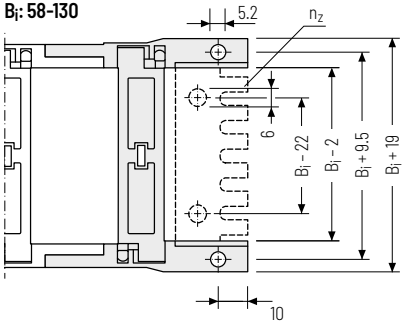
B_i: 25



B_i: 38



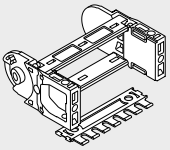
B_i: 58-130



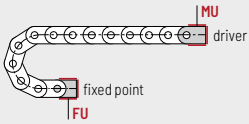
Recommended tightening torque:
5 Nm for screws M5 - 8.8

▲ Assembly options

B_i [mm]	n_z
25	2
38	3
58	5
78	7
103	9
130	11



The end connectors are optionally also available **with** strain relief comb (1 on each side).
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

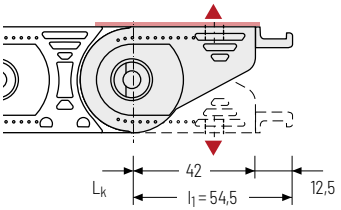
Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

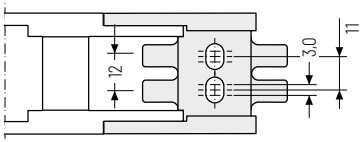
Subject to change without notice.

Single-part end connectors short – plastic

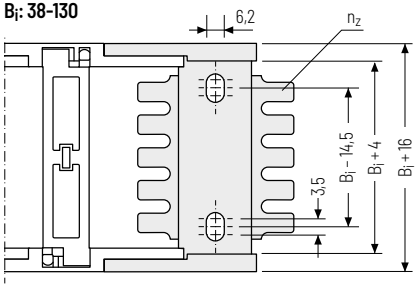
The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



B_i: 25



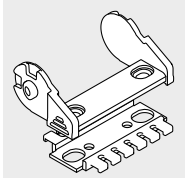
B_i: 38-130



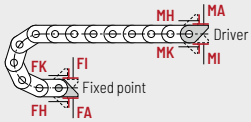
Recommended tightening torque:
6 Nm for screws M6 - 8.8

▲ Assembly options

B_i [mm]	n_z
25	2 x 2
38	2 x 3
58	2 x 4
78	2 x 6
103	2 x 8
130	2 x 10



The end connectors are optionally also available **without** strain relief comb (except B_i 25). Please state when ordering.



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

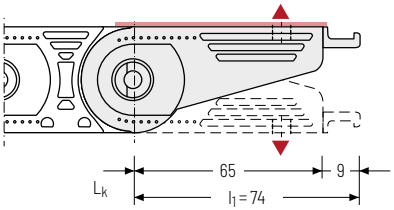
Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

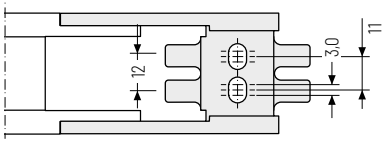
Subject to change without notice.

Single-part end connectors long – plastic

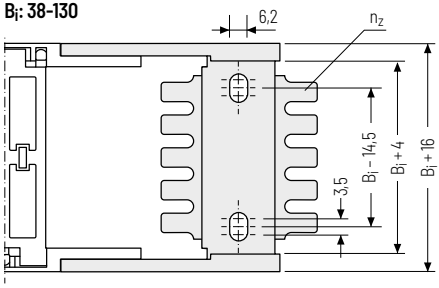
The plastic end connectors can be connected **from above or below and allow a 1: 1 replacement of the UNIFLEX 0455 in the connection area**. The connection type can be changed by altering the position of the end connector.



B_i: 25



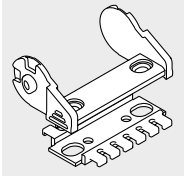
B_i: 38-130



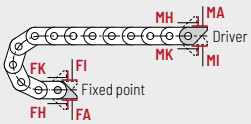
▲ Assembly options

Recommended tightening torque:
6 Nm for screws M6 - 8.8 and washers

B_i [mm]	n_z
25	2 x 2
38	2 x 3
58	2 x 4
78	2 x 6
103	2 x 8
130	2 x 10



The end connectors are optionally also available **without** strain relief comb (except B_i 25). Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector		Connection point	Connection type
End connector U0455	.	F	A
End connector U0455	.	M	A

Subject to change without notice.

Subject to change without notice.



UA1555

Pitch
55.5 mm

Inner height
38 mm

Inner widths
50 – 150 mm

Bending radii
63 – 200 mm

Stay variants



Design 020 ..... page **174**

Closed frame
» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Design 030 ..... page **175**

Frame with outside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** openable and detachable.



Design 040 ..... page **176**

Frame with inside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** openable and detachable.

Additional product information online

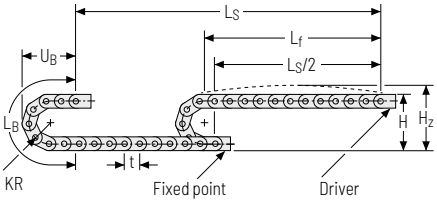
Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

Unsupported arrangement

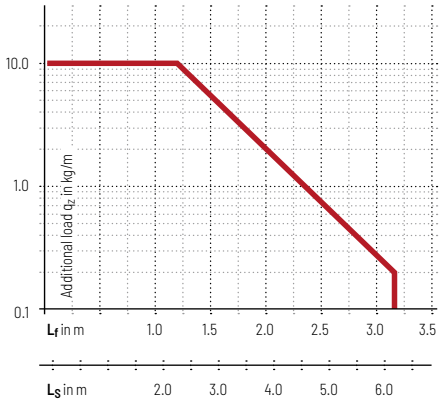


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
63	176	216	309	145
80	210	240	362	165
100	250	280	425	185
125	300	330	504	210
160	370	400	614	245
200	450	480	740	285

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.32 kg/m with B_i 100 mm. For other inner widths, the maximum additional load changes.



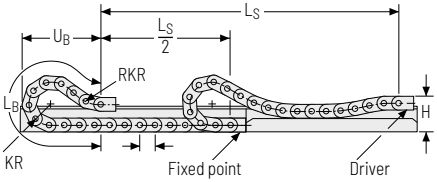
Speed
up to 9 m/s

Acceleration
up to 45 m/s²

Travel length
up to 6.3 m

Additional load
up to 10 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
63	150	250	939	458
80	150	250	994	473
100	150	250	1105	510
125	150	250	1272	567
160	150	250	1438	612
200	150	250	1771	730

Speed
up to 3 m/s

Acceleration
up to 20 m/s²

Travel length
up to 125 m

Additional load
up to 10 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

Only designs 020 and 030 can be used for a gliding arrangement.

Subject to change without notice.

UA1555.020 | Dimensions · Technical data

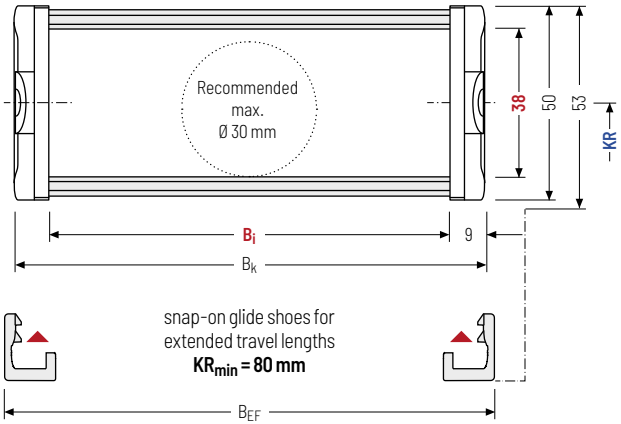
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 150 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
38	50	53	50	75	100	B_i + 18	B_i + 22	63	80	100	125	1.13 – 1.52
			125	150				160	200			

Order example

UA1555	.	020	.	125	.	160	-	1887	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1555.030 | Dimensions · Technical data

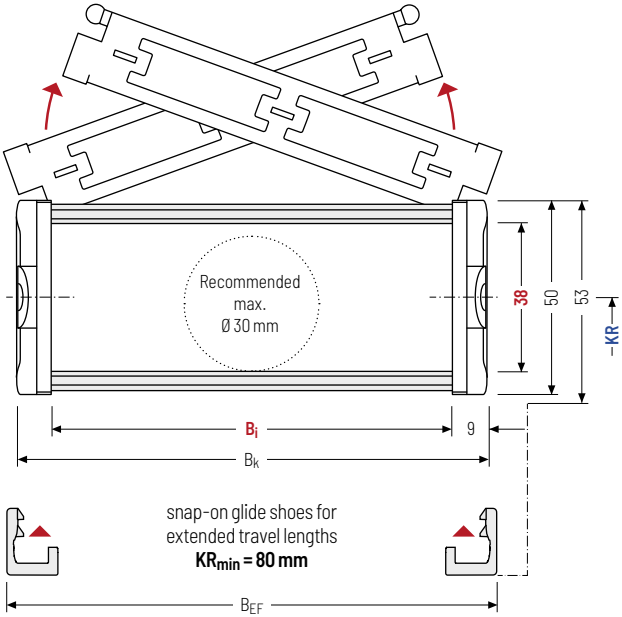
Stay variant 030 – with outside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Outside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 150 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
38	50	53	50	75	100	B_i + 18	B_i + 22	63	80	100	125	1.13 – 1.51
			125	150				160	200			

Order example

UA1555	.	030	.	125	.	160	-	1887	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1555.040 | Dimensions · Technical data

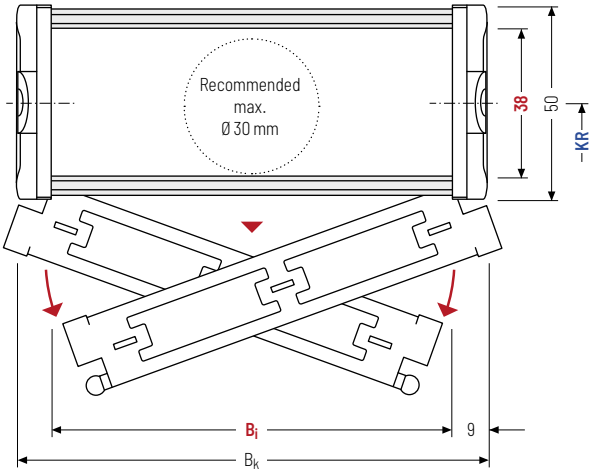
Stay variant 040 – with inside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Inside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 150 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
38	50	50	75	100	B_i + 18	63	80	100	125	1.13 – 1.52
		125	150			160	200			

Order example

UA1555	.	040	.	125	.	160	-	1887		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1555 | Inner distribution | TS0 · TS1 · TS3

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

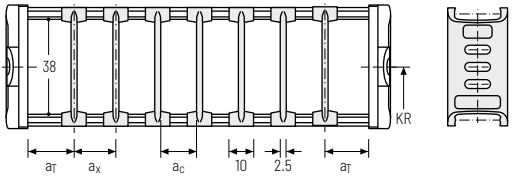
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.
The locking cams click into place in the locking grids in the stays **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	5	10	7.5	–	–
B*	5	10	7.5	2.5	–

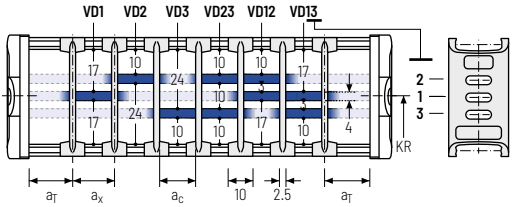
Number of dividers for design 020 depending on B_i
* not for design 020



Divider system TS1 with continuous height separation*

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	5	20	10	7.5	–	2
B	5	20.5	10	7.5	2.5	2

* not for design 020

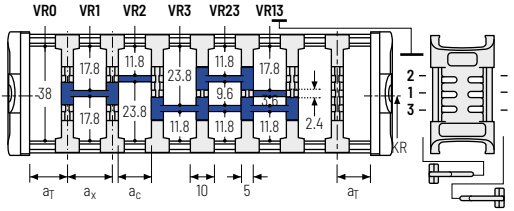


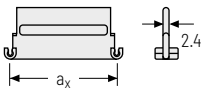
Divider system TS3 with height separation consisting of plastic section subdivisions*

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	5	15	10	2

* not for design 020

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





a_x (centre distance of dividers) [mm]									
a_C (usable width of inner chamber) [mm]									
15	**20**	**25**	**30**	**35**	**40**	**45**	**55**	**65**	**75**
10	15	20	25	30	35	40	50	60	70

Order example

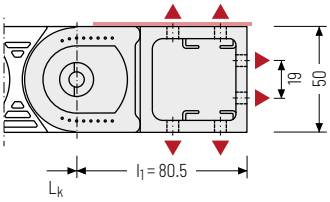
TS3	.	A	.	2	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

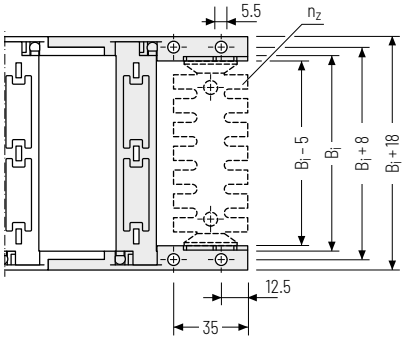
Subject to change without notice.

UA1555 | End connectors

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.

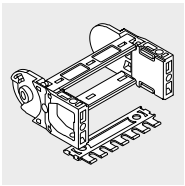




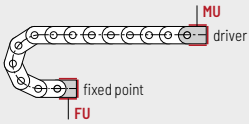
▲ Assembly options

Recommended tightening torque:
5 Nm for screws M5 - 8.8

B_i [mm]	n_z
50	2 x 3
75	2 x 5
90	2 x 6
100	2 x 7
125	2 x 9
150	2 x 11



The end connectors are optionally also available **with** strain relief comb or **with** C-rail
Art. no. 3931 (1 on each side) for clamps.
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

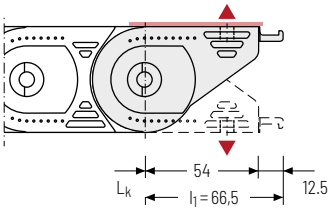
UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

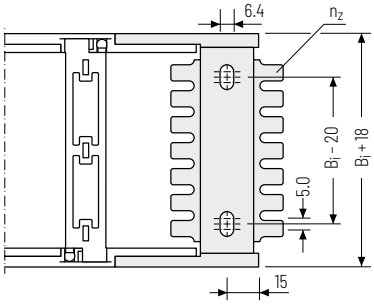
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Single-part end connectors short – plastic

The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.

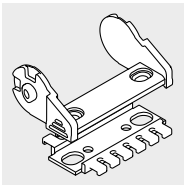




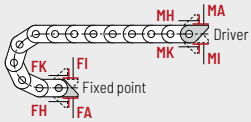
▲ Assembly options

Recommended tightening torque:
6 Nm for screws M6 - 8.8

B_i [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12



The end connectors are optionally also available **without** strain relief comb.
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

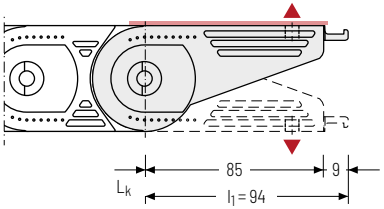
Order example

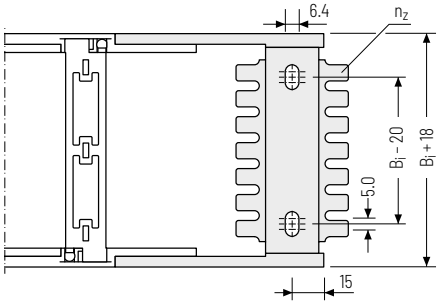
End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

Single-part end connectors long – plastic

The plastic end connectors can be connected **from above or below and allow a 1: 1 replacement of the UNIFLEX 0555 in the connection area**. The connection type can be changed by altering the position of the end connector.

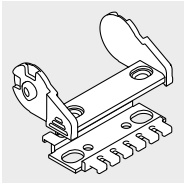




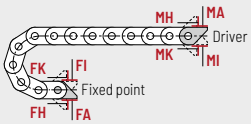
▲ Assembly options

Recommended tightening torque:
6 Nm for screws M6 - 8.8 and washers

B_i [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12



The end connectors are optionally also available **without** strain relief comb.
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	Connection point	Connection type
End connector U0555	.	F	A
End connector U0555	.	M	A

Subject to change without notice.

Subject to change without notice.



UA1665

Pitch
66.5 mm

Inner height
44 mm

Inner widths
50 – 250 mm

Bending radii
75 – 300 mm

Stay variants



Design 020 ..... page **184**

Closed frame
» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Design 030 ..... page **185**

Frame with outside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** openable and detachable.



Design 040 ..... page **186**

Frame with inside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** openable and detachable.



Design RMAI ..... page **188**

Mounting frame stay
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** threaded joint easy to release.

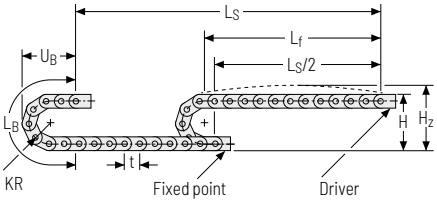


Design RMAO ..... page **190**

Mounting frame stay
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** threaded joint easy to release.

Subject to change without notice.

Unsupported arrangement

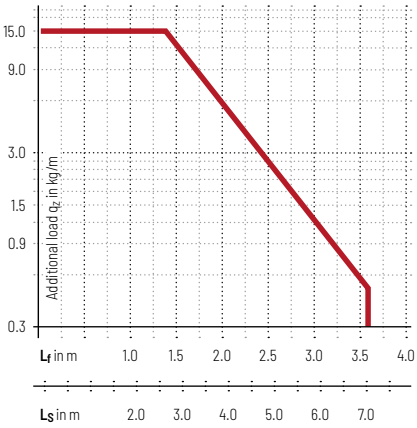


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
75	210	245	369	172
100	260	295	448	197
120	300	335	511	217
140	340	375	574	237
200	460	495	762	297
250	560	595	919	347
300	660	695	1076	397

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.43 kg/m with B_i 200 mm. For other inner widths, the maximum additional load changes.



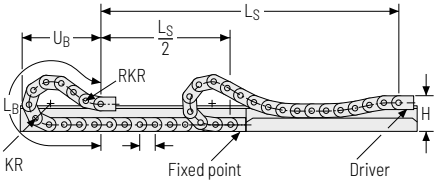
Speed
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 7 m

Additional load
up to 15 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
75	180	300	1118	546
100	180	300	1251	593
120	180	300	1318	609
140	180	300	1450	654
200	180	300	1783	753
250	180	300	2182	864
300	180	300	2581	1035

Speed
up to 3 m/s

Acceleration
up to 15 m/s²

Travel length
up to 150 m

Additional load
up to 15 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

Only designs 020 and 030 can be used for a gliding arrangement.

Subject to change without notice.

UA1665.020 | Dimensions · Technical data

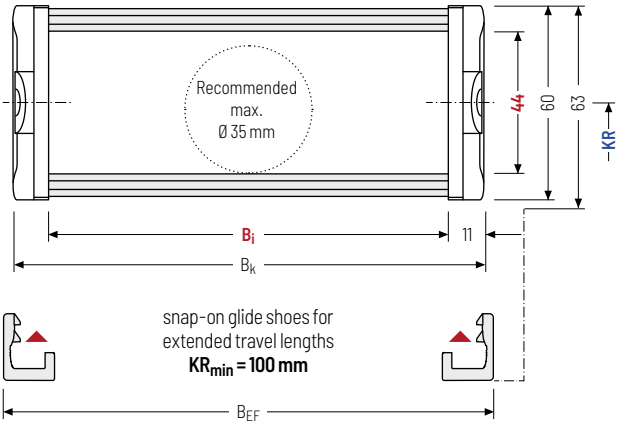
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
44	60	63	50	75	100	125	150	B_i + 22	B_i + 27	75	100	120	140	1.67 – 2.76
			175	200	225	250				200	250	300		

Order example

UA1665	.	020	.	125	.	140	-	2660	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1665.030 | Dimensions · Technical data

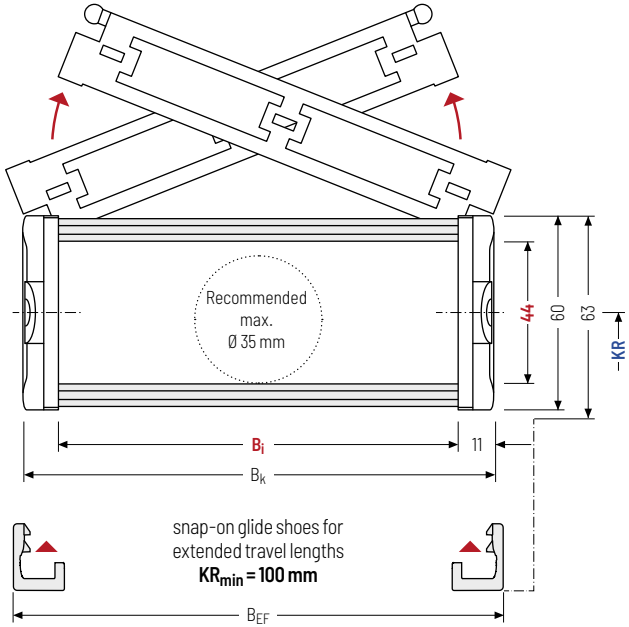
Stay variant 030 – with outside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Outside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
44	60	63	50	75	100	125	150	B_i + 22	B_i + 27	75	100	120	140	1.67 – 2.70
			175	200	225	250				200	250	300		

Order example

UA1665	.	030	.	125	.	140	-	2660	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1665.040 | Dimensions · Technical data

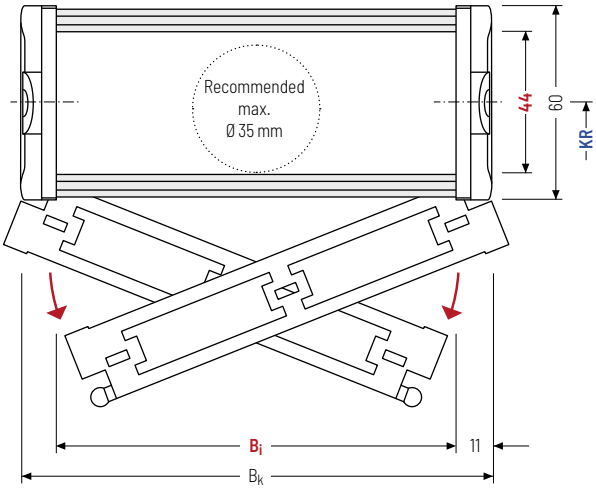
Stay variant 040 – with inside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Inside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

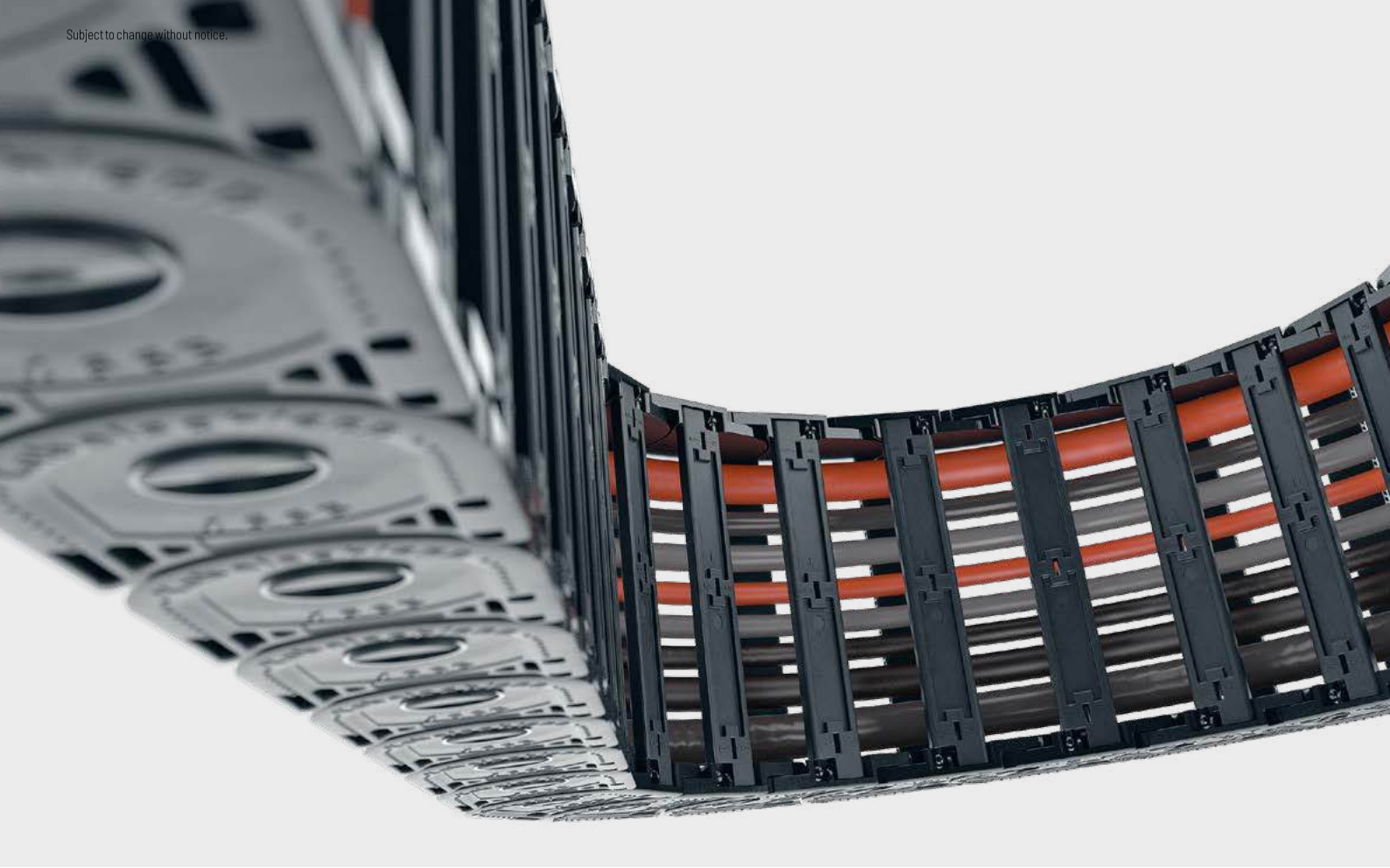
h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]				q_k [kg/m]
44	60	50	75	100	125	150	B_i + 22	75	100	120	140	1.67 – 2.70
		175	200	225	250			200	250	300		

Order example

UA1665	.	040	.	125	.	140	-	2660	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Subject to change without notice.



UA1665.RMAI | Dimensions · Technical data

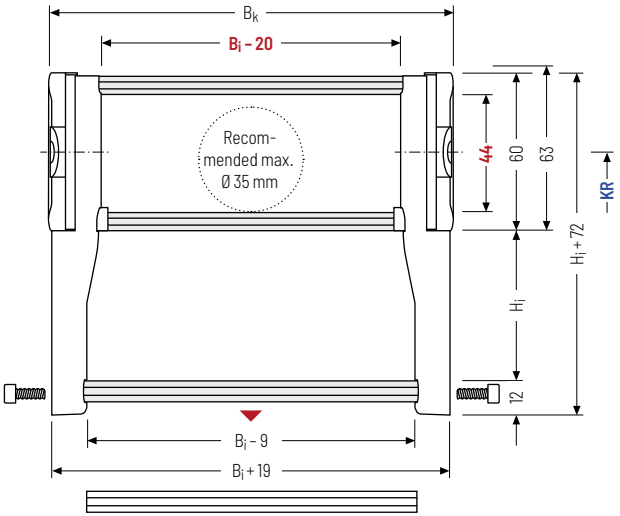
Stay variant RMAI – mounting frame stay



» Weight-optimized plastic frame with particularly high torsional rigidity.
» Plastic stays and aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** threaded joint easy to release.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 125 – 200 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	H_i [mm]		B_i [mm]		B_k [mm]	B_{EF} [mm]	KR [mm]				q_k* [kg/m]
44	60	114	139	125	150	B_i + 22	B_i + 27	75	100	120	140	3.10 – 3.95
		164	189	175	200			200	250	300		

* indicated according to standard pitch

Order example

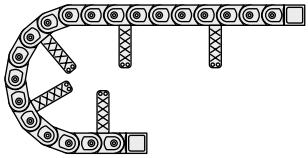
UA1665	.	RMAI	.	150	.	140	-	2660	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
standard pitch, mounting frame stay on every 4th stay, no screw fixing.

Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 114 mm: KR_{min} = 200 mm
H_i = 139 mm: KR_{min} = 250 mm
H_i = 164 mm: KR_{min} = 300 mm
H_i = 189 mm: KR_{min} = 300 mm



Cross section mounting frame stay

To achieve a nearly square cross section in the mounting frame stay, we recommend the following combination of B_i and H_i:

B_i [mm]	H_i [mm]	KR_{min} [mm]	Stays [mm]
125	114	200	100
150	139	250	125
175	164	300	150
200	189	300	175



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TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

UA1665.RMA0 | Dimensions · Technical data

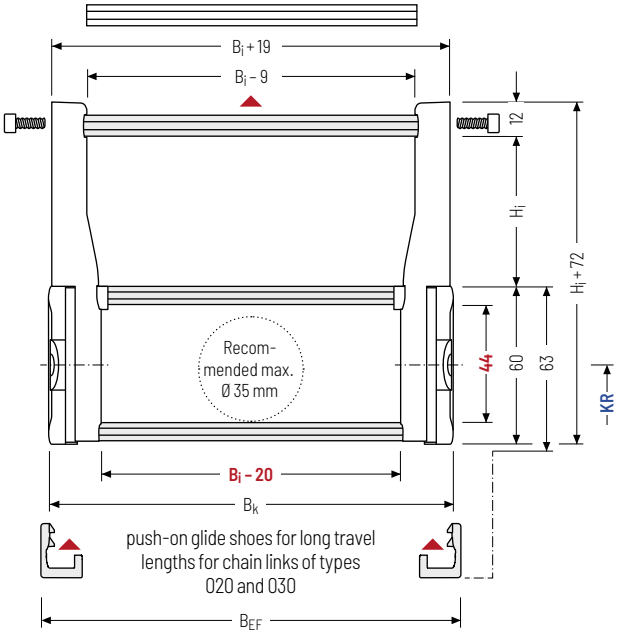
Stay variant RMA0 –
mounting frame stay

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Plastic stays and aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- **Outside:** threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 125 – 200 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type.
Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	H_i [mm]		B_i [mm]		B_k [mm]	B_{EF} [mm]	KR [mm]				q_k* [kg/m]
44	60	114	139	125	150	B_i + 22	B_i + 27	75	100	120	140	3.58 – 4.66
		164	189	175	200			200	250	300		

* indicated according to standard pitch

Order example

UA1665	.	RMA0	.	150	.	140	-	2660		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

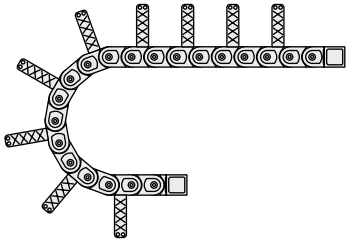
UA1665.RMA0 | Dimensions · Technical data

RMA0 – assembly to the outside:
standard pitch, mounting frame stay on every 2nd stay, screw fixing.

The cable carrier rests on the bars. A bracket must be provided for the fixed point.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.



Cross section mounting frame stay

To achieve a nearly square cross section in the mounting frame stay, we recommend the following combination of B_i and H_i:

B_i [mm]	H_i [mm]	KR_{min} [mm]	Stays [mm]
125	114	200	100
150	139	250	125
175	164	300	150
200	189	300	175



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TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.



Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

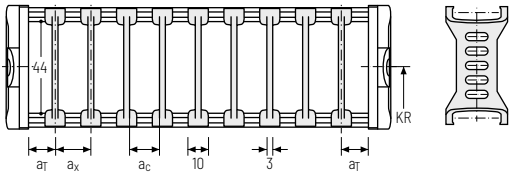
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.
The locking cams click into place in the locking grids in the stays **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	5	10	7	–	–
B*	5	10	7	2.5	–

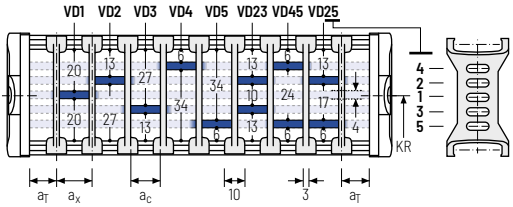
Number of dividers for design 020 depending on B_i
* not for design 020



Divider system TS1 with continuous height separation*

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	5	20	10	7	–	2
B	5	20	10	7	2.5	2

* not for design 020

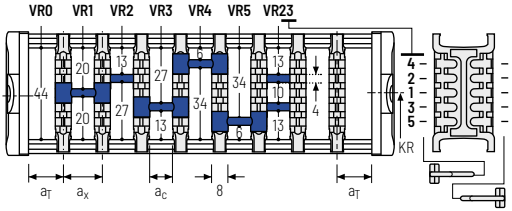


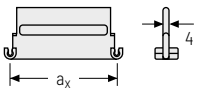
Divider system TS3 with height separation consisting of plastic section subdivisions*

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	16/40**	8	2

* not for design 020
** for aluminium partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminium partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (centre distance of dividers) [mm]											
a_C (usable width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

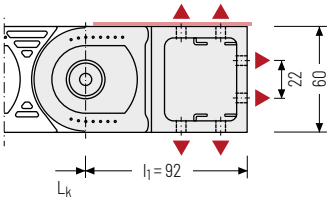
When using partitions with **a_x > 112 mm**, we recommend an additional central support with a **twin divider**. The height separations VD4 and VD5 are not possible when using twin dividers.

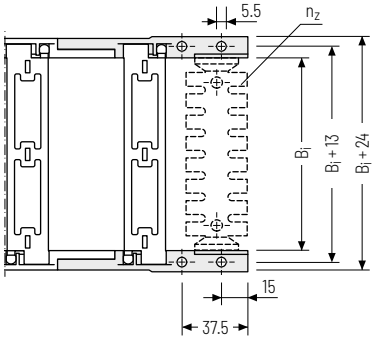
Subject to change without notice.

UA1665 | End connectors

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.

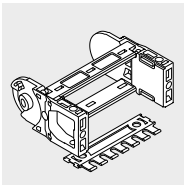




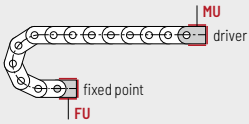
▲ Assembly options

Recommended tightening torque:
5 Nm for screws M5 - 8.8

B_i [mm]	n_z
50	2 x 3
75	2 x 5
100	2 x 7
125	2 x 9
150	2 x 11
175	2 x 13



The end connectors are also available as an option **with** strain relief comb or **with** C-rail Art. no 3931 (1 on each side) for clamps. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

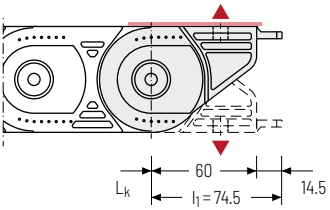
UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

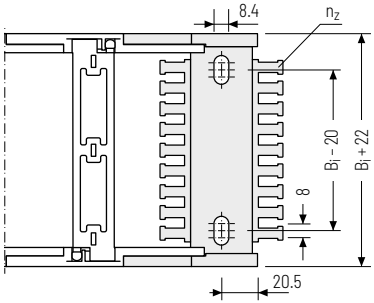
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Single-part end connectors – plastic

The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.

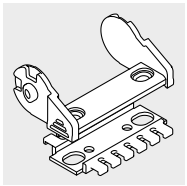




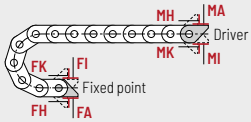
▲ Assembly options

Recommended tightening torque:
15 Nm for screws M8 - 8.8

B_i [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12
175	2 x 14
200	2 x 16
225	2 x 18
250	2 x 20



The end connectors are optionally also available **without** strain relief comb.
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

UA1775

Pitch
77.5 mm

Inner height
56 mm

Inner widths
100 – 400 mm

Bending radii
90 – 340 mm

Stay variants



Design 020 ..... page **198**

Closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Design 030 ..... page **199**

Frame with outside detachable stays

» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** openable and detachable.



Design 040 ..... page **200**

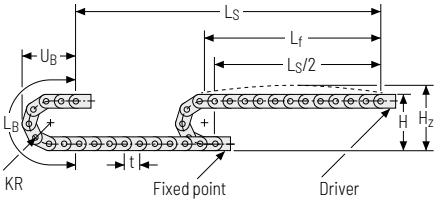
Frame with inside detachable stays

» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** openable and detachable.

Subject to change without notice.

UA1775 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

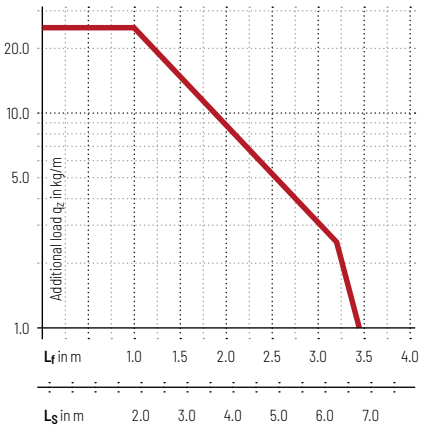


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
90	257	297	438	206
115	307	347	516	231
140	357	397	595	256
165	407	447	673	281
190	457	497	752	306
240	557	597	909	356
285	647	687	1050	401
340	757	797	1223	456

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.03 kg/m with B_i 150 mm. For other inner widths, the maximum additional load changes.



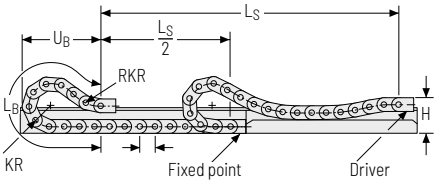
Speed
up to 10 m/s

Acceleration
up to 35 m/s²

Travel length
up to 6.8 m

Additional load
up to 25 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	LB [mm]	UB [mm]
90	231	400	1313	643
115	231	400	1440	688
140	231	400	1575	733
165	231	400	1715	779
190	231	400	1868	828
240	231	400	2225	951
285	231	400	2580	1081
340	231	400	3015	1240

Speed
up to 3 m/s

Acceleration
up to 8 m/s²

Travel length
up to 200 m

Additional load
up to 25 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

Subject to change without notice.

UA1775.020 | Dimensions · Technical data

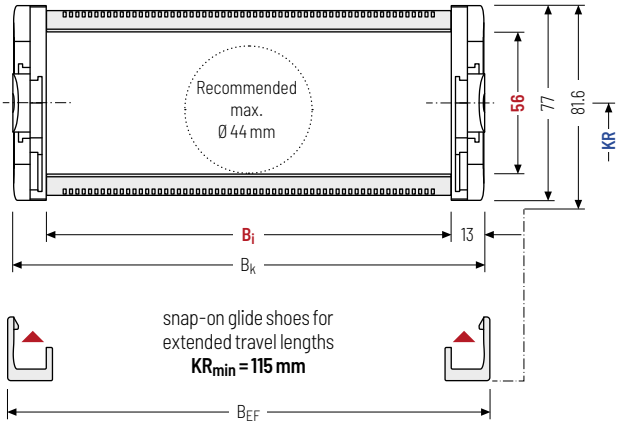
Stay variant 020 – closed frame



» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 100 – 400 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	B_{EF} [mm]	KR [mm]			q_k [kg/m]
			100	125	150	175	200			90	115	140	
56	77	81.6	225	250	275	300	325	$B_i + 26$	$B_i + 30$	165	190	240	2.844 – 4.239
			350	375	400					285	340		

Order example

UA1775	.	020	.	150	.	140	-	3100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1775.030 | Dimensions · Technical data

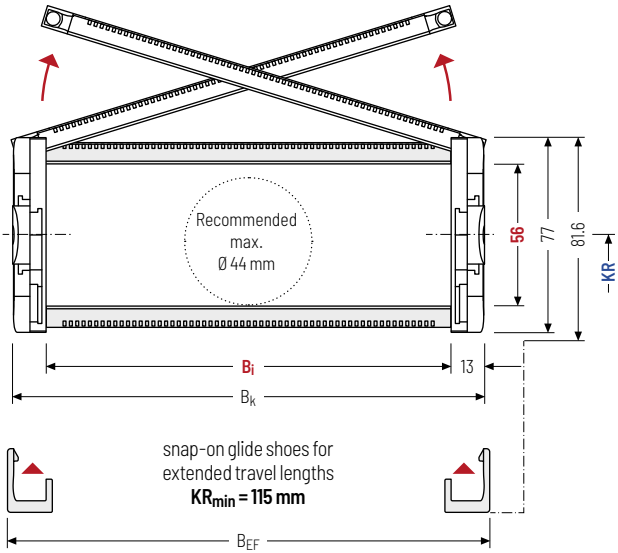
Stay variant 030 – with outside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Outside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 100 – 400 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	B_{EF} [mm]	KR [mm]			q_k [kg/m]
			100	125	150	175	200			90	115	140	
56	77	81.6	225	250	275	300	325	$B_i + 26$	$B_i + 30$	165	190	240	2.831 – 4.224
			350	375	400					285	340		

Order example

UA1775	.	030	.	150	.	140	-	3100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1775.040 | Dimensions · Technical data

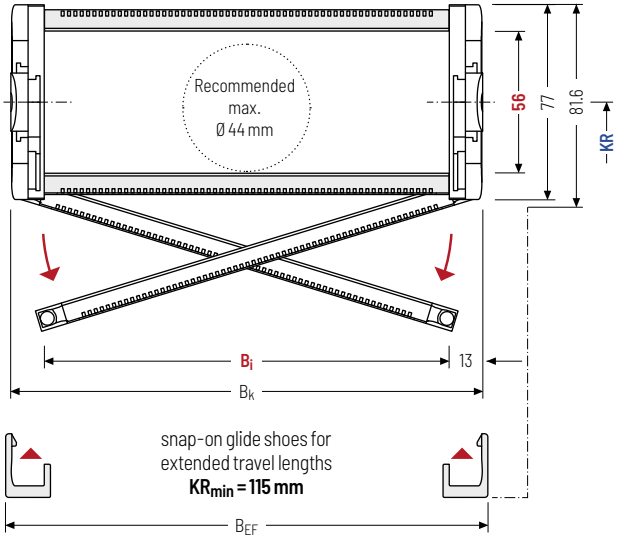
Stay variant 040 – with inside opening and detachable stays

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Inside:** openable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 100 – 400 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	B_{EF} [mm]	KR [mm]			q_k [kg/m]
56	77	81.6	100	125	150	175	200	B_i + 26	B_i + 30	90	115	140	2.831 – 4.224
			225	250	275	300	325			165	190	240	
			350	375	400					285	340		

Order example

UA1775	.	040	.	150	.	140	-	3100	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

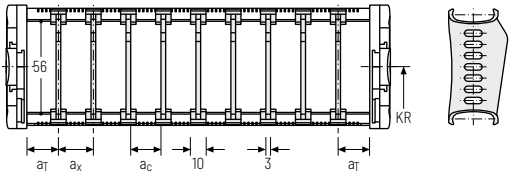
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.
The locking cams click into place in the locking grids in the stays **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	5	10	7	–	–
B	5	10	7	2.5	–

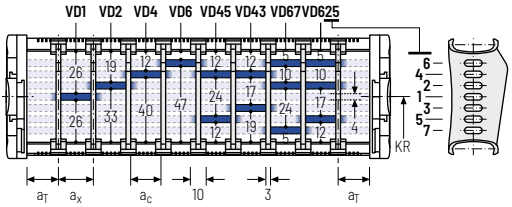
Number of dividers for design 020 depending on B_i



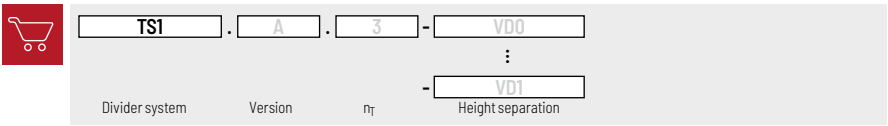
Divider system TS1 with continuous height separation*

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	5	10	7	–	2
B	5	10	7	2.5	2

* not for design 020



Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

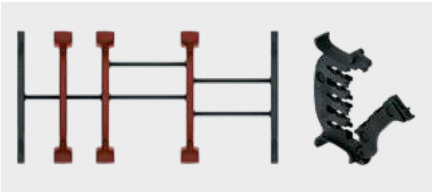
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

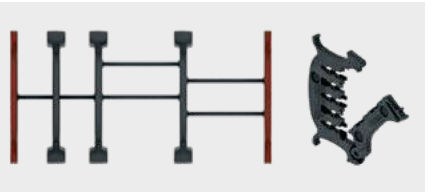
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A

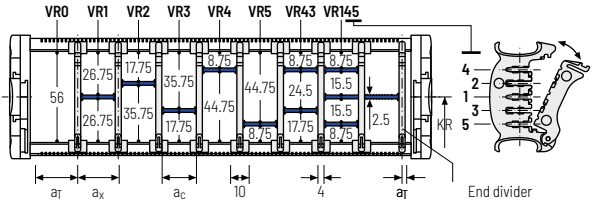


End divider

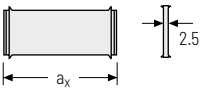


Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	5 / 2*	14	10	2

* For End divider



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



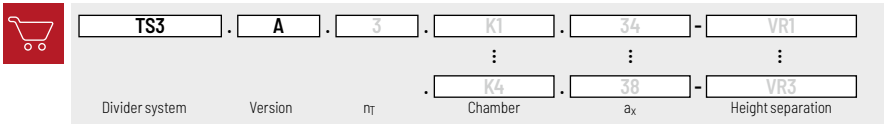
a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example



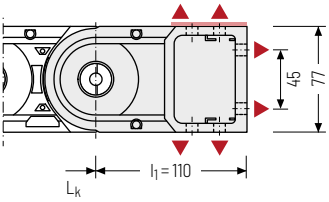
Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

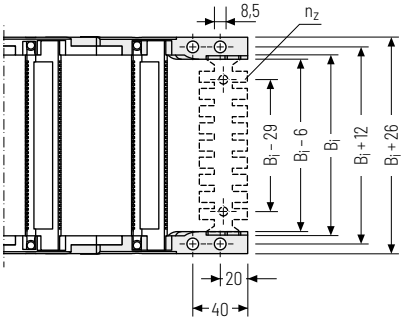
If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.

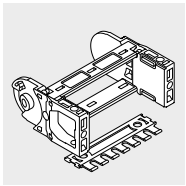




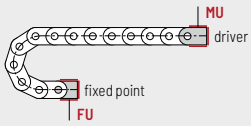
▲ Assembly options

Recommended tightening torque:
27 Nm for screws M8

B_i [mm]	n_z
100	2 x 7
125	2 x 9
150	2 x 11
175	2 x 13



The end connectors are also available as an option **with** strain relief comb or **with** C-rail Art. no 3931 (1 on each side) for clamps. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

UA1995

Pitch
99.5 mm

Inner height
80 mm

Inner widths
85 – 250 mm

Bending radii
150 – 500 mm

Stay variants



Design 020 ..... page **206**

Closed frame
» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.



Design 030 ..... page **207**

Frame with outside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** release by rotating 90°.



Design 040 ..... page **208**

Frame with inside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** release by rotating 90°.



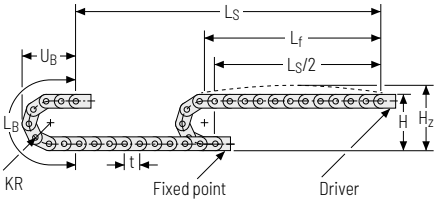
Design 070 ..... page **209**

Frame with outside and inside detachable stays
» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside/inside:** release by rotating 90°.

Subject to change without notice.

UA1995 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

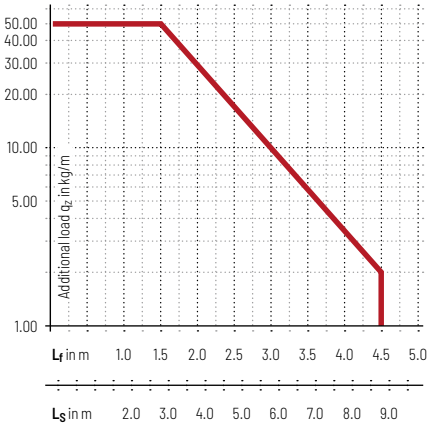


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
150	410	440	680	250
210	530	560	860	310
250	610	640	990	350
300	710	740	1150	400
350	810	840	1300	450
400	910	940	1460	500
500	1110	1140	1770	600

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.85 kg/m with B_i 196 mm. For other inner widths, the maximum additional load changes.



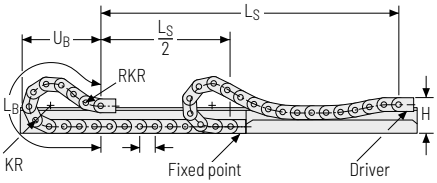
Speed up to 10 m/s

Acceleration up to 25 m/s²

Travel length up to 9 m

Additional load up to 50 kg/m

Gliding arrangement | GO module with chain links optimized for gliding*



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
150	330	400	1805	890
210	330	400	2180	1010
250	330	400	2390	1070
300	330	400	2690	1160
350	330	400	3090	1310
400	330	400	3490	1450
500	330	400	4280	1740

Speed up to 8 m/s

Acceleration up to 20 m/s²

Travel length up to 200 m

Additional load up to 50 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

* only design 070

Subject to change without notice.

UA1995.020 | Dimensions · Technical data

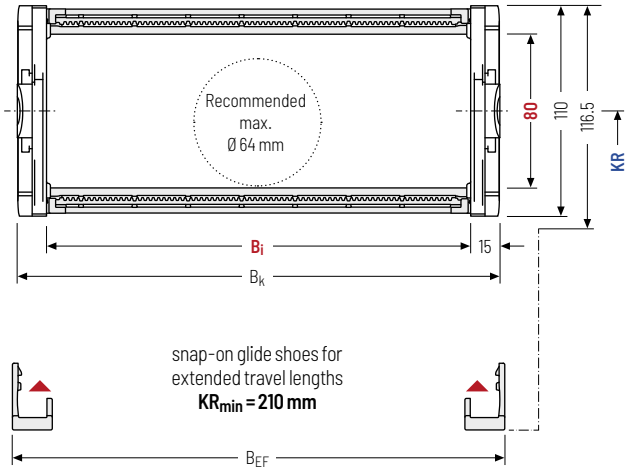
Stay variant 020 – closed frame



» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** not openable.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 85 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]				B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
80	110	116.5	85 180	125 196	138 225	150 250	B_i + 30	B_i + 36	150 350	210 400	250 500	300	3.860 – 3.861

Order example

UA1995	020	150	210	3582	VS
Type	Stay variant	B_i [mm]	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995.030 | Dimensions · Technical data

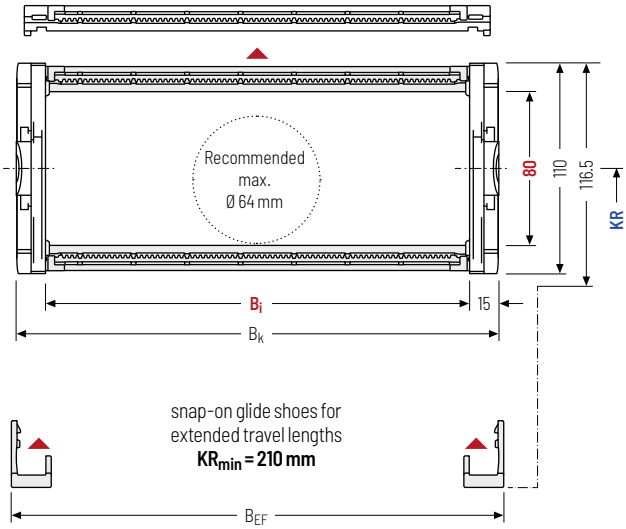
Stay variant 030 –
with outside detachable stays

» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside:** release by rotating 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 85 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]				B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
80	110	116.5	85	125	138	150	$B_i + 30$	$B_i + 36$	150	210	250	300	3.833 – 3.834
			180	196	225	250			350	400	500		

Order example

UA1995	.	030	.	150	.	210	-	3582	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995.040 | Dimensions · Technical data

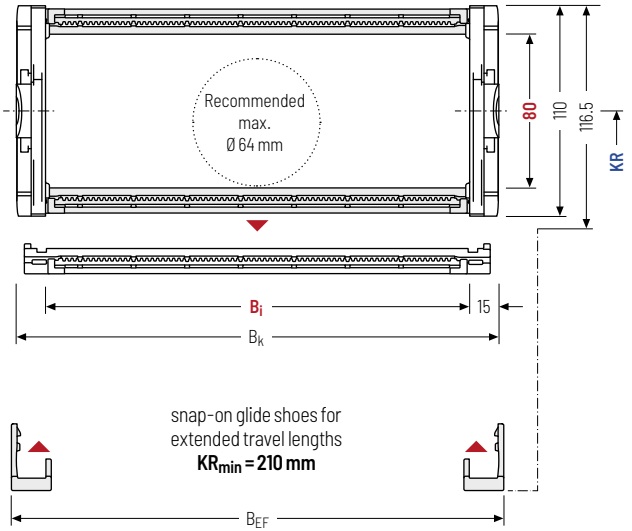
Stay variant 040 –
with inside detachable stays

» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Inside:** release by rotating 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 85 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]				B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
80	110	116.5	85	125	138	150	B_i + 30	B_i + 36	150	210	250	300	3.833 – 3.834
			180	196	225	250			350	400	500		

Order example

UA1995	.	040	.	150	.	210	-	3582		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UA1995.070 | Dimensions · Technical data

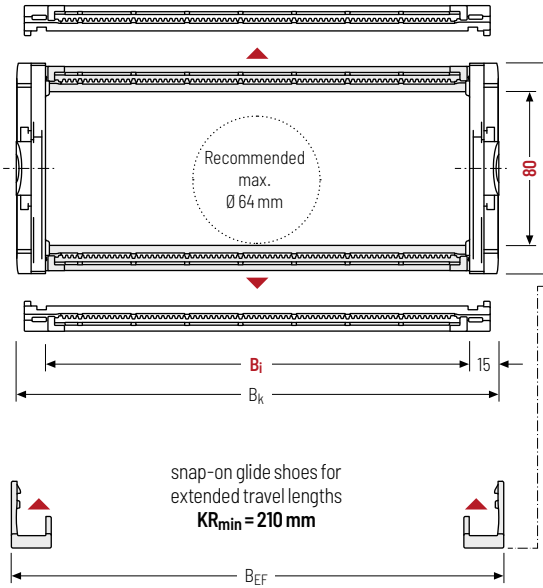
Stay variant 070 – with outside and inside detachable stays



» Weight-optimised plastic frame with particularly high torsional rigidity.
» **Outside/Inside:** release by rotating 90°.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 85 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 070 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]				B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
80	110	116.5	85	125	138	150	B_i + 30	B_i + 36	150	210	250	300	3.852 – 3.853
			180	196	225	250			350	400	500		

Order example

UA1995	.	070	.	150	.	210	-	3582	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995 | Inner distribution | TS0 · TS1

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

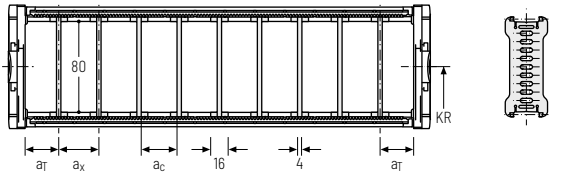
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.
The locking cams click into place in the locking grids in the stays **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	10	16	12	–	–
B	10	17.5	13.5	2.5	–

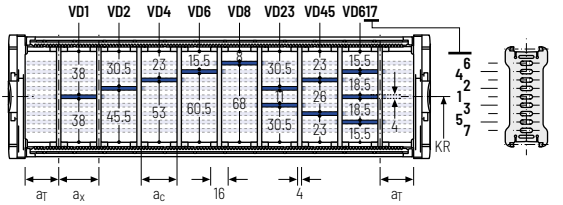
Number of dividers for design 020 depending on B_i



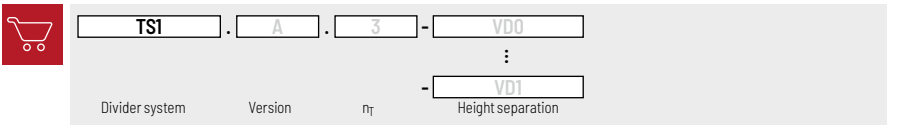
Divider system TS1 with continuous height separation*

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	10	16	12	–	2
B	10	17.5	13.5	2.5	2

* not for design 020



Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

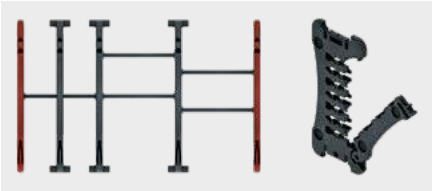
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



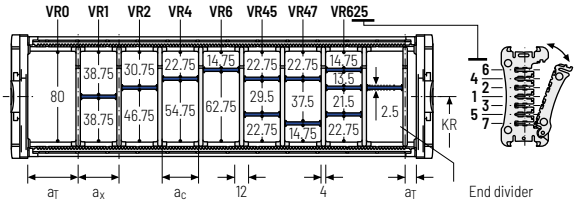
End divider

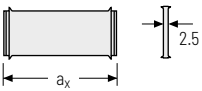


Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	n_T min
A	8 / 4*	14	10	2

Number of dividers for design 020 depending on B_i
* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_x > 49 mm**.

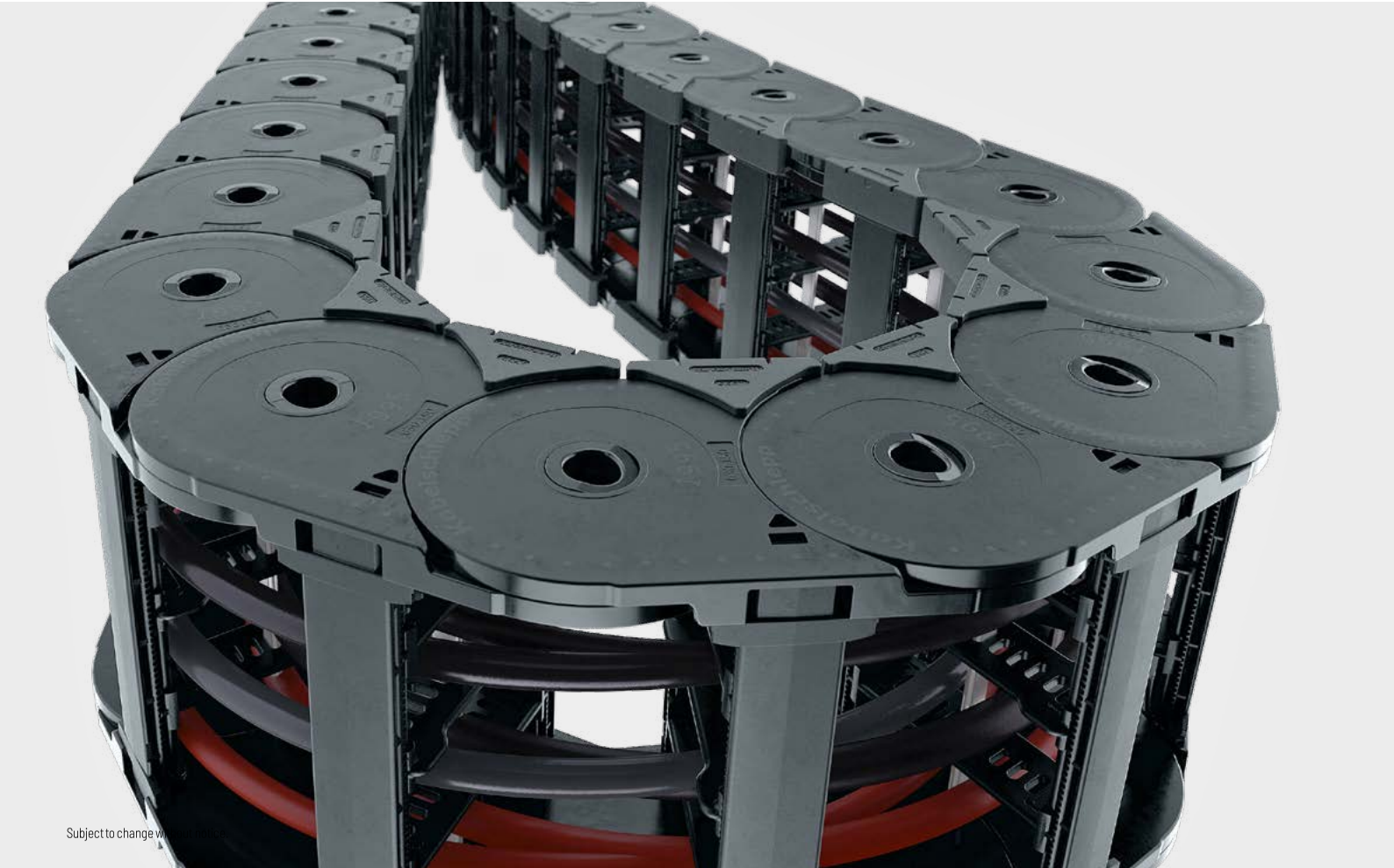
Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

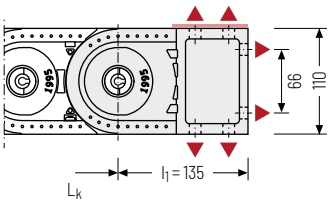
Subject to change without notice.

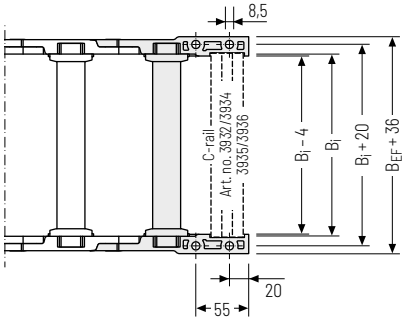


Subject to change w

Universal end connectors UMB – plastic (standard)

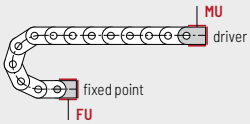
The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.





▲ Assembly options

Recommended tightening torque:
27 Nm for screws M8



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

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TKP35 series

Robust all-rounder with variable inner distribution



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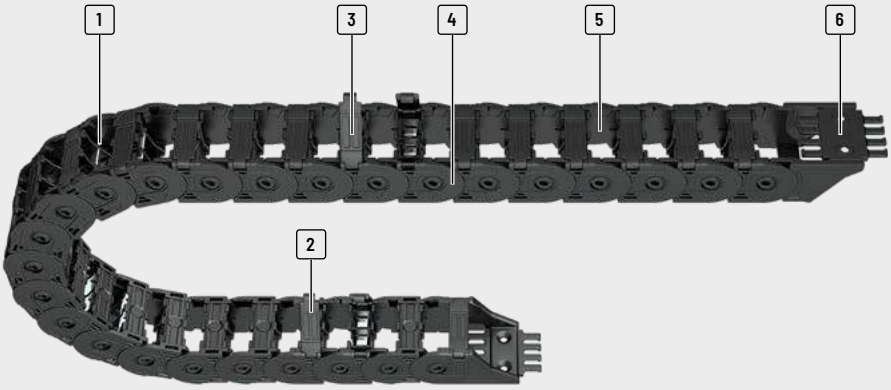


1 Dividers and height partitions for cable separation

2 Designs with inward or outward opening crossbars

3 Easy and quick to open at any position

4 Integrated noise damping

5 Interior space is gentle on the cables without sharp edges

6 End connectors with optional strain relief

Features

- » Robust and extremely rigid stroke system
- » Quiet operation due to internal dampening system
- » Weight-optimized cable carrier geometry
- » Interior without sharp edges, design that protects the cable
- » Variable inner distribution
- » Vertical moveable dividers or with arresting cams, can be attached at 2-mm increments (not B_i 16)
- » Easy-to-open versions, left or right (not B_i 16)
- » Quick and easy to open
- » Optional strain relief can be fully integrated into the end connector



Reliable cable separation through fixable dividers



Design 030 with outside opening and detachable crossbars on both sides



Design 040 with inside opening and detachable crossbars on both sides



Optimised utilisation of the interior space; vertical and horizontal inner distribution possible

Subject to change without notice.

TKP35 series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKP35											
		030	32	40	16 – 50	26 – 62	–	35	48 – 125	2	25
		040	32	40	25 – 50	37 – 62	–	35	48 – 125	2	25

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
2.3	5	20	–	–	–	•	•	–	–	•	•	•	220
2.3	5	20	–	–	–	•	•	–	–	•	•	•	221

Subject to change without notice.

TKP35

Pitch
35 mm

Inner height
32 mm

Inner widths
16 – 50 mm

Bending radii
48 – 125 mm

Stay variants



Design 030 ..... page **220**

Frame with outside opening crossbars on both sides

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Outside:** opening and detachable crossbars.



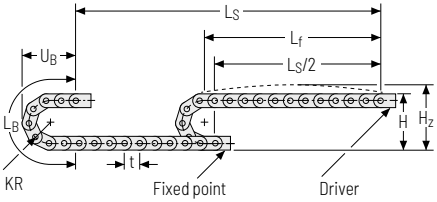
Design 040 ..... page **221**

Frame with inside opening crossbars on both sides

» Weight optimised plastic frame with high torsional rigidity.
» Can be opened at any position on both sides.
» **Inside:** opening and detachable crossbars.

Subject to change without notice.

Unsupported arrangement

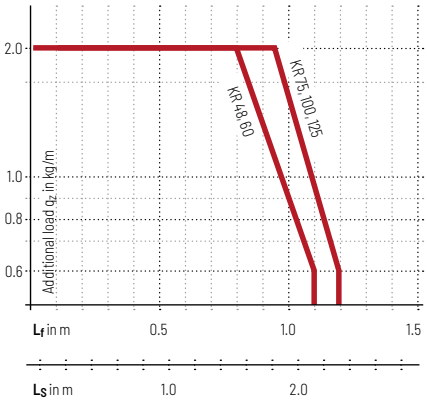


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
48	146	176	220	103
60	170	200	258	115
75	200	230	306	130
100	250	280	384	155
125	300	330	463	180

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.5 kg/m with B_i 16 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 20 m/s²

Travel length
up to 2.3 m

Additional load
up to 2 kg/m



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

TKP35.030 | Dimensions · Technical data

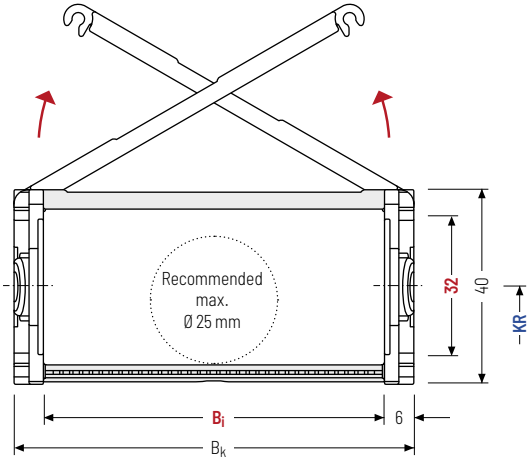
Stay variant 030 – with outside opening and detachable crossbars

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Outside:** opening and detachable crossbars.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 16 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]					q_k [kg/m]
32	40	16	25	38	50	B_i + 12*	48	60	75	100	125	0.5 – 0.8

*For B_i 16 = B_i + 10

Order example

TKP35	.	030	.	50	.	100	-	700		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

TKP35.040 | Dimensions · Technical data

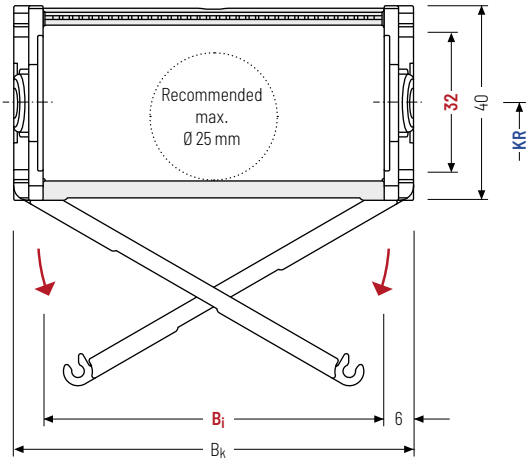
Stay variant 040 – with inside opening and detachable crossbars



» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Inside:** opening and detachable crossbars.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]					qk [kg/m]
32	40	25	38	50	Bi + 12	48	60	75	100	125	0.6 – 0.8

Order example

TKP35	.	040	.	50	.	100	-	700		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

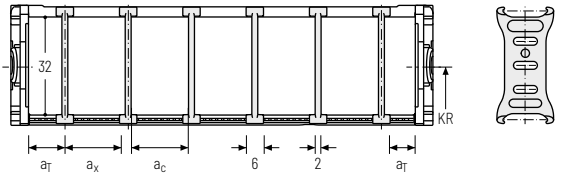
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay through rotation.
The arresting cams snap into the catch profiles in the covers **(version B).**

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	3	6	4	–	–
B	4.5* / 5	6	4	2	–

* Only B_i 25

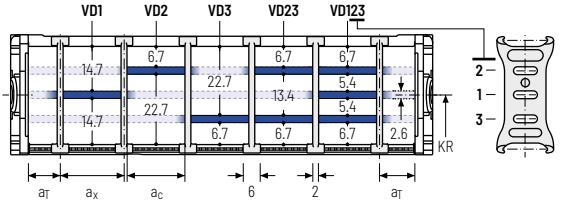


Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	3	6	4	–	2
B	4.5* / 5	6	4	2	2

* Only B_i 25

The dividers can be moved in the cross section.



Order example



TS1 . A . 3 - VD1
⋮
- VD3

Divider system | Version | n_T | Height separation

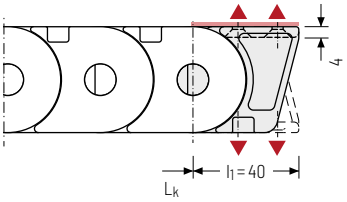
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

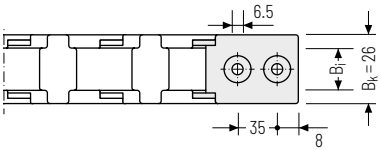
When using divider systems with height separation (TS1), please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Single-part end connectors – plastic
(suitable for B_i 16)

The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.

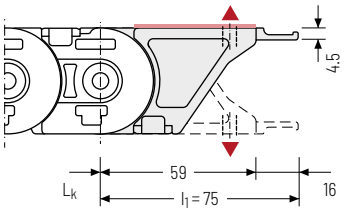


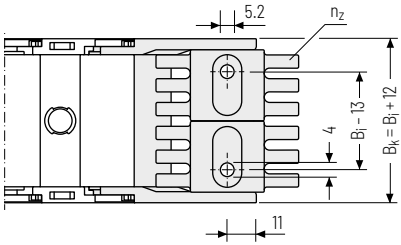


▲ Assembly options

Single-part end connectors – plastic
(suitable for B_i 25 – 50)

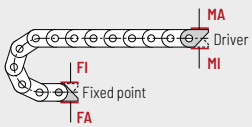
The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.





The end connectors are optionally also available without strain relief comb.

B_i [mm]	B_{EF} [mm]	n_z
25	37	2
38	50	4
50	62	6



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

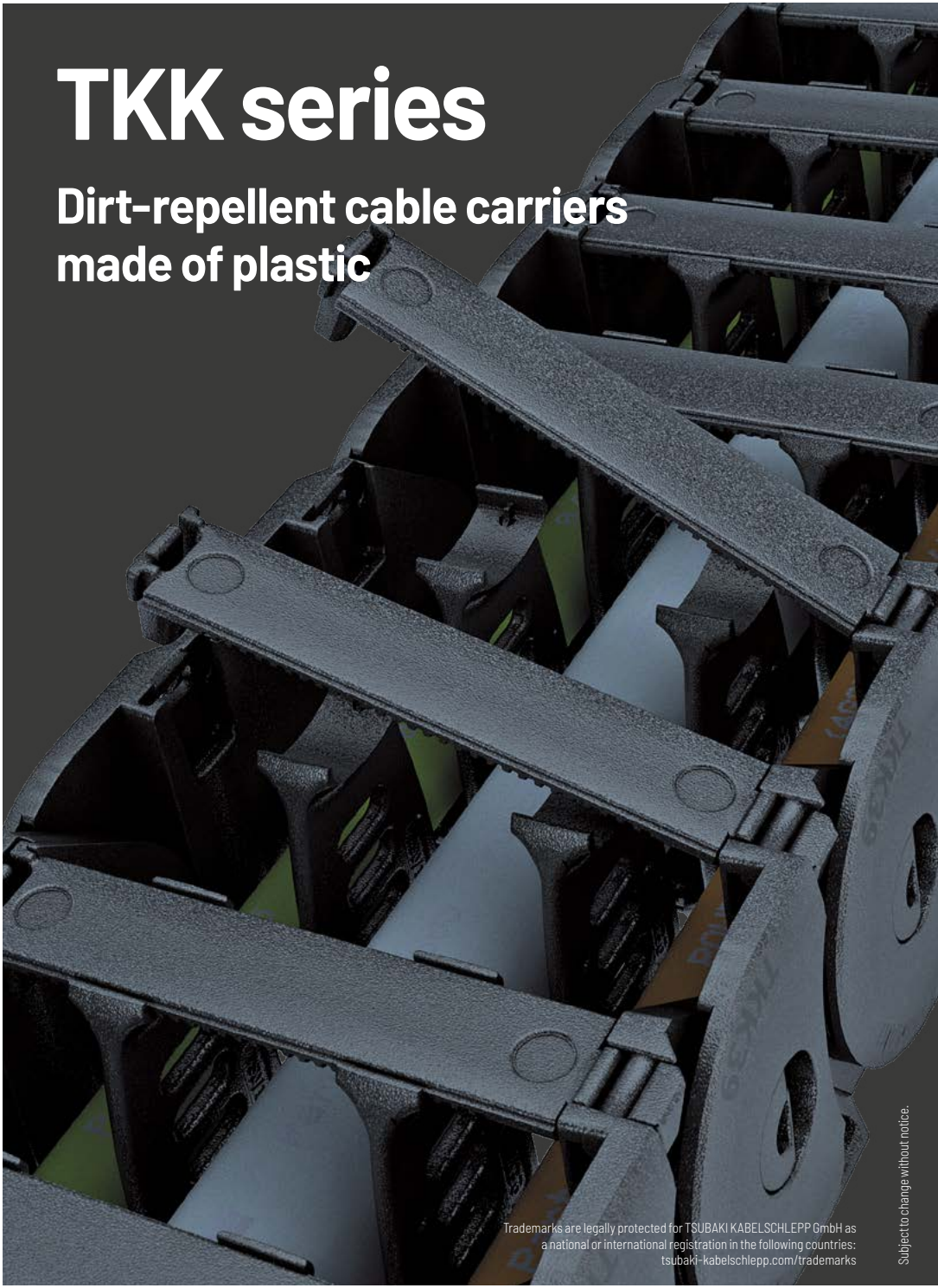
Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

TKK series

Dirt-repellent cable carriers made of plastic



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Subject to change without notice.



1 Very short steel end connectors
2 Plastic chain links
3 Extensive unsupported length
4 Link system repels dust and chips
5 Smooth surface for smooth running
6 Inside openable (design 040)
7 Dividers and height separations for cable separation

Features

- » High torsional rigidity
- » Optimised dividers to protect cables: rounded inner and outer profile
- » Extensive unsupported length
- » New dirt-resistant design of the chain links to protect against dust and chips
- » Smooth surface for optimum running
- » Closed and openable designs
- » Very short end connectors
- » Fixable dividers
- » Optimised stroke system
- » High side stability
- » Space-saving design for small spaces




Optimised divider design to protect cables


New design of chain links. Link system repels dust, chips and dirt


Very short end connectors

Subject to change without notice.

TKK series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	B_i-grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKK39											
		020	39	50	39 – 99	60 – 120	–	39	46 – 95	10	31
		040	39	50	39 – 99	60 – 120	–	39	46 – 95	10	31

Subject to change without notice.

TKK series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
4.8	3	9	120	2.5	9	•	•	–	–	•	•	•	230
4.8	3	9	–	–	–	•	•	–	–	•	•	•	231

Subject to change without notice.

TKK39

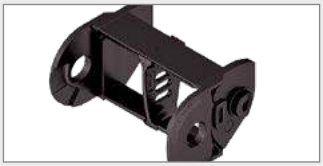
Pitch
39 mm

Inner height
39 mm

Inner width
39 – 99 mm

Bending radii
46 – 95 mm

Stay variants



Design 020 ..... page **230**

Closed frame
» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** closed.



Design 040 ..... page **231**

Frame with inside opening crossbar
» Weight-optimised plastic frame with particularly high torsional rigidity.
» Crossbars can be opened at any position on one side.
» **Inside:** openable.



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Additional product information online

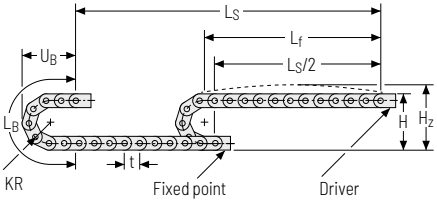
Installation instructions, etc.: Additional information via your smartphone or online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

Unsupported arrangement

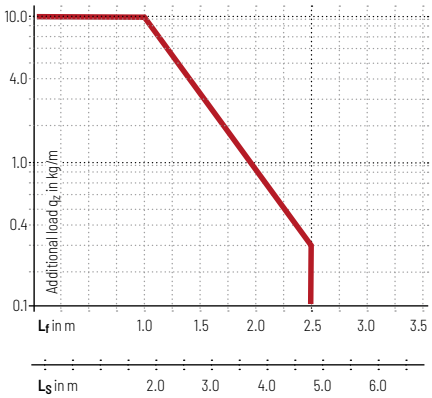


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
46	142	172	222	149
58	166	196	260	161
70	190	220	298	173
95	240	270	376	198

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.56 kg/m. The maximum additional load changes with deviating inner widths.



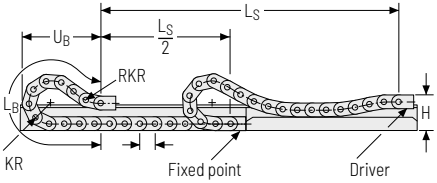
Speed
up to 3 m/s

Acceleration
up to 9 m/s²

Travel length
up to 4.8 m

Additional load
up to 10 kg/m

Gliding arrangement



KR [mm]	H [mm]	n_{RKR}	L_B [mm]	U_B [mm]
46	142	0	222	149
58	150	2	405	196
70	150	3	551	257
95	150	4	770	341

Speed
up to 2.5 m/s

Acceleration
up to 9 m/s²

Travel length
up to 120 m

Additional load
up to 10 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only design 020 can be used for a gliding arrangement.

Subject to change without notice.

TKK39.020 | Dimensions · Technical data

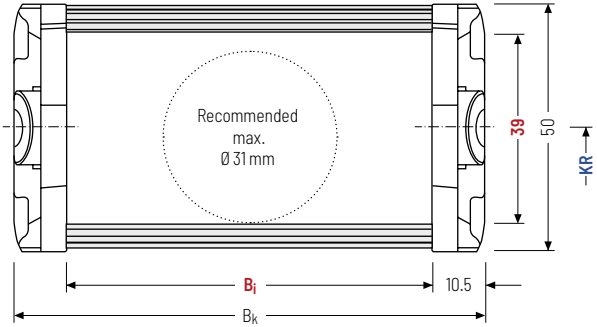
Stay variant 020 – closed frame

» Weight-optimised, closed plastic frame with particularly high torsional rigidity.
» **Outside/inside:** closed.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 39 – 99 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]				q_k [kg/m]
39	50	39	59	74	99	B_i + 21	46	58	70	95	1.29 – 1.71

Order example

TKK39	.	020	.	74	.	70	-	1950	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

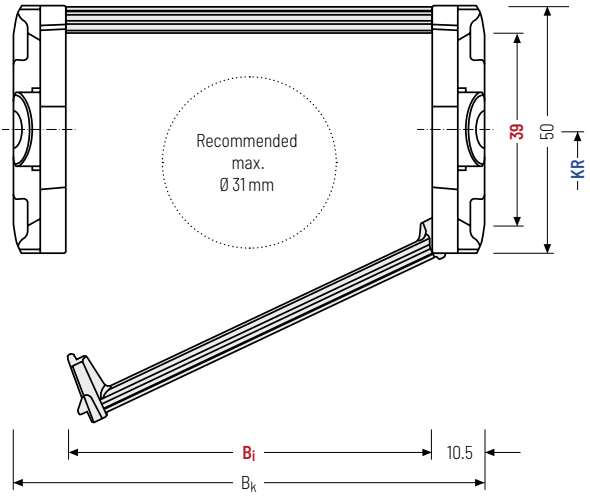
Stay variant 040 –
with inside opening crossbar

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Crossbars can be opened at any position on one side.
- **Inside:** openable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 39 – 99 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]				q_k [kg/m]
39	50	39	59	74	99	B_i + 21	46	58	70	95	1.29 – 1.72

Order example

TKK39	.	040	.	74	.	70	-	1950	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

Dividers, and the complete divider system (dividers with height separations) comes as diameter adjustable as standard **(version A)**.

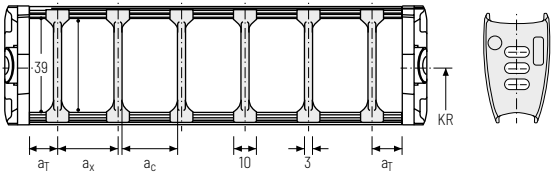
For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay.
The arresting cams snap into the catch profiles in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	5	10	7	–	–
B*	9.5	10	7	2	–

* not for design 020

The dividers can be moved in the cross section.

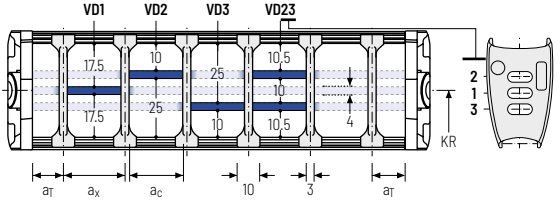


Divider system TS1 with continuous height separation*

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	5	10	7	–	2
B	9.5	10	7	2	2

* not for design 020

The dividers can be moved in the cross section.



Order example



TS1 . A . 3 - VD1
⋮
- VD3

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

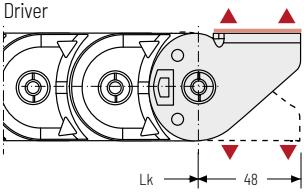
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

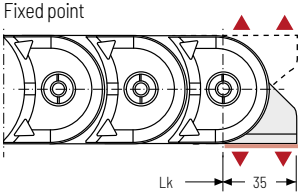
End connectors – steel

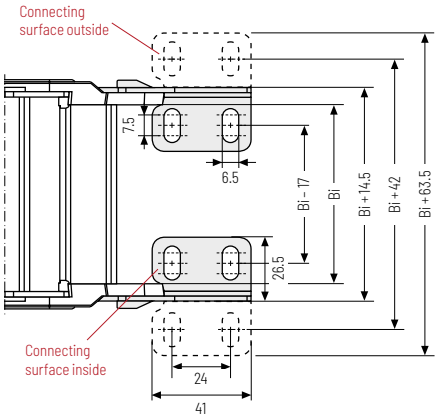
The steel end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.

Driver



Fixed point



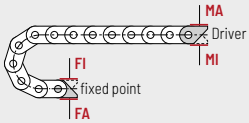


▲ Assembly options

Connection point
F – fixed point
M – driver

Connection type
A – connecting surface outside
I – connecting surface inside

Connecting surface
A – threaded joint outside (standard)
I – threaded joint inside



Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

BASIC-LINE*PLUS*

Solid plastic cable carriers with fixed chain widths

The product types from BASIC-LINE*PLUS* feature pre-defined cable carrier widths and extremely fast cable laying. All combine robustness and reliability with an attractive price-performance ratio.

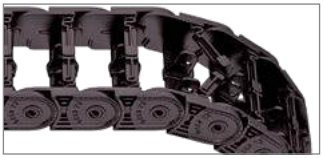
- Cost-effective solutions for standard applications
- Cables are simply pressed/pulled into the cable carrier
- Very fast cable laying
- Numerous types and designs available immediately from our warehouse
- Ideal for short travel lengths and high travel speeds



Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration. Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Subject to change without notice.





EasyTrax® series ..... Page **236**

Extremely fast cable laying thanks to easy cable insertion



PROTUM® series ..... Page **264**

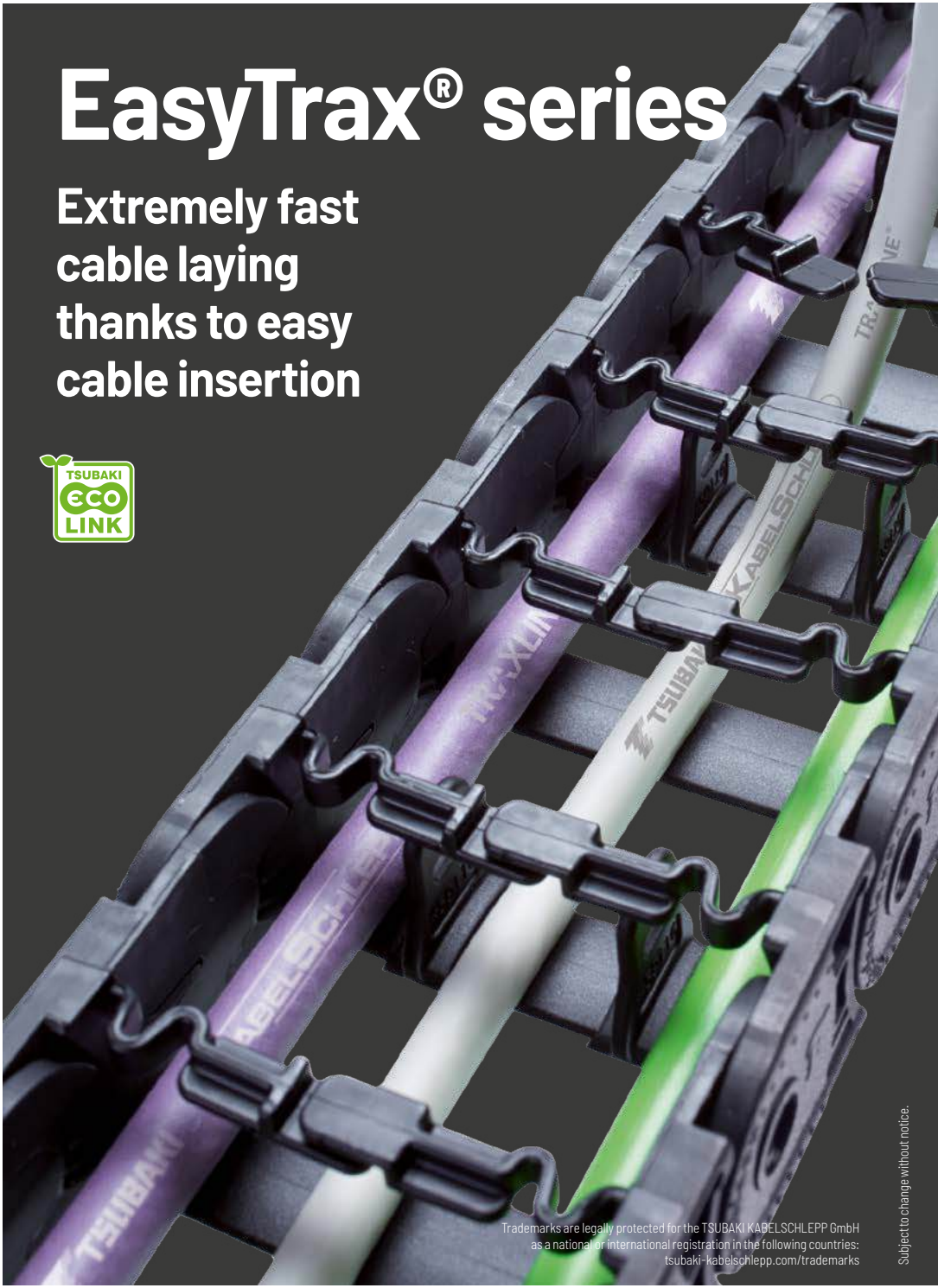
Small, light cable carrier for unsupported applications

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

EasyTrax® series

Extremely fast cable laying thanks to easy cable insertion



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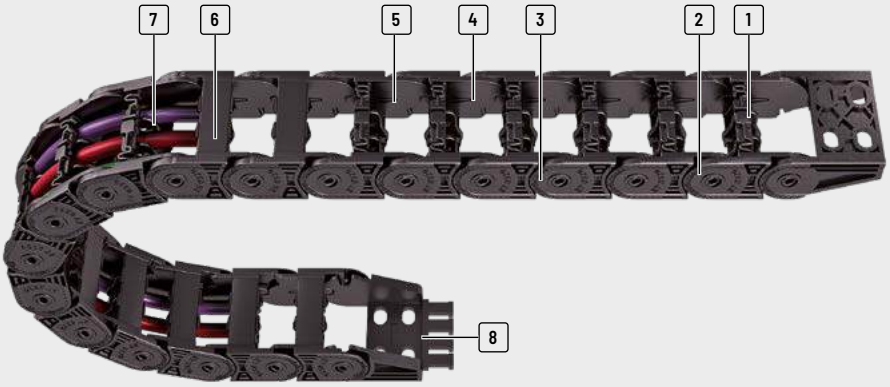
Subject to change without notice.



1 Sturdy 2-component design: solid chain body, flexible film hinge

2 Plastic chain links

3 Extensive unsupported length

4 Inside space is gentle on the cables – no interfering edges

5 Very quiet through integrated noise damping

6 Inside or outside openable

7 Dividers for cable separation

8 Single-part end connectors with integratable strain relief

Features

» Very fast cable laying by simply pressing in the cables

» Very high fill level through lateral swivelling of the lamella – lamellae do not swivel into the cable space

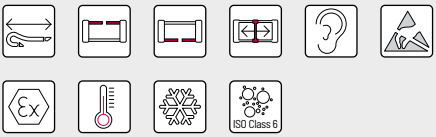
» Each chain link consists of two different materials:
- Hard chain body made of glass-fibre reinforced material
- Lamellae with flexible film hinge made of special elastic plastic

» Sturdy cable carrier design

» High torsional rigidity

» Extensive unsupported length

» Very quiet through integrated noise damping





Fast and easy installation of cables



Very high fill level



High side stability



Divider systems for reliable cable separation

Subject to change without notice.

Cable carrier design

Solid plastic cable carriers: chain links and end connectors made of plastic

Each chain link consists of two different materials:

» Hard cable carrier body made of glass fiber-reinforced material

» Flexible lamellae made of elastic plastic



The two-component technology

The two-component technology of the EasyTrax® combines two seemingly incompatible features: **stability and flexibility**.

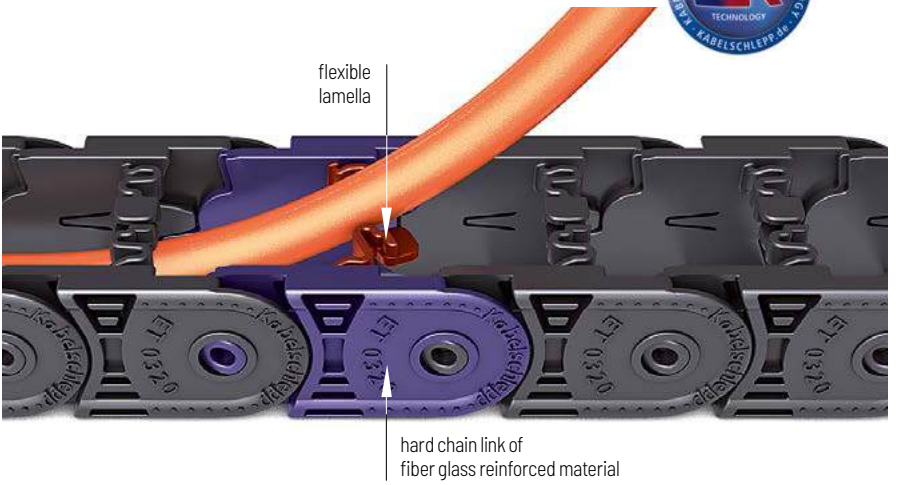
Cable carriers need to be extremely sturdy, with extensive unsupported length. At the same time, cables need to be inserted easily for fast cable laying. The EasyTrax® meets these requirements thanks to its innovative design and material combination of a hard cable carrier body made from fiber glass reinforced material and lamellae made of elastic plastic.



high flexibility



high stability

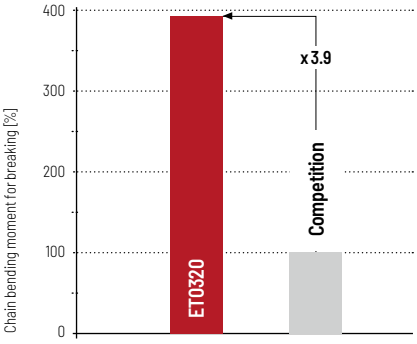


Subject to change without notice.

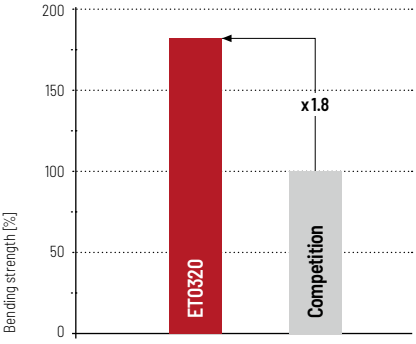
Comparison of dimensions

Manufacturer	h_i [mm]	h_G [mm]	t [mm]	Identical connection hole pattern
ET0320	18	25.5	32	yes
Competitive product	19	25	30.5	yes

Comparison of bending moment

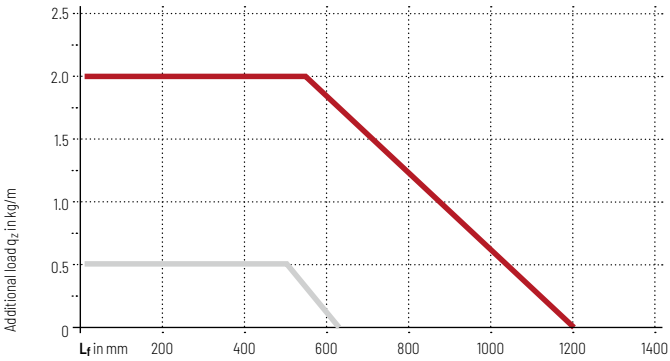


Comparison of bending strength

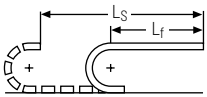


Load diagram

for unsupported length depending on additional load



Unsupported length L_f



ET0320
Competitive product

Advantages over competitive product

- 4 times bigger additional load compared to competitive product
- Double unsupported length compared to competitive product
- Faster cable laying at a higher utilization faktor
- Low noise operation due to internal damping system
- High side stability through locking in the stroke system
- Dividers can be used for cable separation

Subject to change without notice.

EasyTrax® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
ET0115											
		040	4.6	8	7	11	–	11.5	10	0.4	3.5
ET0250											
		030	16.5	23	30 – 50	60	–	25	28 – 100	4	13
		040	16.5	23	30 – 50	60	–	25	28 – 100	4	13
ET0320											
		030	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
		040	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
ET1455											
		030	25	36	25 – 78	94	–	45.5	52 – 200	6	20
		040	25	36	25 – 78	94	–	45.5	52 – 200	6	20

Subject to change without notice.

EasyTrax® series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
0.68	3	10	–	–	–	–	–	–	–	•	–	–	244
1.6	10	50	60	3	30	•	–	–	–	•	–	•	248
1.6	10	50	–	–	–	•	–	–	–	•	–	•	249
2.90	10	50	80	2.5	25	•	–	–	–	•	–	•	254
2.90	10	50	–	–	–	•	–	–	–	•	–	•	255
4.80	10	50	–	–	–	–	–	–	–	•	–	•	260
4.80	10	50	–	–	–	–	–	–	–	•	–	•	261

Subject to change without notice.

ET0115

Pitch
11.5 mm

Inner height
4.6 mm

Inner width
7 mm

Bending radius
10 mm

Stay variants



Design 040 ..... page **244**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Swivelling at any position on one side.
» **Inside:** swivelling.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

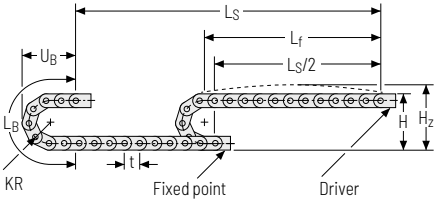


TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

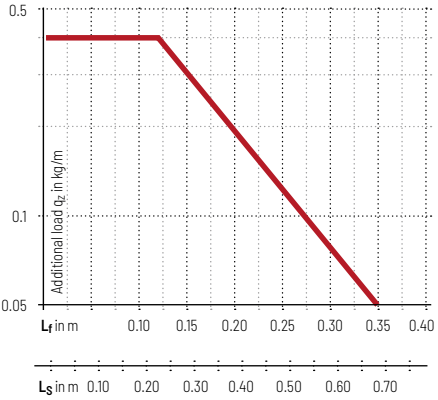
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
10	28	38	54.5	25.5

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.044 kg/m with B_i 7 mm. For other inner widths, the maximum additional load changes.



Speed
up to 3 m/s

Acceleration
up to 10 m/s²

Travel length
up to 0.68 m

Additional load
up to 0.4 kg/m

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

ET0115.040 | Dimensions · Technical data

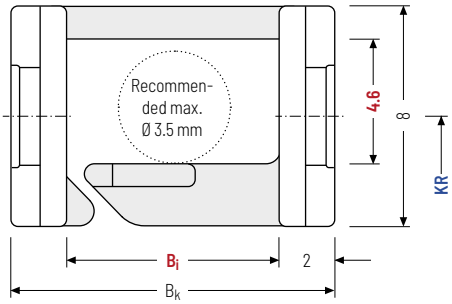
Stay variant 040 – with lamella in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be swivelled at any position on one side.
» **Inside:** swivelling.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 7 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	KR [mm]	q_k [kg/m]
4.6	8	**7**	$B_i + 4$	**10**	0.044

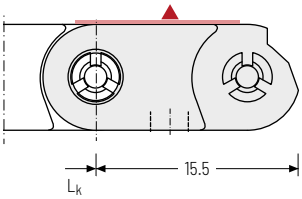
Order example

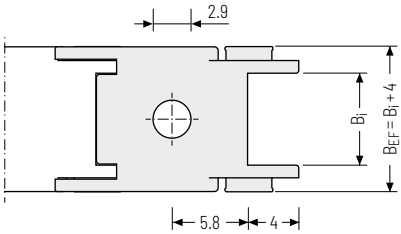
ET0115	.	040	.	7	.	10	-	1,280		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

End connector – plastic

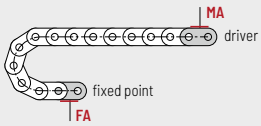
The plastic end connectors can be connected **from above or below**.





▲ Assembly options

The end connectors can be swivelled in the KR direction.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

ET0250

Pitch
25 mm

Inner height
16.5 mm

Inner widths
30 – 50 mm

Bending radii
28 – 100 mm

Stay variants



Design 030 ..... page **248**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.



Design 040 ..... page **249**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.

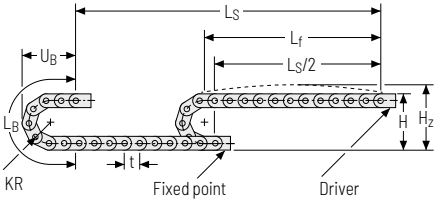


UNIFLEX Advanced

For a non-opening cable carrier with 17.5 mm inner height we recommend the series UNIFLEX Advanced
UA1250 from page 150.

Subject to change without notice.

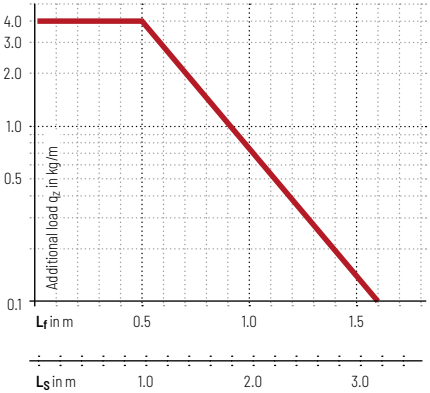
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	79	104	138	65
38	99	124	169	75
45	113	138	191	82
60	143	168	238	97
75	173	198	286	112
100	223	248	364	137

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.36 kg/m with B_i 50 mm. For other inner widths, the maximum additional load changes.



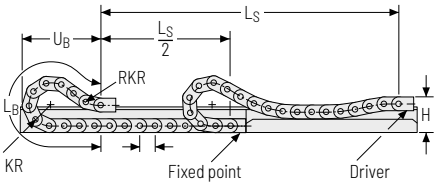
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.6 m

Additional load
up to 4 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 60 m

Additional load
up to 4 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only design 030 can be used for a gliding arrangement.

Subject to change without notice.

ET0250.030 | Dimensions · Technical data

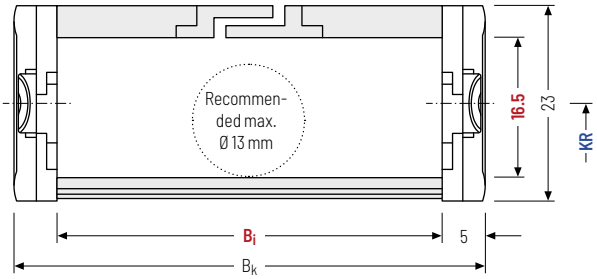
Stay variant 030 – with lamellae in the outer radius



» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side
» **Outside:** swivelling.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 30 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]		B_k [mm]	KR [mm]						q_k [kg/m]
16.5	23	**30**	**50**	B_i + 10	**28**	**38**	**45**	**60**	**75**	**100**	0.32 – 0.36

Order example

ET0250	.	030	.	50	.	75	-	1,110		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

ET0250.040 | Dimensions · Technical data

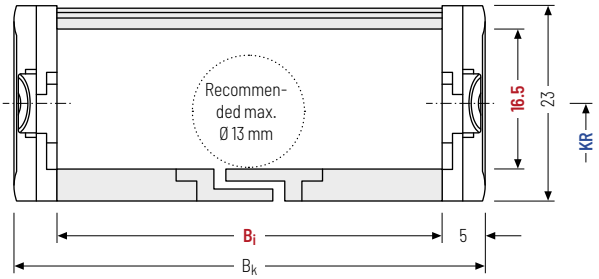
Stay variant 040 – with lamellae in the inner radius



- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 30 – 50 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]		B_k [mm]	KR [mm]						q_k [kg/m]
16.5	23	30	50	B_i + 10	28	38	45	60	75	100	0.32 – 0.36

Order example

ET0250	.	040	.	50	.	75	-	1,100		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

ET0250 | Inner distribution | TS0

Divider systems

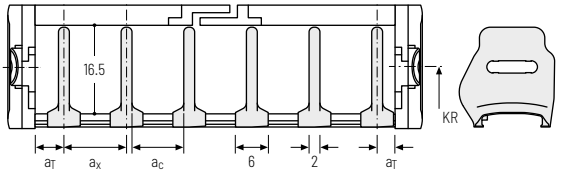
The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay through rotation.
The arresting cams snap into the catch profiles in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	3	6	4	–	–
B	3	6	4	2	–



Order example

TS0	.	A	.	3
Divider system		Version		n_T

Please state the designation of the divider system (TS0), the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads

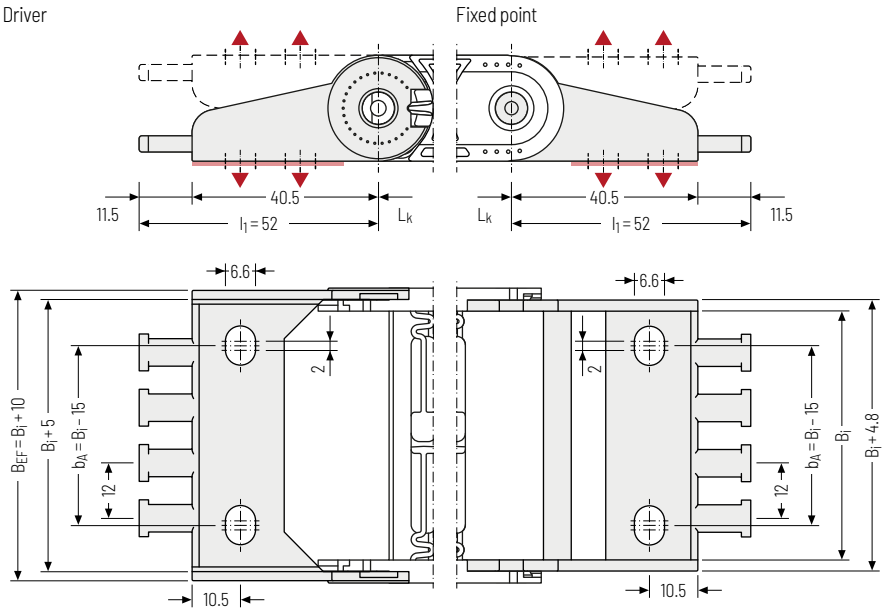


Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

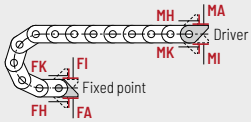
Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be connected **from above or below**. The connection type can be changed by altering the position of the end connector.



▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
30	40	2
50	60	4



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

ET0320

Pitch
32 mm

Inner height
18 mm

Inner widths
15 – 65 mm

Bending radii
28 – 125 mm

Stay variants



Design 030 ..... page **254**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.



Design 040 ..... page **255**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.



TOTALTRAX® complete systems

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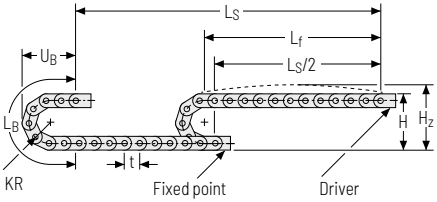
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

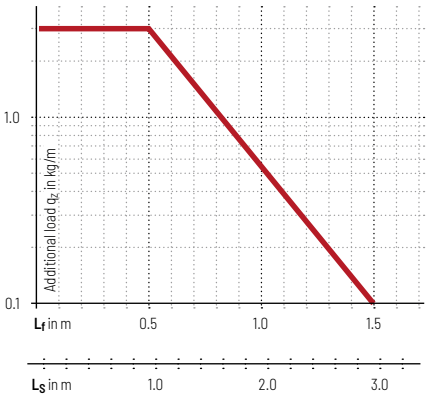
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	81.5	101.5	152	73
38	101.5	121.5	184	83
48	121.5	141.5	215	93
75	175.5	195.5	300	120
100	225.5	245.5	379	145
125	275.5	295.5	457	170

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.40 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



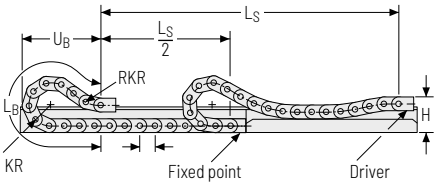
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.9 m

Additional load
up to 1.2 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 1.2 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only design 030 can be used for a gliding arrangement.

Subject to change without notice.

ET0320.030 | Dimensions · Technical data

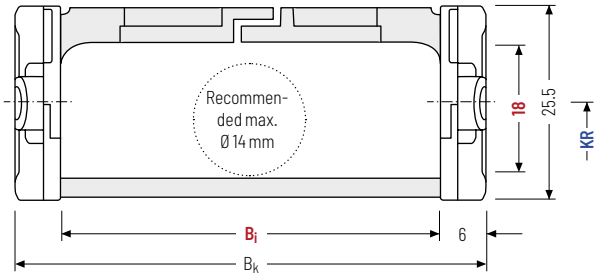
Stay variant 030 – with lamellae in the outer radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Outside:** swivelling.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]						q_k [kg/m]
18	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

ET0320	.	030	.	50	.	100	-	1,280		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

ET0320.040 | Dimensions · Technical data

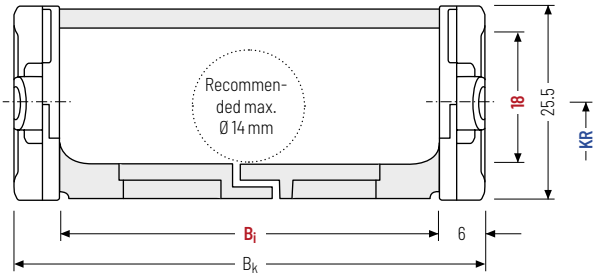
Stay variant 040 – with lamellae in the inner radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]						q_k [kg/m]
18	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

ET0320	.	040	.	50	.	100	-	1,280	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

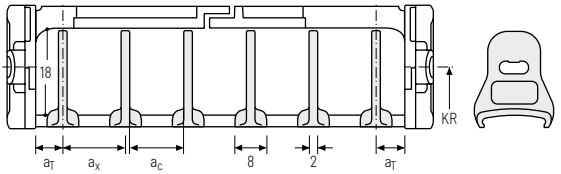
The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	8	6	–

The dividers can be moved in the cross section.



Order example

TS0	.	A	.	3
Divider system		Version		n_T

Please state the designation of the divider system (TS0), the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



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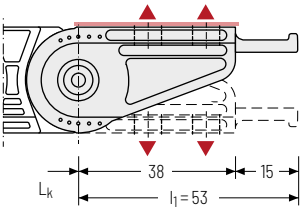
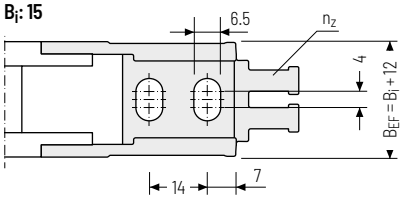
Single-part end connectors – plastic (with integrated strain relief)

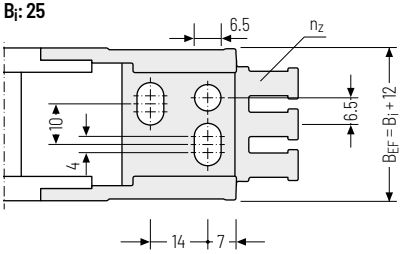
The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.



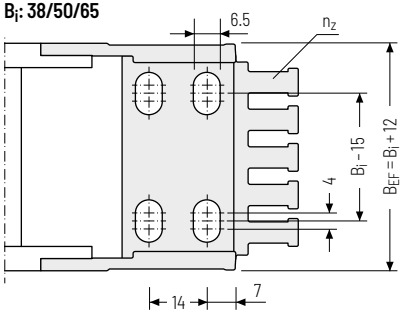
B_i: 15



B_i: 25

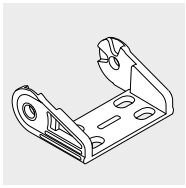


B_i: 38/50/65

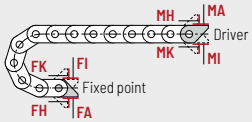


▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
15	27	2
25	37	3
38	50	4
50	62	5
65	77	6



The end connectors are also available as an option **without** integrated strain relief. Please state when ordering.



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

ET1455

Pitch
45.5 mm

Inner height
25 mm

Inner width
25 – 78 mm

Bending radii
52 – 200 mm

Stay variants



Design 030 ..... page **260**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.



Design 040 ..... page **261**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.



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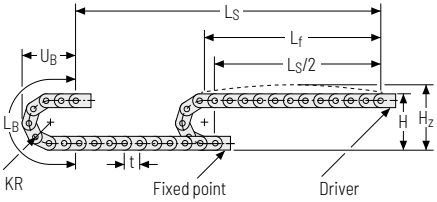
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

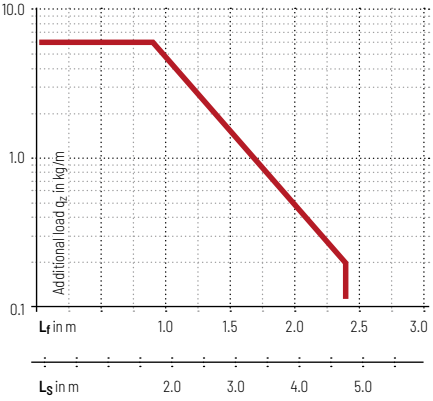
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
52	140	165	255	116
65	166	191	296	129
95	226	251	390	159
125	286	211	484	189
150	336	361	563	214
180	396	421	657	244
200	436	461	720	264

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.75 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 4.8 m

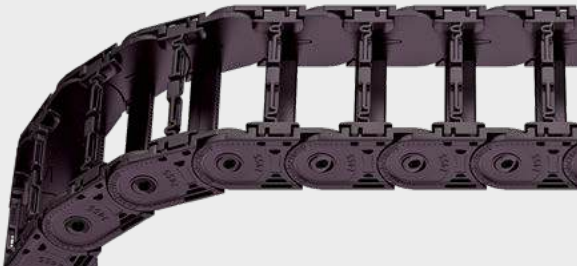
Additional load
up to 6.0 kg/m

Subject to change without notice.

ET1455.030 | Dimensions · Technical data

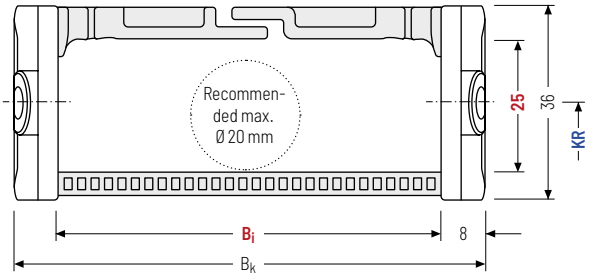
Stay variant 030 – with lamellae in the outer radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Outside:** swivelling.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 78 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]				q_k [kg/m]
25	36	25	38	58	78	B_i + 16	52	65	95	125	0.65 – 0.80
							150	180	200		

Order example

ET1455	.	030	.	78	.	150	-	1,456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

ET1455.040 | Dimensions · Technical data

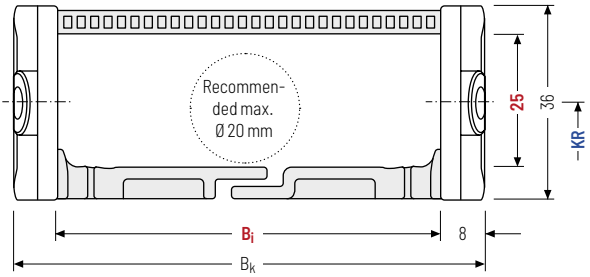
Stay variant 040 – with lamellae in the inner radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 78 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design 040 is not suitable for gliding arrangements.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]				B_k [mm]	KR [mm]				q_k [kg/m]
25	36	25	38	58	78	B_i + 16	52	65	95	125	0.65 – 0.80
							150	180	200		

Order example

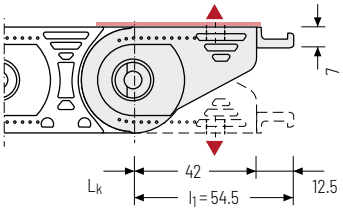
ET1455	.	040	.	78	.	150	-	1,456	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

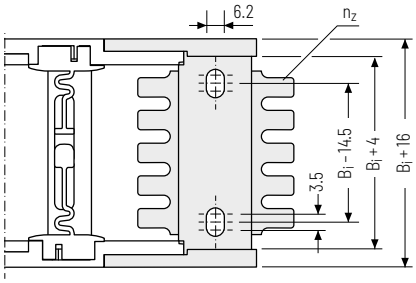
ET1455 | End connectors

Single-part end connectors – plastic

The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.

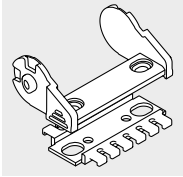


▲ Assembly options

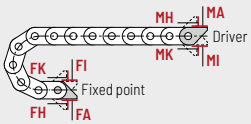


Recommended tightening torque:
6 Nm for screws M6 - 8.8

B_i [mm]	n_z
25	2 x 2
38	2 x 3
58	2 x 4
78	2 x 6



The end connectors are optionally also available **without** strain relief comb.
Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type

Subject to change without notice.

Subject to change without notice.



PROTUM® series

Small, light cable carriers for modern offices

P0240 GS

product design award 2015



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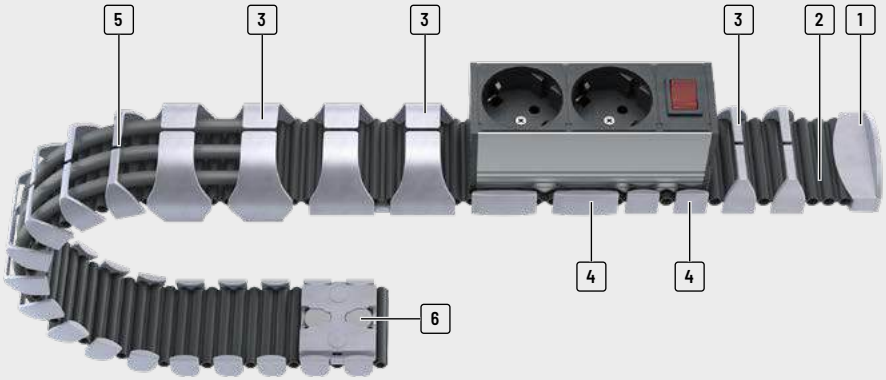
Subject to change without notice.



1 Variable fastening for table top, table frame, table foot and floor

2 Very long service life – no links and therefore no link wear

3 Different side parts / inner heights available

4 "Clip" side parts for attaching add-on parts

5 Cables are simply pressed in

6 Variable mounting possible via magnets, screws, adhesive pads, cable ties or integrated clip

Features

- » Solid plastic cable carrier
- » Cost savings through easy cable installation
- » Installation of pre-assembled cables also possible
- » Belt with clip-on side parts
- » Easy adaptation of the chain length
- » Low weight, good ratio between inner and outer width
- » Combination options for end connectors



Available in the standard color variants black, white, and silver gray



Cables are simply pressed in



The basic structure: belt with clip-on side parts



PROTUM OFFICE for office furniture and interiors

Subject to change without notice.

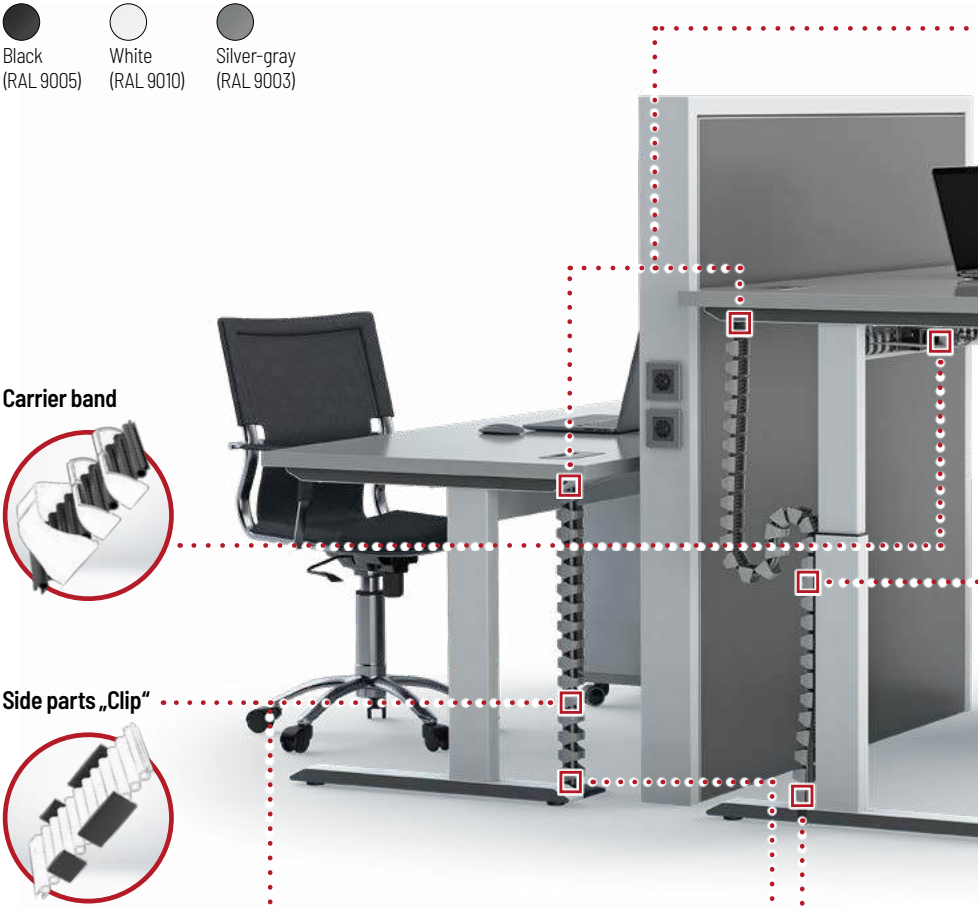
Color combinations

The standard color variants silver-gray, black and white for the band, the side parts and the connections can be combined.

Black (RAL 9005)

White (RAL 9010)

Silver-gray (RAL 9003)



Carrier band

Side parts „Clip“

P0240GS / P0400GS01

Side parts



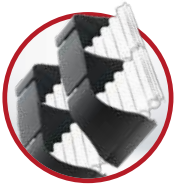
P0240GS



P0400GS01



P0400GS02



P0400GS Module combination

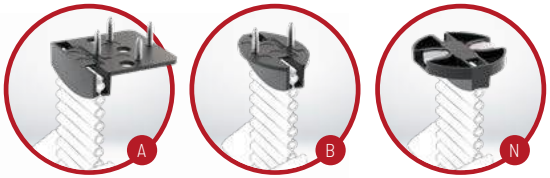
Subject to change without notice.

Combination options for end connectors

Can be attached to table frames, underneath table tops or cable ducts, to rectangular or round table legs or to the floor.

Connection A/B/N –
angled/oval for table top

for mounting underneath the table top, on the table frame or on the cable duct





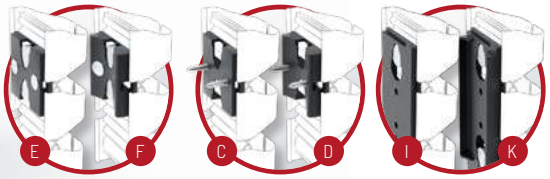
Connection M – for profiles flat

for mounting on rectangular aluminum profiles with groove



Connection C/E + I/J – for flat frames and
Connection D/F + K/L – for round frames

for mounting on the table frame (rectangular/Ø = 70 mm) using integrated magnets E F I K or screws C D J L
as short E F C D or long version I K J L



Adhesive pads are also available for optional attachment for connectors A B and J, and self-adhesive counterholder for non-magnetic surfaces for connectors E I and N! Connectors C and D can also be fixed with cable ties.



Connection G –
for floor connection

for a clean transition to the floor covering



Connection H –
for table base

for mounting on the table base by clipping



Subject to change without notice.

PROTUM® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
P0240 GS											
		010	10	23	50	54	-	24	-	-	8
P0400 GS											
		010	21.5	34	50	55	-	40	-	-	8
		010	21.5	53.5	50	55	-	40	-	-	8
		010	21,5	53,5	(2x51) - (2x51 + 3x52)	109.5 - 273	-	40	-	-	8

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
–	–	–	–	–	–	–	–	–	–	(•)	–	–	
													286
–	–	–	–	–	–	–	–	–	–	(•)	–	–	
													286
–	–	–	–	–	–	–	–	–	–	(•)	–	–	
													287
–	–	–	–	–	–	–	–	–	–	(•)	–	–	

Subject to change without notice.

P0240 GS
PROTUM OFFICE

Pitch
24 mm

Inner height
10 mm

Inner width
50 mm

This variant for office use is based on the PROTUM® cable carrier system.

With in inner width of 50 mm and cable installation on both sides, PROTUM OFFICE offers sufficient space for telecommunication, energy and data cables in modern offices.

The linkless design can blend into the environment as a design element, e.g. with an elegant silver-grey optic.

Small, light cable carrier

» Long service life – no links and therefore no link wear
» Good ratio of usable space to outer dimensions
» Easy installation by pressing in the cables
» Easy to install and fill
» Suitable for retrofitting
» Clean, space-saving installation
» Can be filled on one or both sides

Easy and fast installation

» Connections for all smooth surfaces
» Standard connection for table frame, round and square outside the footwell
» Up to 4 installation options, depending on connection (magnets, screws, cable ties and adhesive tape)
» Floor connection for sturdy positioning and floor connection

Stay variants



Design 010 ..... page **271**

Frame with lamellae in the outer radius
» Belt with clip-on side parts.
» **One-sided:** for pressing in.

Subject to change without notice.

P0240 GS.010 | Dimensions · Technical data

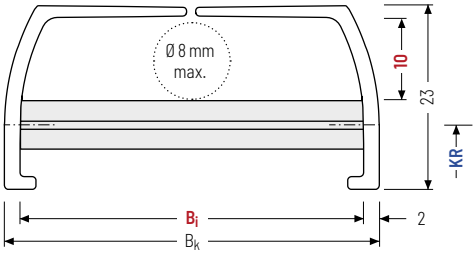
Stay variant 010 – with lamellae in the outer radius

» Belt with clip-on side parts.
» **Outside:** for pressing in.



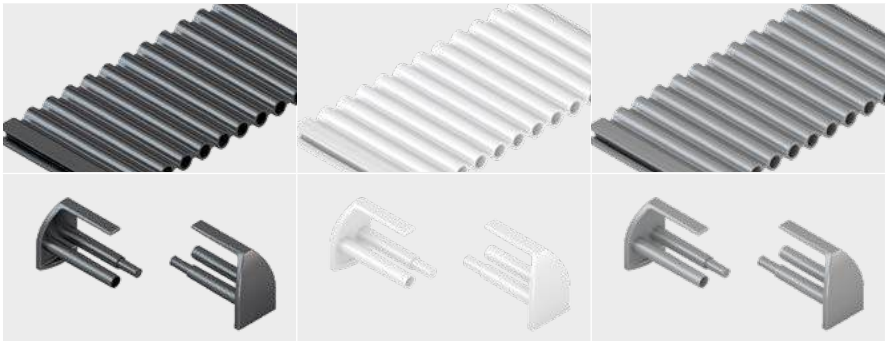
Stay arrangement on each chain link **(fully stayed)**

B_i 50 mm



h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	q_k [kg/m]
10	23	**50**	Bi + 4	0.28

Standard colors



Black (RAL 9005)
Mat. no. 75637*

White (RAL 9010)
Mat. no. 75645*

Silver-gray (RAL 9023)
Mat. no. 75641*

For bulk buyers, the color variants of the belt, the side parts and the connections can be individually combined on request. Colored items may have color differences.

* Length: 960 mm

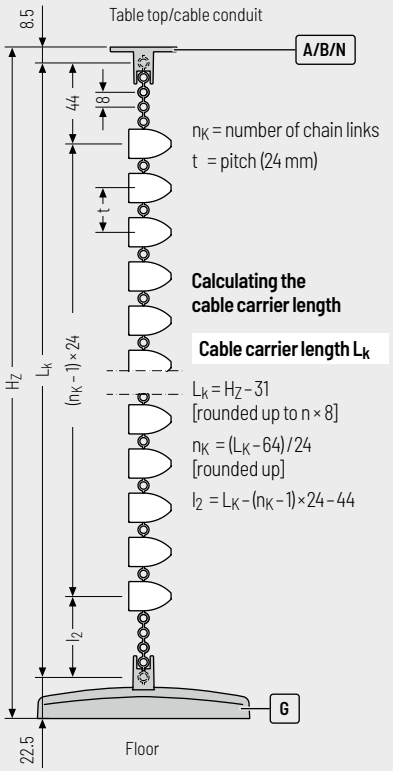
Subject to change without notice.

P0240 GS | End connectors

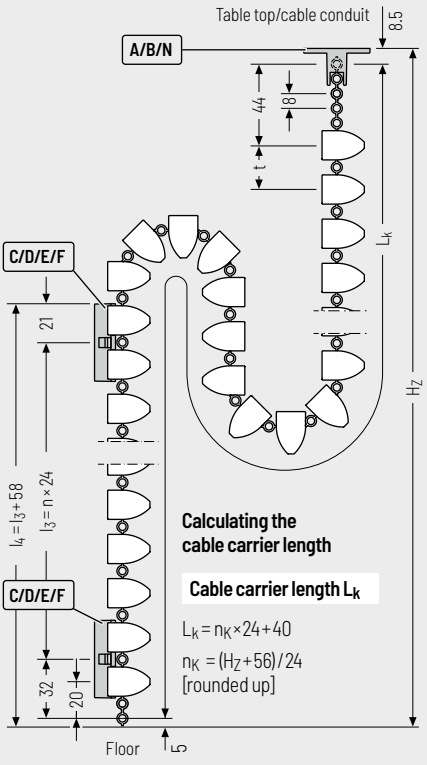
Combination options for end connectors

Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

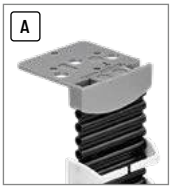
Combination options for tables without height adjustment



Combination options for tables with height adjustment



End connectors



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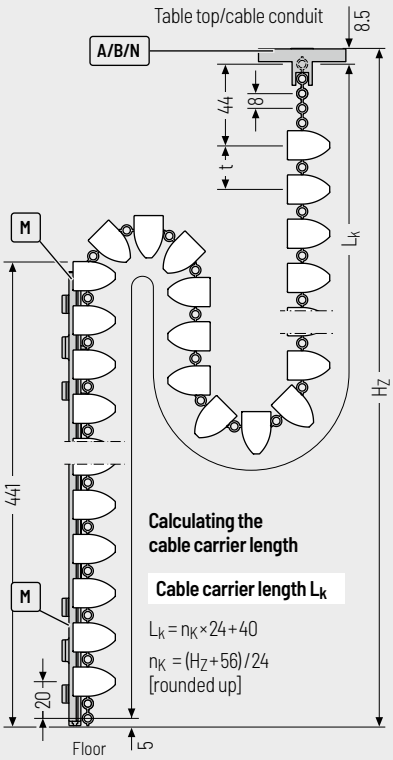
All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

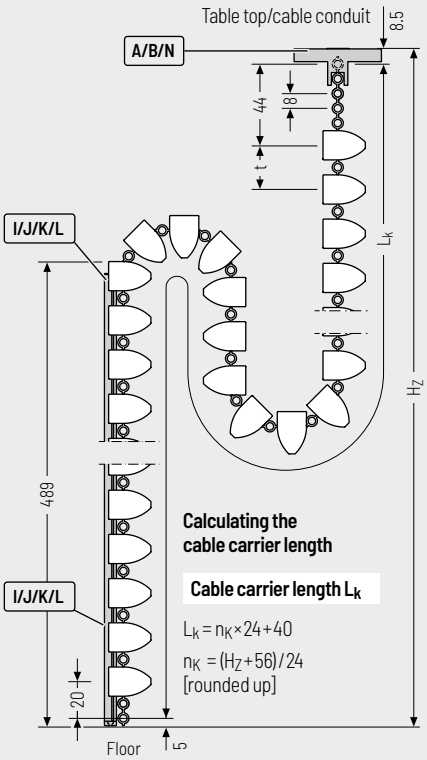
Subject to change without notice.

Combination options for end connectors

Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

Combination options for tables with height adjustment





End connectors



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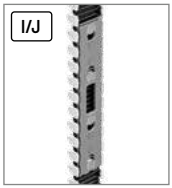

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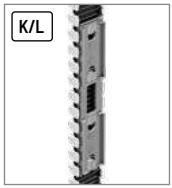

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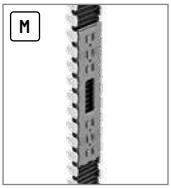

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All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

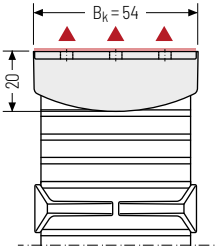
Subject to change without notice.

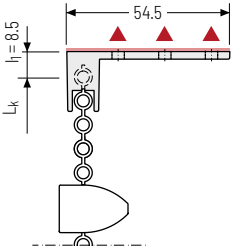
P0240 GS | End connectors · Table top

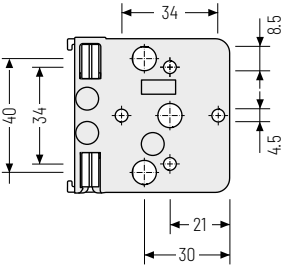
Connection A – angled for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.

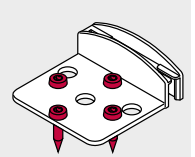
▲ Installation options



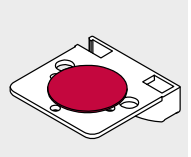




Fixing variant



Screw: 4 mm
Tightening torque: max. 2.5 Nm



Adhesive disc
Mat. no. 75949

Color variants

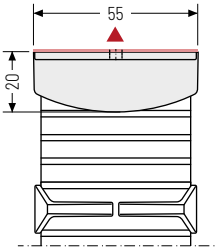
- Black
  Mat. no. 75739*
- White
  Mat. no. 75884*
- Silver-gray
  Mat. no. 75876*

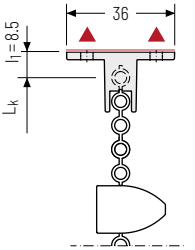
*SU = 50 pieces

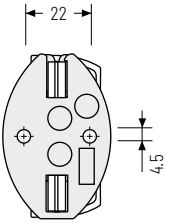
Connection B – oval for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.

▲ Installation options







Fixing variant



Screw: 4 mm
Tightening torque: max. 2,5 Nm



Adhesive disc
Mat. no. 75949

Color variants

- Black
  Mat. no. 75740*
- White
  Mat. no. 75885*
- Silver-gray
  Mat. no. 75877*

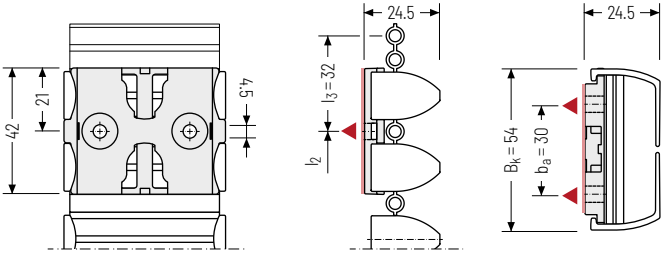
*SU = 50 pieces

Also available as magnetic version (Connector N) see p. 280

Subject to change without notice.

Connection C/E – for flat table frame

Connection for installing the cable routing on a square table frame.
Fixing with integrated magnets, screws or cable ties.

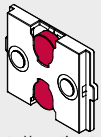


▲ Installation options

Self-adhesive counterholder available for non-magnetic surfaces!

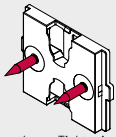
Fixing variants

Connection E



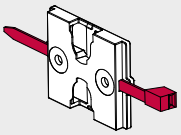
Magnets, Magnetic retention force: max. 40 N

Connection C



Screw: 4 mm, Tightening torque: max. 2.5 Nm

Connection C



Cable tie: 5 mm

Color variants

Black
(E) Mat. no. 75741*
(C) Mat. no. 75742*

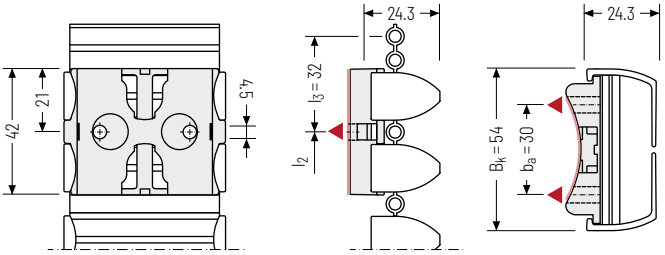
White
(E) Mat. no. 75886*
(C) Mat. no. 75887*

Silver-gray
(E) Mat. no. 75878*
(C) Mat. no. 75879*

*SU = 50 pieces

Connection D/F – for round table frame

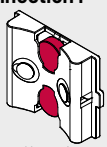
Connection for installing the cable routing on a table frame with 70 mm diameter.
Fixing with integrated magnets, screws or cable ties.



▲ Installation options

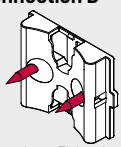
Fixing variants

Connection F



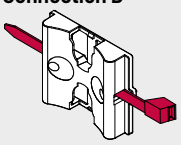
Magnets, Magnetic retention force: max. 40 N

Connection D



Screw: 4 mm, Tightening torque: max. 2.5 Nm

Connection D



Cable tie: 5 mm

Color variants

Black
(F) Mat. no. 75744*
(D) Mat. no. 75743*

White
(F) Mat. no. 75888*
(D) Mat. no. 75889*

Silver-gray
(F) Mat. no. 75880*
(D) Mat. no. 75881*

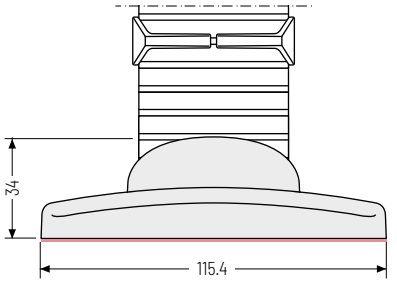
*SU = 50 pieces

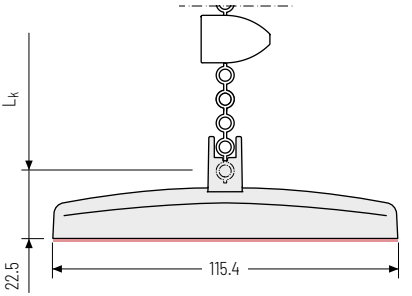
Subject to change without notice.

P0240 GS | End connectors

Connection G – floor connection

Floor connection for a clean transition of the cable routing to the floor.
Individual colors and designs on request.





Color variants

Black
Mat. no. 75745*

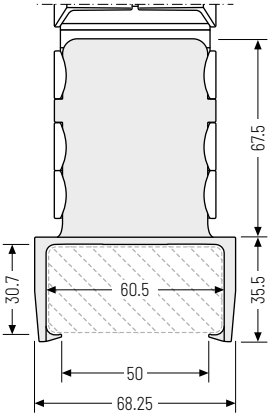
White
Mat. no. 75890*

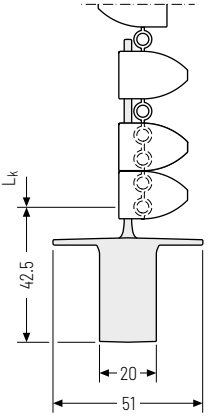
Silver-gray
Mat. no. 75882*

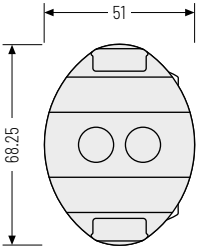
*SU = 50 pieces

Connection H – for table base

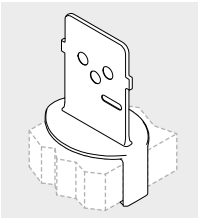
Connection for installing the cable routing on a table base.
Fixing by clipping.







Fixing variant



Color variants

Black
Mat. no. 75992*

White
Mat. no. 75994*

Silver-gray
Mat. no. 75993*

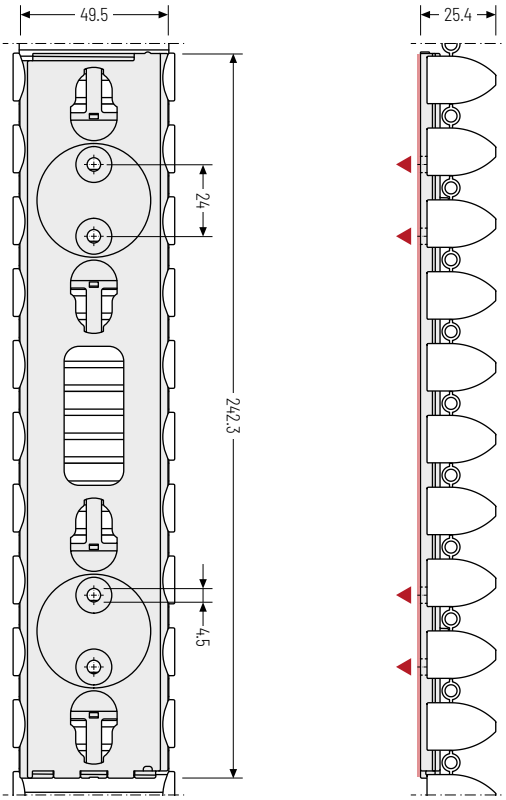
*SU = 50 pieces

Subject to change without notice.

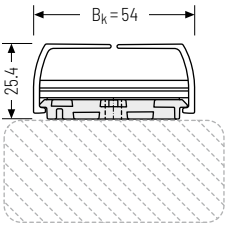
P0240 GS | End connectors

Connection I/J – for flat table frame

Connection for installing the cable routing on a square table frame.
Fixing with integrated magnets or screws.



▲ Installation options



Self-adhesive counterholder available for non-magnetic surfaces!

Color variants

Black
(I) Mat. no. 75940*
(J) Mat. no. 75634*

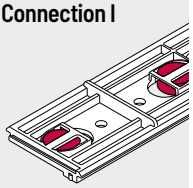
White
(I) Mat. no. 75941*
(J) Mat. no. 75635*

Silver-gray
(I) Mat. no. 75942*
(J) Mat. no. 75636*

*SU = 50 pieces

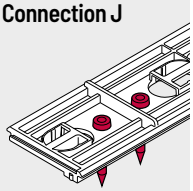
Fixing variants

Connection I



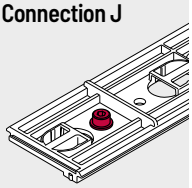
Up to 4 magnets, Magnetic retention force: min. 60 N

Connection J



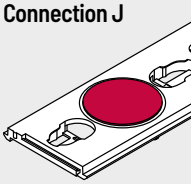
Up to 4 Screws: 4 mm
Tightening torque: max. 2,5 Nm

Connection J



For slot nut M4
Cylinder screw: DIN 9612 M4
Washer: DIN 125

Connection J



Adhesive disc
Mat. no. 75949

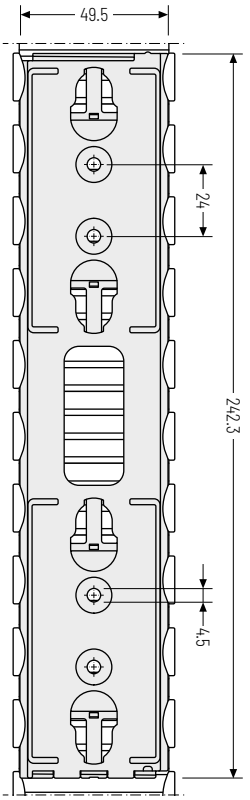
Subject to change without notice.

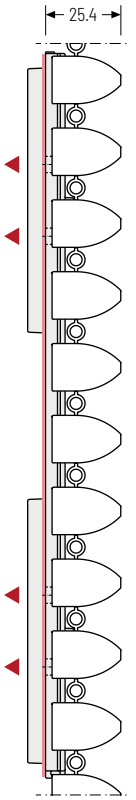
P0240 GS | End connectors

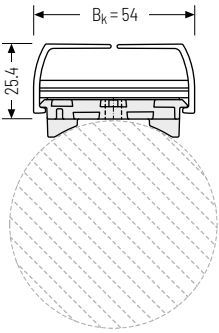
Connection K/L – for round table frame

Connection for installing the cable routing on a table frame with 70 mm diameter.
Fixing with integrated magnets or screws.

▲ Installation options







Individual diameters on request.

Color variants

Black
(K) Mat. no. 75943*
(L) Mat. no. 75647*

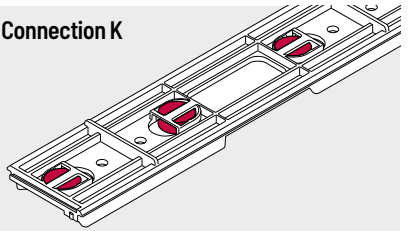
White
(K) Mat. no. 75944*
(L) Mat. no. 75648*

Silver-gray
(K) Mat. no. 75945*
(L) Mat. no. 75649*

*SU = 50 pieces

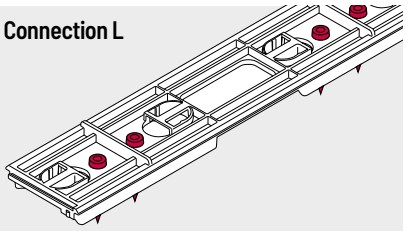
Fixing variants

Connection K



Up to 4 magnets
Magnetic retention force: min. 60 N

Connection L



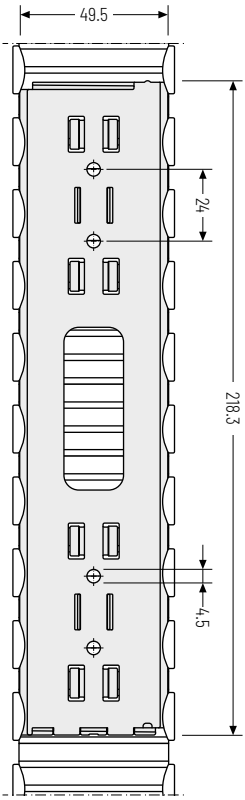
Up to 4 Screws: 4 mm
Tightening torque: max. 2.5 Nm

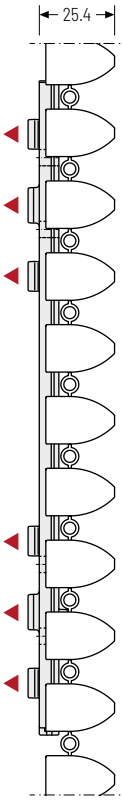
Subject to change without notice.

P0240 GS | End connectors

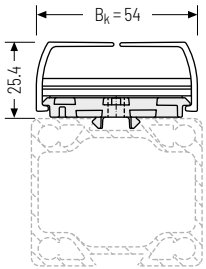
Connection M – for profiles flat

Connection for installing the cable routing on aluminum profiles rectangular.
Fixing via integrated clip.





▲ Installation options



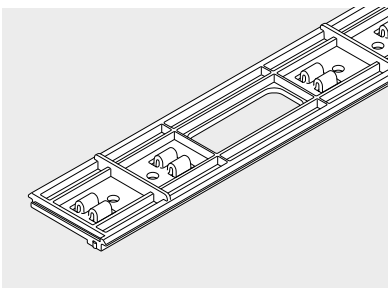
Individual profile cross-section on request.

Color variants

- Black
  Mat. no. 75937*
- White
  Mat. no. 75938*
- Silver-gray
  Mat. no. 75939*

*SU = 50 pieces

Fixing variant





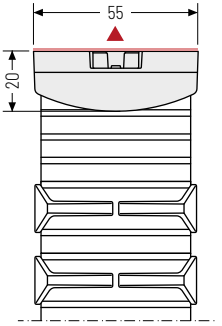
The assembly depends on the shape of the aluminum profile. Please contact us – we are happy to advise you

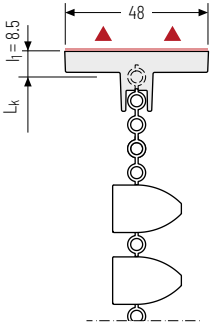
Subject to change without notice.

P0240 GS | End connectors

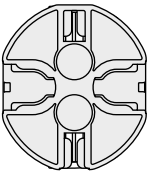
Connection N – oval for table top

Table connection for installing the cable routing underneath the table top or on a cable conduit via integrated magnets.





▲ Installation options



Self-adhesive counterholder available for non-magnetic surfaces!

Fixing variant



Magnets

Magnetic retention force:
max. 35 N

Color variants

- Black
  Mat. no. 75937*
- White
  Mat. no. 75938*
- Silver-gray
  Mat. no. 75939*

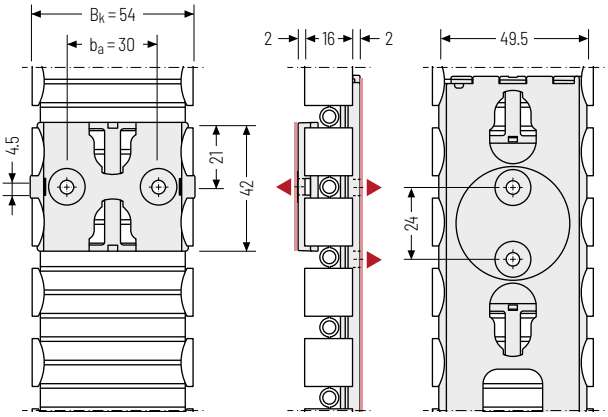
*SU = 50 pieces

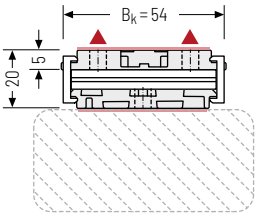
Subject to change without notice.

Side parts „Clip“ – Fixing kit for connection on both sides

Connection for installing the cable routing and attachments such as connector strips, adapters and much more. Fixing with integrated magnets or screws.

▲ Installation options





Self-adhesive counterholder available for non-magnetic surfaces!

The fixing kit includes the belt and the side parts “Clip” for a length of 480 mm.
The side parts “Clip” can be combined with the following connectors:



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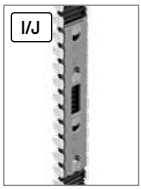

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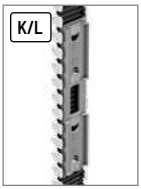

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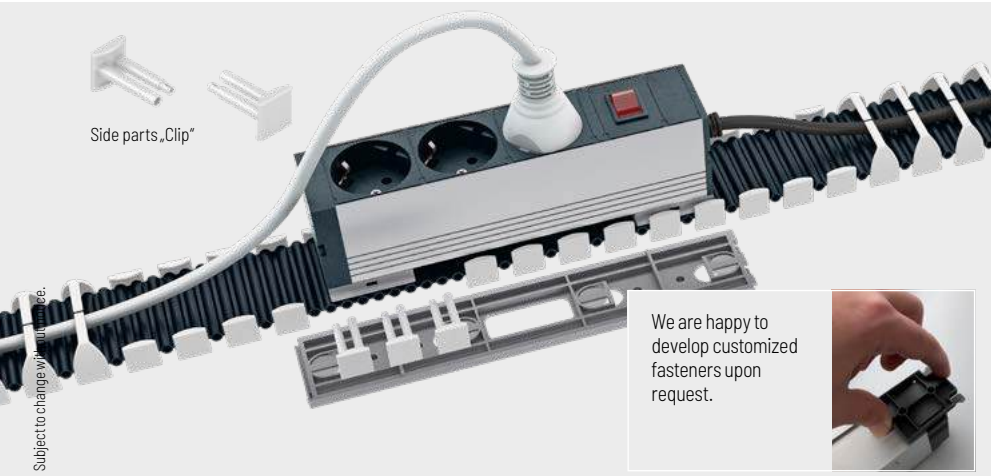
Color variants

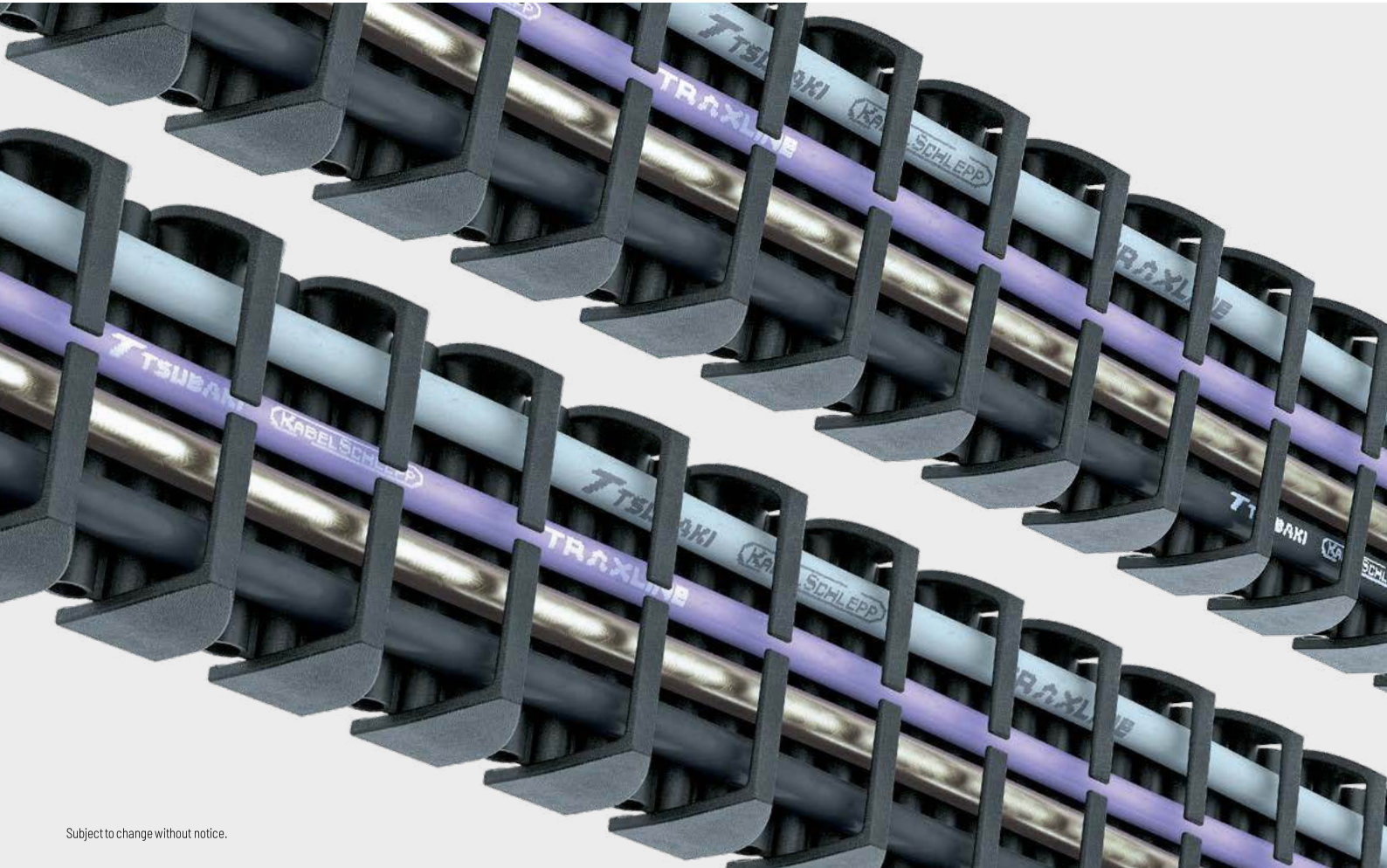
- Black
  Mat. no. 75815*
- White
  Mat. no. 75817*
- Silver-gray
  Mat. no. 75816*

* Length: 480 mm



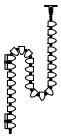
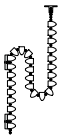
We are happy to develop customized fasteners upon request.

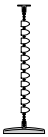
Subject to change without notice.



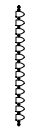
Subject to change without notice.

Order

Standard sets for height-adjustable tables (standing/seated work stations) up to 740 mm lifting height	Color	Order no. Set
 Standard set Protum Office **P0240GS** for standing/seated work station for **one-sided cable laying**, total length 1350 mm incl. 1 **connection B** and 2 **connections F** for installation **underneath a table top** and on a **round table frame (D = 70 mm)**	Black	75905
	White	75907
	Silver-gray	75906
 Standard set Protum Office **P0240GS** for standing/seated work station for **one-sided cable laying**, total length 1350 mm incl. 1 **connection B** and 2 **connections E** for installation **underneath a table top** and on a **flat table frame**	Schwarz	75901
	White	75903
	Silver-gray	75902

Standard sets for non-height adjustable tables (standard work stations)	Color	Order no. Set
 Standard set Protum Office **P0240GS** for standard work station for **one-sided cable laying**, total length 815 mm incl. 1 **connection B** and 1 **connection G** for installation **underneath a table top** and the **floor transition**	Black	75896
	White	75898
	Silver-gray	75897

Standard sets for attaching a power strip	Color	Order no. Set
 Standard set of "Clip" side parts for attaching a **power strip**. Fastening set for **attaching on both sides**. Total length 480 mm.	Black	75815
	White	75817
	Silver-gray	75816

Standard sets for cable routing P0240GS	Color	Order no. Set
 Standard set for cable routing Protum Office **P0240GS**, inner cross section 50 x 10 mm, total length 960 mm.	Black	75637
	White	75645
	Silver-gray	75641

All sets are delivered packaged in a box including fixing materials and installation instructions.
The order number applies for 1 set / 1 sales unit (SU) = 50 sets. Individual sets (from 5 units = 250 sets) only for bulk buyers on request.

Colored items may have color differences.

Subject to change without notice.

P0400 GS

PROTUM OFFICE

Pitch
40 mm

Inner height
21.5 mm

Inner width
50 – 52 mm

This variant for office use is based on the PROTUM® cable carrier system. With in inner width of 50 mm and cable installation on both sides, PROTUM OFFICE offers sufficient space for telecommunication, energy and data cables in modern offices.

The linkless design can blend into the environment as a design element, e.g. with an elegant silver-grey optic.

Small, light cable carrier

» Long service life – no links and therefore no link wear
» Easy to install and fill
» Suitable for retrofitting
» Clean, space-saving installation
» Can be filled on one or both sides

Easy and fast installation

» Standard connection for table frame, round and square outside the footwell
» Up to 4 installation options, depending on connection (magnets, screws, cable ties and adhesive tape)
» Floor connection for sturdy positioning and floor connection

Stay variants



P0400GS01 (one-sided) ..... page **286**

Frame with lamellae in the outer radius
» Belt with clip-on side parts.
» **One-sided:** for pressing in.



P0400GS02 (double-sided) ..... page **286**

Frame with lamellae in the outer and inner radius
» Belt with clip-on side parts.
» **Double-sided:** for pressing in.



P0400GS01.X (Module combination) ..... page **287**

Frame with lamellae in the outer radius
» Belt with clip-on side parts.
» **One-sided:** for pressing in.

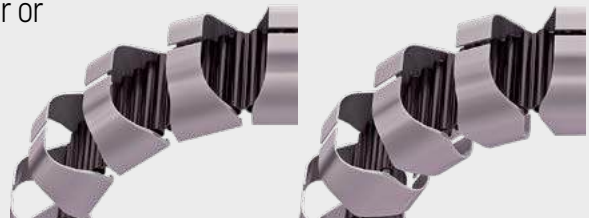
Subject to change without notice.

Subject to change without notice.

P0400 GS | Dimensions · Technical data

Stay variant 010 –
with lamellae in the outer or outer and innerradius

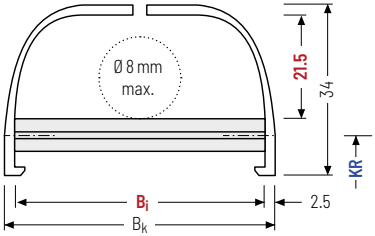
» Belt with clip-on side parts.
» **One-sided/Double-sided:** for pressing in.



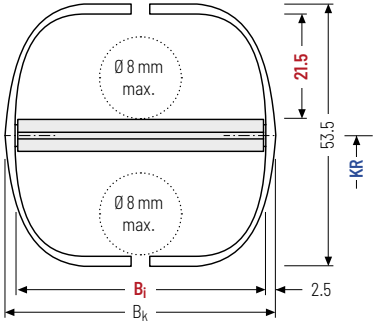
Stay arrangement on each chain link **(fully stayed)**

B_i 50 mm

P0400GS01

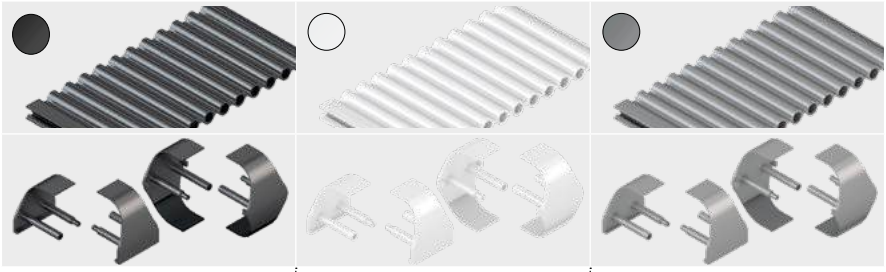


P0400GS02



Design	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	q_k [kg/m]
P0400GS01 (one-sided)	21.5	34	**50**	Bi + 5	0.286
P0400GS02 (double-sided)	21.5	53.5	**50**	Bi + 5	0.336

Standard colours



Black (RAL 9005)	White (RAL 9010)	Silver-grey (RAL 9023)
P0400GS01 Mat. no. 75972*	P0400GS01 Mat. no. 75980*	P0400GS01 Mat. no. 75976*
P0400GS02 Mat. no. 75981*	P0400GS02 Mat. no. 75989*	P0400GS02 Mat. no. 75985*

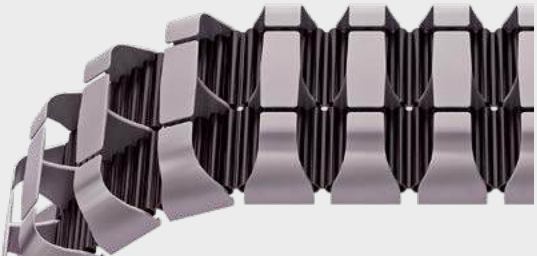
For bulk buyers, the colour variants of the belt, the side parts and the connections can be individually combined on request. Colored items may have color differences.

* Length: 960 mm

Subject to change without notice.

P0400 GS | Dimensions · Technical data

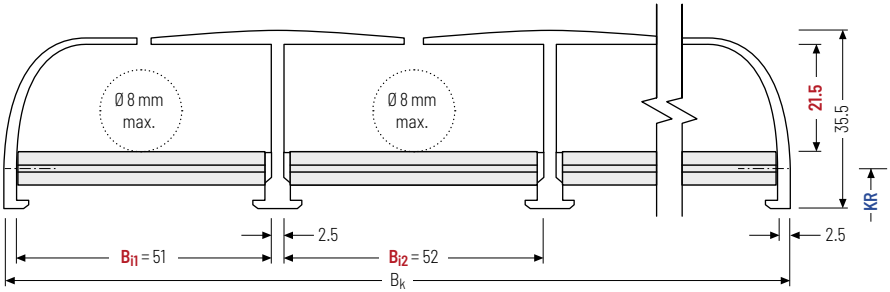
Stay variant 010
Module combination – with lamellae in the outer radius



» Belt with clip-on side and middle parts.
» Modules can be combined with one another as required.
» **One-sided:** for pressing in.

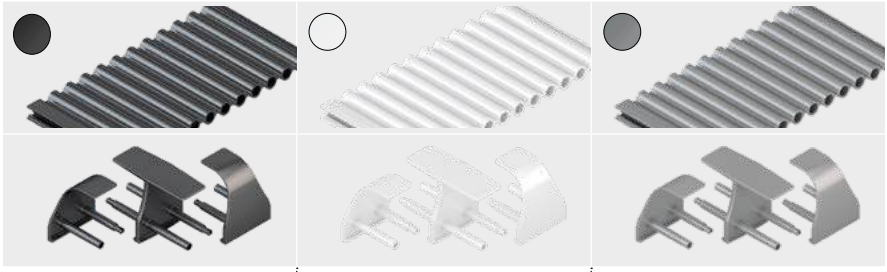
Stay arrangement on each chain link **(fully stayed)**

B_i 51/52 mm



Design	Chamber	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	q_k [kg/m]
P0400GS01.2	2	21.5	35.5	**2x51**	109.5	0.608
P0400GS01.3	3	21.5	35.5	**2x51 + 1x52**	164.0	0.911
P0400GS01.4	4	21.5	35.5	**2x51 + 2x52**	218.5	1.215
P0400GS01.5	5	21.5	35.5	**2x51 + 3x52**	273.0	1.519

Standard colours



Black (RAL 9005)
P0400GS01.2 Mat. no. 75855*

White (RAL 9010)
P0400GS01.2 Mat. no. 75857*

Silver-grey (RAL 9023)
P0400GS01.2 Mat. no. 75856*

For bulk buyers, the colour variants of the belt, the side parts and the connections, as well as the modules can be individually combined on request. Colored items may have color differences.

* Length: 960 mm

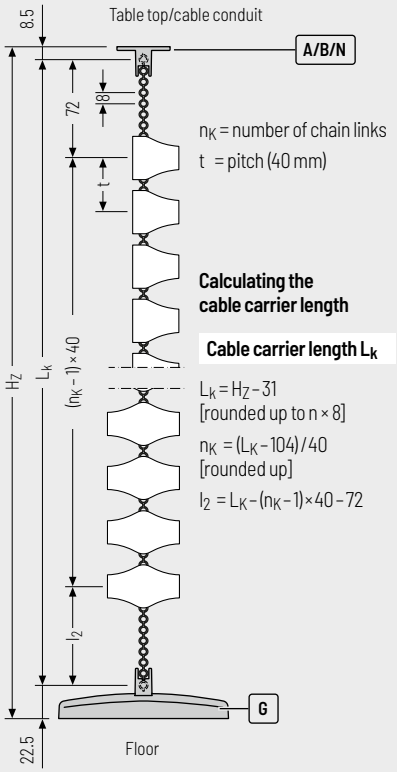
Subject to change without notice.

P0400 GS | End connectors

Combination options for end connectors

Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

Combination options for tables without height adjustment



n_K = number of chain links
t = pitch (40 mm)

Calculating the cable carrier length

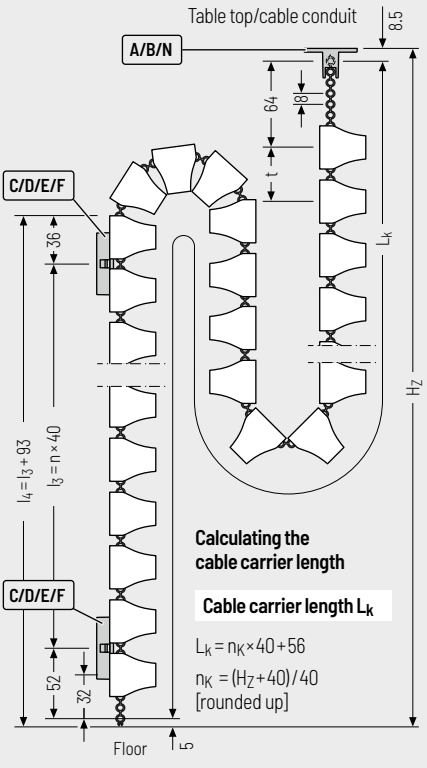
Cable carrier length L_k

$L_k = H_Z - 31$
[rounded up to n × 8]

$n_K = (L_K - 104)/40$
[rounded up]

$l_2 = L_K - (n_K - 1) \times 40 - 72$

Combination options for tables with height adjustment (only one-sided variant)



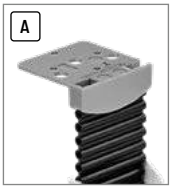
Calculating the cable carrier length

Cable carrier length L_k

$L_k = n_K \times 40 + 56$

$n_K = (H_Z + 40)/40$
[rounded up]

End connectors



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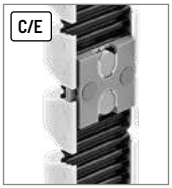

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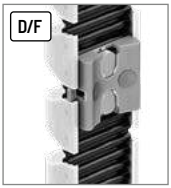

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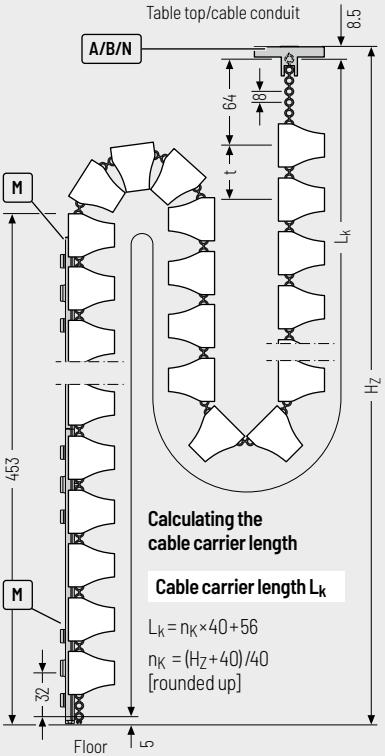
All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

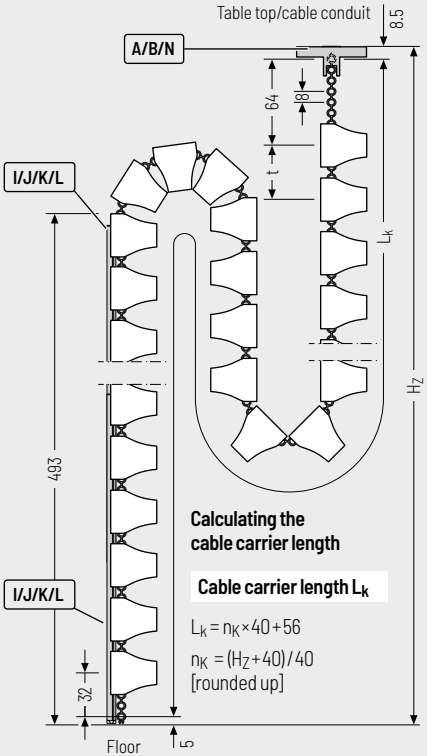
Subject to change without notice.

Combination options for end connectors

Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

Combination options for tables with height adjustment (only one-sided variant)





End connectors



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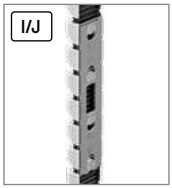

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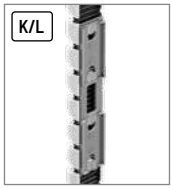

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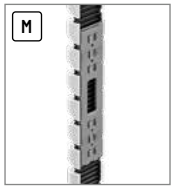

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Page 296

All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

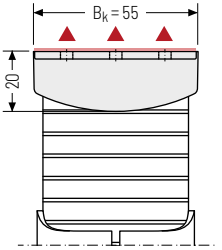
Subject to change without notice.

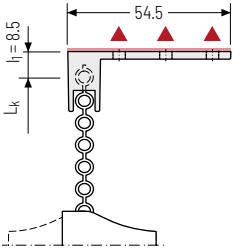
P0400 GS | End connectors · Table top

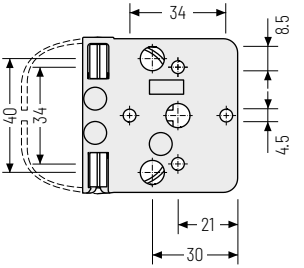
Connection A – angled for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.

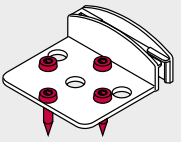
▲ Installation options



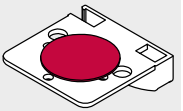




Fixing variant



Screw: 4 mm
Tightening torque: max. 2.5 Nm



Adhesive disc
Mat. no. 75949

Color variants

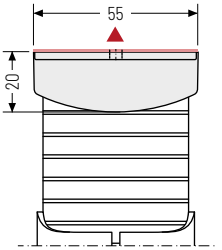
- Black
  Mat. no. 75739*
- White
  Mat. no. 75884*
- Silver-gray
  Mat. no. 75876*

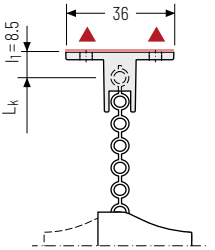
*SU = 50 pieces

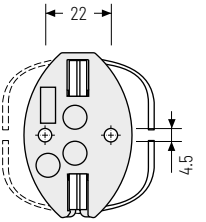
Connection B – oval for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.

▲ Installation options



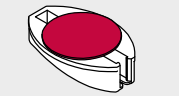




Fixing variant



Screw: 4 mm
Tightening torque: max. 2,5 Nm



Adhesive disc
Mat. no. 75949

Color variants

- Black
  Mat. no. 75740*
- White
  Mat. no. 75885*
- Silver-gray
  Mat. no. 75877*

*SU = 50 pieces

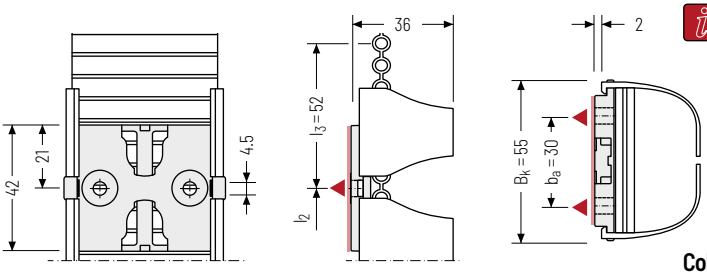
Also available as magnetic version (Connector N) see p. 280

Subject to change without notice.

P0400 GS | End connectors · Table frame

Connection C/E – for flat table frame

Connection for installing the cable routing on a square table frame.
Fixing with integrated magnets, screws or cable ties.

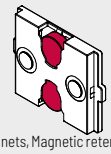


▲ Installation options

Self-adhesive counterholder available for non-magnetic surfaces!

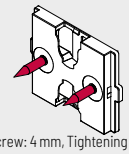
Fixing variants

Connection E



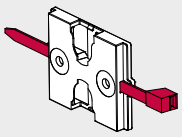
Magnets, Magnetic retention force: max. 40 N

Connection C



Screw: 4 mm, Tightening torque: max. 2.5 Nm

Connection C



Cable tie: 5 mm

Color variants

Black
(E) Mat. no. 75741*
(C) Mat. no. 75742*

White
(E) Mat. no. 75886*
(C) Mat. no. 75887*

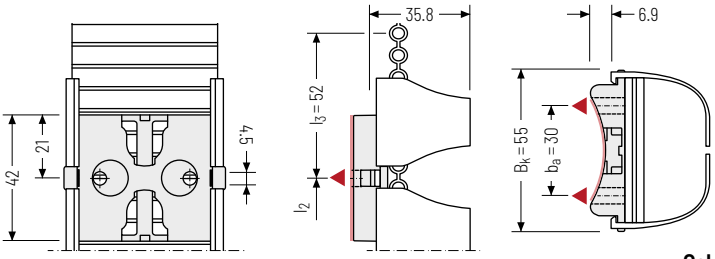
Silver-gray
(E) Mat. no. 75878*
(C) Mat. no. 75879*

*SU = 50 pieces

Connection D/F – for round table frame

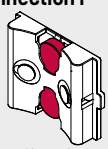
Connection for installing the cable routing on a table frame with 70 mm diameter.
Fixing with integrated magnets, screws or cable ties.

▲ Installation options



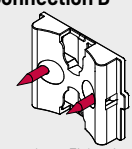
Fixing variants

Connection F



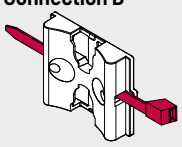
Magnets, Magnetic retention force: max. 40 N

Connection D



Screw: 4 mm, Tightening torque: max. 2.5 Nm

Connection D



Cable tie: 5 mm

Color variants

Black
(F) Mat. no. 75744*
(D) Mat. no. 75743*

White
(F) Mat. no. 75888*
(D) Mat. no. 75889*

Silver-gray
(F) Mat. no. 75880*
(D) Mat. no. 75881*

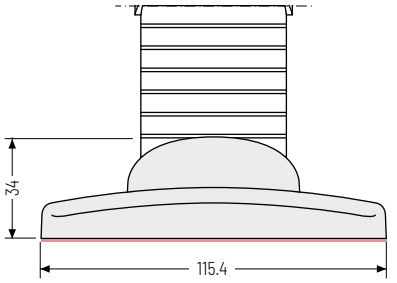
*SU = 50 pieces

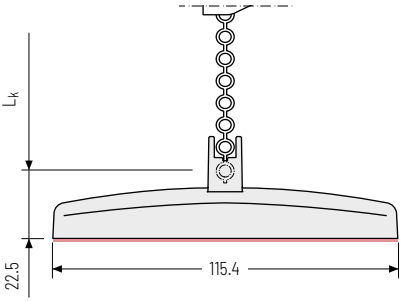
Subject to change without notice.

P0400 GS | End connectors · Floor

Connection G – floor connection

Floor connection for a clean transition of the cable routing to the floor.
Individual colors and designs on request.





Color variants

Black
Mat. no. 75745*

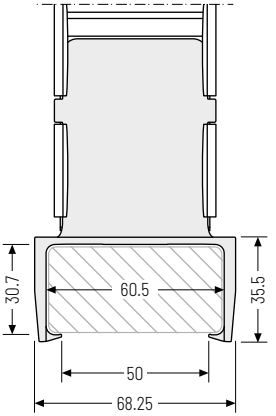
White
Mat. no. 75890*

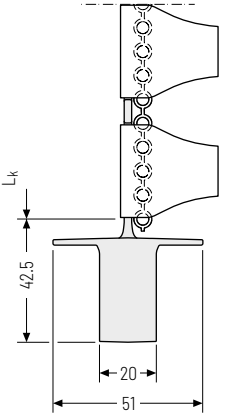
Silver-gray
Mat. no. 75882*

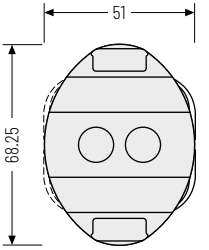
*SU = 50 pieces

Connection H – for table base

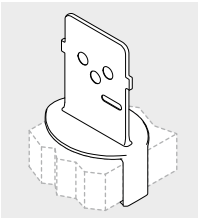
Connection for installing the cable routing on a table base.
Fixing by clipping.







Fixing variant



Color variants

Black
Mat. no. 75992*

White
Mat. no. 75994*

Silver-gray
Mat. no. 75993*

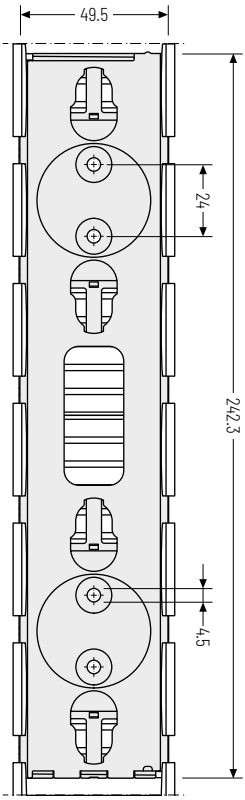
*SU = 50 pieces

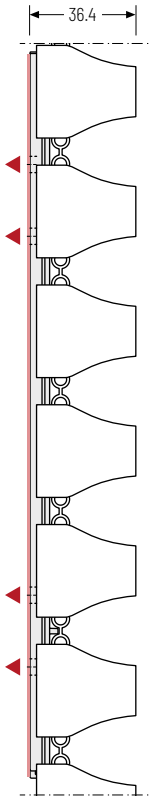
Subject to change without notice.

P0400 GS | End connectors

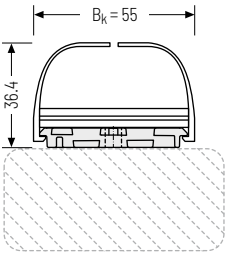
Connection I/J – for flat table frame

Connection for installing the cable routing on a square table frame.
Fixing with integrated magnets or screws.





▲ Installation options



Self-adhesive counterholder available for non-magnetic surfaces!

Color variants

Black
(I) Mat. no. 75940*
(J) Mat. no. 75634*

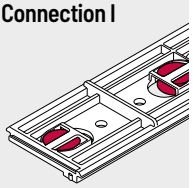
White
(I) Mat. no. 75941*
(J) Mat. no. 75635*

Silver-gray
(I) Mat. no. 75942*
(J) Mat. no. 75636*

*SU = 50 pieces

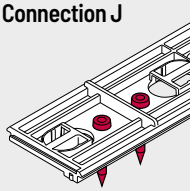
Fixing variants

Connection I



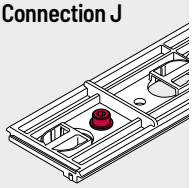
Up to 4 magnets, Magnetic retention force: min. 60 N

Connection J



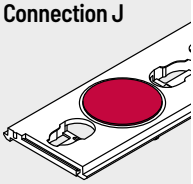
Up to 4 Screws: 4 mm
Tightening torque: max. 2,5 Nm

Connection J



For slot nut M4
Cylinder screw: DIN 9612 M4
Washer: DIN 125

Connection J



Adhesive disc
Mat. no. 75949

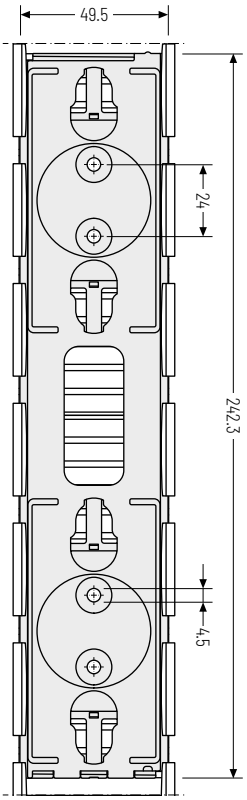
Subject to change without notice.

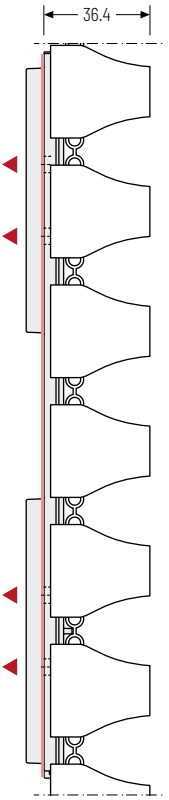
P0400 GS | End connectors

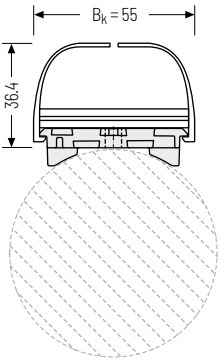
Connection K/L – for round table frame

Connection for installing the cable routing on a table frame with 70 mm diameter.
Fixing with integrated magnets or screws.

▲ Installation options







Individual diameters on request.

Color variants

Black
(K) Mat. no. 75943*
(L) Mat. no. 75647*

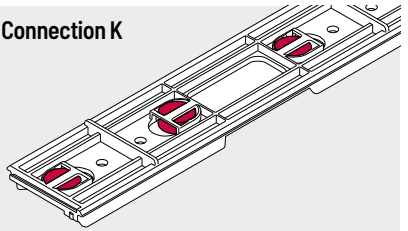
White
(K) Mat. no. 75944*
(L) Mat. no. 75648*

Silver-gray
(K) Mat. no. 75945*
(L) Mat. no. 75649*

*SU = 50 pieces

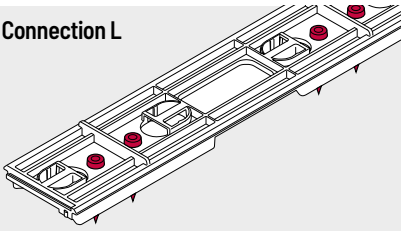
Fixing variants

Connection K



Up to 4 magnets
Magnetic retention force: min. 60 N

Connection L



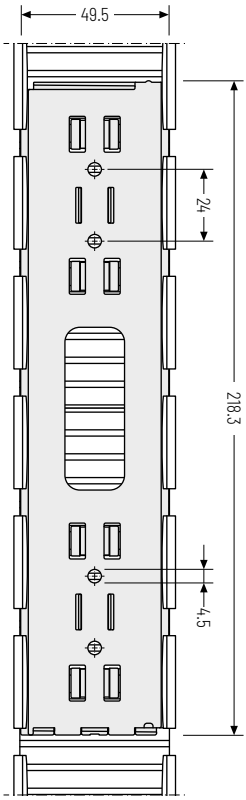
Up to 4 Screws: 4 mm
Tightening torque: max. 2,5 Nm

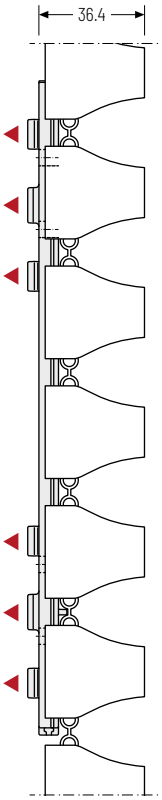
Subject to change without notice.

P0400 GS | End connectors

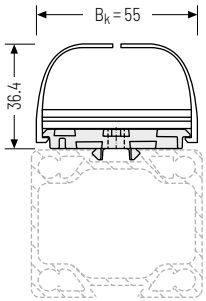
Connection M – for profiles flat

Connection for installing the cable routing on aluminum profiles rectangular.
Fixing via integrated clip.





▲ Installation options



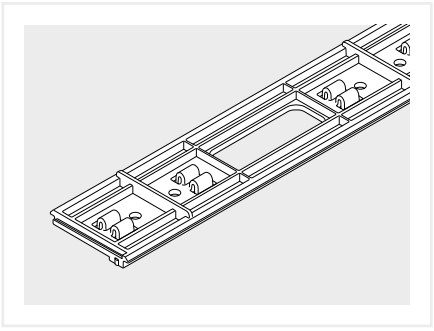
Individual profile cross-section on request.

Color variants

- Black
  Mat. no. 75937*
- White
  Mat. no. 75938*
- Silver-gray
  Mat. no. 75939*

*SU = 50 pieces

Fixing variant





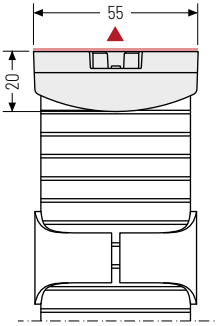
The assembly depends on the shape of the aluminum profile. Please contact us – we are happy to advise you

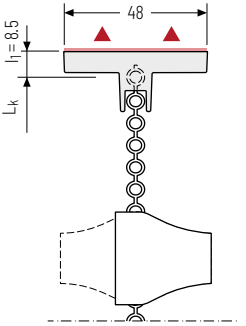
Subject to change without notice.

P0400 GS | End connectors

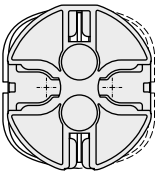
Connection N – oval for table top

Table connection for installing the cable routing underneath the table top or on a cable conduit via integrated magnets.



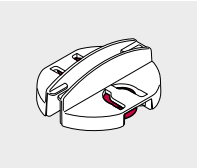


▲ Installation options



Self-adhesive counterholder available for non-magnetic surfaces!

Fixing variant



Magnets

Magnetic retention force:
max. 35 N

Color variants

- Black
  Mat. no. 75937*
- White
  Mat. no. 75938*
- Silver-gray
  Mat. no. 75939*

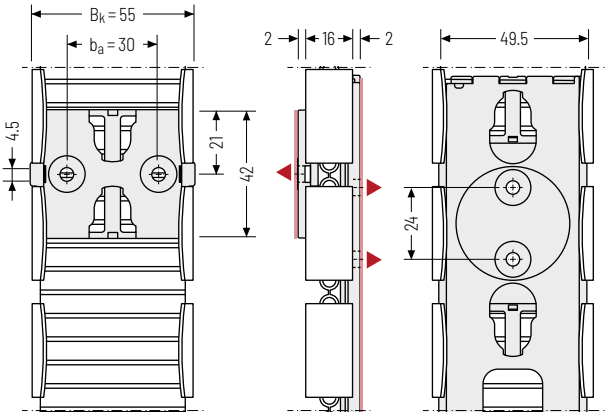
*SU = 50 pieces

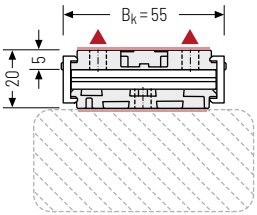
Subject to change without notice.

Side parts „Clip“ – Fixing kit for connection on both sides

Connection for installing the cable routing and attachments such as connector strips, adapters and much more. Fixing with integrated magnets or screws.

▲ Installation options





Self-adhesive counterholder available for non-magnetic surfaces!

The fixing kit includes the belt and the side parts “Clip” for a length of 480 mm.
The side parts “Clip” can be combined with the following connectors:



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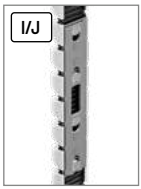
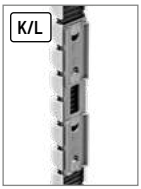
Page 291



Page 293

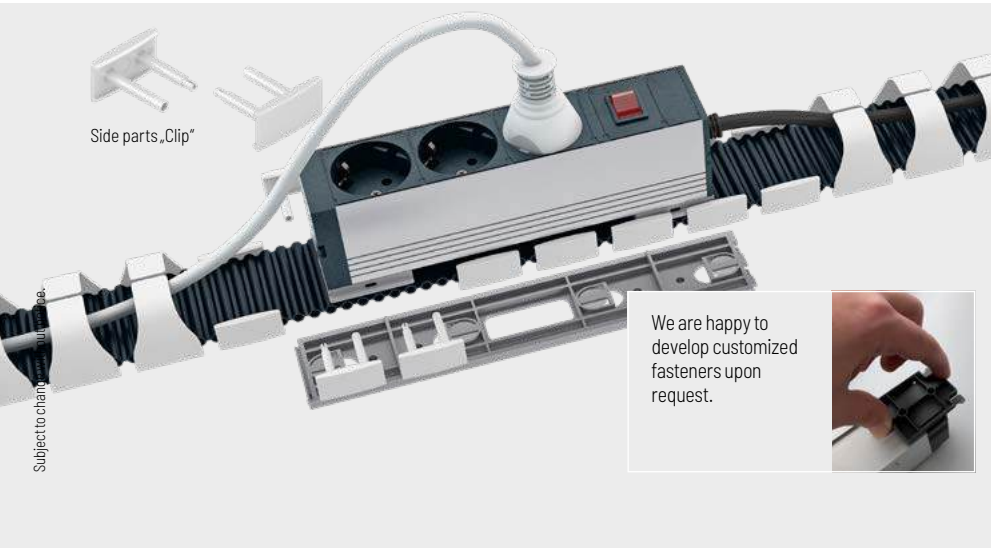


Page 294

Color variants

- Black
  Mat. no. 75812*
- White
  Mat. no. 75814*
- Silver-gray
  Mat. no. 75813*

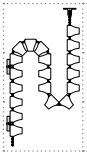
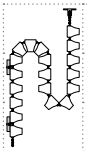
* Length: 480 mm

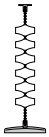
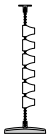


We are happy to develop customized fasteners upon request.

Subject to change without notice.

Order

Standard sets for height-adjustable tables (standing/seated work stations) up to 740 mm lifting height	Color	Order no. Set
 Standard set Protum Office **P0400GS01** for standing/seated work station for **one-sided cable laying**, total length 1350 mm incl. 1 **connection B** and 2 **connections F** for installation **underneath a table top** and on a **round table frame (D=70 mm)**	Black	75968
	White	75970
	Silver-gray	75969
 Standard set Protum Office **P0400GS01** for standing/seated work station for **one-sided cable laying**, total length 1350 mm incl. 1 **connection B** and 2 **connections E** for installation **underneath a table top** and on a **flat table frame**	Black	75964
	White	75966
	Silver-gray	75965

Standard sets for non-height adjustable tables (standard work stations)	Color	Order no. Set
 Standard set Protum Office **P0400GS02** for standard work station for **double-sided cable laying**, total length 815 mm incl. 1 **connection B** and 1 **connection G** for installation **underneath a table top** and the **floor transition**	Black	75960
	White	75962
	Silver-gray	75961
 Standard set Protum Office **P0400GS01** for standard work station for **one-sided cable laying**, total length 815 mm incl. 1 **connection B** and 1 **connection G** for installation **underneath a table top** and the **floor transition**	Black	75956
	White	75958
	Silver-gray	75957

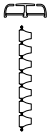
Standard sets for attaching a power strip	Color	Order no. Set
Standard set of "Clip" side parts for attaching a **power strip**. Fastening set for **attaching on both sides**. Total length 480 mm.	Black	75835
	White	75837
	Silver-gray	75836



Subject to change without notice.

Order

Standard sets for cable routing P0400GS01		Color	Order no. Set
	Standard set for cable routing Protum Office **P0400GS01**, inner cross section 50 x 21,5 mm, total length 960 mm.	Black	75972
		White	75980
		Silver-gray	75976

Standard sets for cable routing P0400GS01.2		Color	Order no. Set
	Standard set for cable routing Protum Office **P0400GS01.2**, inner cross section 2 x (51 x 21,5 mm), total length 960 mm.	Black	75855
		White	75857
		Silver-gray	75856

Standard sets for cable routing P0400GS02		Color	Order no. Set
	Standard set for cable routing Protum Office **P0400GS02**, inner cross section 2 x (50 x 21,5 mm), total length 960 mm.	Black	75981
		White	75989
		Silver-gray	75985

All sets are delivered packaged in a box including fixing materials and installation instructions.
The order number applies for 1 set / 1 sales unit (SU) = 50 sets. Individual sets (from 5 units = 250 sets) only for bulk buyers on request.

Colored items may have color differences.



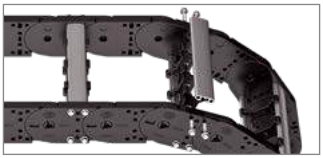
nge without notice.

VARIO-LINE

Cable carriers with variable chain widths

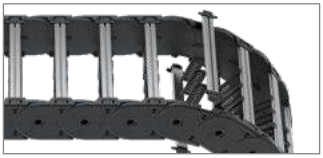
The product types from the VARIO-LINE offer great variability for cable carrier widths and separation options within the cable carrier. This allows reliable and efficient partitioning even for complex cable configurations. Hoses and cables with larger diameters can also be accommodated and guided.

- Aluminum stays available in 1 mm width sections
- Plastic stays available in 4, 8 or 16 mm width sections (depending on type)
- Easy and quick to open inside and outside
- Light, extremely robust or linkless series
- Cable carriers for complex applications



K series ..... Page **302**

Cost-effective, robust cable carrier – suitable for large additional loads



UNIFLEX Advanced series ..... Page **344**

Light and quiet all-rounder



M series ..... Page **358**

Variable cable carrier with extensive accessories and stay variants



TKHP® series ..... Page **464**

Heavy duty cable carriers for long travel lengths and high additional loads

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration. Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Subject to change without notice.





XL series ..... Page **492**

Cable carrier with large inside height



QUANTUM® series ..... Page **502**

Light, extremely quiet and low-vibration for high speeds and accelerations



TKR series ..... Page **550**

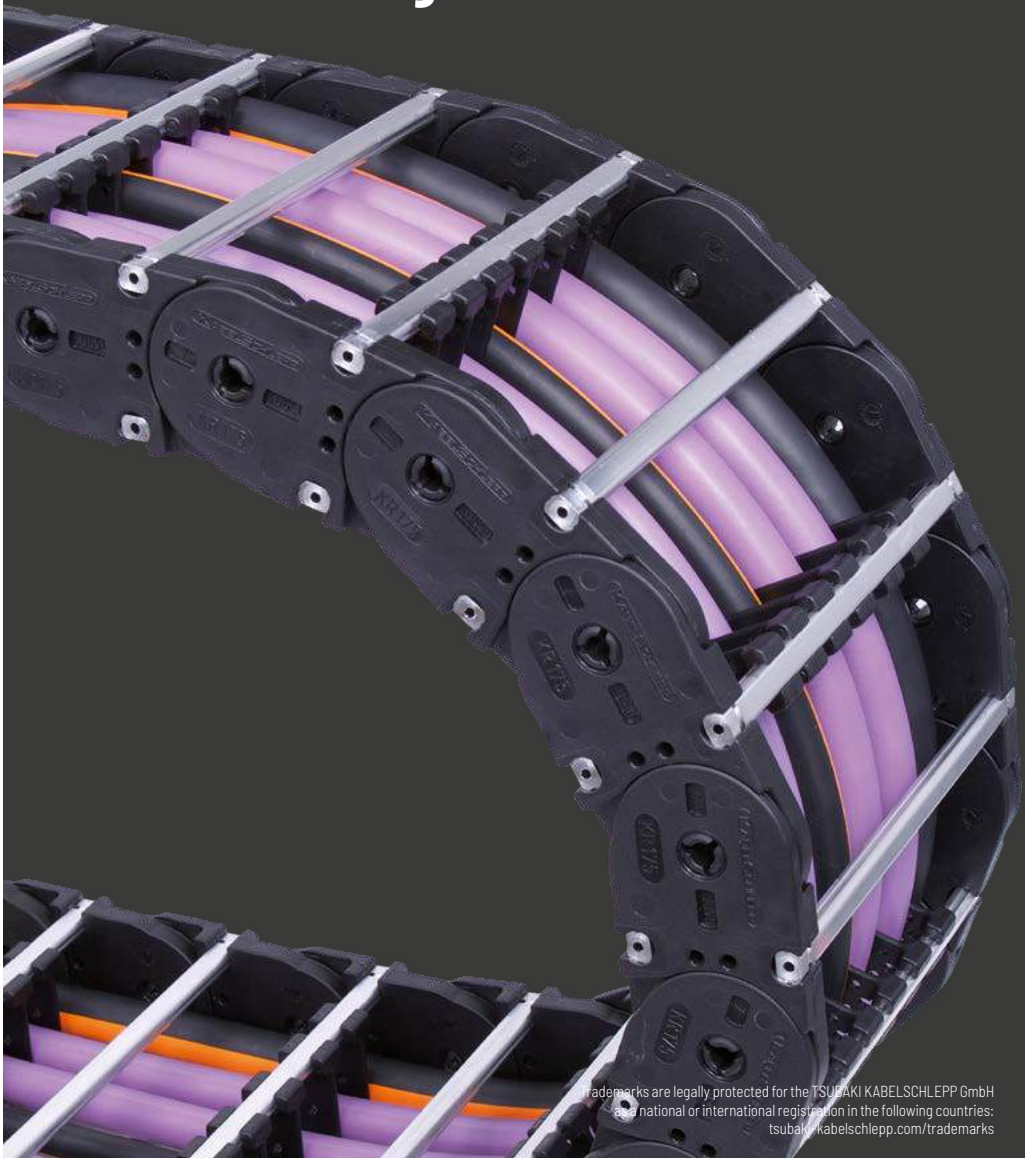
Extremely quiet and low-vibration for highly dynamic applications

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

K series

Cost-effective, robust cable carrier – suitable for large additional loads



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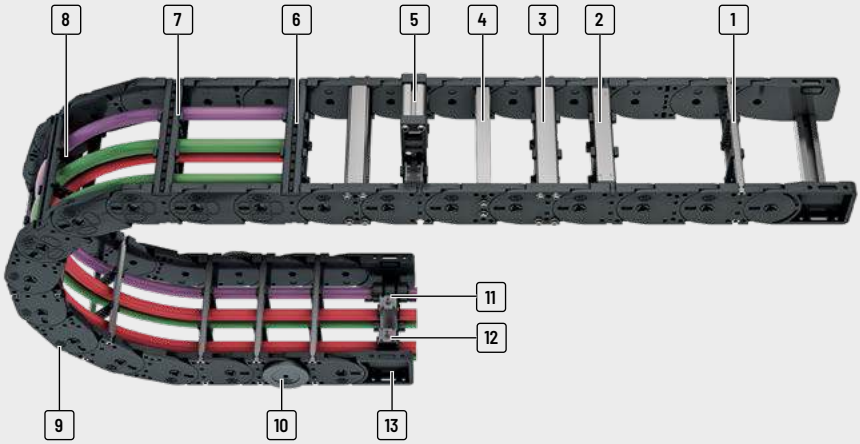


1 Aluminum stays available in **1 mm width sections**

2 Aluminum stays in reinforced version

3 Aluminum stays with 4 screw-fixing points for extreme loads

4 Aluminum hole stays

5 Mounting frame stays

6 Plastic stays available in **8 or 16 mm width sections**

7 Can be opened quickly on the inside and the outside for cable laying

8 Fixable dividers

9 Molded slide runners

10 Slide discs

11 C-rail for strain relief elements

12 Strain relief elements

13 Universal end connectors (UMB)

Features

» Stable sidebands through robust link plate design

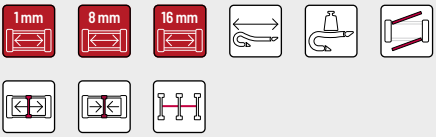
» Encapsulated, dirt-resistant stroke system

» Long service due to minimized hinge wear owing to the "life extending 2 disc principle"

» Versions with aluminum stays available in 1 mm width sections up to 700 mm inner width

» Versions with plastic stays available in 8 or 16 mm width sections

» Large selection of vertical and horizontal stay separation options for your cables





Minimized hinge wear owing to the "life extending 2 disc principle"



Slide discs for long service life for applications where the carrier is rotated through 90°



Molded slide runners for long service life in sliding arrangement



Many separation options for the cables

Subject to change without notice.

K series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
K0650											
		RS	38	57.5	75 – 400	103 – 428	1	65	75 – 300	20	30
		LG	36	57.5	75 – 600	103 – 628	1	65	75 – 300	20	32
		RMAI	38 (200)	57.5 (224)	200 – 400	234 – 428	1	65	175 – 300	20	160
		RMAO	38 (200)	57.5 (224)	200 – 400	234 – 428	1	65	75 – 300	20	160
		RE	42	57.5	68 – 268	96 – 296	8	65	75 – 300	20	33
K0900											
		RS	58	78.5	100 – 400	131 – 431	1	90	130 – 385	30	46
		RV	58	78.5	100 – 500	131 – 531	1	90	130 – 385	30	46
		RM	54	78.5	100 – 600	131 – 631	1	90	130 – 385	30	43
		LG	50	78.5	100 – 700	131 – 731	1	90	130 – 385	30	42
		RMAI	58 (200)	78.5 (224)	200 – 500	231 – 531	1	90	150 – 385	30	160
		RMAO	58 (200)	78.5 (224)	200 – 500	231 – 531	1	90	130 – 385	30	160
		RMR	51	78.5	100 – 600	131 – 631	1	90	130 – 385	30	41
		RE	58	78.5	81 – 561	112 – 592	16	90	130 – 385	30	46

* Further information on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	**Travel length** ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	**TS0**	**TS1**	**TS2**	**TS3**	**vertical hanging or standing**	**lying on the side**	**rotating arrangement**	
4.8	8	40	220	2	3	•	•	•	•	•	•	•	308
4.8	8	40	220	2	3	–	–	–	–	•	•	•	312
4.8	8	40	220	2	3	•	–	–	–	•	•	–	314
4.8	8	40	220	2	3	•	–	–	–	•	•	–	316
4.8	8	40	220	2	3	•	•	–	•	•	•	•	318
8.4	6	30	260	2	3	•	•	•	•	•	•	•	326
8.4	6	30	260	2	3	•	•	•	•	•	•	•	330
8.4	6	30	260	2	3	•	•	–	–	•	•	•	*
8.4	6	30	260	2	3	–	–	–	–	•	•	•	334
8.4	6	30	260	2	3	•	–	–	–	•	•	–	336
8.4	6	30	260	2	3	•	–	–	–	•	•	–	338
8.4	6	30	260	2	3	•	–	–	–	•	•	•	*
8.4	6	30	260	2	3	•	•	•	•	•	•	•	340

Subject to change without notice.

K0650

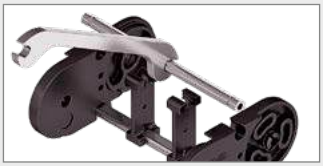
Pitch
65 mm

Inner heights
36 – 42 mm

Inner widths
68 – 600 mm

Bending radii
75 – 300 mm

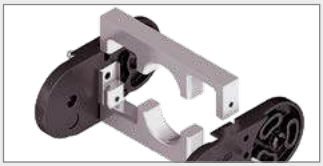
Stay variants



Aluminum stay RS page **308**

Frame stay, narrow "The standard"

» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** to open by rotating 90°.



Aluminum stay LG page **312**

Hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.



Aluminum stay RMAI page **314**

Mounting frame stay

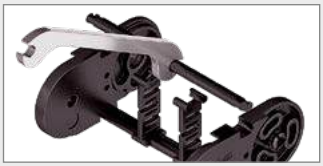
» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO page **316**

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.



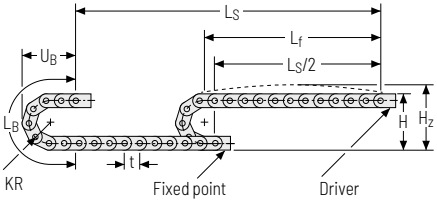
Plastic stay RE page **318**

Frame screw-in stay

» Plastic profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** to open by rotating 90°.

Subject to change without notice.

Unsupported arrangement

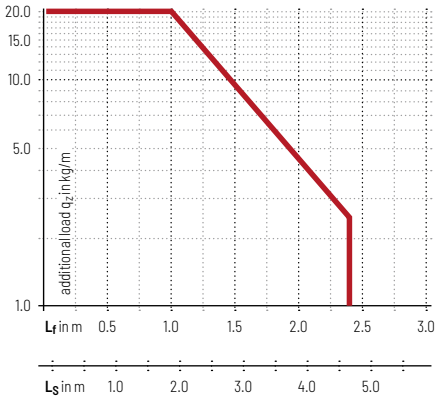


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
75	205	245	366	168
115	285	325	492	208
145	345	385	586	238
175	405	445	680	268
220	495	535	822	313
300	655	695	1073	393

Load diagram for unsupported length depending on additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.5 kg/m. For other inner widths, the maximum additional load changes.



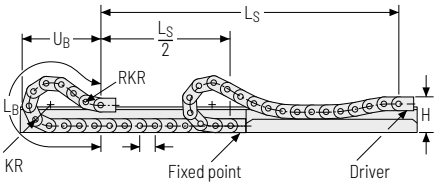
Speed
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 4.8 m

Additional load
up to 20 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 3 m/s²

Travel length
up to 220 m

Additional load
up to 20 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

If the cable carrier is positioned so it is rotated by 90° (gliding on the outside of the side band), slide discs snapped onto the side optimize the friction and wear situation.

Subject to change without notice.

KC0650 RS | Dimensions · Technical Data

Aluminum stay RS – frame stay narrow

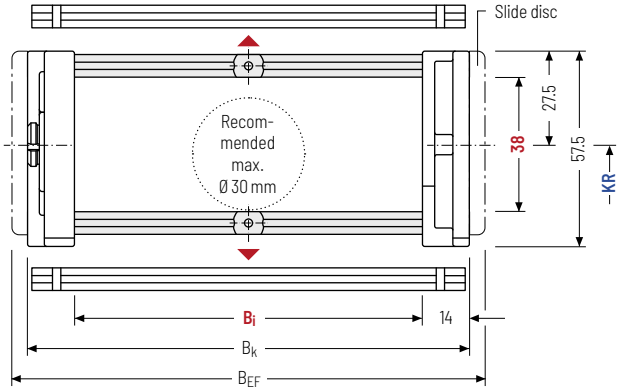
» Extremely quick to open and close
» Aluminum profile bars for light to medium loads. Assembly without screws.
» Available customized in **1 mm width sections**.
» **Outside/inside:** to open by rotating 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 75 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
38	57,5	**75 – 400**	B_i + 28	B_i + 36	**75**	**115**	**145**	**175**	**220**	**300**	1.87 – 3.60

* in 1 mm width sections

Order example

KC0650	.	176	.	RS	.	115	-	1430		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS – half-stayed).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

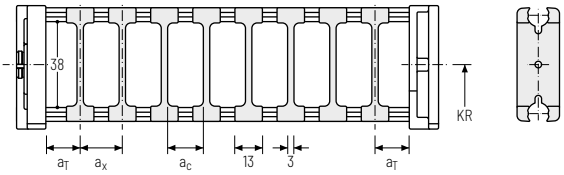
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm. The inner height is reduced to 32 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6.5	13	10	2

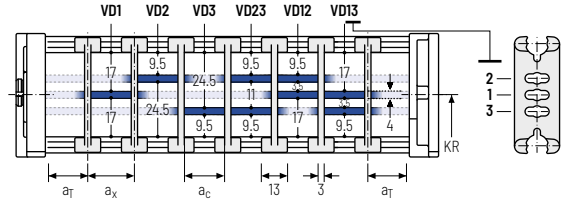
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6.5	25	13	10	2

The dividers can be moved in the cross section.

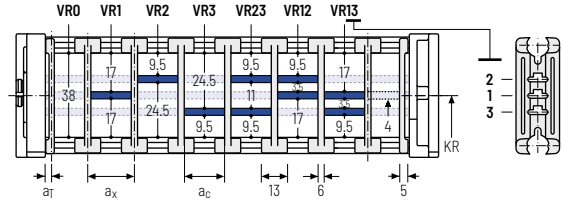


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	3.5	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 3 mm).



Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

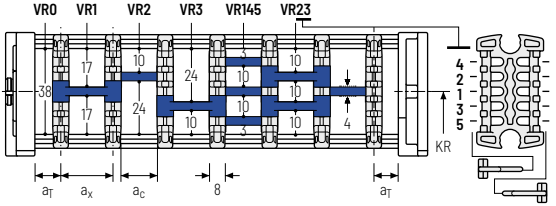
Subject to change without notice.

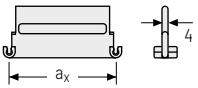
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS3)**, please also state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



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Subject to change without notice.



KC0650 LG | Dimensions · Technical Data

Aluminum stay LG –
Hole stay, split version

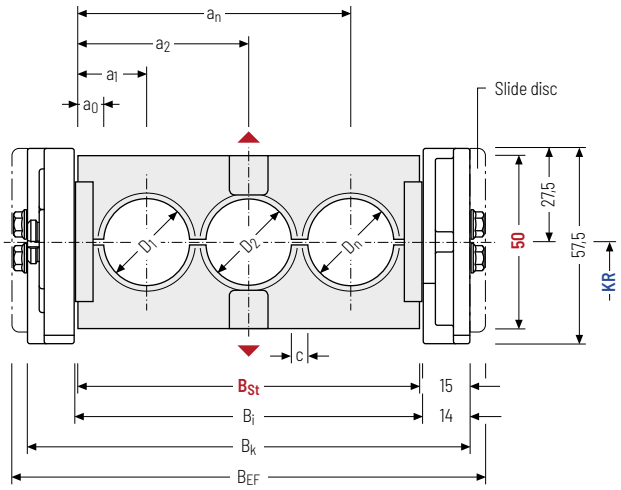
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm width sections**.
» **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 75 – 600 mm in **1 mm width sections**



The outer width of the cable carrier corresponds to dimension B_{EF} for stay variant LG.

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

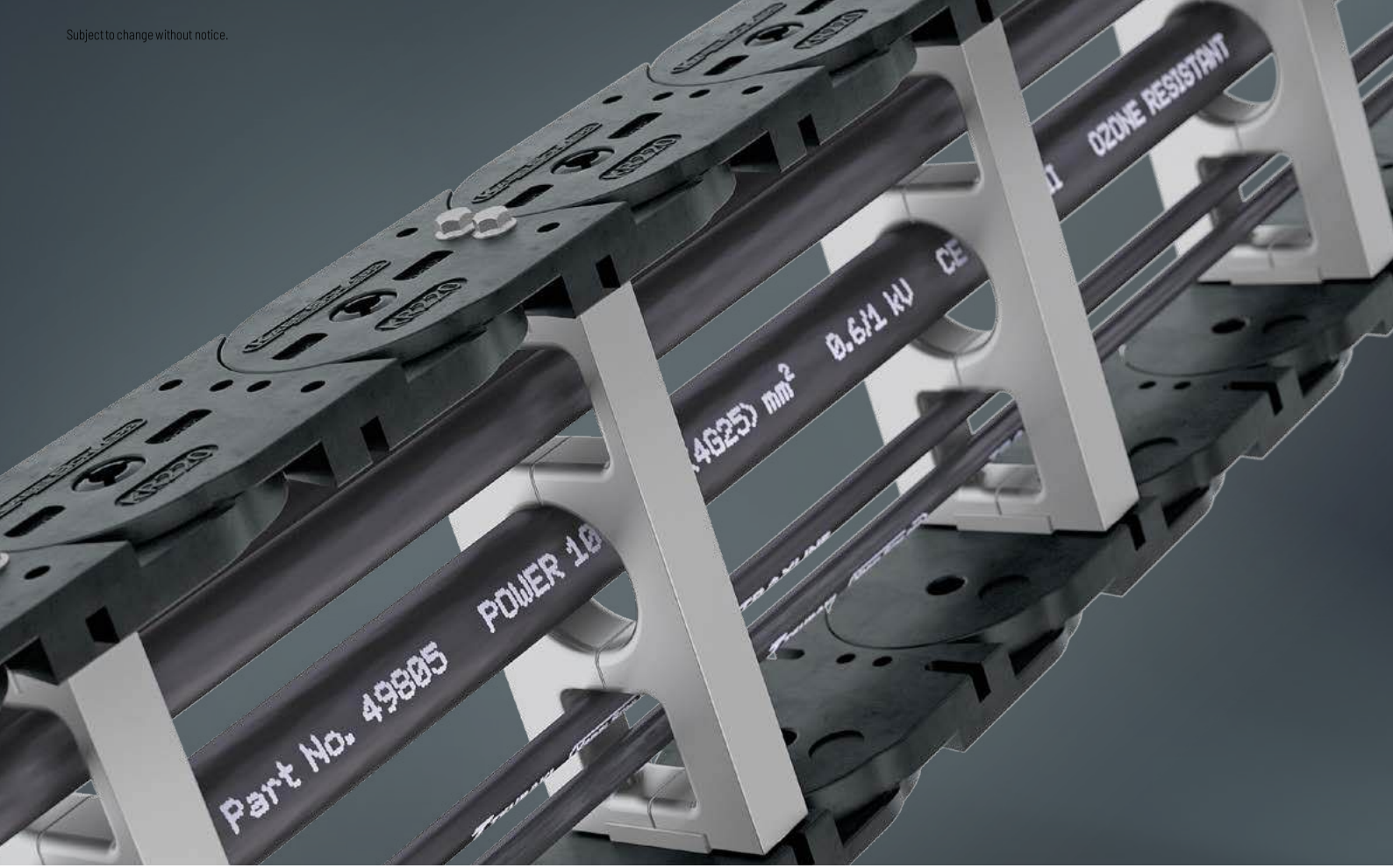
D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]			q_k 50 %** [kg/m]
36	9	57.5	75 – 600	**73 – 598**	B_{St} + 30	B_{St} + 38	4	9	75 175	115 220	145 300	2.20 – 5.15

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

KC0650	.	176	.	LG	.	115	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.


Part No. 49805
POWER 10
(4625) mm²
0.6/1 kV
OZONE RESISTANT

KC0650 RMAI | Dimensions · Technical data

Aluminum stay RMAI –
mounting frame stay

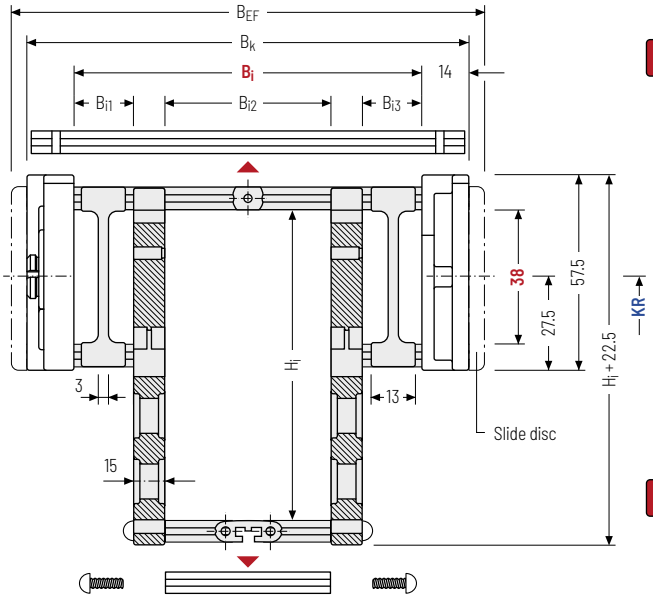
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the inside in the bending radius.
- Available customized in **1 mm width sections**.
- **Inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight
Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
38	130	160	57.5	200 – 400	18	18	B_i + 28	B_i + 36	175	220	300
	200										

Order example

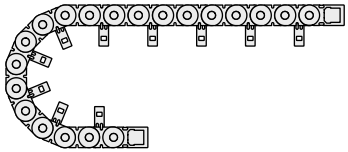
KC0650	.	276	.	RMAI	.	145	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

KC0650 RMAI | Dimensions · Technical data

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 175 mm
H_i = 160 mm: KR_{min} = 220 mm
H_i = 200 mm: KR_{min} = 300 mm





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Subject to change without notice.

KC0650 RMAO | Dimensions · Technical data

Aluminum stay RMAO – mounting frame stay

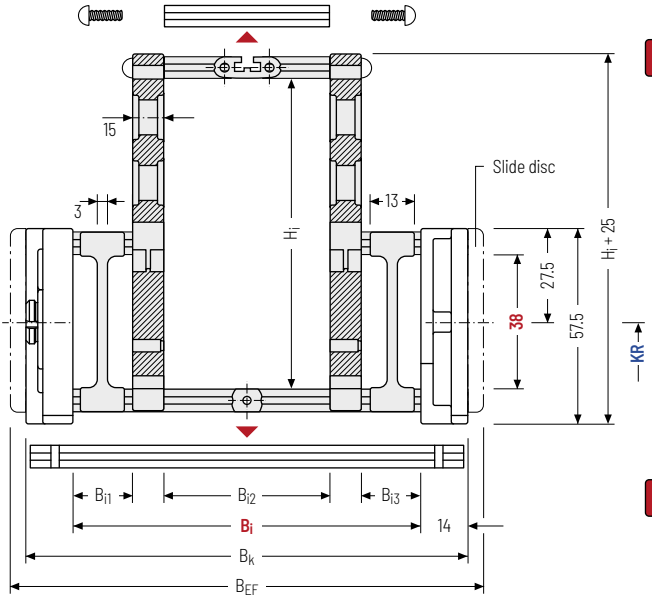
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
38	130	160	57.5	200 – 400	18	18	B_i + 28	B_i + 36	75	115	145
	200								175	220	300

Order example

KC0650	.	276	.	RMAO	.	145	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

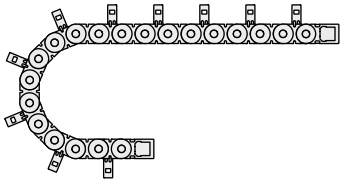
Subject to change without notice.

KC0650 RMA0 | Dimensions · Technical data

RMA0 – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.





Subject to change without notice.

KE0650 RE | Dimensions · Technical Data

Plastic stay RE –
screw-in frame stay

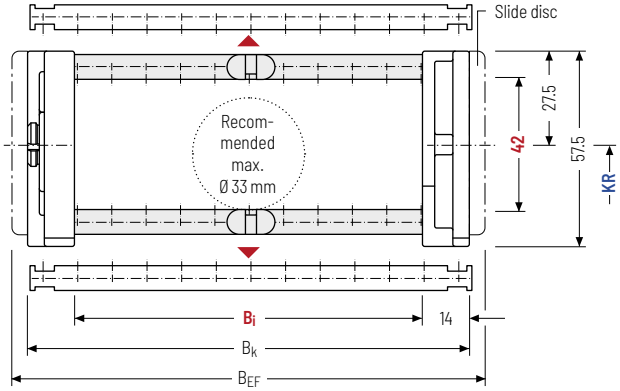
» Plastic profile bars for light and medium loads. Assembly without screws.
» Available customized in **8 mm grid**.
» **Outside/inside:** to open by rotating 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

8 mm
B_i 68 – 260 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
		68	76	84	92	100	108	116	124	132			75	115	1.75
42	57.5	140	148	156	164	172	180	188	196	204	B_i + 28	B_i + 36	145	175	–
		212	220	228	236	244	252	260					220	300	2.71

Order example

KE0650	.	140	.	RE	.	115	-	2600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS – half-stayed).

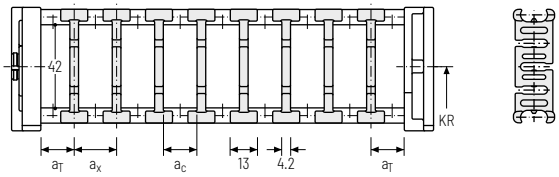
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	6.5	13	8.8	–	2
B	13	16	11.8	8	2

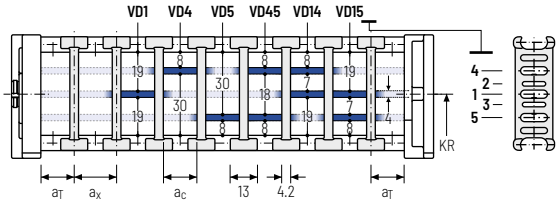
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	6.5	13	8.8	–	2

The dividers can be moved in the cross section.



Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

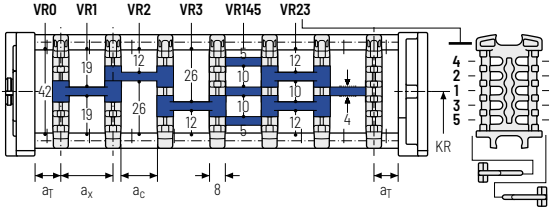
Subject to change without notice.

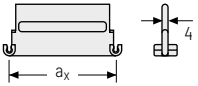
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS3)**, please also state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



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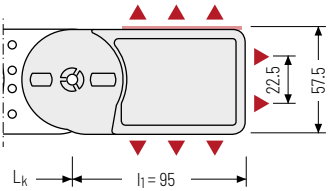
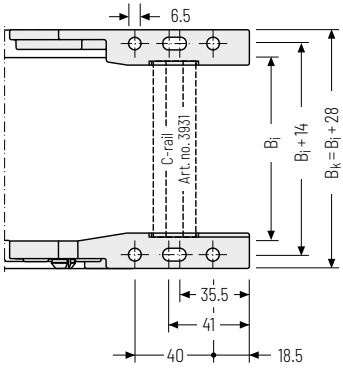
Subject to change without notice.

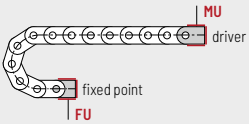
Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom or face on**.



▲ Assembly options





Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

K0900

Pitch
90 mm

Inner heights
50 – 58 mm

Inner widths
81 – 700 mm

Bending radii
130 – 385 mm

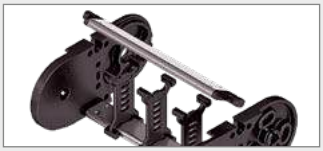
Stay variants



Aluminum stay RS page **326**

Frame stay, narrow "The standard"

» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** to open by rotating 90°.



Aluminum stay RV page **330**

Frame stay, reinforced

» Aluminum profile bars plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
» **Outside/inside:** to open by rotating 90°.



Aluminum stay LG page **334**

Hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.



Aluminum stay RMAI page **336**

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO page **338**

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.

Subject to change without notice.

Stay variants



Plastic stay RE page **340**

Frame screw-in stay

» Plastic profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** to open by rotating 90°.

Additional stay variants on request

Aluminum stay RM
Aluminum profile bars for high loads.

Aluminum stay RMR
Gentle cable guiding with rollers.



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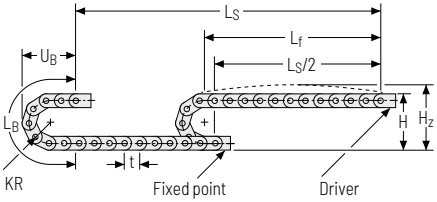
Subject to change without notice.

Unsupported arrangement

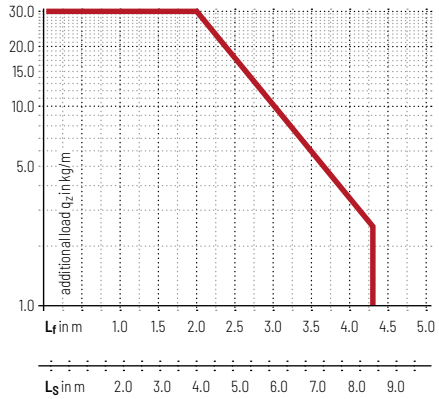


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
130	336	386	589	258
150	376	426	652	278
190	456	506	777	318
245	566	616	950	373
300	676	726	1123	428
385	846	896	1390	513

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 4.05 kg/m. For other inner widths, the maximum additional load changes.



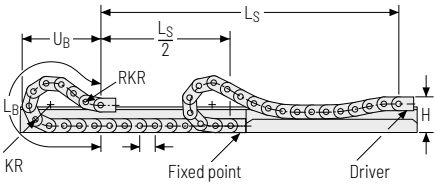
Speed
up to 6 m/s

Acceleration
up to 30 m/s²

Travel length
up to 8.4 m

Additional load
up to 30 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 3 m/s²

Travel length
up to 260 m

Additional load
up to 30 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

If the cable carrier is positioned so it is rotated by 90° (gliding on the outside of the side band), slide discs snapped onto the side optimize the friction and wear situation.

Subject to change without notice.

KC0900 RS | Dimensions · Technical Data

Aluminum stay RS – frame stay narrow

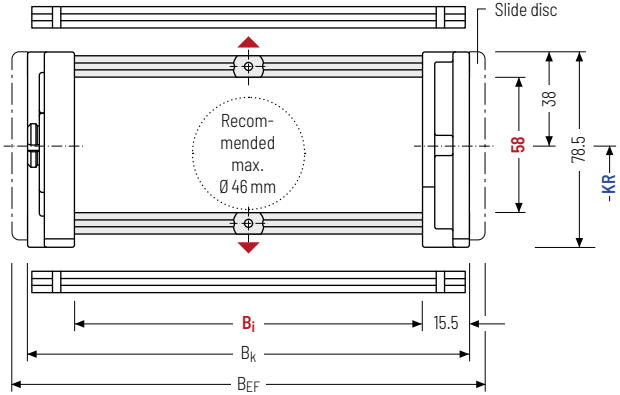
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm width sections**.
- **Outside/inside:** to open by rotating 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	78.5	100 – 400	B_i + 31	B_i + 45	130	150	190	245	300	385	2.8 – 5.8

* in 1 mm width sections

Order example

KC0900	.	300	.	RS	.	150	-	1890	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS – half-stayed).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

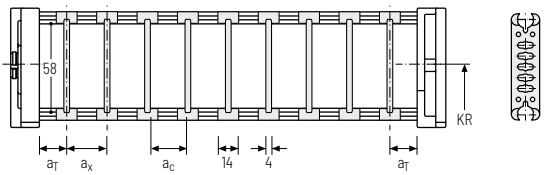
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The socket additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm. The inner height is reduced to 54 mm **(version B)**

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	14	10	2

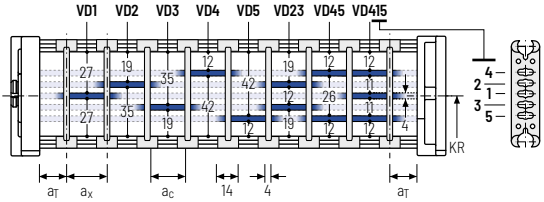
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	25	14	10	2

The dividers can be moved in the cross section.

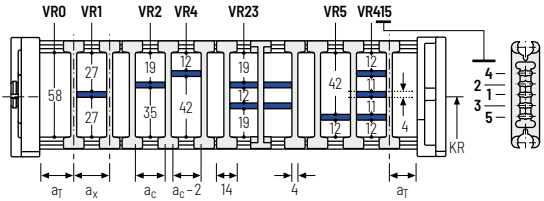


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	23	19	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Please note that the real dimensions may deviate slightly from the values indicated here.

Order example

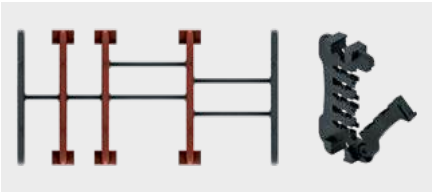
TS2	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



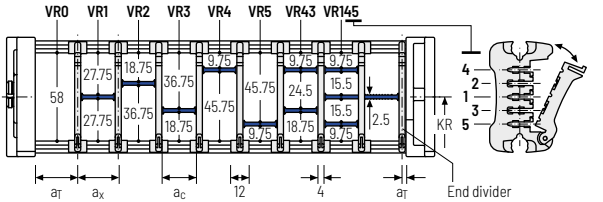
End divider

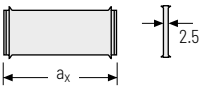


Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	6 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





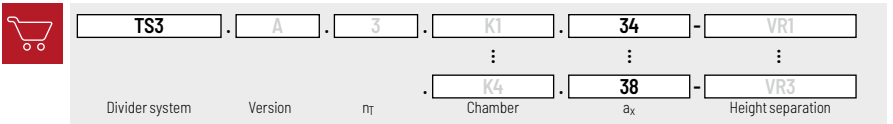
a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example



Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice.



KC0900 RV | Dimensions · Technical Data

Aluminum stay RV – frame stay reinforced

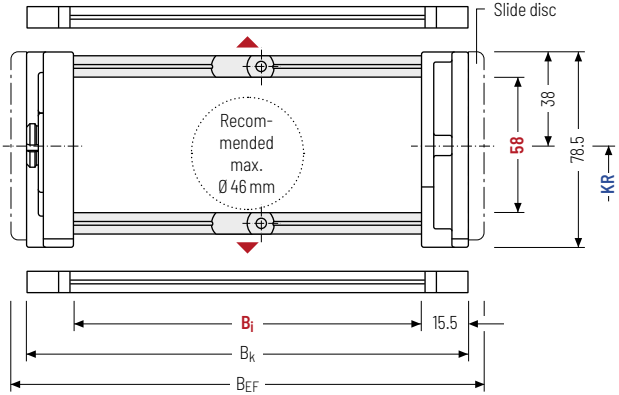
» Aluminum profile bars plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
» Available customized in **1 mm grid**.
» **Outside/inside:** to open by rotating 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	78.5	**100 – 500**	B_i + 31	B_i + 45	**130**	**150**	**190**	**245**	**300**	**385**	3.2 – 7.0

* in 1 mm width sections

Order example

KC0900	.	400	.	RV	.	150	-	1890		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

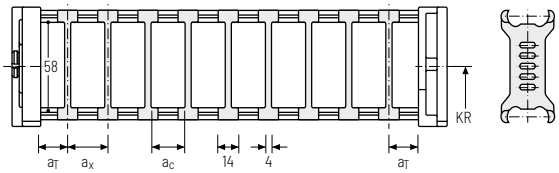
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS – half-stayed).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	14	10	–

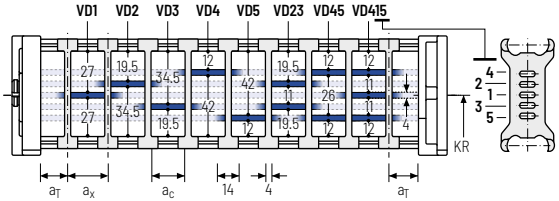
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	25	14	10	2

The dividers can be moved in the cross section.

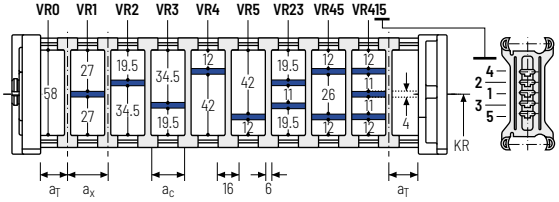


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	8	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

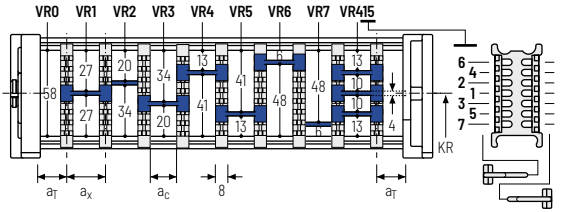
Subject to change without notice.

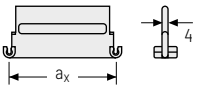
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS3)**, please also state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.



KC0900 LG | Dimensions · Technical Data

Aluminum stay LG –
Hole stay, split version

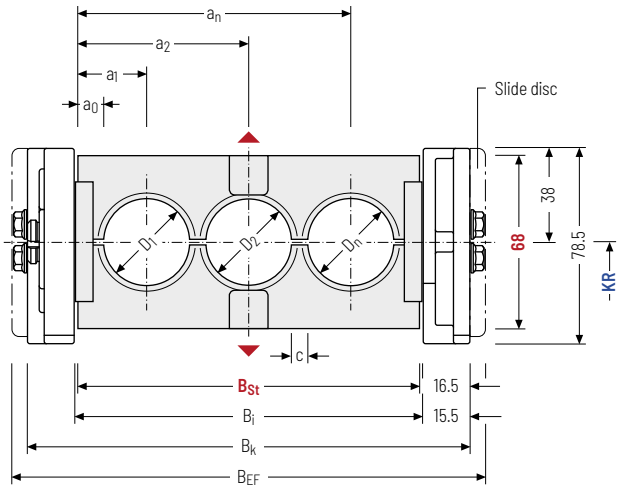
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm width sections**.
» **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 700 mm in **1 mm width sections**



The outer width of the cable carrier corresponds to dimension B_{EF} for stay variant LG.

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]			q_k 50 %** [kg/m]
50	10	78.5	100 – 700	**98 – 698**	B_{St} + 33	B_{St} + 45	4	11	130 245	150 300	190 385	4.79 – 9.83

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

KC0900	.	400	.	LG	.	150	-	1890	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

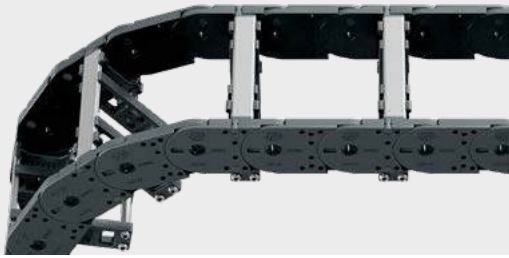
Subject to change without notice.



KC0900 RMAI | Dimensions · Technical Data

Aluminum stay RMAI – mounting frame stay

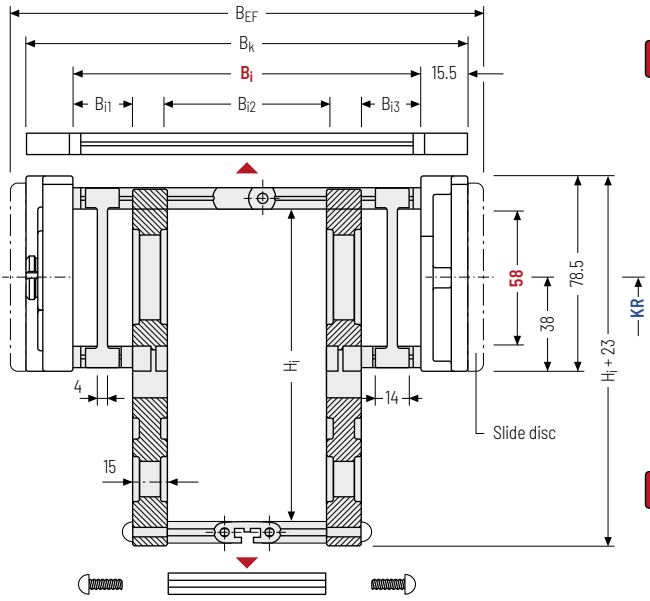
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the inside in the bending radius.
- Available customized in **1 mm width sections**.
- **Inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
58	130	160	78.5	200 – 500	40	40	B_i + 31	B_i + 45	150	190	245
	200								300	385	

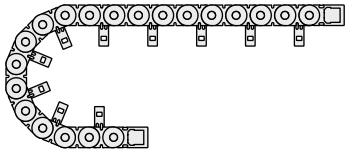
Order example

KC0900	.	400	.	RMAI	.	150	-	1890	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 150 mm
H_i = 160 mm: KR_{min} = 190 mm
H_i = 200 mm: KR_{min} = 245 mm





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KC0900 RMAO | Dimensions · Technical Data

Aluminum stay RMAO – mounting frame stay

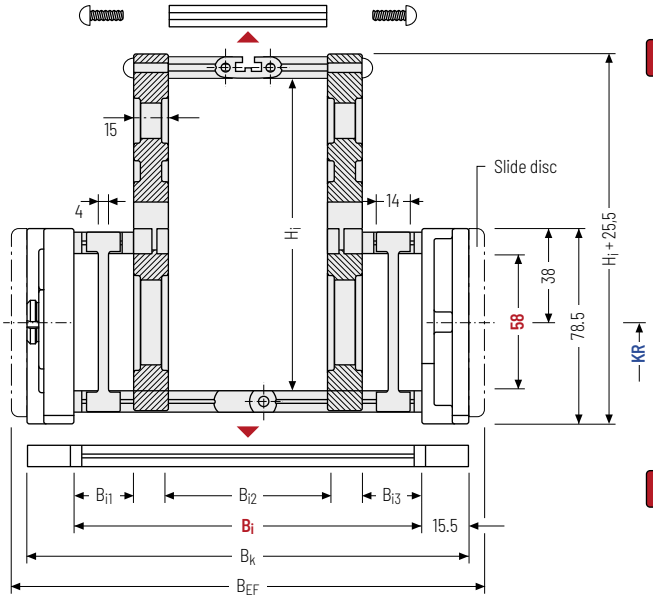
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
58	130	160	78.5	200 – 500	40	40	B_i + 31	B_i + 45	130	150	190
	200								245	300	385

Order example

KC0900	.	400	.	RMAO	.	150	-	1890	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

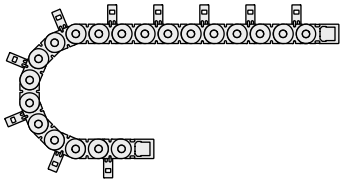
Subject to change without notice.

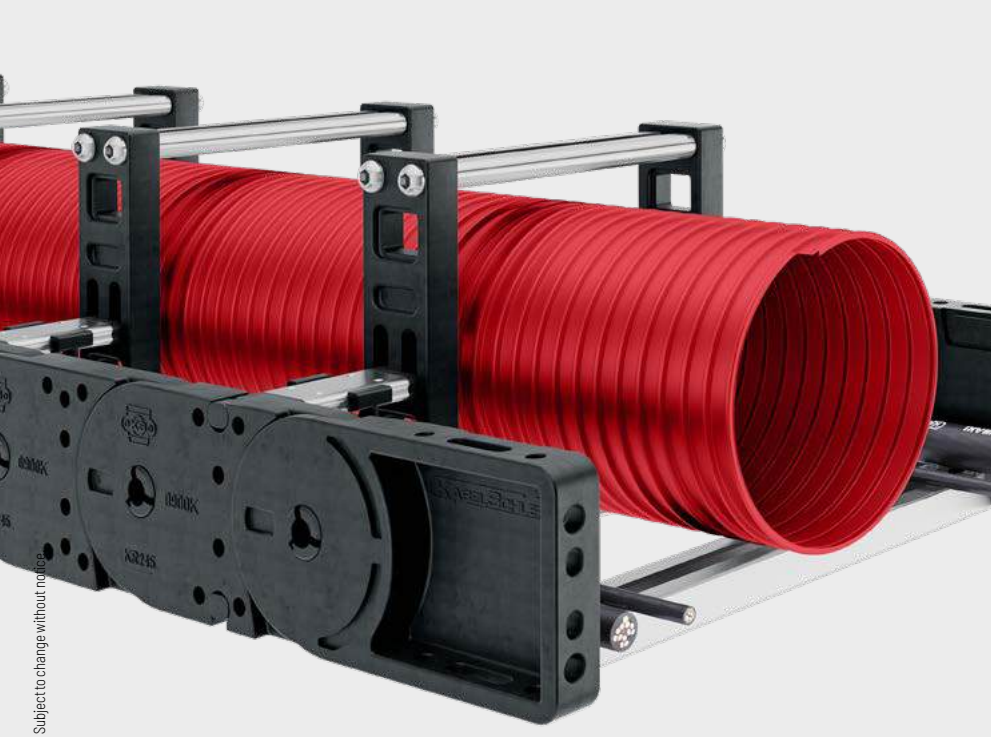
KC0900 RMA0 | Dimensions · Technical Data

RMA0 – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.





Subject to change without notice.

KE0900 RE | Dimensions · Technical Data

Plastic stay RE –
frame screw-in stay

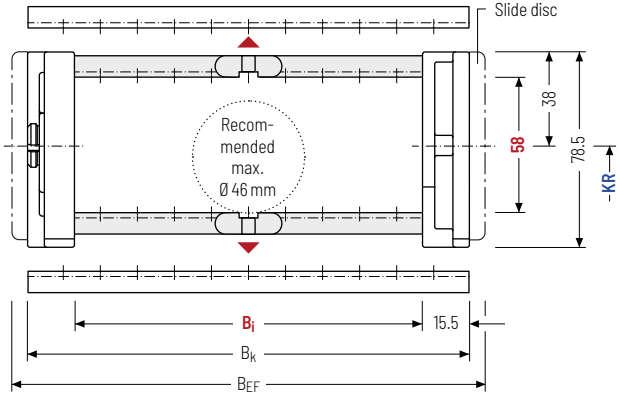
» Plastic profile bars for light to medium loads. Assembly without screws.
» Available customized in **16 mm grid**.
» **Outside/inside:** to open by rotating 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

16 mm
B_i 81 – 561 mm in **16 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]										B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
58	78.5	81	97	113	129	145	161	177	193	209	225	B_i + 31	B_i + 45	130	150	2.95 – 5.95
		241	257	273	289	305	321	337	353	369	385			190	245	
		401	417	433	449	465	481	497	513	545	561			300	385	

Order example

KE0900	.	209	.	RE	.	150	-	1890	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS – half-stayed).

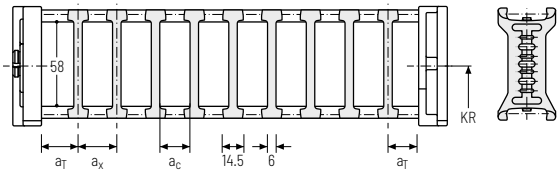
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	7.5	14.5	8.5	–	–
B	8.5	16	10	16	–

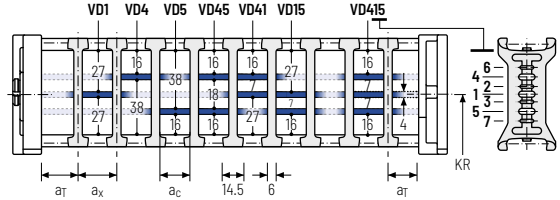
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	7.5	14.5	8.5	–	2
B	8.5	16	10	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).

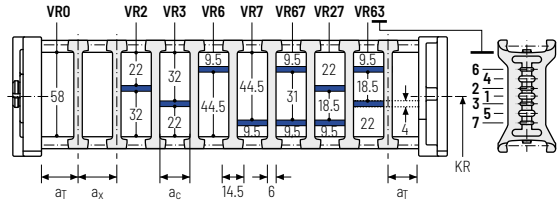


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	7.5	14.5*/21	8.5*/15	–	2
B	8.5	16*/32	10*/26	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).



Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

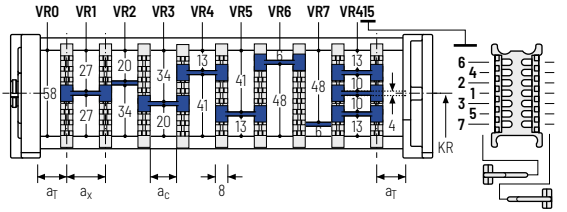
Subject to change without notice.

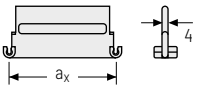
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS3)**, please also state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request!
Learn more at **tsubaki-kabelschlepp.com/totaltrax**



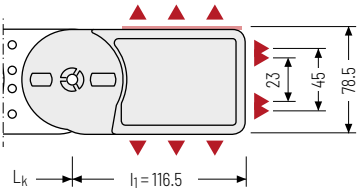
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

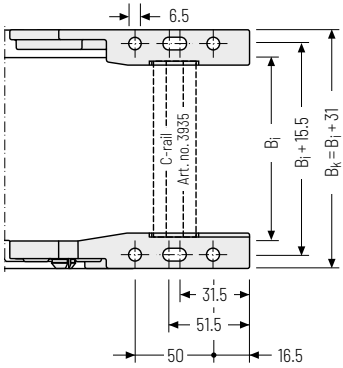
Subject to change without notice.

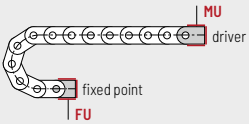
Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side**.



▲ Assembly options





Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

UNIFLEX *Advanced* **series**

Light and quiet all-rounder



TSUBAKI ECO LINK

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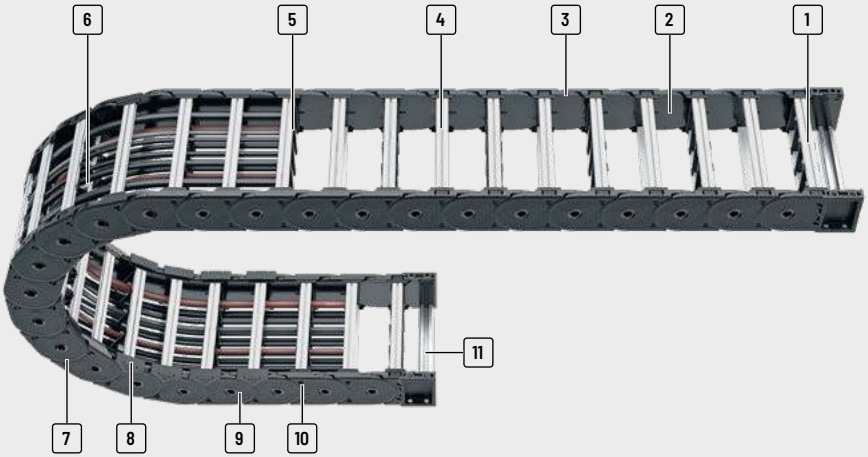
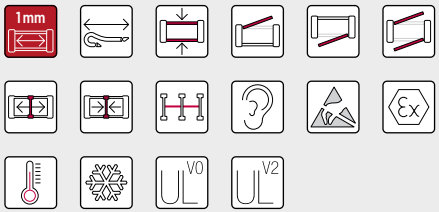


1 Aluminum stays available in **1 mm width sections**
2 Favourable ratio of inner to outer width
3 Chain link plates made of at least 35 % pure regranulate
4 Quick and easy opening to the inside or outside for cable laying
5 Fixable dividers
6 Many separation options for the cables
7 Robust double-stroke system for long unsupported lengths
8 Replaceable glide shoes
9 Very quiet through integrated noise damping
10 Lateral wear surfaces
11 C-rail for strain relief elements

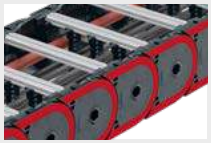
Features

» Four designs: closed, and openable to the inner or outer side or to both sides
» Good ratio of inner to outer width
» Easy assembly and fast cable laying
» UMB connectors made of sturdy plastic (strengths comparable to aluminium)
» Low-wear, cable-friendly design with smooth surface
» Polygon-optimized bending radii for smooth and low-wear chain running




Replaceable glide shoes – optionally with automatic wear monitoring


UMB connectors made of sturdy plastic (strengths comparable to aluminium)


Lateral wear surfaces – for long service life for applications where the carrier is rotated through 90°


Rear grips at stopper for better force transmission and higher strengths

Subject to change without notice.

UNIFLEX Advanced series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
UA1995											
		RSH 020	80	110	66 - 600	96 - 630	1	99.5	150 - 500	50	64
		RSH 030	80	110	66 - 600	96 - 630	1	99.5	150 - 500	50	64
		RSH 040	80	110	66 - 600	96 - 630	1	99.5	150 - 500	50	64
		RSH 070	80	110	66 - 600	96 - 630	1	99.5	150 - 500	50	64

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
9	10	25	200	8	20	•	–	–	•	•	•	•	350
9	10	25	200	8	20	•	•	–	•	•	•	•	351
9	10	25	200	8	20	•	•	–	•	•	•	•	352
9	10	25	200	8	20	•	•	–	•	•	•	•	353

Subject to change without notice.

UA1995

Pitch
99.5 mm

Inner height
80 mm

Inner widths
66 – 600 mm

Bending radii
150 – 500 mm

Stay variants



Design RSH 020 ..... page **350**

Closed frame
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** not openable.



Design RSH 030 ..... page **351**

Frame with outside detachable stays
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside:** release by rotating 90°.



Design RSH 040 ..... page **352**

Frame with inside detachable stays
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Inside:** release by rotating 90°.

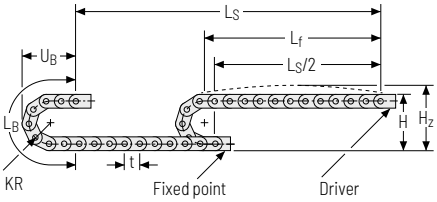


Design RSH 070 ..... page **353**

Frame with outside and inside detachable stays
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by rotating 90°.

Subject to change without notice.

Unsupported arrangement

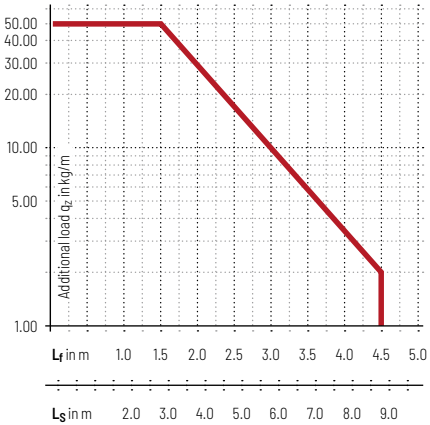


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
150	410	440	680	250
210	530	560	860	310
250	610	640	990	350
300	710	740	1150	400
350	810	840	1300	450
400	910	940	1460	500
500	1110	1140	1770	600

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.85 kg/m with B_i 196 mm. For other inner widths, the maximum additional load changes.



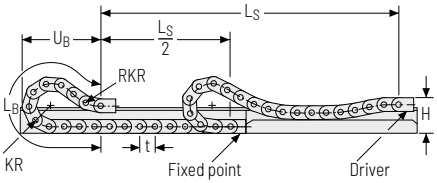
Speed up to 10 m/s

Acceleration up to 25 m/s²

Travel length up to 9 m

Additional load up to 50 kg/m

Gliding arrangement | GO module with chain links optimized for gliding*



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
150	330	400	1805	890
210	330	400	2180	1010
250	330	400	2390	1070
300	330	400	2690	1160
350	330	400	3090	1310
400	330	400	3490	1450
500	330	400	4280	1740

Speed up to 8 m/s

Acceleration up to 20 m/s²

Travel length up to 200 m

Additional load up to 50 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

* only design 070

Subject to change without notice.

UA1995 RSH 020 | Dimensions · Technical data

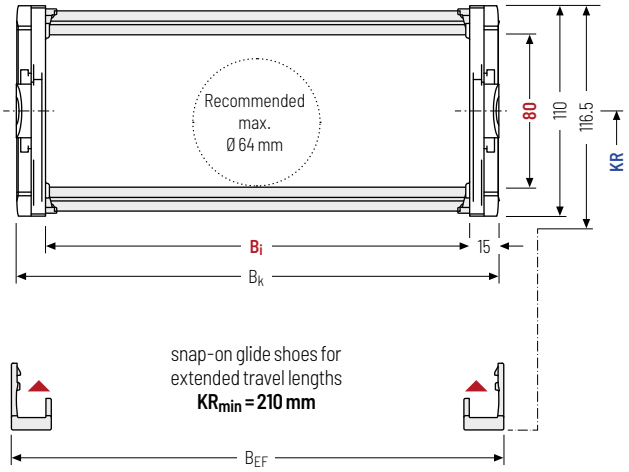
Stay variant RSH 020 – closed frame



» Aluminum profile bars for light to medium loads. Assembly without screws.
» Available customized in **1 mm grid**.
» **Outside/inside:** not openable.

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 66 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
80	110	116.5	**66 – 600**	B_i + 30	B_i + 36	**150**	**210**	**250**	**300**	**350**	**400**	**500**	4.168 – 4.173

* in 1 mm width sections

Order example

UA1995	.	150	.	RSH 020	.	210	-	3582	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995 RSH 030 | Dimensions · Technical data

Stay variant RSH 030 –
with outside detachable stays

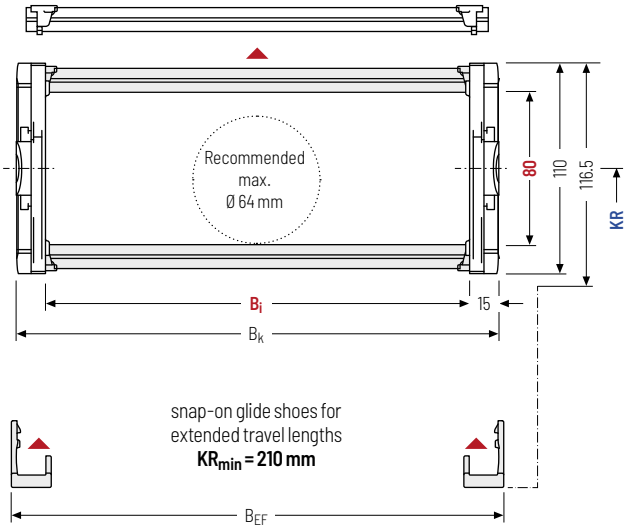
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside:** release by rotating 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm

B_i 66 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
80	110	116.5	**66 – 600**	B_i + 30	B_i + 36	**150**	**210**	**250**	**300**	**350**	**400**	**500**	4.192 – 4.197

* in 1 mm width sections

Order example

UA1995	150	RSH 030	210	3582	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995 RSH 040 | Dimensions · Technical data

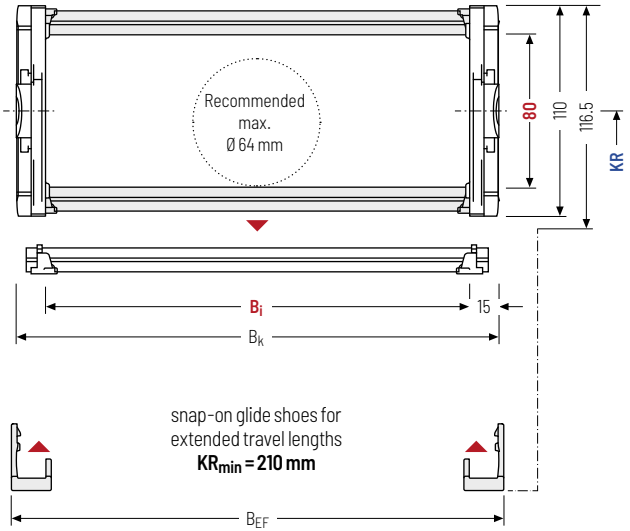
Stay variant RSH 040 –
with inside detachable stays

» Aluminum profile bars for light to medium loads. Assembly without screws.
» Available customized in **1 mm grid**.
» **Inside:** release by rotating 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 66 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design RSH 040 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
80	110	116.5	**66 – 600**	B_i + 30	B_i + 36	**150**	**210**	**250**	**300**	**350**	**400**	**500**	4.192 – 4.197

* in 1 mm width sections

Order example

UA1995	.	150	.	RSH 040	.	210	-	3582	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

UA1995 RSH 070 | Dimensions · Technical data

Stay variant RSH 070 – with outside and inside detachable stays

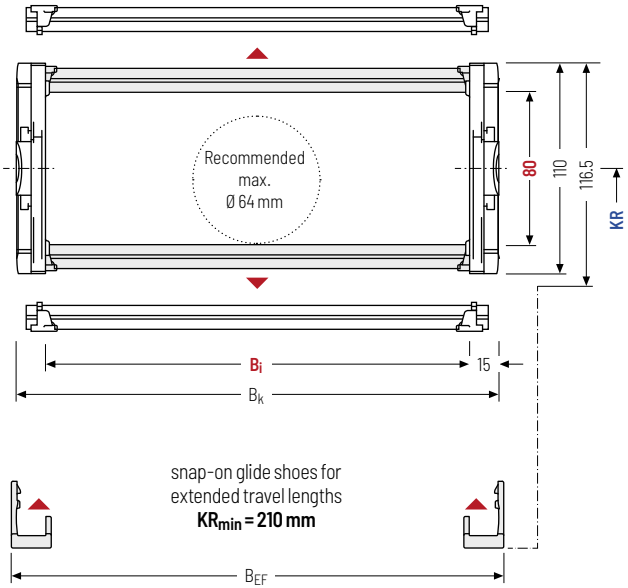
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/Inside:** release by rotating 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm

B_i 66 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Design RSH 070 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
80	110	116.5	**66 – 600**	B_i + 30	B_i + 36	**150**	**210**	**250**	**300**	**350**	**400**	**500**	4.211 – 4.216

* in 1 mm width sections

Order example

UA1995	150	RSH 070	210	3582	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

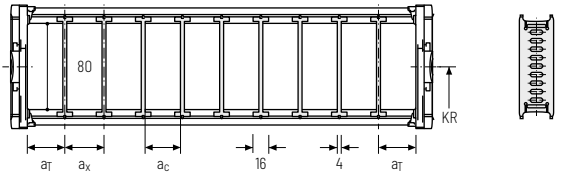
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by a fixing profile, available as an accessory **(version B)**. The fixing profile must be installed at the factory.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	10	16	12	–	–
B	10	17.5	13.5	2.5	–

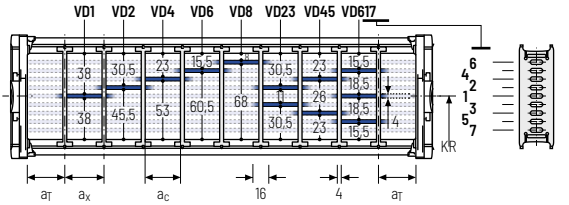
Number of dividers for design RSH 020 depending on B_i



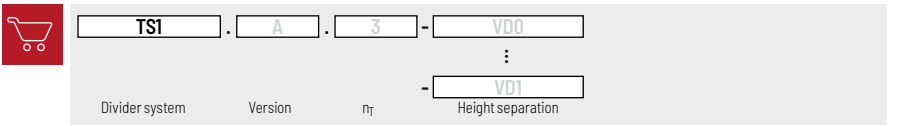
Divider system TS1 with continuous height separation*

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	10	16	12	–	2
B	10	17.5	13.5	2.5	2

* not for design RSH 020



Order example



Please state the designation of the divider system (TS0, TS1,...), the version, and the number of dividers per cross section [n_T].

When using divider systems with height separation (TS1), please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



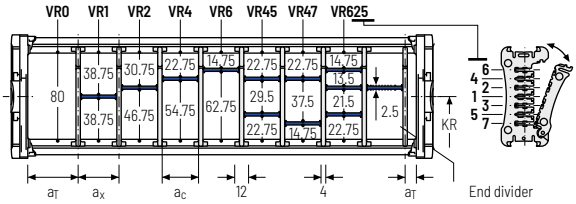
End divider

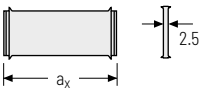


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	8 / 4*	14	10	2

Number of dividers for design RSH 020 depending on B_i
* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_x > 49 mm**.

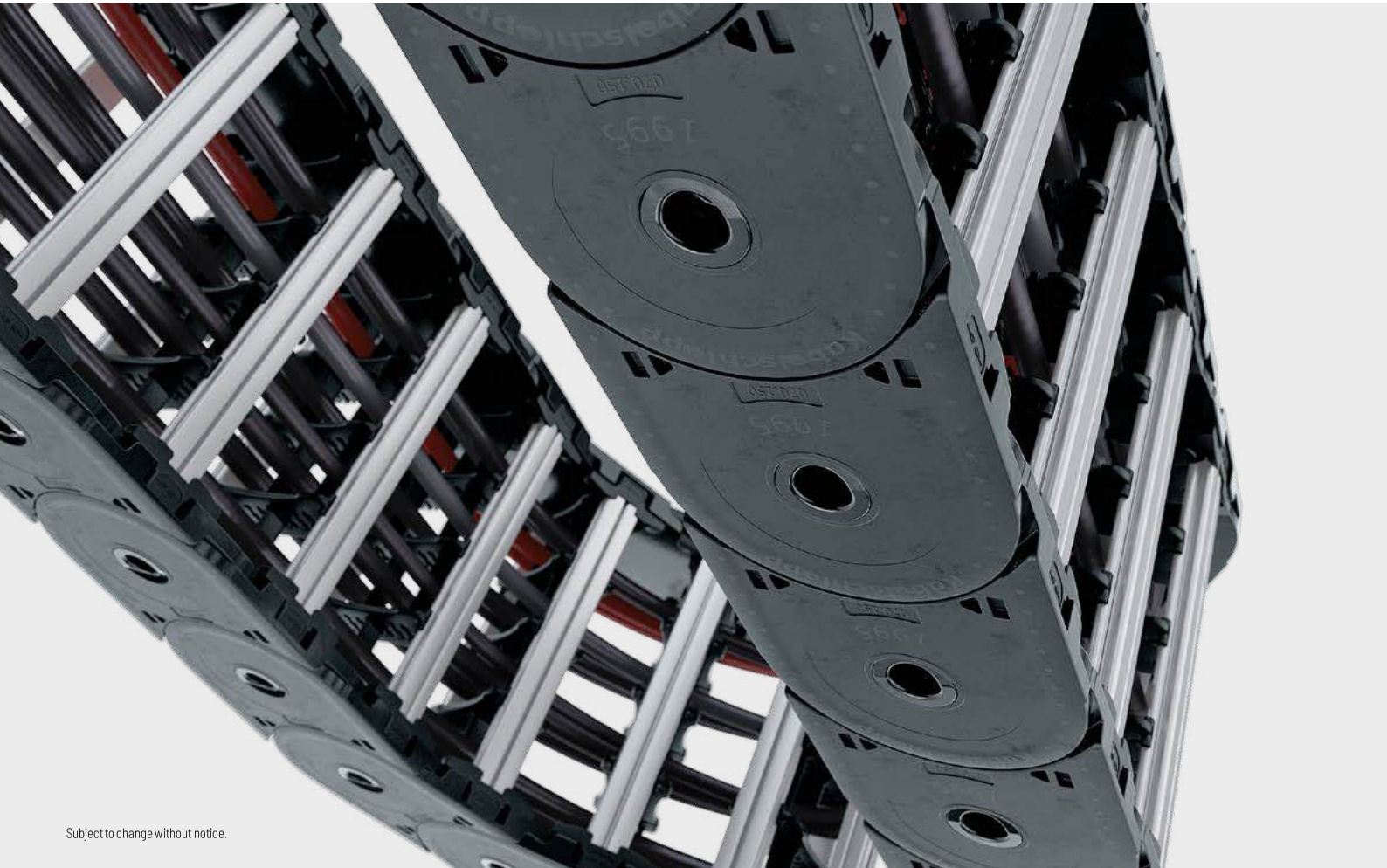
Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

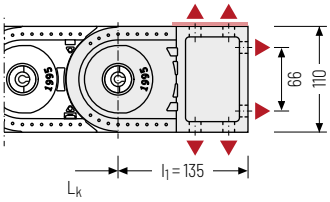
Subject to change without notice.

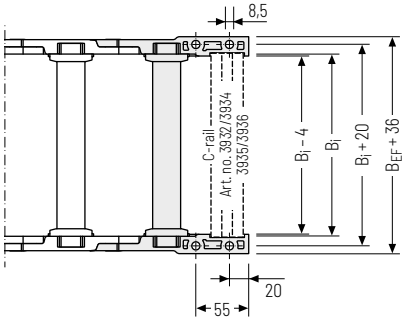


Subject to change without notice.

Universal end connectors UMB – plastic (standard)

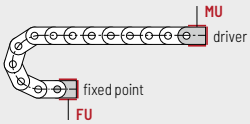
The universal mounting brackets (UMB) are made from plastic and can be mounted **from above, from below or on the face side**.





▲ Assembly options

Recommended tightening torque:
27 Nm for screws M8



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

M series

Variable cable carrier with extensive accessories and stay variants



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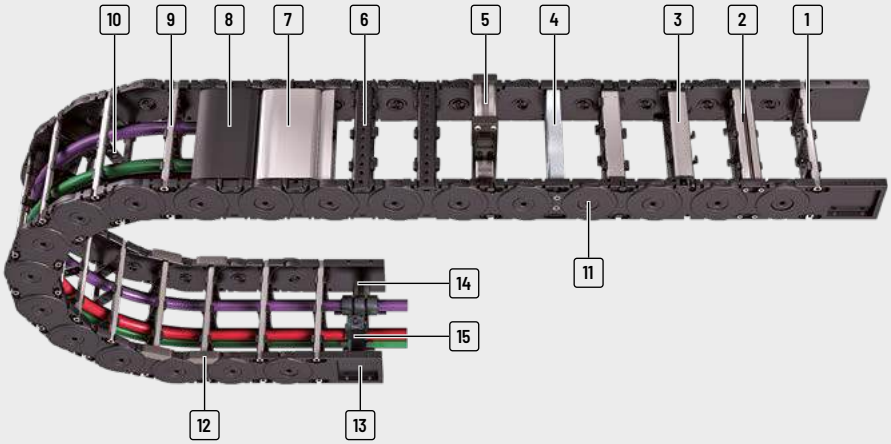
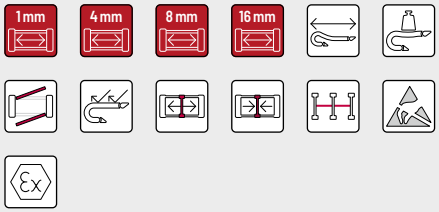


1 Aluminum stays available in **1 mm width sections**
2 4-fold bolted aluminum stays for extreme loads
3 Aluminum stays with ball joint
4 Aluminum hole stays
5 Mounting frame stays
6 Plastic stays available in **4, 8** or **16 mm width sections**
7 Aluminum cover available in **1 mm width sections**
8 Plastic cover available in **8** or **16 mm width sections**
9 Can be opened quickly on the inside and the outside for cable laying
10 Fixable dividers
11 Locking bolts
12 Replaceable glide shoes
13 Universal end connectors (UMB)
14 C-rail for strain relief elements
15 Strain relief combs

Features

» Encapsulated, dirt-resistant stroke system
» Durable sidebands through robust link plate design
» Easy assembly of side bands through bars with easy-to-assemble locking bolts
» Long service life due to minimized hinge wear owing to the "life extending 2 disc principle"
» Large selection of vertical and horizontal stay systems and dividing options for your cables
» Versions with aluminum stays in 1 mm width sections up to 800 mm inner width
» Versions with plastic stays available in 4, 8 or 16 mm width sections




Minimized hinge wear owing to the "life extending 2 disc principle"


Sturdy link plate design, encapsulated stroke system


Easy to assemble through locking bolts


Replaceable glide shoes for long service life for gliding applications

Subject to change without notice.

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
M0320											
		RS 01	19	27.5	25 – 280	36 – 291	1	32	37 – 200	2.5	15
		RS 02	19	27.5	25 – 280	36 – 291	1	32	37 – 200	2.5	15
		RE	19	27.5	25 – 189	36 – 200	4	32	37 – 200	2.5	15
M0475											
		RD 01	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
		RD 02	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
M0650											
		RS	38	57	75 – 400	109 – 434	1	65	75 – 350	25	30
		LG	36	57	75 – 600	109 – 634	1	65	75 – 350	25	29
		RMAI	38 (200)	57 (224)	200 – 400	234 – 434	1	65	220 – 350	25	30 (160)
		RMAO	38 (200)	57 (224)	200 – 400	234 – 434	1	65	75 – 350	25	30 (160)
		RE	42	57	50 – 266	84 – 300	8	65	75 – 350	25	33
		RD	42	57	50 – 266	84 – 300	8	65	75 – 350	25	33
M0950											
		RS	58	80	75 – 400	114 – 439	1	95	140 – 380	35	46
		RV	58	80	75 – 500	114 – 539	1	95	140 – 380	35	46
		RM	54	80	75 – 600	114 – 639	1	95	140 – 380	35	43
		LG	50	80	75 – 600	114 – 639	1	95	140 – 380	35	38
		RMAI	58 (200)	80 (224)	200 – 500	239 – 539	1	95	170 – 380	35	46 (160)
		RMAO	58 (200)	80 (224)	200 – 500	239 – 539	1	95	140 – 380	35	46 (160)
		RMR	51	80	75 – 600	114 – 639	1	95	140 – 380	35	46
		RE	58	80	45 – 557	84 – 596	16	95	140 – 380	35	46
		RD	58	80	45 – 557	84 – 596	16	95	140 – 380	35	46

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	366
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	366
2.8	10	50	80	2.5	25	•	•	–	–	•	•	•	368
2.7	10	50	–	–	–	•	•	•	–	•	•	•	374
2.7	10	50	–	–	–	•	•	•	–	•	•	•	376
4.8	10	40	220	8	20	•	•	•	•	•	•	•	384
4.8	10	40	220	8	20	–	–	–	–	•	•	•	388
4.8	10	40	220	8	20	•	–	–	–	•	•	–	390
4.8	10	40	220	8	20	•	–	–	–	•	•	–	392
4.8	10	40	220	8	20	•	•	–	•	•	•	•	394
4.8	10	40	220	8	20	•	•	–	•	•	•	•	395
7.4	10	30	260	8	20	•	•	•	•	•	•	•	404
7.4	10	30	260	8	20	•	•	•	•	•	–	•	408
7.4	10	30	260	8	20	•	•	•	–	•	•	•	412
7.4	10	30	260	8	20	–	–	–	–	•	•	•	414
7.4	10	30	260	8	20	•	–	–	–	•	•	–	416
7.4	10	30	260	8	20	•	–	–	–	•	•	–	418
7.4	10	30	260	8	20	•	–	–	–	•	•	•	420
7.4	10	30	260	8	20	•	•	•	•	•	•	•	422
7.4	10	30	260	8	20	•	•	•	•	•	•	•	423

Subject to change without notice.

M series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
M1250											
		RS	72	96	75 – 400	120 – 445	1	125	180 – 500	65	61
		RV	72	96	100 – 600	145 – 645	1	125	180 – 500	65	61
		RM	69	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		LG	76	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		RMAI	72 (200)	96 (226)	200 – 800	245 – 845	1	125	180 – 500	65	61 (160)
		RMAO	72 (200)	96 (226)	200 – 800	245 – 845	1	125	180 – 500	65	61 (160)
		RMR	66	96	100 – 800	145 – 845	1	125	180 – 500	65	54
		RE	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
		RD	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
M1300											
		RMF	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		RMS	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		LG	98	120	100 – 800	150 – 850	1	130	150 – 500	70	74

* Further information on request.

Subject to change without notice.

M series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
9.7	10	25	320	8	20	•	•	–	•	•	•	•	432
9.7	10	25	320	8	20	•	•	•	•	•	–	•	436
9.7	10	25	320	8	20	•	•	•	–	•	•	•	440
9.7	10	25	320	8	20	–	–	–	–	•	•	•	442
9.7	10	25	320	8	20	•	–	–	–	•	•	–	444
9.7	10	25	320	8	20	•	–	–	–	•	•	–	446
9.7	10	25	320	8	20	•	–	–	–	•	•	•	448
9.7	10	25	320	8	20	•	•	•	•	•	•	•	450
9.7	10	25	320	8	20	•	•	•	•	•	•	•	451
10.8	10	25	350	8	20	•	•	–	•	–	–	–	458
10.8	10	25	350	8	20	•	•	–	•	•	•	•	460
10.8	10	25	350	8	20	–	–	–	–	•	•	•	462

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M0320

Pitch
32 mm

Inner height
19 mm

Inner widths
25 – 280 mm

Bending radii
37 – 200 mm

Stay variants



Aluminum stay 01 ..... page **366**

Frame stay detachable inside
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Inside:** release by turning by 90°.



Aluminum stay 02 ..... page **366**

Frame stay detachable outside "the standard"
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside:** release by turning by 90°.



Plastic stay RE ..... page **368**

Frame screw-in stay
» Plastic profile bars for light to medium loads. Assembly without screws.
» **Inside/outside:** release by turning by 90°.

More product information online

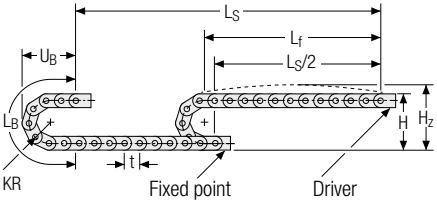
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Unsupported arrangement

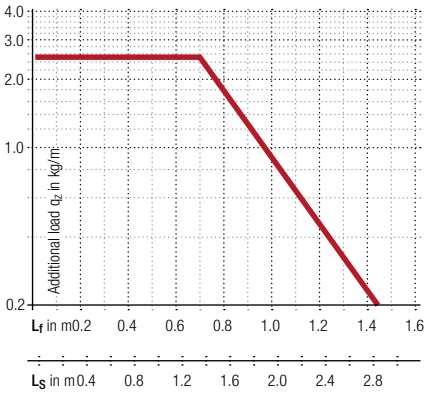


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
37	101.5	121.5	181	83
47	121.5	141.5	212	93
77	181.5	201.5	306	123
100	227.5	247.5	379	146
200	427.5	427.5	693	246

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.54 kg/m. For other inner widths, the maximum additional load changes.



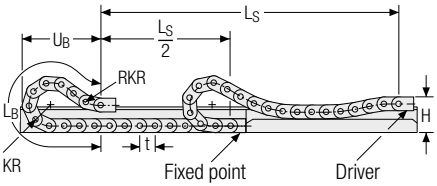
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.8 m

Additional load
up to 2.5 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

The gliding cable carrier must be guided in a channel. See p. 866.

Travel length
up to 80 m

Additional load
up to 2.5 kg/m

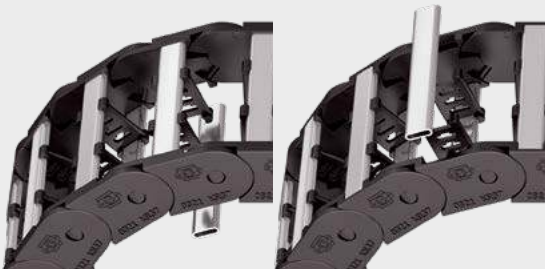
Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

MC0320 01/02 | Dimensions · Technical data

Aluminum stay 01/02 – frame stay detachable outside

- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.

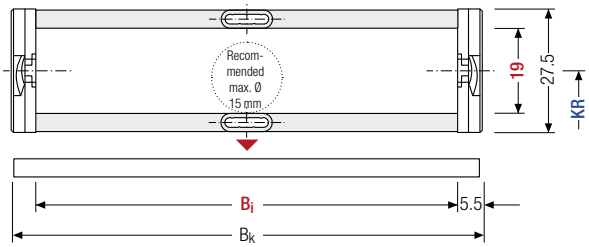


Stay arrangement on each chain link **(VS: fully-stayed)**

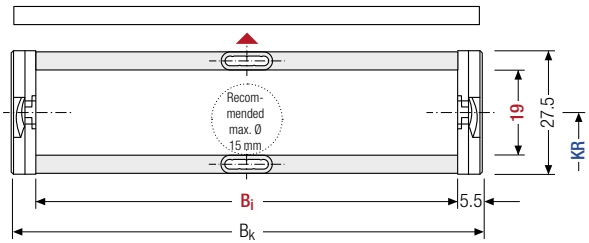
1 mm

B_i 25 – 280 mm in **1 mm width sections**

Aluminum stay 01 frame stay detachable inside



Aluminum stay 02 frame stay detachable outside



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	KR [mm]					q_k [kg/m]
19	27.5	25 – 280	B_i + 11	37	47	77	100	200	0.47 – 1.70

* in 1 mm width sections

Order example

MC0320	.	200	.	01	.	100	-	1152		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

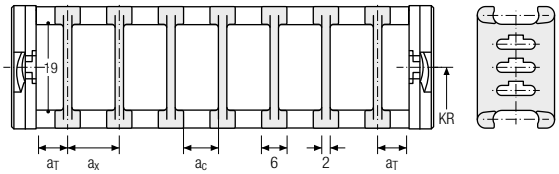
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	3	6	4	2

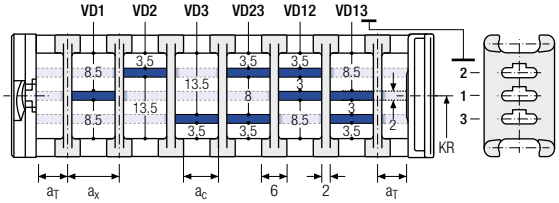
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

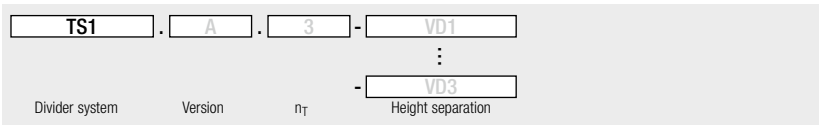
Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_{T} min
A	3	20	6	4	2

The dividers can be moved in the cross section.



Order example





Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

ME0320 RE | Dimensions · Technical data

Plastic stay RE –
screw-in frame stay

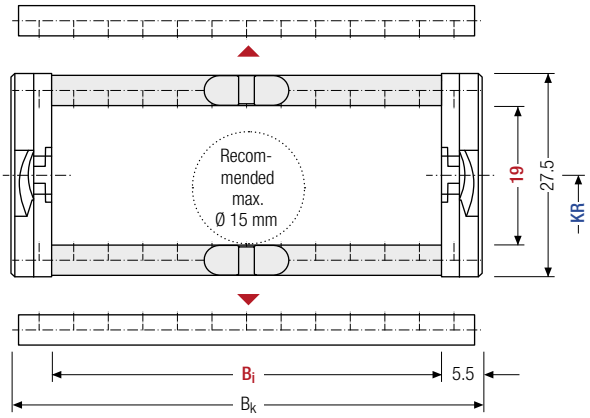
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **4 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

4 mm

B_i 25 – 189 mm in **4 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]												B_k [mm]	KR [mm]		q_k [kg/m]
19	27.5	25	29	33	37	41	45	49	53	57	61	65		B_i + 11	37	47	0.46 – 1.00
		69	73	77	81	85	89	93	97	101	105	109			77	100	
		113	117	121	125	129	133	137	141	145	149				200		

For B_i > 149 mm we recommend a multi-band chain.

Order example

ME0320	.	105	.	RE	.	100	-	1152		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

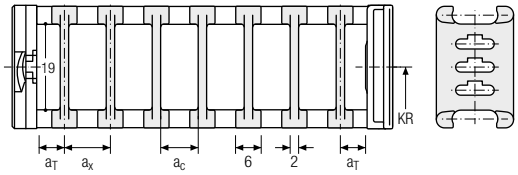
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3	6	4	–	–
B	4.5	8	6	4	–

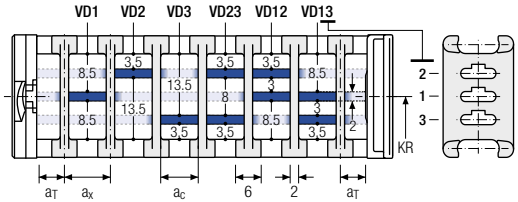
The dividers can be moved in the cross section.



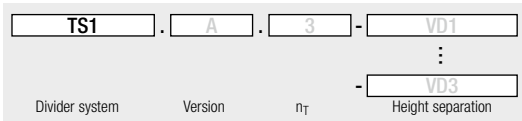
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3	20	6	4	–	2
B	4.5	20.5	8	6	4	2

The dividers can be moved in the cross section.



Order example



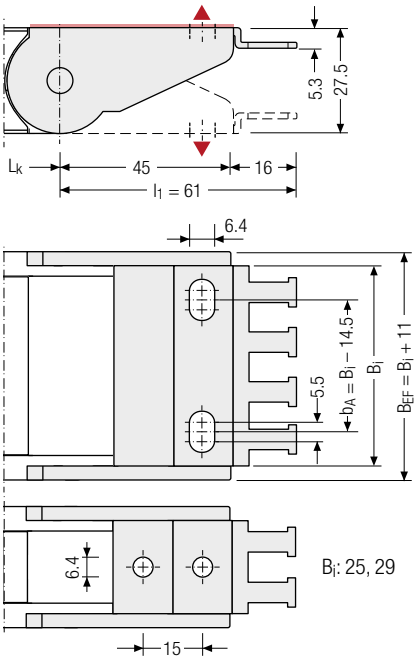
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)**, please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

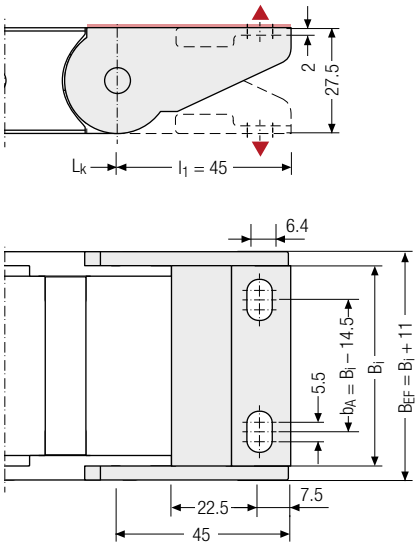
One part end connectors – plastic/aluminum (with integrated strain relief)

The plastic/aluminum end connectors can be **connected from above or below**. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



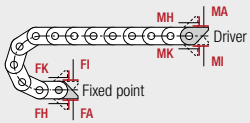
One-part end connectors – plastic/aluminum

The plastic/aluminum end connectors can be **connected from above or below**. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options

B_i [mm]	n_z	B_i [mm]	n_z	B_i [mm]	n_z	B_i [mm]	n_z
25	2	39	4	89	7	149	11
29	2	49	4	109	8		
37	3	69	5	124	10		



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Order example

Plastic/aluminum	.	F	A
Plastic/aluminum	.	M	A
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.



M0475

Pitch
47.5 mm

Inner height
28 mm

Inner widths
24 – 280 mm

Bending radii
55 – 300 mm

Stay variants



Plastic stay RD 01 ..... page **374**

Frame stay with hinge in the inner radius
» Plastic profile bars with hinge for light to medium loads. Assembly without screws.
» **Outside:** release by turning by 90°.
» **Inside:** swivable to both sides.



Plastic stay RD 02 ..... page **376**

Frame stay with hinge in the outer radius
» Plastic profile bars with hinge for light to medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



MT series

Also available as covered variants with cover system.
More information can be found
in chapter “MT series” from p. 628.

More product information online

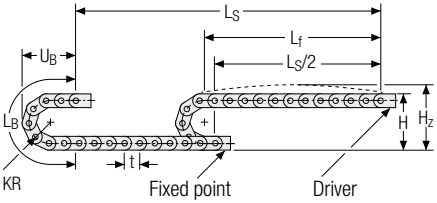
Assembly instructions etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your custom cable carrier here:
online-engineer.de

Subject to change without notice.

Unsupported arrangement

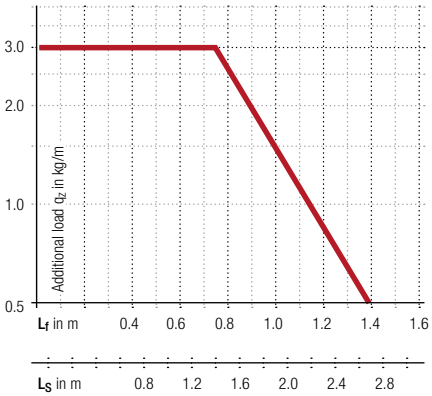


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
55	149	174	268	122
75	189	214	331	142
100	239	264	410	167
130	299	324	504	197
160	359	384	598	227
200	439	464	724	267
250	539	564	881	317
300	639	664	1038	367

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.7 kg/m. For other inner widths, the maximum additional load changes.





Speed
up to 10 m/s



Acceleration
up to 50 m/s²



Travel length
up to 2.7 m



Additional load
up to 3.0 kg/m

Subject to change without notice.

MK0475 RD 01 | Dimensions · Technical data

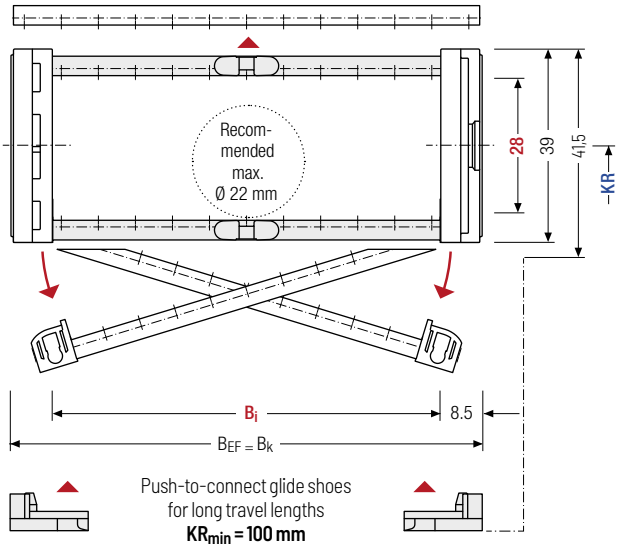
Plastic stay RD 01 – frame stay with hinge in the inner radius

- Plastic profile bars with hinge for light to medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside:** release by turning by 90°.
  Inside: swivable to both sides.



Stay arrangement on every chain link **(VS: fully-stayed)**

8 mm B_i 24 – 280 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
28	39	24	32	40	48	56	64	72	80	88	B_i + 17	B_i + 17	55	75	0.79 – 3.03
		96	104	112	120	128	136	144	152	160			100	130	
		168	176	184	192	200	208	216	224	232			160	200	
		240	248	256	264	272	280						250	300	

Order example

MK0475	.	128	.	RD 01	.	100	-	1425		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

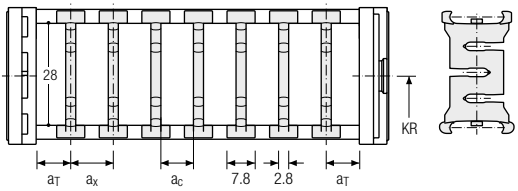
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	6	7.8	5	–	–
B	12	8	5,2	8	–

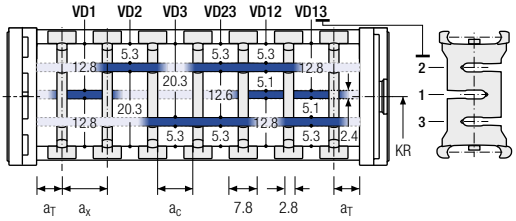
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	6	20	7.8	5	–	2
B	12	20	8	5,2	8	2

The dividers can be moved within the cross section (version A) or fixed (version B).

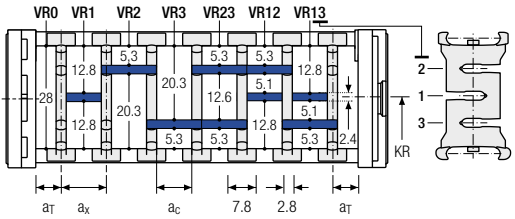


Divider system TS2 with partial height separation

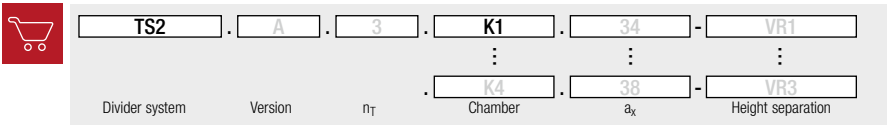
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
B	12	8*/24	5.2*/21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).



Order example



Subject to change without notice.

MK0475 RD 02 | Dimensions · Technical data

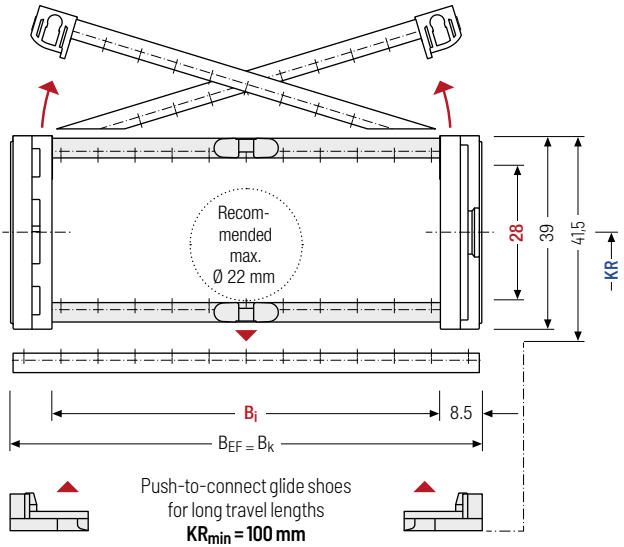
Plastic stay RD 02 – frame stay with hinge in the outer radius

- Plastic profile bars with hinge for light to medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside:** swivable to both sides.
  Inside: release by turning by 90°.



Stay arrangement on every chain link **(VS: fully-stayed)**

8 mm B_i 24 – 280 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
28	39	24	32	40	48	56	64	72	80	88	B_i + 17	B_i + 17	55	75	0.79 – 3.03
		96	104	112	120	128	136	144	152	160			100	130	
		168	176	184	192	200	208	216	224	232			160	200	
		240	248	256	264	272	280						250	300	

Order example

MK0475	.	128	.	RD 02	.	100	-	1425	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

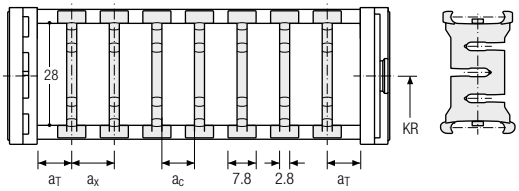
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	6	7.8	5	–	–
B	12	8	5,2	8	–

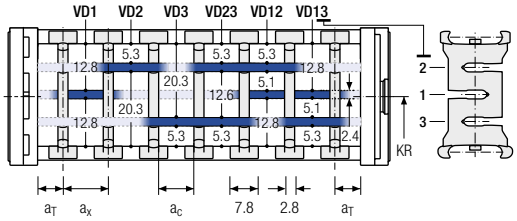
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	6	20	7.8	5	–	2
B	12	20	8	5,2	8	2

The dividers can be moved within the cross section (version A) or fixed (version B).

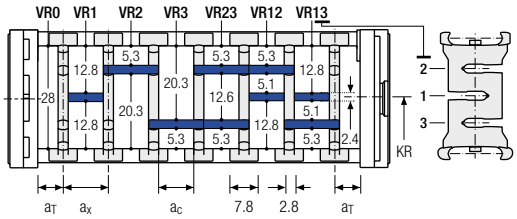


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
B	12	8*/24	5.2*/21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).



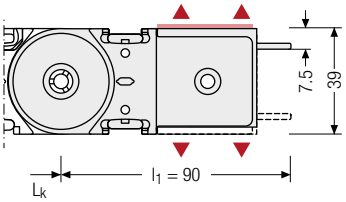
Order example

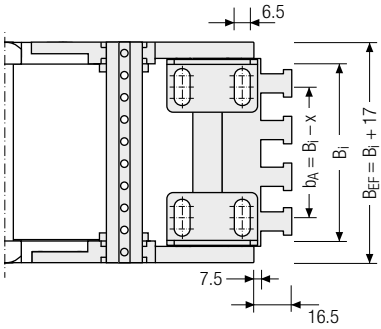
TS2	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Subject to change without notice.

End connectors – plastic/steel (with strain relief)

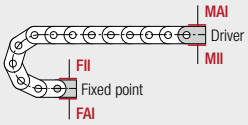
Link end connector made of plastic, end connector made of sheet steel with screw-fixed aluminum strain relief.
The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options

B_i [mm]	x [mm]	n_z
40	17.5	3
56	21.5	4
80	17.5	6
104	19.0	8
128	19.5	9
152	17.5	11
192	18.5	14



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

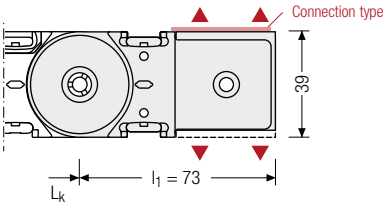
Order example

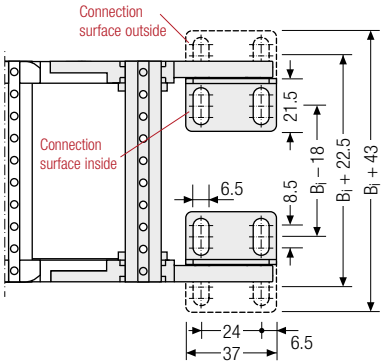
Plastic/steel	.	F	A	I
Plastic/steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

Subject to change without notice.

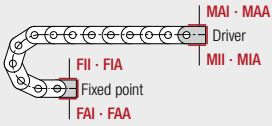
End connectors – plastic/steel

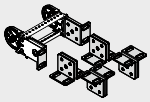
Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options





Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection

Order example

Plastic/steel	.	F	A	A
Plastic/steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

M0650

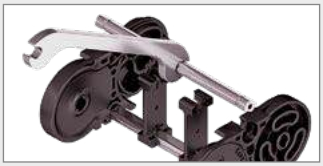
Pitch
65 mm

Inner heights
36 – 42 mm

Inner widths
50 – 600 mm

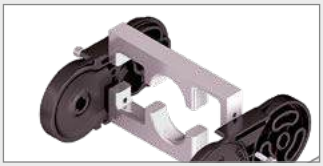
Bending radii
75 – 350 mm

Stay variants



Aluminum stay RS ..... page **384**

Frame stay, narrow "The standard"
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Aluminum stay LG ..... page **388**

Hole stay, split version
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.



Aluminum stay RMAI ..... page **390**

Mounting frame stay
» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO ..... page **392**

Mounting frame stay
» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.

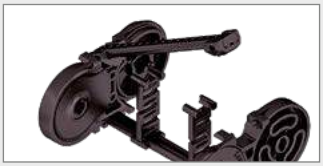


Plastic stay RE ..... page **394**

Frame screw-in stay
» Plastic profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.

Subject to change without notice.

Stay variants



Plastic stay RD page 395

Frame stay with hinge

» Plastic profile bars with hinge for light to medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



MT series

Also available as covered variants with cover system.
More information can be found in chapter “MT series” from p. 628.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



TRAXLINE® cables for cable carriers

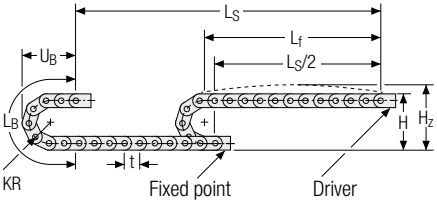
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.



Subject to change without notice.

Unsupported arrangement

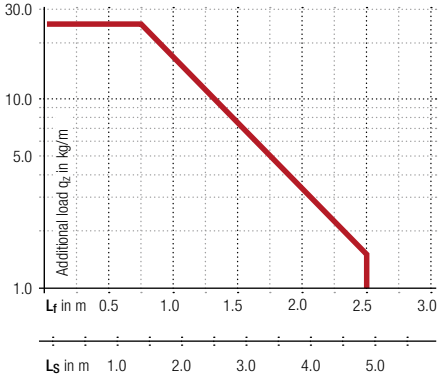


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
75	207	242	366	169
95	247	282	429	189
115	287	322	492	209
145	347	382	586	239
175	407	442	680	269
220	497	532	822	314
260	577	612	948	354
275	607	642	994	369
300	657	692	1073	394
350	757	792	1230	444

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.4 kg/m. For other inner widths, the maximum additional load changes.



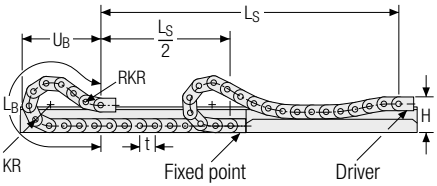
Speed
up to 10 m/s

Acceleration
up to 40 m/s²

Travel length
up to 4.8 m

Additional load
up to 25 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
95	171	300	1180	560
115	171	300	1310	605
145	171	300	1440	640
175	171	300	1635	705
220	171	300	1950	810
260	171	300	2275	926
275	171	300	2405	973
300	171	300	2535	1014
350	171	300	2925	1152

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 220 m

Additional load
up to 25 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MC0650 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

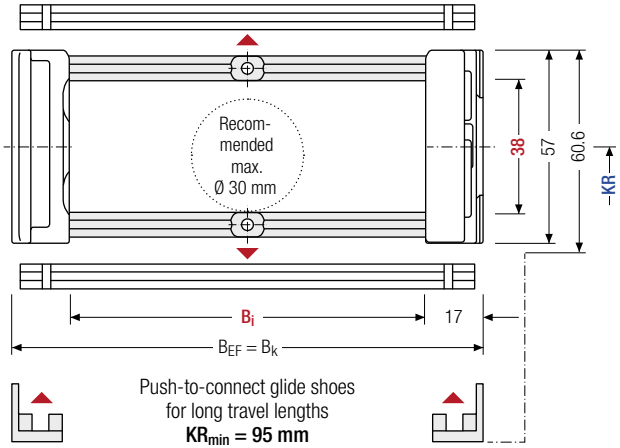
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 400 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 95 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
38	57	60.6	62.2	75 – 400	B_i + 34	B_i + 34	75	95	115	145	175	1.98 – 3.85
							220	260	275	300	350	

* in 1 mm width sections

Order example

MC0650	.	300	.	RS	.	175	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

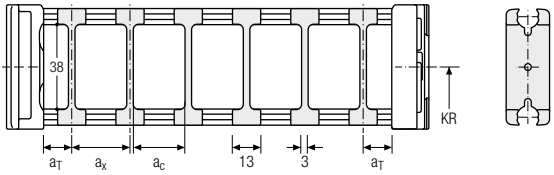
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm. The inner height is reduced to 32 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	6.5	13	10	2

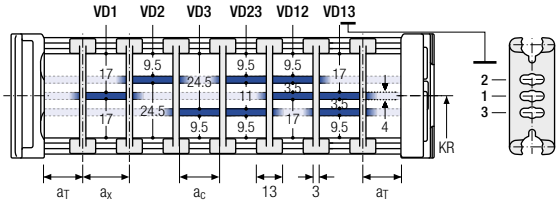
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	6.5	25	13	10	2

The dividers can be moved in the cross section.

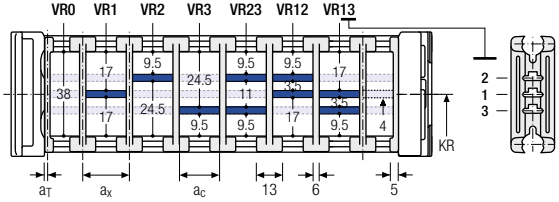


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	1,5	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 3 mm).





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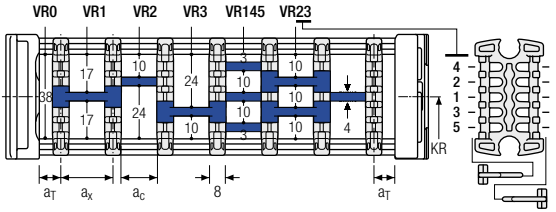
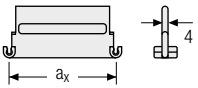
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 3 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

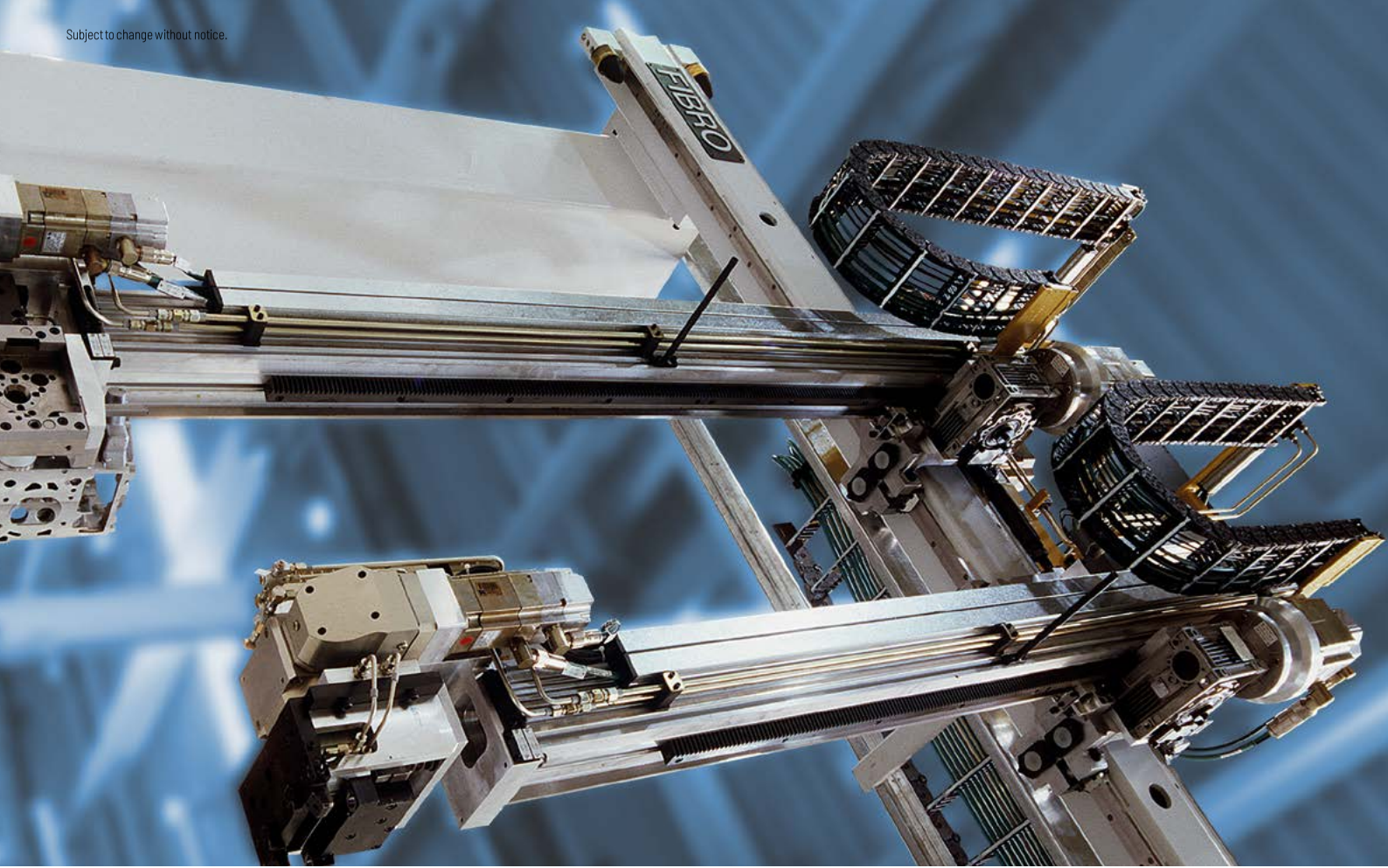
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/support**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.



MC0650 LG | Dimensions · Technical Data

Aluminum stay LG –
Hole stay, split version

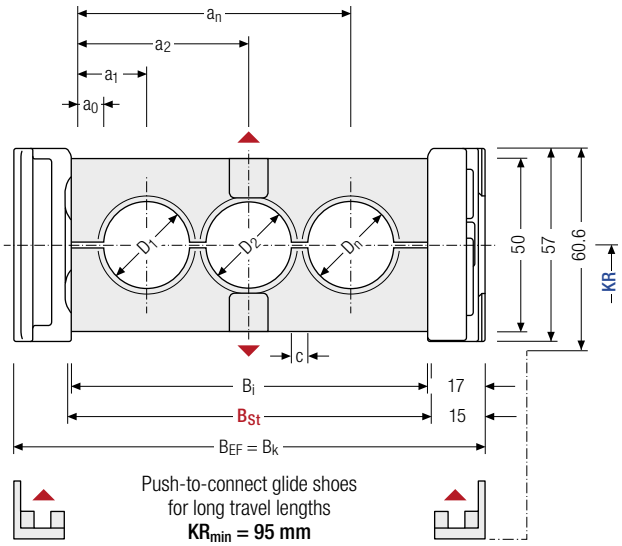
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 95 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
36	9	57	75 – 600	79 – 604	B_{St} + 30	B_{St} + 30	4	10	75	95	115	145	2.39 – 4.66
									175	220	260	275	
									300	350			

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

MC0650	.	300	.	LG	.	175	-	1430		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.



MC0650 RMAI | Dimensions · Technical data

Aluminum stay RMAI – mounting frame stay

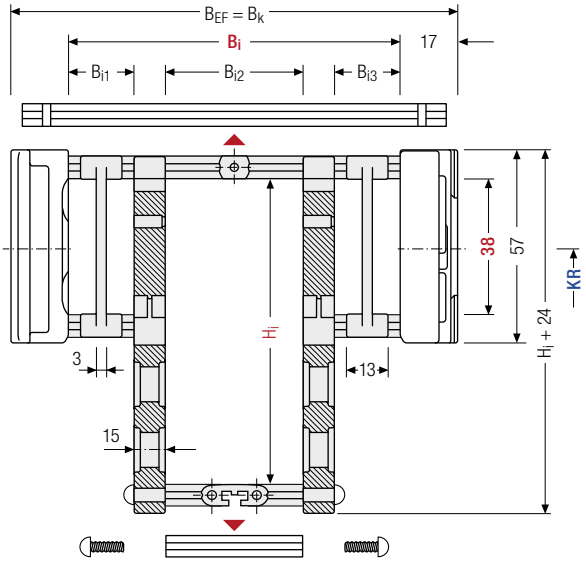
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the inside in the bending radius.
- Available customized in **1 mm width sections**.
- **Inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\ min}$ [mm]	$B_{i3\ min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
38	130	160	57	200 – 400	16	16	B_i + 34	B_i + 34	220	260	275
	200								300	350	

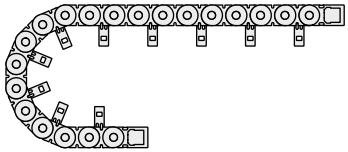
Order example

MC0650	.	300	.	RMAI	.	175	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 220 mm
H_i = 160 mm: KR_{min} = 300 mm
H_i = 200 mm: KR_{min} = 300 mm





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Subject to change without notice.

MC0650 RMAO | Dimensions · Technical data

Aluminum stay RMAO – mounting frame stay

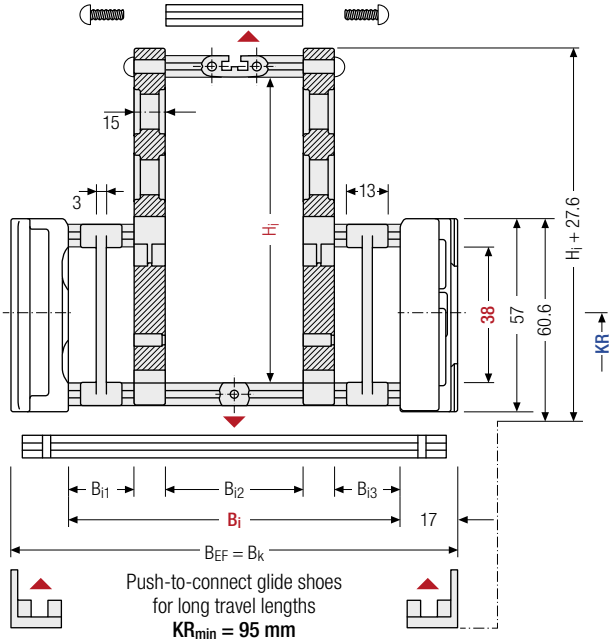
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\ min}$ [mm]	$B_{i3\ min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]				
38	130	160	57	200 – 400	16	16	B_i + 34	B_i + 34	75	95	115	145	175
	200								220	260	275	300	350

Order example

MC0650	.	300	.	RMAO	.	175	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

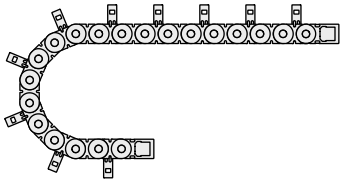
Subject to change without notice.

MC0650 RMAO | Dimensions · Technical data

RMAO – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.





Subject to change without notice.

ME0650 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

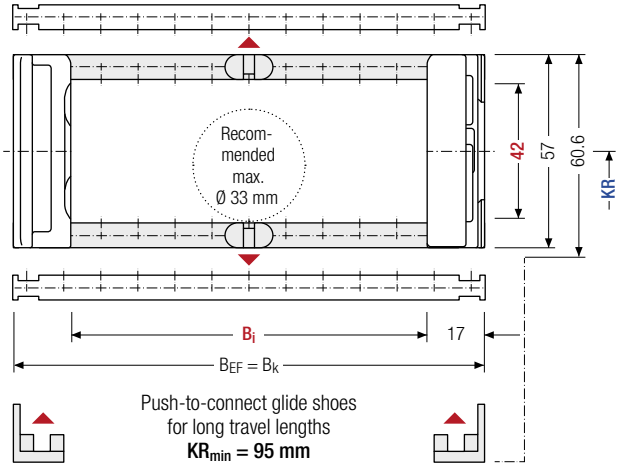
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

8 mm — B_i 50 – 266 mm in **8 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 95 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]						B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
42	57	60.6	62.2	50	58	66	74	82	90	B_i + 34	B_i + 34	75	95	2.00 – 2.84
				98	106	114	122	130	138			115	145	
				146	154	162	170	178	186			175	220	
				194	202	210	218	226	234			260	275	
				242	250	258	266					300	350	

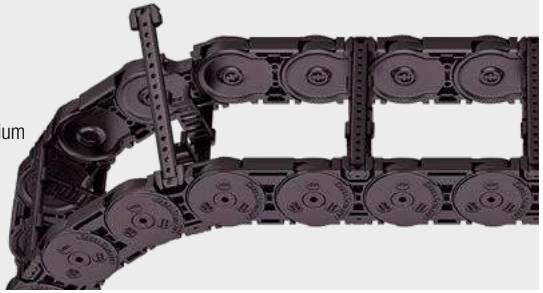
Order example

ME0650	.	210	.	RE	.	175	-	1430	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Plastic stay RD –
Frame stay with hinge

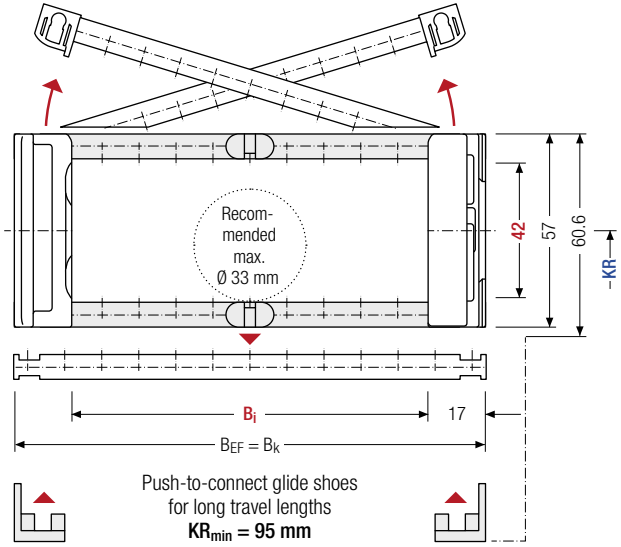
- Plastic profile bars with hinge for light to medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside:** swivable to both sides.
- **Inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

8 mm — B_i 50 – 266 mm in **8 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 95 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]						B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
42	57	60.6	62.2	50	58	66	74	82	90	B_i + 34	B_i + 34	75	95	2.00 – 2.84
				98	106	114	122	130	138			115	145	
				146	154	162	170	178	186			175	220	
				194	202	210	218	226	234			260	275	
				242	250	258	266					300	350	

Order example

MK0650 . 210 . RD . 175 - 1430 HS

Type | B_i [mm] | Stay variant | KR [mm] | L_k [mm] | Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

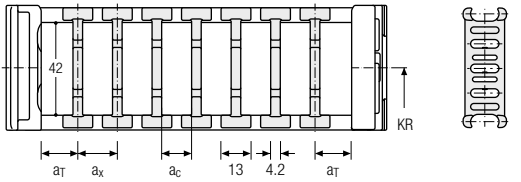
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x Raster [mm]	n_T min
A	6.5	13	8.8	–	–
B	13	16	11.8	8	–

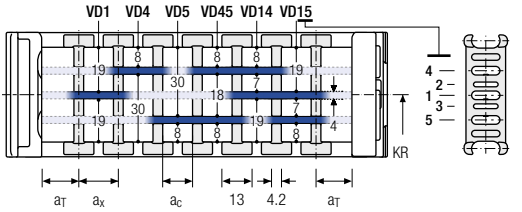
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_c min [mm]	a_x Raster [mm]	n_T min
A	6.5	25	13	8.8	–	2

The dividers can be moved within the cross section.





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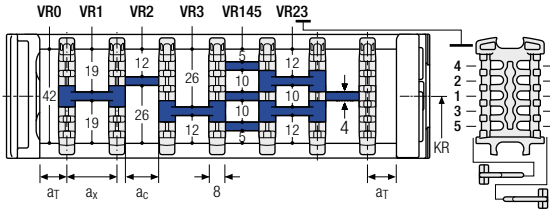
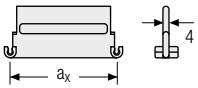
Divider system TS3 with height separation made of plastic partitions

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 3 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 2	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier: here **online-engineer.de**

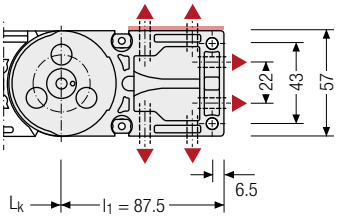
Subject to change without notice.

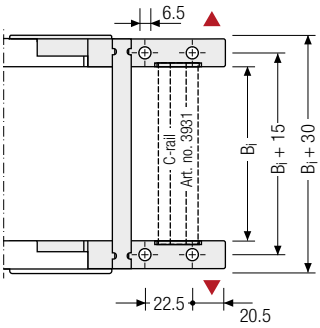


Subject to change without notice.

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**

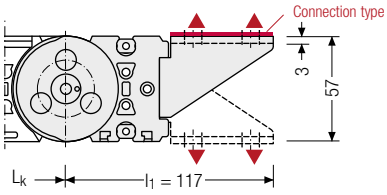


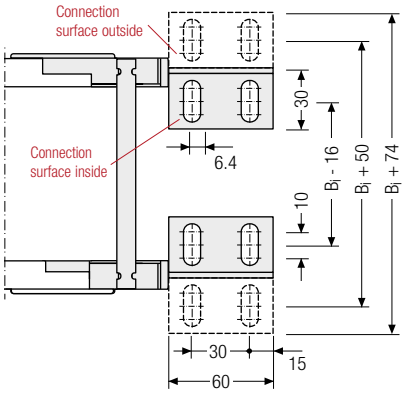


Recommended tightening torque: 11 Nm for cheese-head screws ISO 4762 - M6 - 8.8

End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

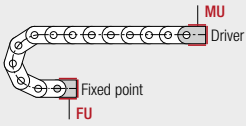




▲ Assembly options

Connection point
F – fixed point
M – driver

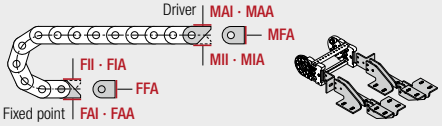
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

M0950

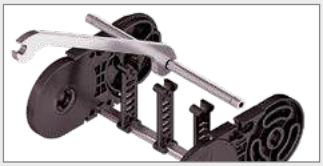
Pitch
95 mm

Inner heights
50 – 58 mm

Inner widths
45 – 600 mm

Bending radii
140 – 380 mm

Stay variants



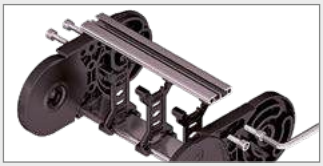
Aluminum stay RS page **404**

Frame stay, narrow "The standard"
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Aluminum stay RV page **408**

Frame stay, reinforced
» Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Aluminum stay RM page **412**

Frame stay, solid
» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay LG page **414**

Hole stay, split version
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.



MT series

Also available as covered variants with cover system.
More information can be found in chapter "MT series" from p. 628.

Subject to change without notice.

Stay variants



Aluminum stay RMAI ..... page 416

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO ..... page 418

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.



Aluminum stay RMR ..... page 420

Frame rolling stay

» Aluminum profile bars with rotating plastic rolling stay for highest requirements with gentle cable guiding. Double threaded joint on both sides.
» **Inside/outside:** threaded joint easy to release.



Plastic stay RE ..... page 422

Frame screw-in stay

» Plastic profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.

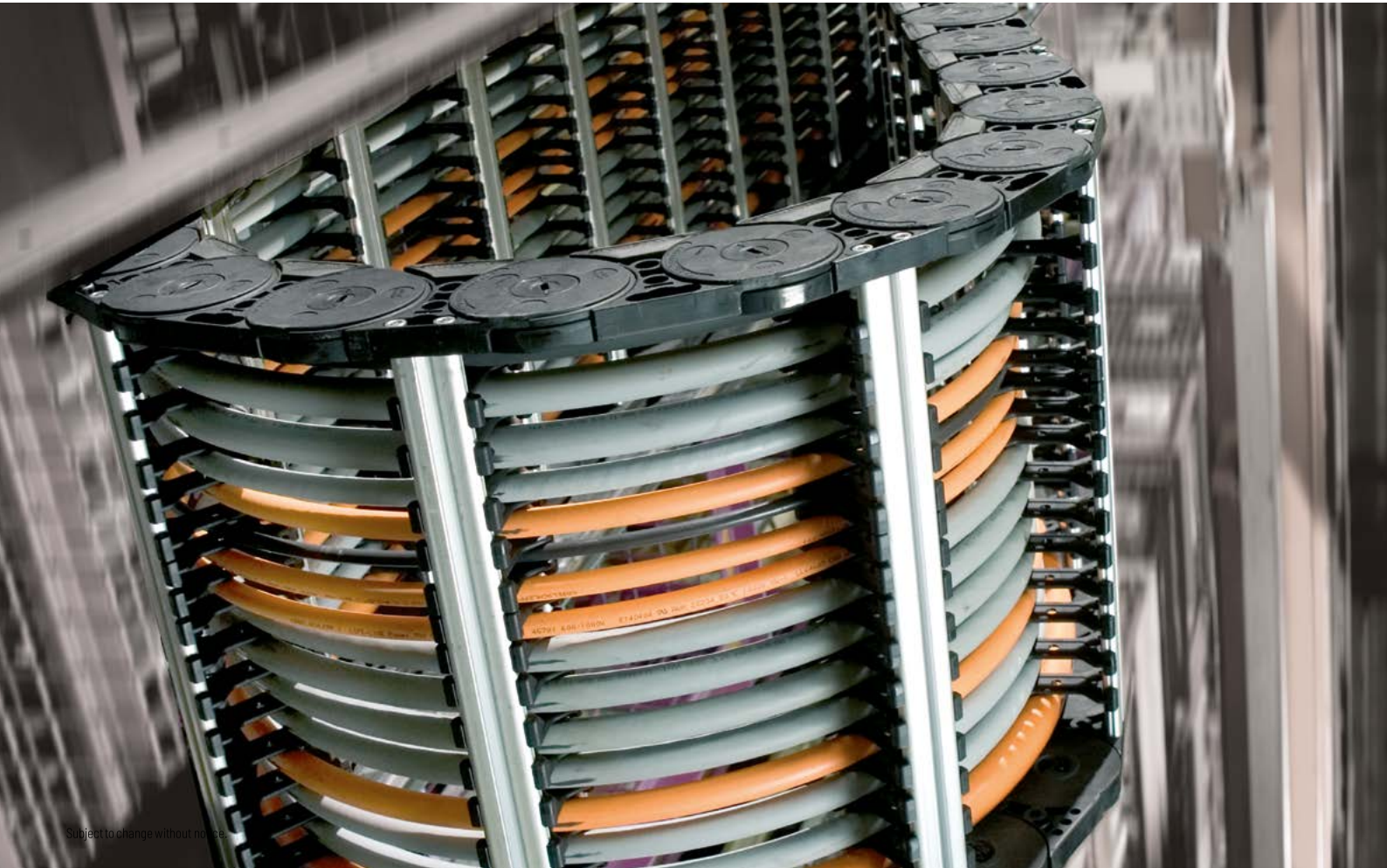


Plastic stay RD ..... page 423

Frame stay with hinge

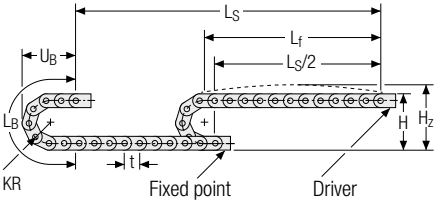
» Plastic profile bars with hinge for light to medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.

Subject to change without notice.



Subject to change without notice.

Unsupported arrangement

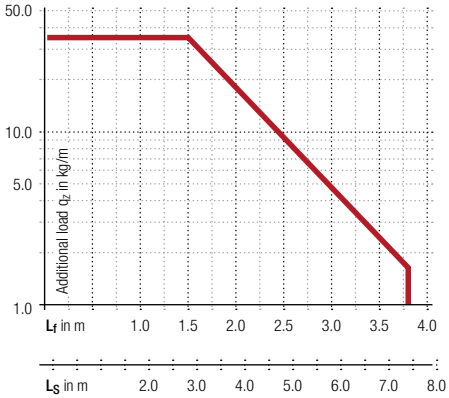


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
140	360	405	630	275
170	420	465	725	305
200	480	525	819	335
260	600	645	1007	395
290	660	705	1102	425
320	720	765	1196	445
380	840	885	1384	515

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 4.5 kg/m. For other inner widths, the maximum additional load changes.



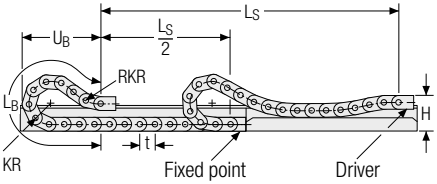
Speed
up to 10 m/s

Acceleration
up to 30 m/s²

Travel length
up to 7.4 m

Additional load
up to 35 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
140	240	500	1580	740
170	240	500	1710	773
200	240	500	1995	888
260	240	500	2565	1114
290	240	500	2755	1183
320	240	500	3040	1296
380	240	500	3610	1523

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 260 m

Additional load
up to 35 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

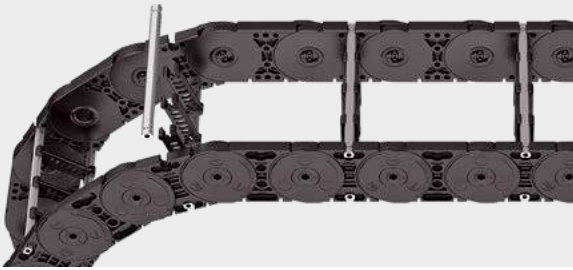
Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

MC0950 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

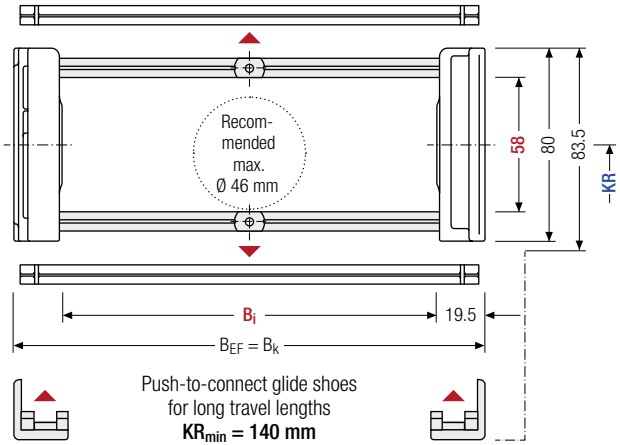
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 400 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
58	80	83.5	86	75 – 400	B_i + 39	B_i + 39	140	170	200	260	2.93 – 4.71
							290	320	380		

* in 1 mm width sections

Order example

MC0950	.	400	.	RS	.	200	-	2850	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

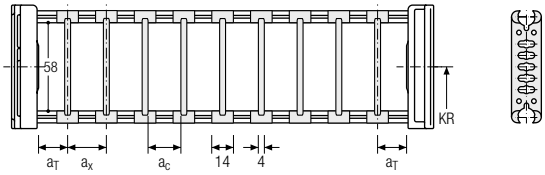
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The socket additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm. The inner height is reduced to 54 mm **(version B)**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	14	10	2

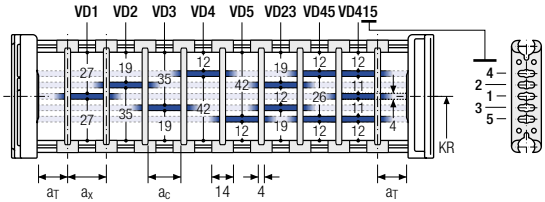
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_{T} min
A	4.5	25	14	10	2

The dividers can be moved in the cross section.

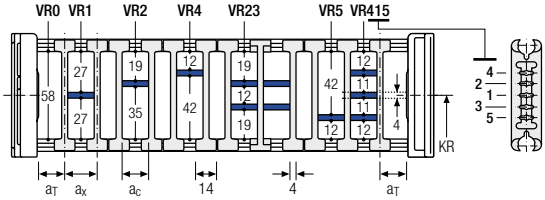


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	23	19	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Please note that the real dimensions may deviate slightly from the values indicated here.

Order example

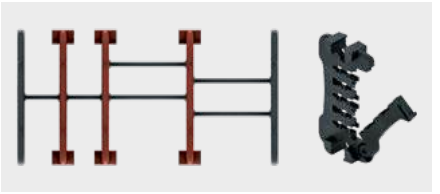
TS2	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



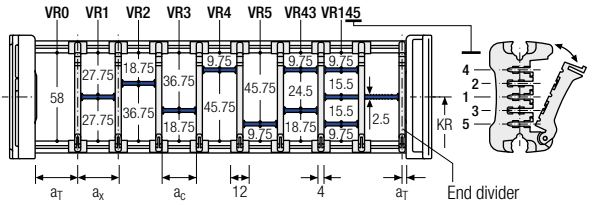
End divider

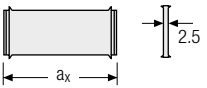


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	6 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

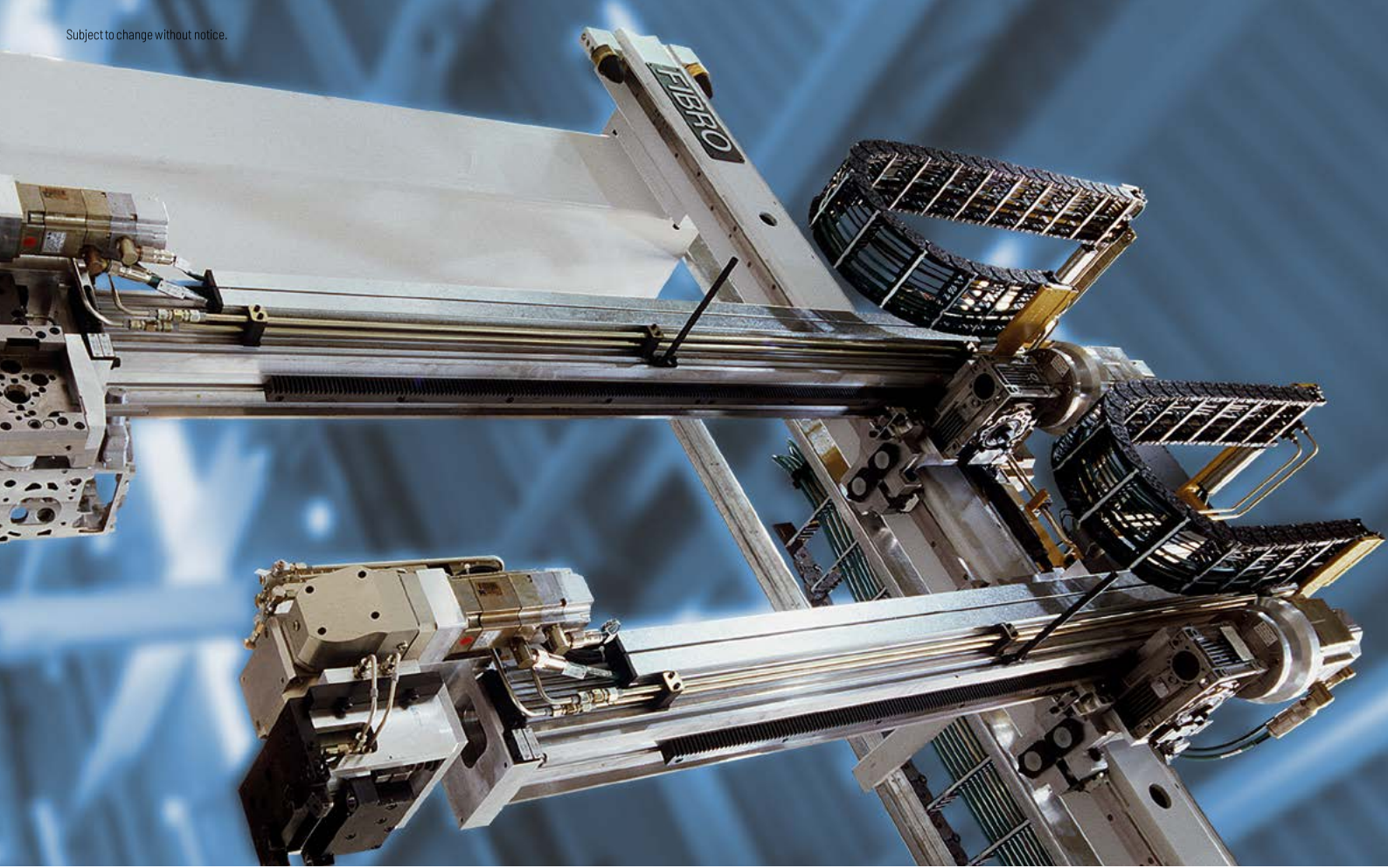
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

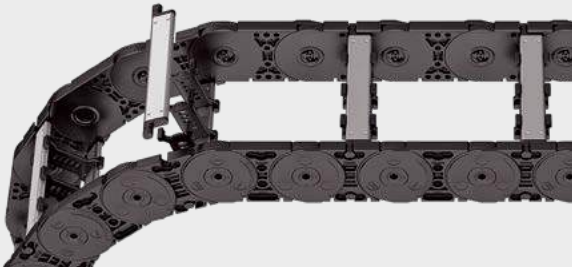
Subject to change without notice.



MC0950 RV | Dimensions · Technical data

Aluminum stay RV – frame stay reinforced

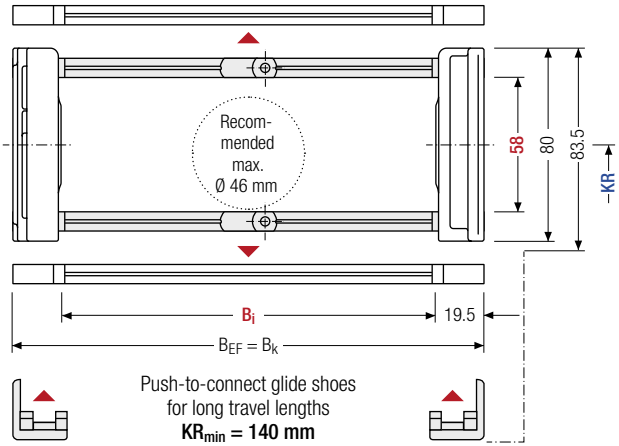
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 500 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
58	80	83.5	86	75 – 500	B_i + 39	B_i + 39	140	170	200	260	3.32 – 6.02
							290	320	380		

* in 1 mm width sections

Order example

MC0950	.	400	.	RV	.	200	-	2850	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

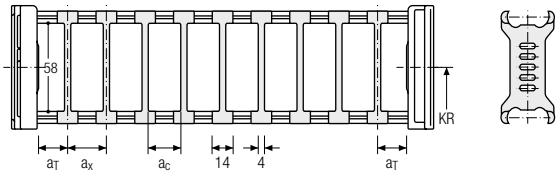
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	14	10	2

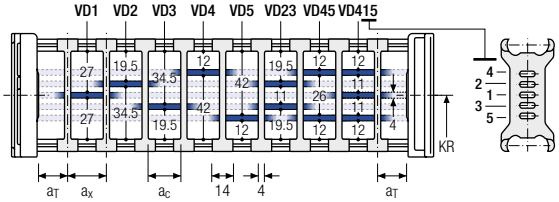
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	25	14	10	2

The dividers can be moved in the cross section.

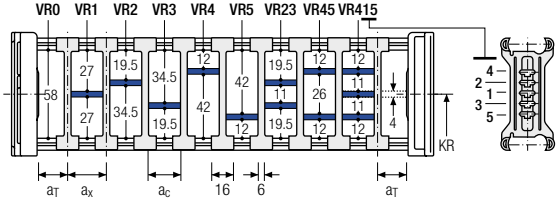


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	5.5	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).





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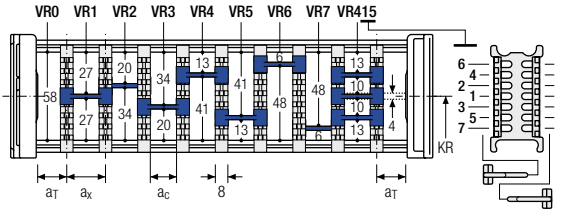
Subject to change without notice.

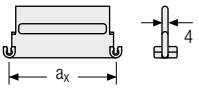
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

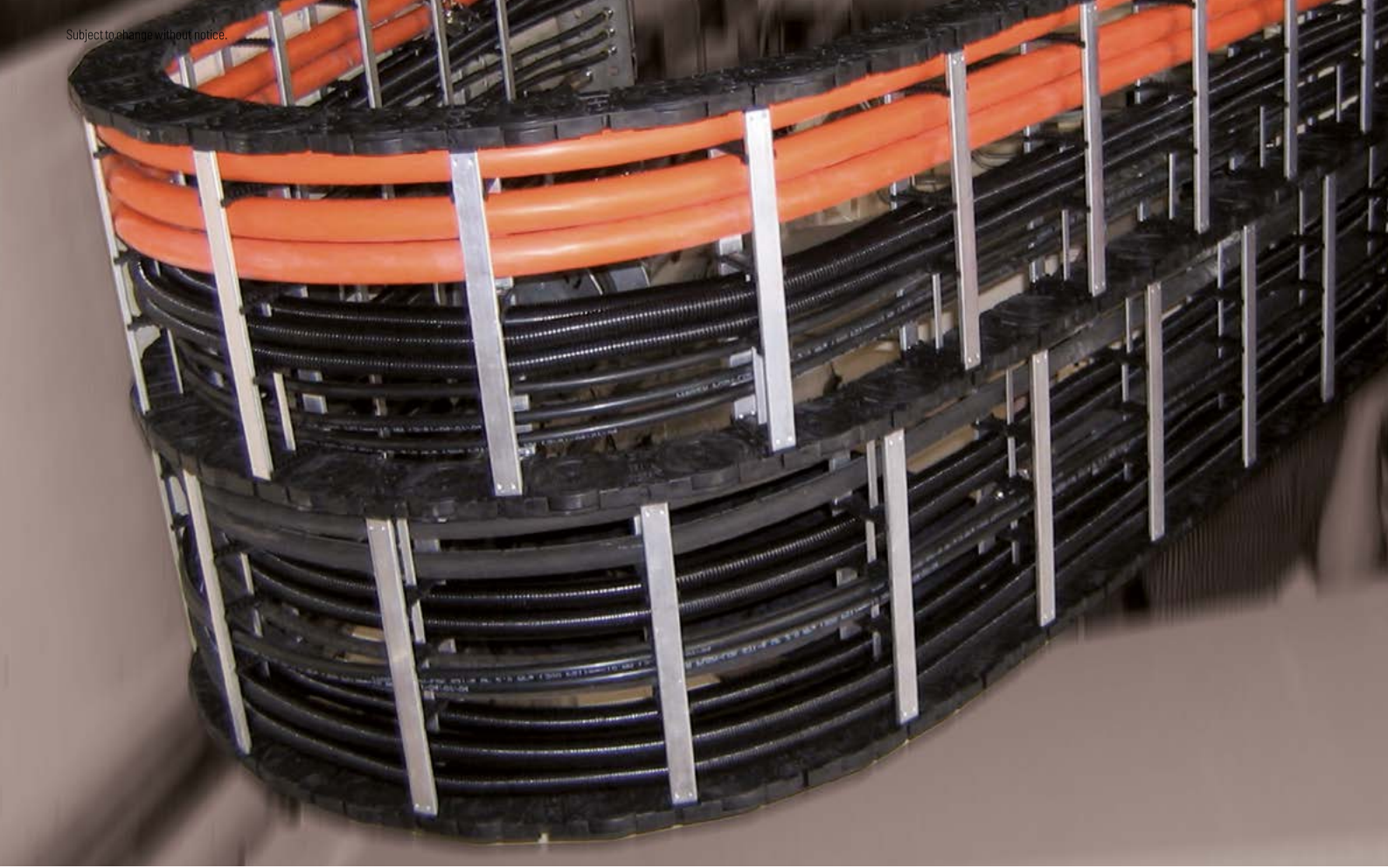
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.

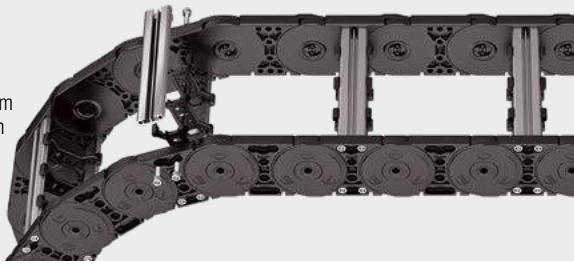


MC0950 RM | Dimensions · Technical data

Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.

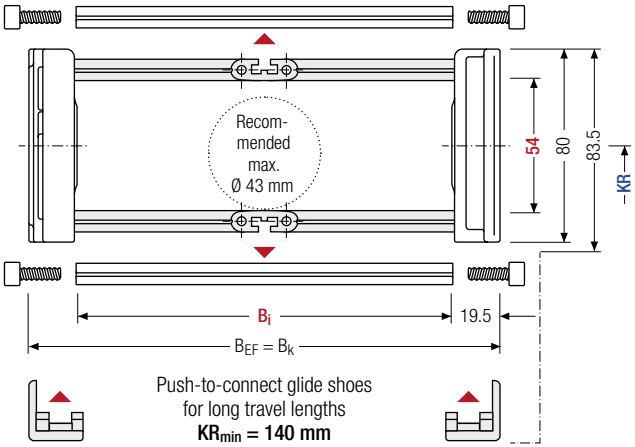
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 75 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
54	80	83.5	86	75 – 600	B_i + 39	B_i + 39	140	170	200	260	3.63 – 6.55
							290	320	380		

* in 1 mm width sections

Order example

MC0950	.	400	.	RM	.	200	-	2850	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

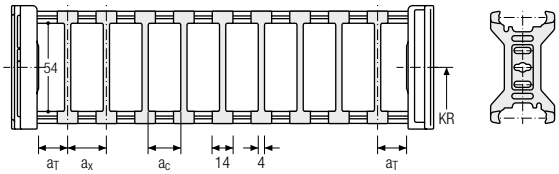
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	14	10	–

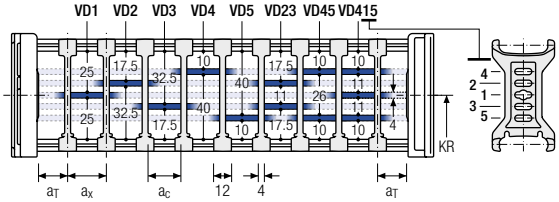
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	3.5	25	12	8	2

The dividers can be moved in the cross section.

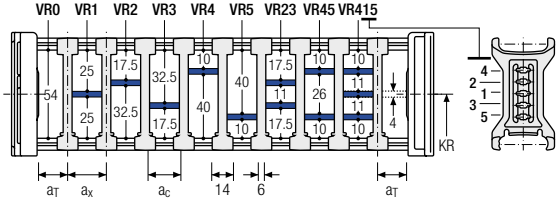


Divider system TS2 with partial height separation

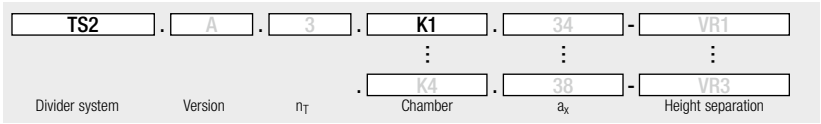
Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4.5	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Order example



Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS2)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MC0950 LG | Dimensions · Technical Data

Aluminum stay LG –
Hole stay, split version

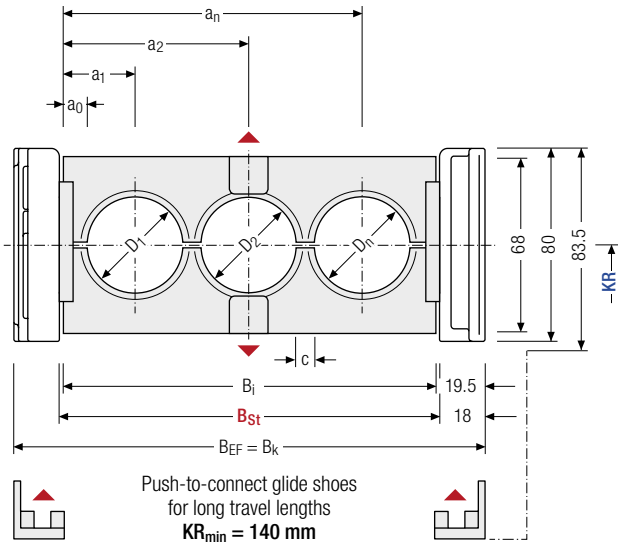
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

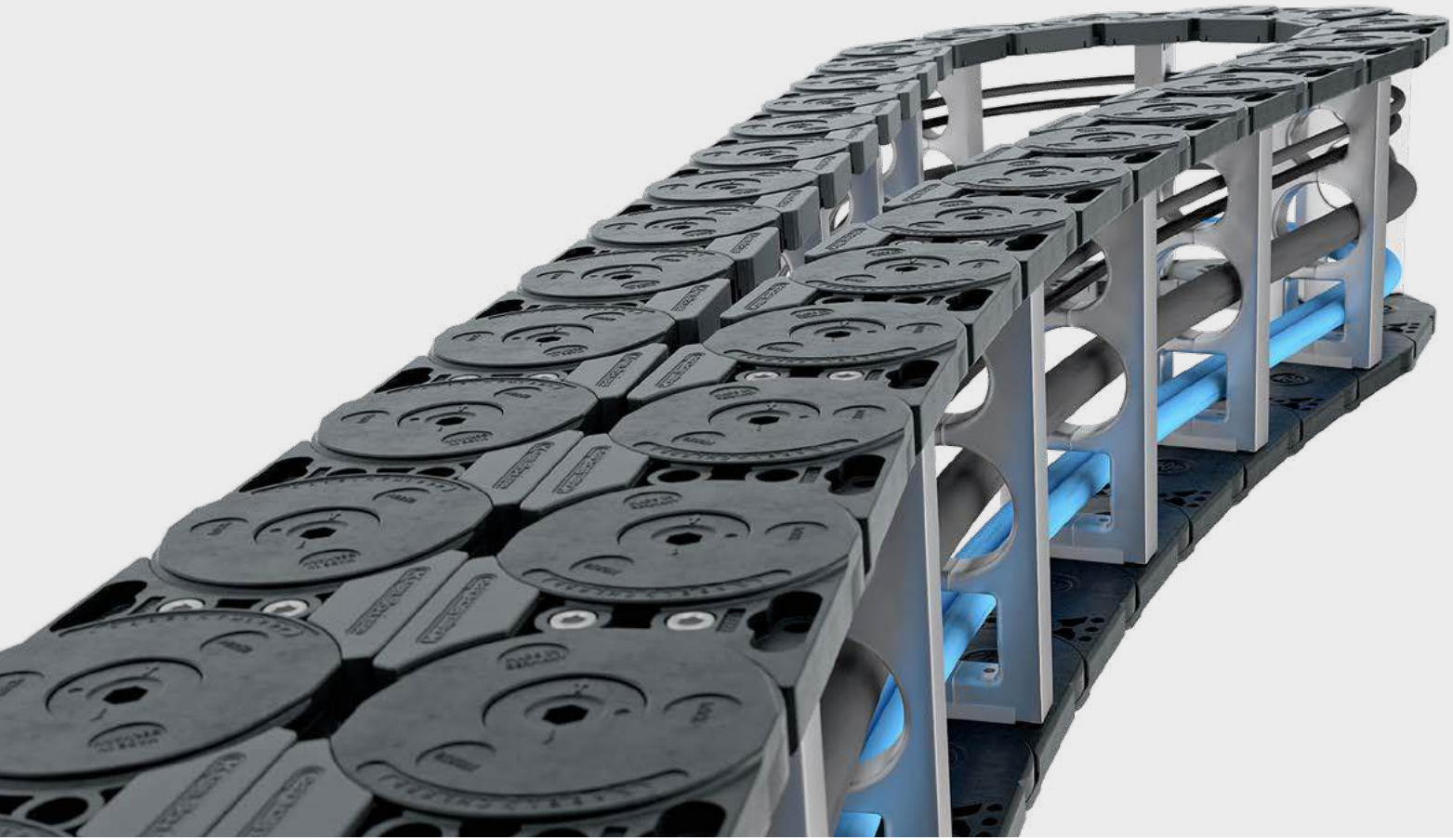
D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]								q_k 50 %** [kg/m]
50	12	80	75 – 600	78 – 603	B_{St} + 39	B_{St} + 39	4	11	140	170	200	260	290	320	380		3.89 – 8.25

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

MC0950	400	LG	200	2850	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.



MC0950 RMAI | Dimensions · Technical Data

Aluminum stay RMAI – mounting frame stay

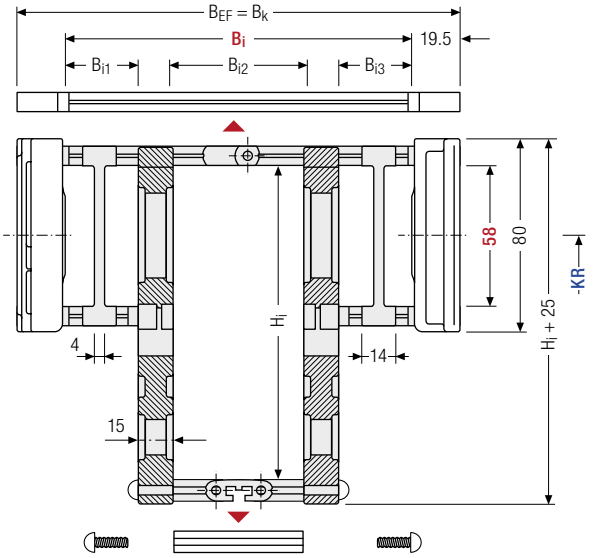
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the inside in the bending radius.
- Available customized in **1 mm width sections**.
- **Inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 200 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\ min}$ [mm]	$B_{i3\ min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]		
58	130	160	80	200 – 500	40	40	B_i + 39	B_i + 39	170	200	260
	200								290	320	380

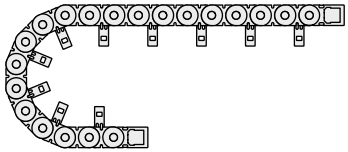
Order example

MC0950	.	400	.	RMAI	.	200	-	2850	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 170 mm
H_i = 160 mm: KR_{min} = 200 mm
H_i = 200 mm: KR_{min} = 260 mm



Subject to change without notice.

MC0950 RMAO | Dimensions · Technical Data

Aluminum stay RMAO – mounting frame stay

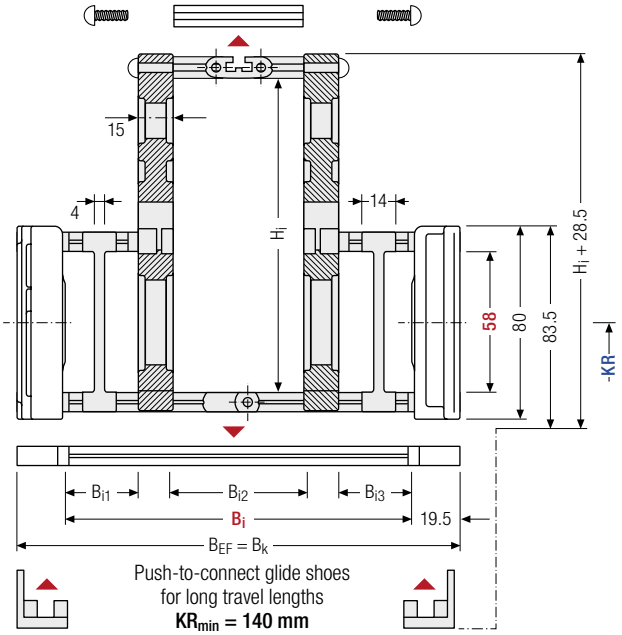
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 200 – 500 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]			
58	130	160	80	200 – 500	40	40	B_i + 39	B_i + 39	140	170	200	260
	200								290	320	380	

Order example

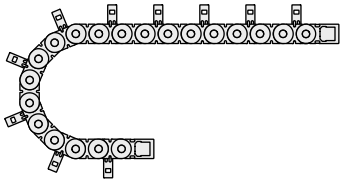
MC0950	.	400	.	RMAO	.	200	-	2850	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAO – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.



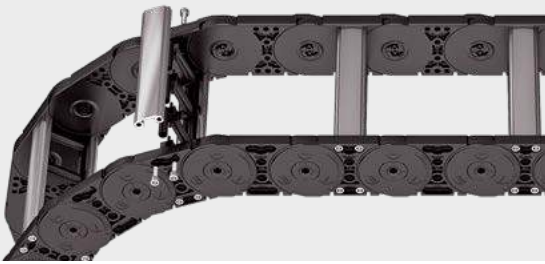


Subject to change without notice

MC0950 RMR | Dimensions · Technical data

Aluminum stay RMR –
Frame rolling stay

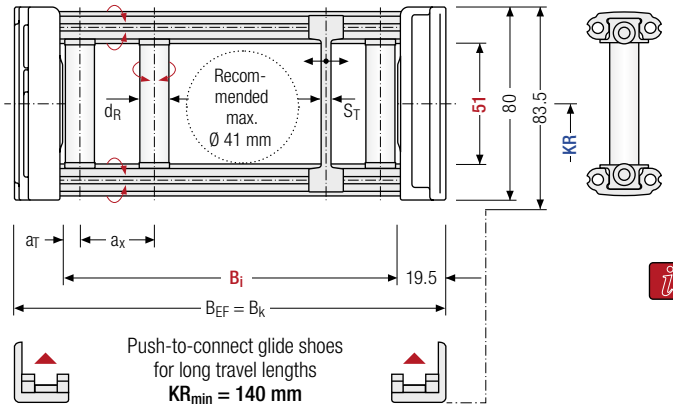
- Aluminum profile bars with rotating plastic rolling stay for highest requirements with gentle cable guiding. Double threaded joint on both sides.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	d_R [mm]	S_T [mm]	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	KR [mm]		q_k [kg/m]
51	80	83.5	86	75 – 600	B_i + 39	B_i + 39	10	4	6.5	37	140	170	3.63 – 6.55
											200	260	
											290	320	
											380		

* in 1 mm width sections

Order example

MC0950	.	400	.	RMR	.	200	-	2850		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

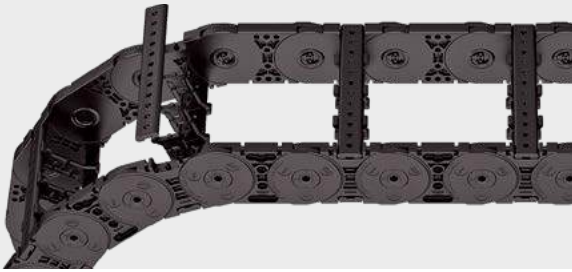
Subject to change without notice.



ME0950 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

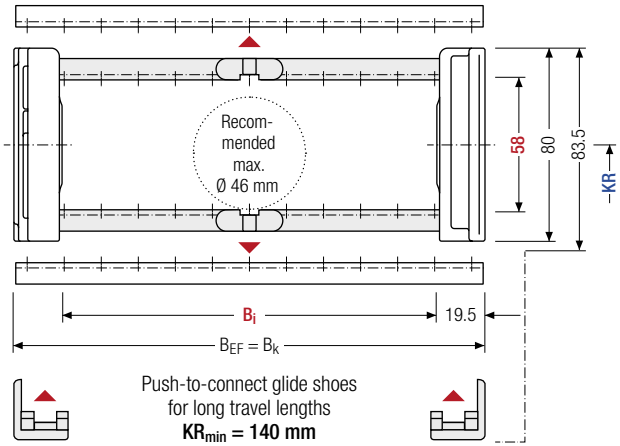
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

16 mm — B_i 45 – 557 mm in **16 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]	q_k [kg/m]
58	80	83.5	86	45 61 77 93 109 125 141 157 173 189 205 221 237 253 269 285 301 317 333 349 365 381 397 413 429 445 461 477 493 509 525 541 557	B_i + 39	B_i + 39	140 170 200 260 290 320 380	3.0 – 6.2

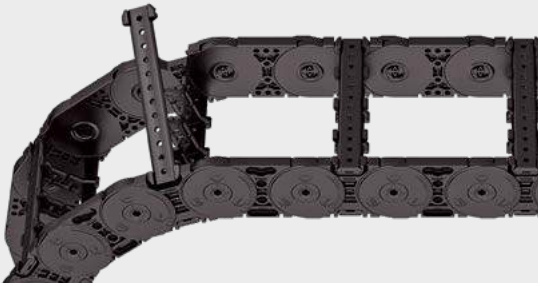
Order example

ME0950	.	413	.	RE	.	200	-	2850		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Plastic stay RD –
Frame stay with hinge

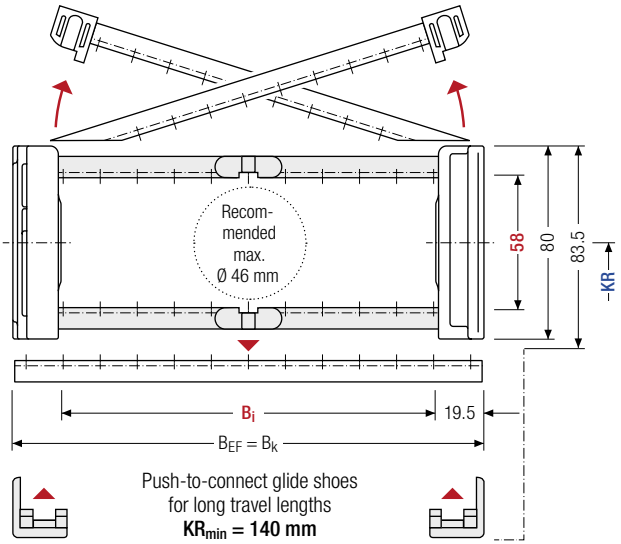
- Plastic profile bars with hinge for light to medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside:** swivable to both sides.
- **Inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

16 mm — B_i 45 – 557 mm in **16 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 140 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]							B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
58	80	83.5	86	45	61	77	93	109	125	141	B_i + 39	B_i + 39	140	170	3.0 – 6.2
				157	173	189	205	221	237	253			200	260	
				269	285	301	317	333	349	365			290	320	
				381	397	413	429	445	461	477			380		
				493	509	525	541	557							

Order example

MK0950	413	RD	200	2850	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.

ME0950 RE/MK0950 RD | Inner distribution

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

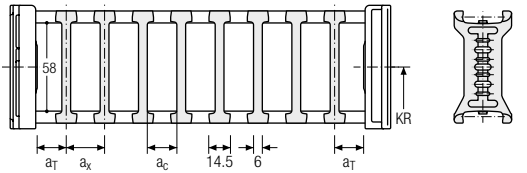
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5.5	14.5	8.5	–	–
B	6.5	16	10	16	–

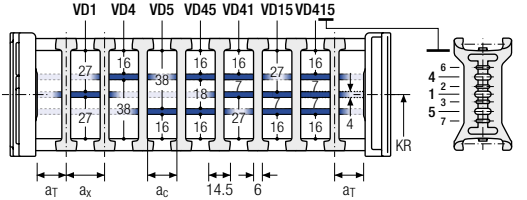
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5.5	25	14.5	8.5	–	2
B	6.5	25	16	10	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).

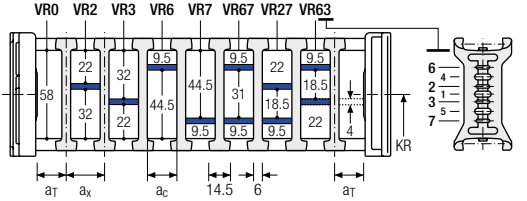


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5.5	14.5*/21	8.5*/15	–	2
B	6.5	16*/32	10*/26	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).



More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

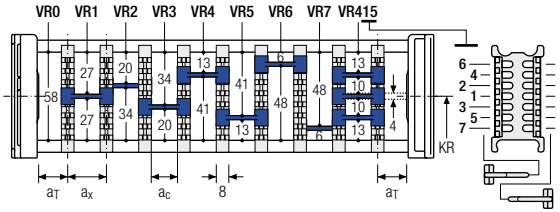
Subject to change without notice.

ME0950 RE/MK0950 RD | Inner distribution

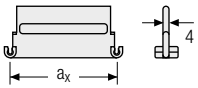
Divider system TS3 with height separation made of plastic partitions

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.



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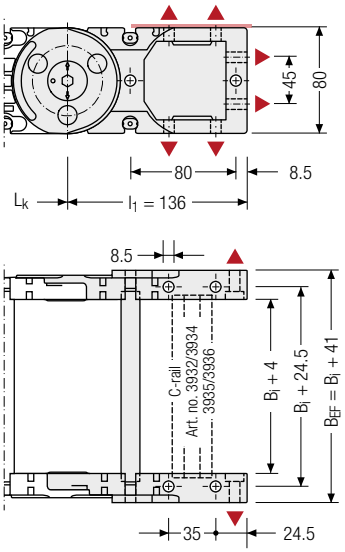
Subject to change without notice.



Subject to change without notice.

Universal end connectors UMB – **plastic** (standard)

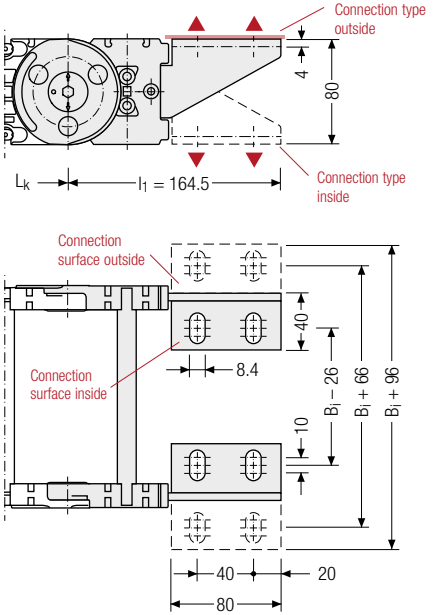
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**



Recommended tightening torque: 27 Nm for cheese-head screws ISO 4762 - M8 - 8.8

End connectors – plastic/steel

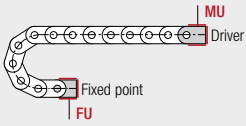
Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options

Connection point
F – fixed point
M – driver

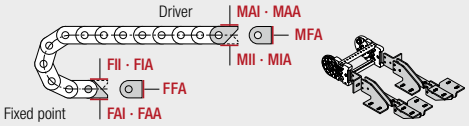
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

M1250

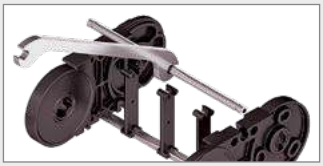
Pitch
125 mm

Inner heights
66 – 76 mm

Inner widths
71 – 800 mm

Bending radii
180 – 500 mm

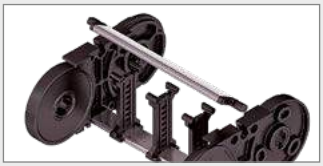
Stay variants



Aluminum stay RS ..... page **432**

Frame stay, narrow "The standard"

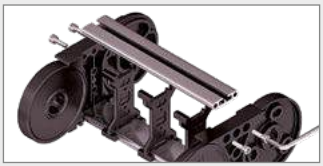
» Aluminum profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Aluminum stay RV ..... page **436**

Frame stay, reinforced

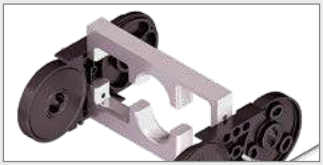
» Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Aluminum stay RM ..... page **440**

Frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay LG ..... page **442**

Hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.



Serie MT

Also available as covered variants with cover system.
More information can be found in
chapter "MT series" from p. 628.

Subject to change without notice.

Stay variants



Aluminum stay RMAI ..... page **444**

Mounting frame stay

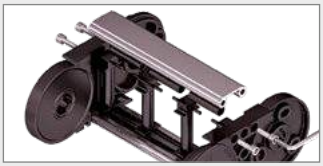
» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO ..... page **446**

Mounting frame stay

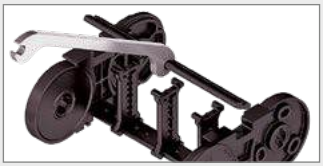
» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.



Aluminum stay RMR ..... page **448**

Frame rolling stay

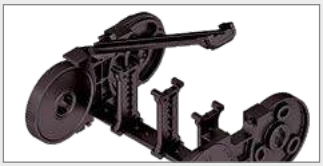
» Aluminum profile bars with rotating plastic rolling stay for highest requirements with gentle cable guiding. Double threaded joint on both sides.
» **Inside/outside:** threaded joint easy to release.



Plastic stay RE ..... page **450**

Frame screw-in stay

» Plastic profile bars for light to medium loads. Assembly without screws.
» **Outside/inside:** release by turning by 90°.



Plastic stay RD ..... page **451**

Frame stay with hinge

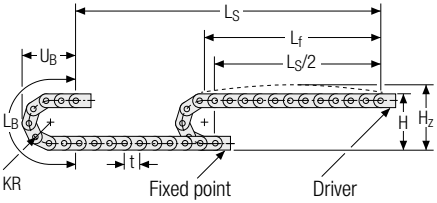
» Plastic profile bars with hinge for light to medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.

Subject to change without notice.



Subject to change without notice.

Unsupported arrangement

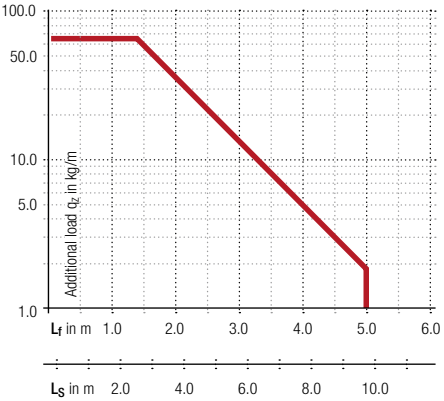


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
180	456	506	816	353
220	536	586	942	393
260	616	666	1067	433
300	696	746	1193	473
340	776	826	1319	513
380	856	906	1444	553
500	1096	1146	1821	673

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 4.5 kg/m. For other inner widths, the maximum additional load changes.



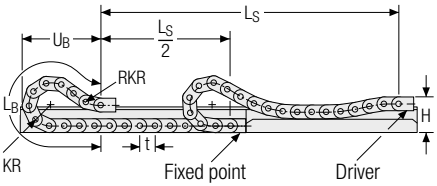
Speed
up to 10 m/s

Acceleration
up to 25 m/s²

Travel length
up to 9.7 m

Additional load
up to 65 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
180	288	500	2000	930
220	288	500	2250	1015
260	288	500	2500	1095
300	288	500	2750	1177
340	288	500	3125	1318
380	288	500	3375	1403
500	288	500	4375	1770

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 320 m

Additional load
up to 65 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MC1250 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

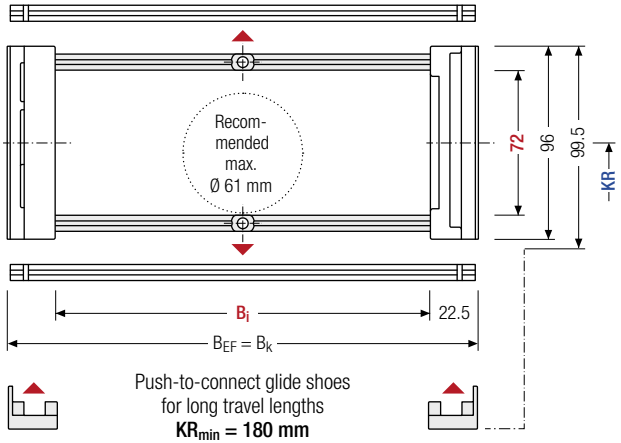
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 75 – 400 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
72	96	99.5	103	**75 – 400**	B_i + 45	B_i + 45	180	220	260	300	4.10 – 4.97
							340	380	500		

* in 1 mm width sections

Order example

MC1250	.	400	.	RS	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

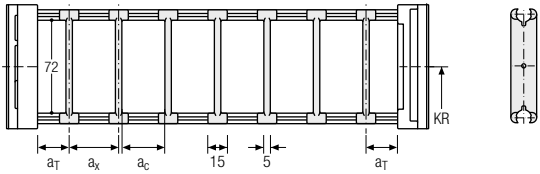
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	7.5	15	10	2

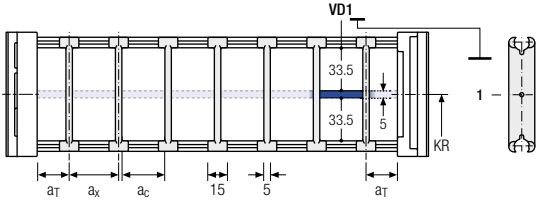
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	7.5	25	15	10	2

The dividers can be moved in the cross section.





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TRAXLINE® cables for cable carriers

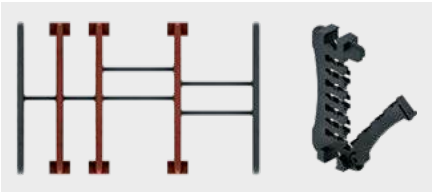
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

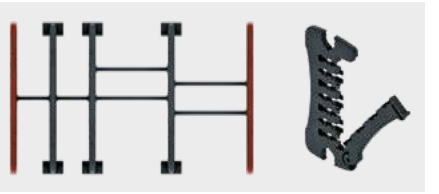
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



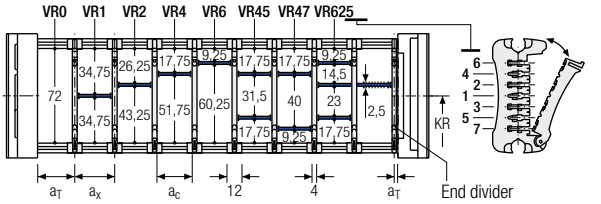
End divider

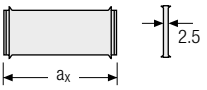


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	6 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

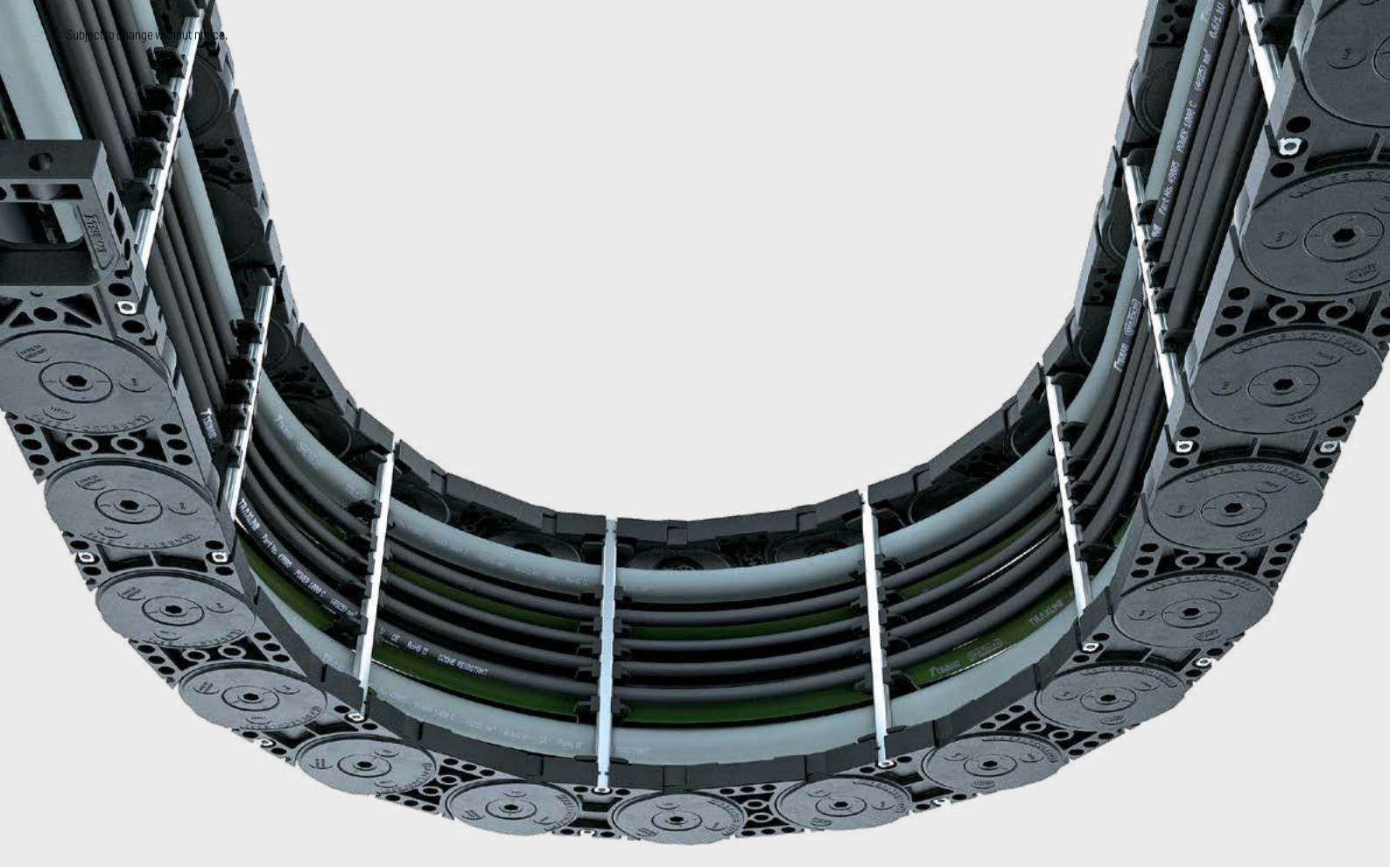
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice.



MC1250 RV | Dimensions · Technical data

Aluminum stay RV – frame stay reinforced

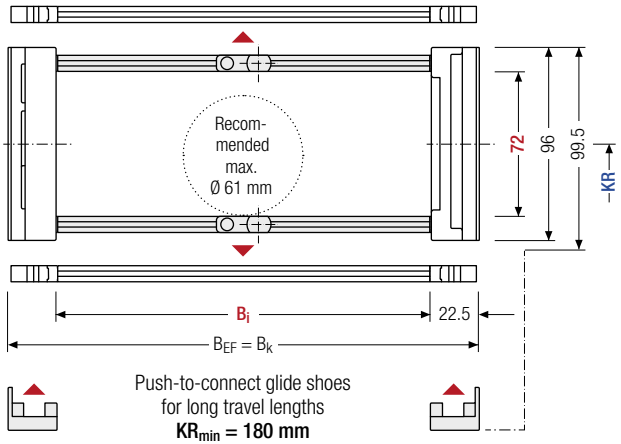
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
72	96	99.5	103	100 – 600	B_i + 45	B_i + 45	180	220	260	300	4.40 – 6.18
							340	380	500		

* in 1 mm width sections

Order example

MC1250	.	400	.	RV	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

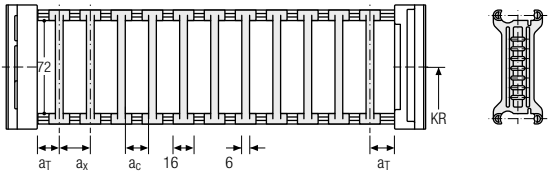
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
A	8	16	10	2

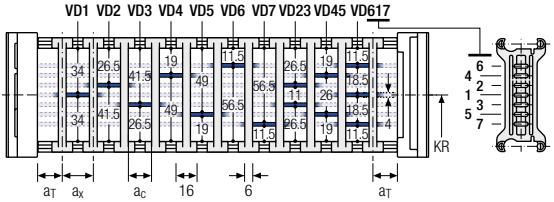
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
A	8	25	16	10	2

The dividers can be moved in the cross section.

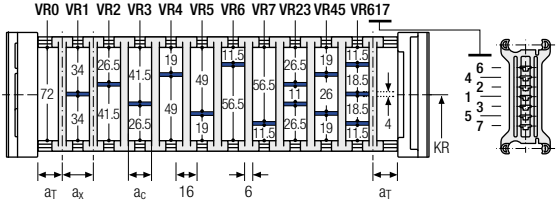


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
A	8	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 6 mm).





TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



TRAXLINE® cables for cable carriers

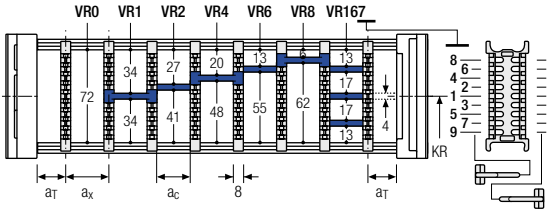
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

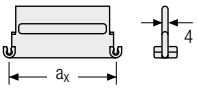
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16/42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/support**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.

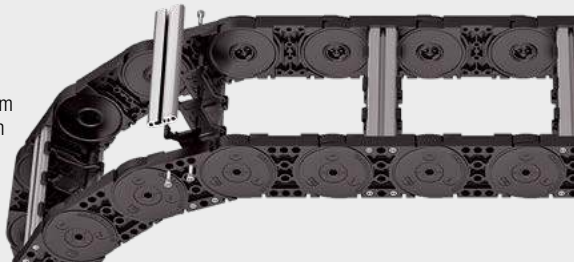


MC1250 RM | Dimensions · Technical data

Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.

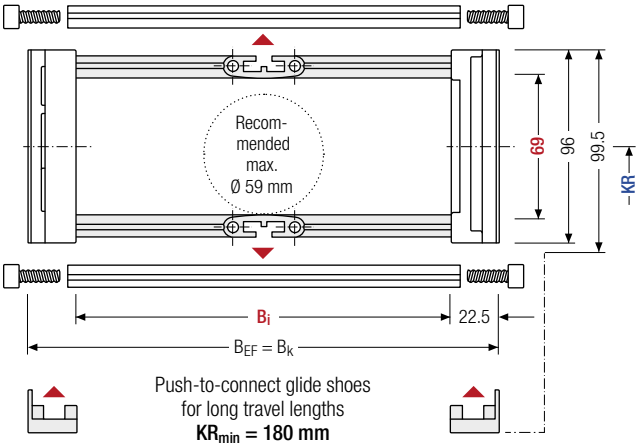
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
69	96	99.5	103	100 – 800	B_i + 45	B_i + 45	180	220	260	300	4.14 – 8.48
							340	380	500		

* in 1 mm width sections

Order example

MC1250	.	400	.	RM	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

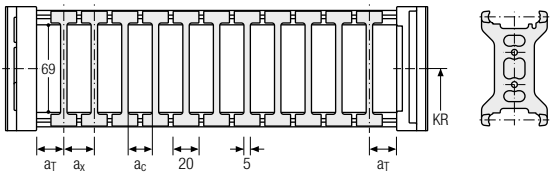
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
A	10	20	15	–

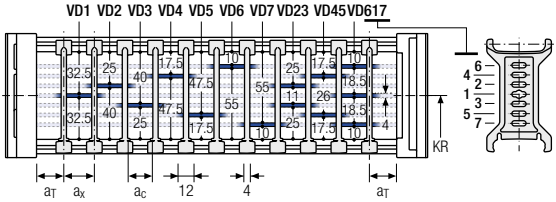
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	n_T min
A	6	25	12	8	2

The dividers can be moved in the cross section.

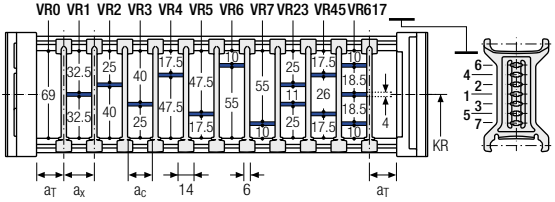


Divider system TS2 with partial height separation

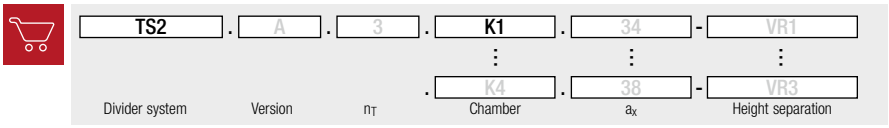
Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
A	7	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Order example



Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_X] (as seen from the driver).

If using divider systems with height separation **(TS1 – TS2)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MC1250 LG | Dimensions · Technical Data

Aluminum stay LG –
Hole stay, split version

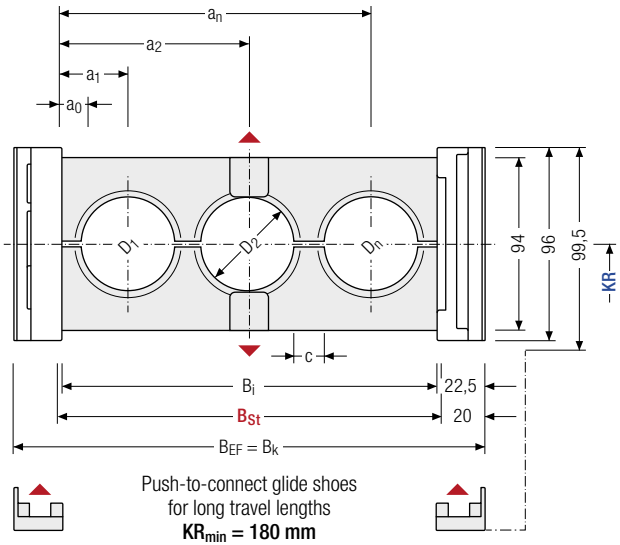
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 100 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]			q_k 50 %** [kg/m]
76	12	96	100 – 800	105 – 805	B_{St} + 40	B_{St} + 40	4	12	180	220	260	4.75 – 11.17
									300	340	380	
									500			

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

MC1250	.	400	.	LG	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Subject to change without notice.



MC1250 RMAI | Dimensions · Technical Data

Aluminum stay RMAI – mounting frame stay

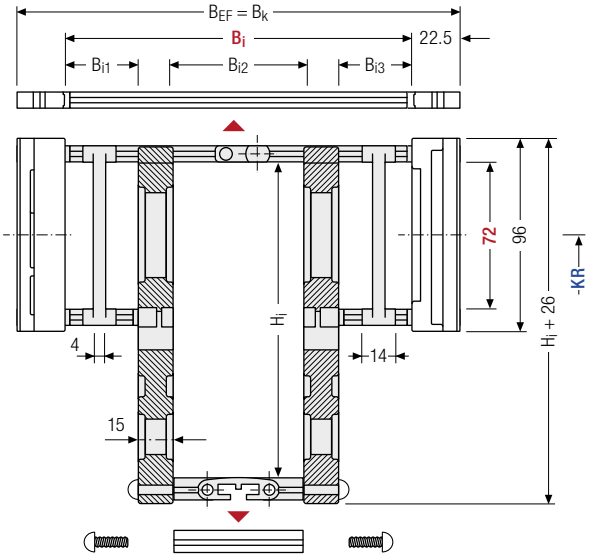
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the inside in the bending radius.
- Available customized in **1 mm width sections**.
- **Inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\ min}$ [mm]	$B_{i3\ min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]			
72	130	160	96	200 – 800	40	40	B_i + 45	B_i + 45	180	220	260	300
	200								340	380	500	

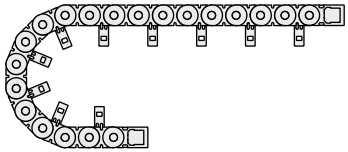
Order example

MC1250	.	400	.	RMAI	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 180 mm
H_i = 160 mm: KR_{min} = 180 mm
H_i = 200 mm: KR_{min} = 220 mm



Subject to change without notice.

MC1250 RMA0 | Dimensions · Technical Data

Aluminum stay RMA0 – mounting frame stay

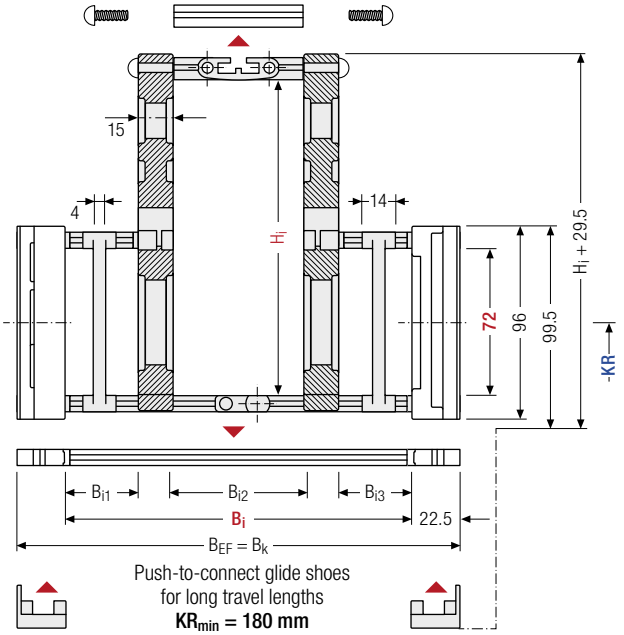
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]		h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_k [mm]	B_{EF} [mm]	KR [mm]			
72	130	160	96	200 – 800	40	40	B_i + 45	B_i + 45	180	220	260	300
	200								340	380	500	

Order example

MC1250	.	400	.	RMA0	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

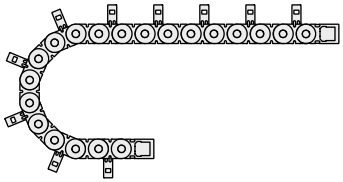
Subject to change without notice.

MC1250 RMAO | Dimensions · Technical Data

RMAO – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.





Subject to change without notice.

MC1250 RMR | Dimensions · Technical data

Aluminum stay RMR –
Frame rolling stay

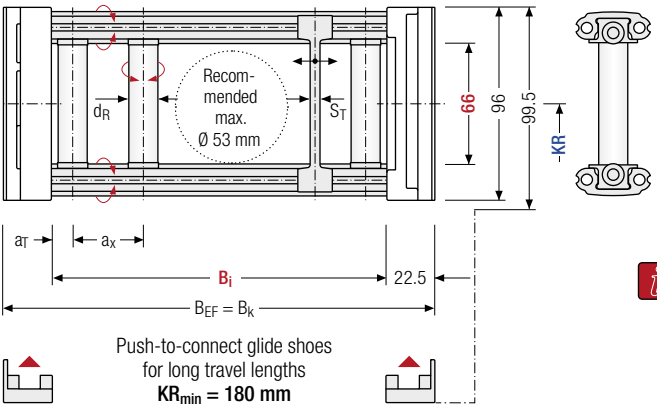
- Aluminum profile bars with rotating plastic rolling stay for highest requirements with gentle cable guiding. Double threaded joint on both sides.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**



Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	d_R [mm]	S_T [mm]	a_T min [mm]	a_X min [mm]	KR [mm]			q_k [kg/m]
66	96	99.5	103	100 – 800	B_i + 45	B_i + 45	10	6	6.5	37	180	220	260	4.13 – 8.39
											300	340	380	
											500			

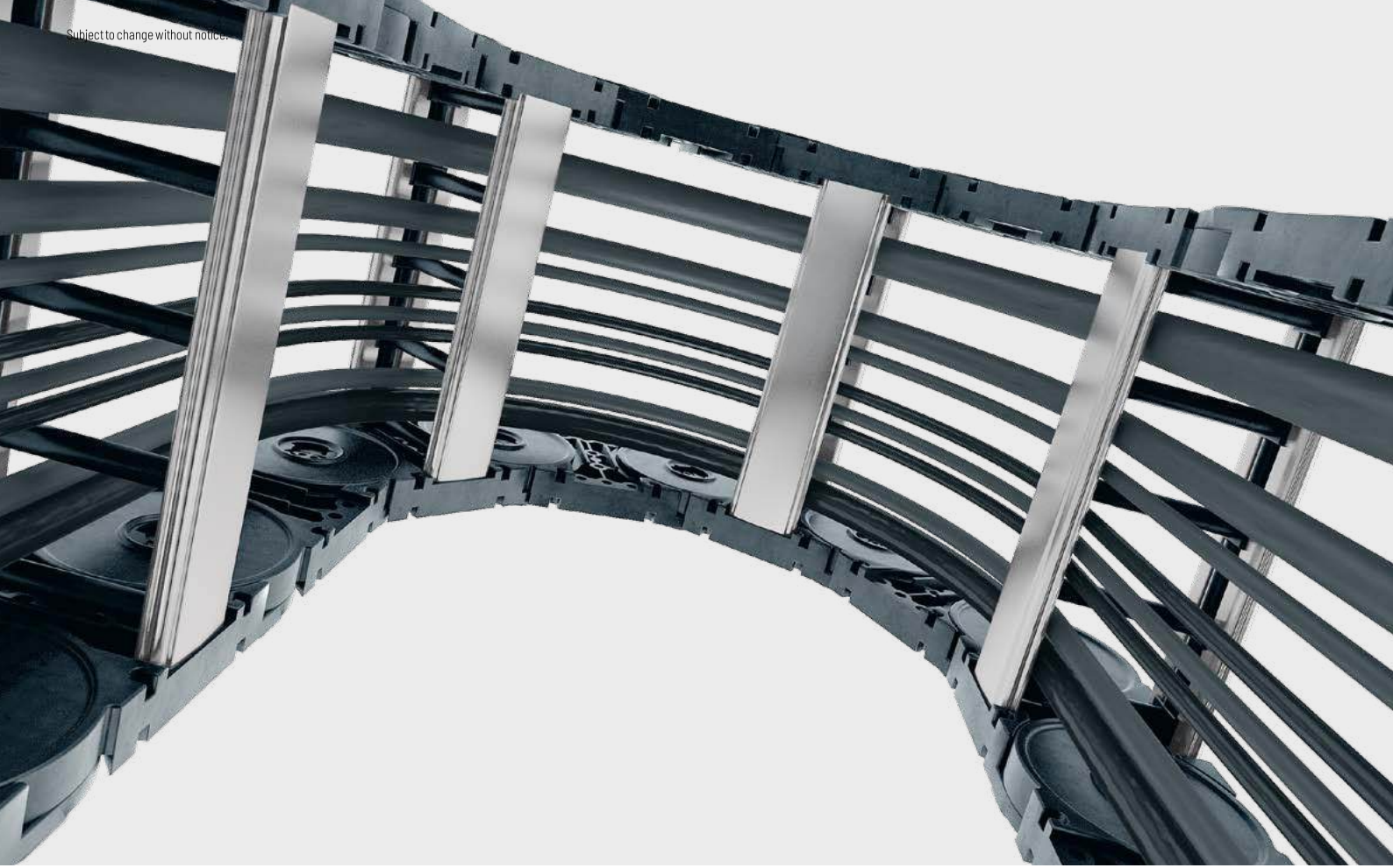
* in 1 mm width sections

Order example

MC1250	.	400	.	RMR	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

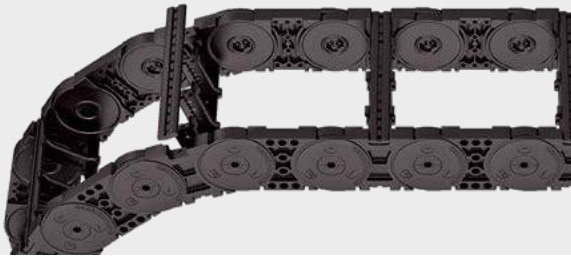
Subject to change without notice.



ME1250 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

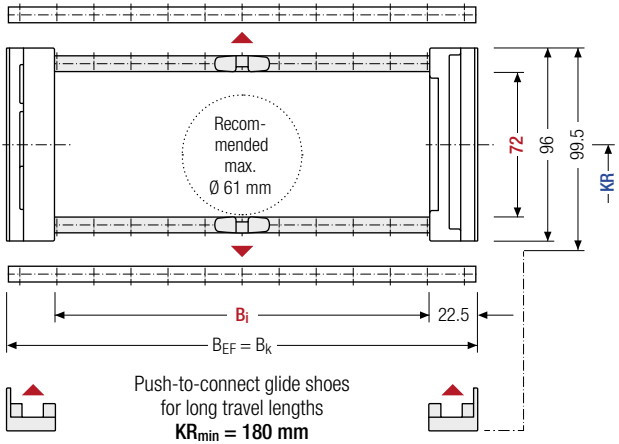
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

16 mm — B_i 71 – 551 mm in **16 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]							B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
72	96	99.5	103	71	87	103	119	135	151	167	B_i + 45	B_i + 45	180	220	4.30 – 5.80
				183	199	215	231	247	263	279			260	300	
				295	311	327	343	359	375	391			340	380	
				407	423	439	455	471	487	503			500		
				519	535	551									

Order example

ME1250	.	407	.	RE	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

MK1250 RD | Dimensions · Technical data

Plastic stay RD –
Frame stay with hinge

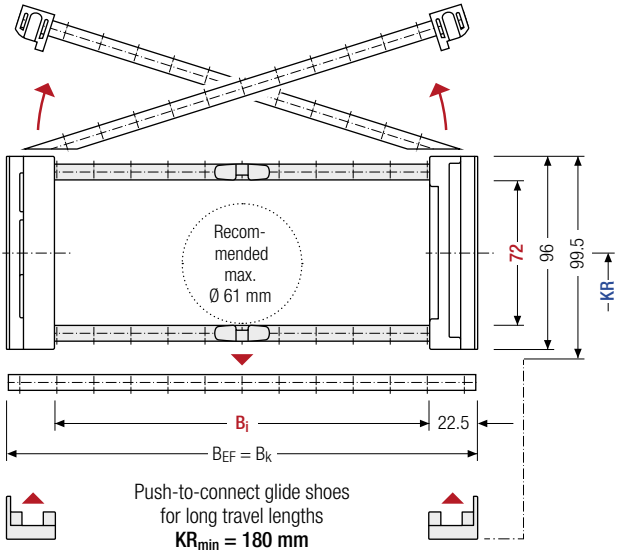
- Plastic profile bars with hinge for light to medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside:** swivable to both sides.
- **Inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

16 mm — B_i 71 – 551 mm in **16 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]							B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
72	96	99.5	103	71	87	103	119	135	151	167	B_i + 45	B_i + 45	180	220	4.30 – 5.80
				183	199	215	231	247	263	279			260	300	
				295	311	327	343	359	375	391			340	380	
				407	423	439	455	471	487	503			500		
				519	535	551									

Order example

MK1250	407	RD	300	4250	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Subject to change without notice.

ME1250 RE/MK1250 RD | Inner distribution

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

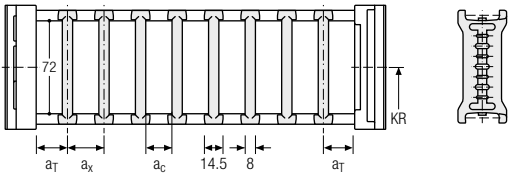
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5	14.5	6.5	–	–
B	19.5	16	8	16	–

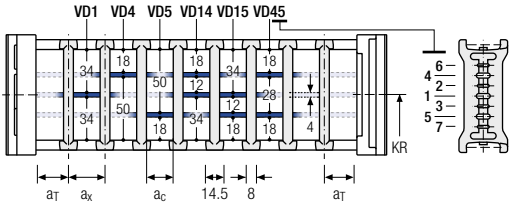
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5	25	14.5	6.5	–	2
B	19.5	19.5	16	8	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).

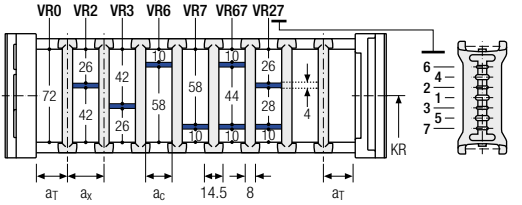


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	5	14.5*/20	6.5*/12	–	2
B	19.5	16*/32	8*/24	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).

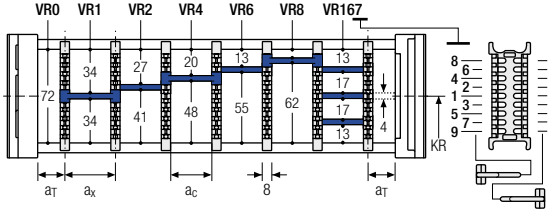


Subject to change without notice.

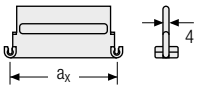
Divider system TS3 with height separation made of plastic partitions

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier: here **online-engineer.de**

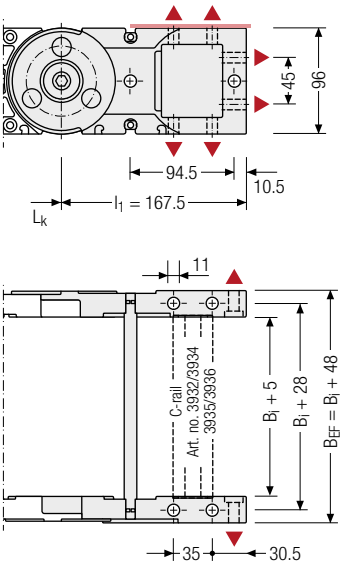
Subject to change without notice.



Subject to change without notice.

Universal end connectors UMB – plastic (standard)

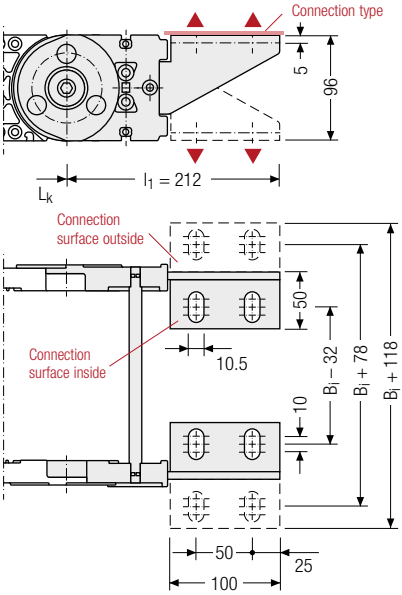
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**



Recommended tightening torque: 54 Nm for cheese-head screws ISO 4762 - M10 - 8.8

End connectors – plastic/steel

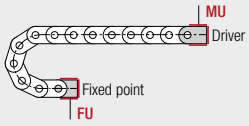
Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options

Connection point
F – fixed point
M – driver

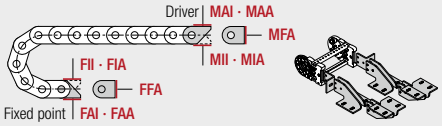
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

M1300

Pitch
130 mm

Inner height
87 – 98 mm

Inner widths
100 – 800 mm

Bending radii
150 – 500 mm

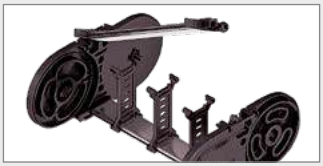
Stay variants



Aluminum stay RMF page **458**

Frame stay solid with optional fixing profile

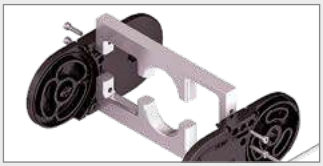
» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay RMS page **460**

Frame stay solid with ball joint

» Aluminum profile bars with plastic ball joint for heavy loads and large cable carrier widths. Assembly without screws.
» **Inside/outside:** Swivable and detachable.



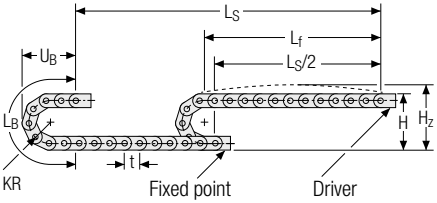
Aluminum stay LG page **462**

Hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Outside/inside:** Screw-fixing easy to release.

Subject to change without notice.

Unsupported arrangement

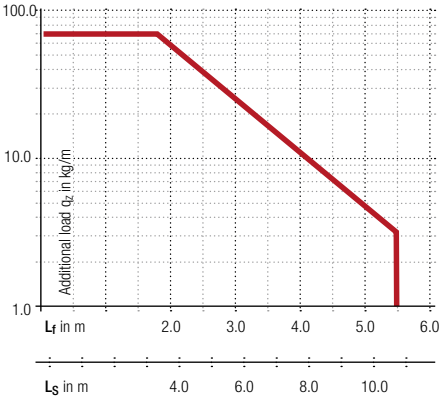


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
150	480	540	732	340
195	570	630	873	385
240	660	720	1014	430
280	740	800	1140	470
320	820	880	1266	510
360	900	960	1391	550
400	980	1040	1517	590
500	1180	1240	1831	690

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 8.0 kg/m. For other inner widths, the maximum additional load changes.



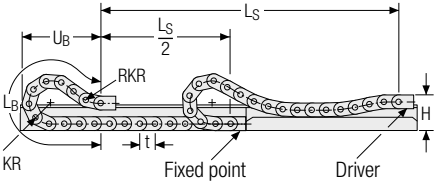
Speed
up to 10 m/s

Acceleration
up to 25 m/s²

Travel length
up to 10.8 m

Additional load
up to 70 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
195	360	500	2210	1040
240	360	500	2470	1125
320	360	500	2880	1240
360	360	500	3140	1331
500	360	500	4310	1756

The cable carrier is to be used gliding only **without pre-tensioning**!

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 350 m

Additional load
up to 70 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

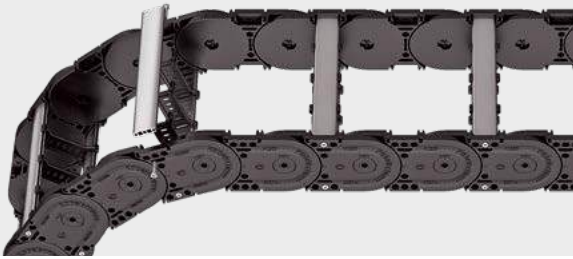
Glide shoes are required for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

Aluminum stay RMF –
frame stay solid
with optional fixing profile

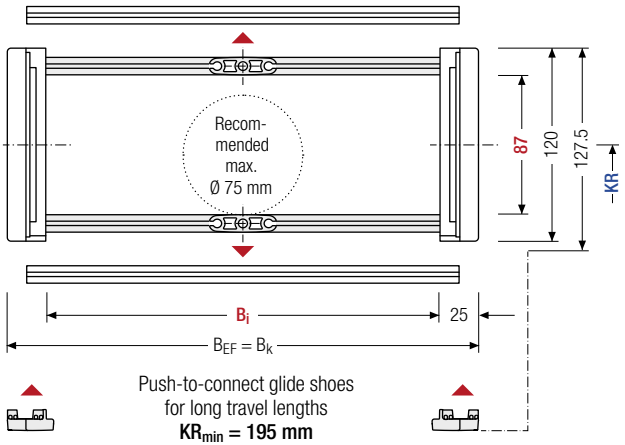
- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 100 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 195 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
87	120	127.5	100 – 800	B_i + 50	B_i + 50	150	195	240	280	6.24 – 9.59
						320	360	400	500	

* in 1 mm width sections

Order example

MC1300	.	400	.	RMF	.	360	-	6500	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

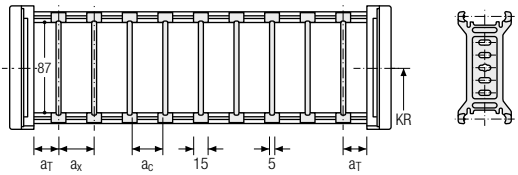
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS). As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	7.5	15	10	–	–
B	10	15	10	5	–

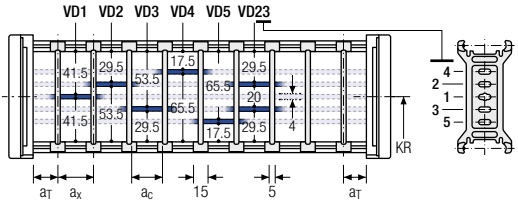
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	7.5	25	15	10	–	2
B	10	25	15	10	5	2

The dividers can be moved within the cross section (version A) or fixed (version B).

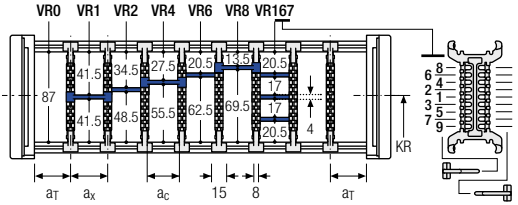


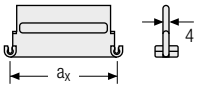
Divider system TS3 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	n_T min
A	7.5	16/42*	8	2

* For aluminum partitions

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.





Aluminum partitions in 1 mm increments with **a_X > 42 mm** are also available.

a_X (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

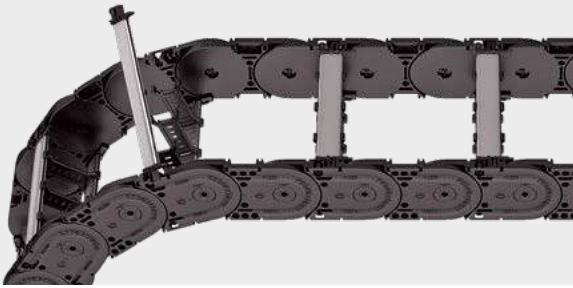
When using **plastic partitions with a_X > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Subject to change without notice.

MC1300 RMS | Dimensions · Technical data

Aluminum stay RMS – frame stay reinforced

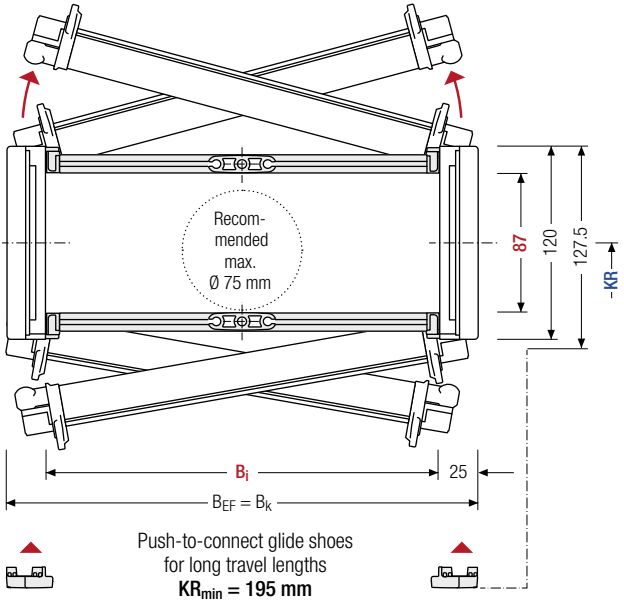
- Aluminum profile bars with plastic ball joint for heavy loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Inside/outside:** Swivable and detachable.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 100 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
87	120	127.5	100 – 800	B_i + 50	B_i + 50	150	195	240	280	6.31 – 6.65
						320	360	400	500	

* in 1 mm width sections

Order example

MC1300	.	400	.	RMS	.	360	-	6500		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

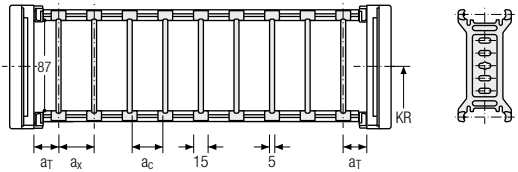
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS). As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

For applications with lateral acceleration and lying on the side, the dividers can be attached by a fixing profile, available as an accessory **(version B)**. The fixing profile must be installed at the factory.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	15.5	15	10	–	–
B	18.5	15	10	5	–

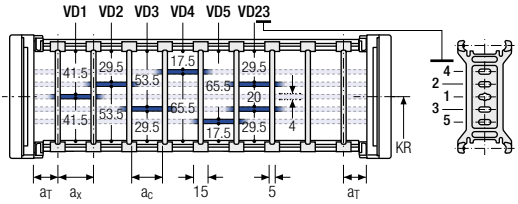
The dividers can be moved within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	15.5	25	15	10	–	2
B	18.5	25	15	10	5	2

The dividers can be moved within the cross section (version A) or fixed (version B).

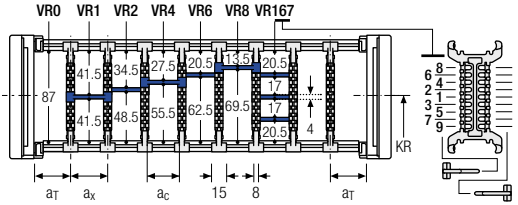


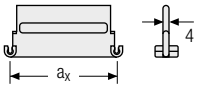
Divider system TS3 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	n_T min
A	15.5	16/42*	8	2

* For aluminum partitions

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.





Aluminum partitions in 1 mm increments with **a_X > 42 mm** are also available.

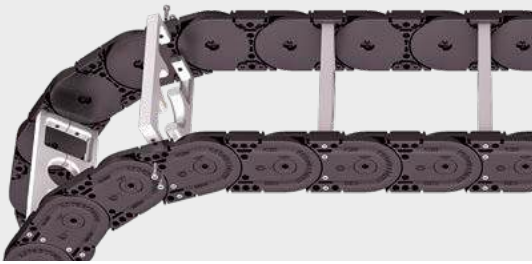
a_X (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_X > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Subject to change without notice.

Aluminum stay LG –
Hole stay, split version

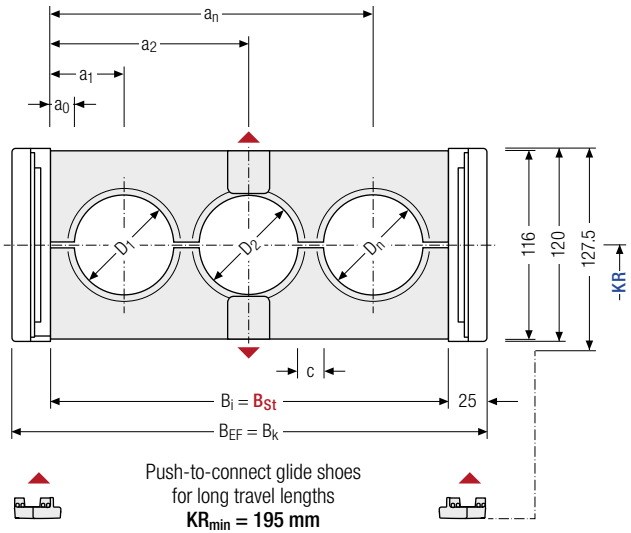
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- **Outside/inside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 100 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 195 mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]			q_k 50 %** [kg/m]
98	12	120	100 – 800	**100 – 800**	B_{St} + 50	B_{St} + 50	4	13	150	195	240	7.04 – 13.53
									280	320	360	
									400	500		

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

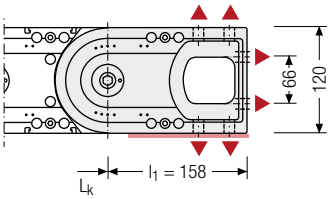
Order example

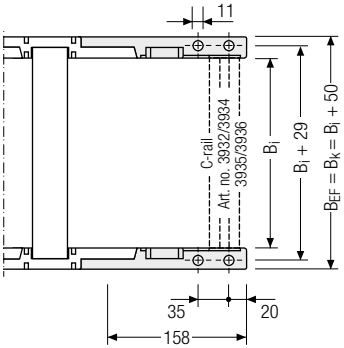
MC1300	.	400	.	LG	.	360	-	6500	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

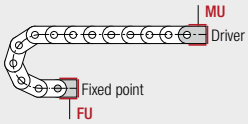
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**





▲ Assembly options

Recommended tightening torque: 54 Nm
for cheese-head screws ISO 4762 - M10 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



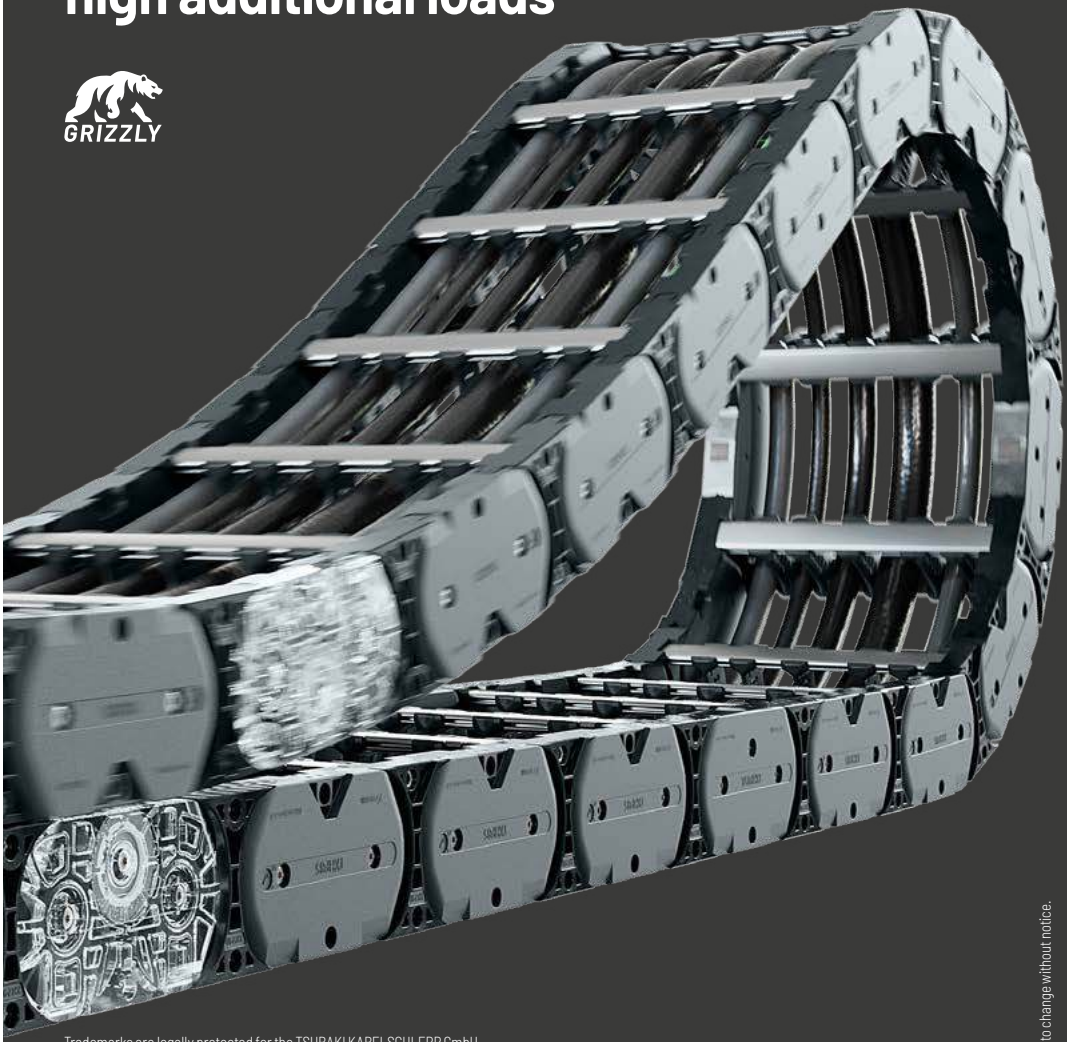
Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

TKHP® series

High-Performance cable carriers for long travel lengths and high additional loads

GRIZZLY



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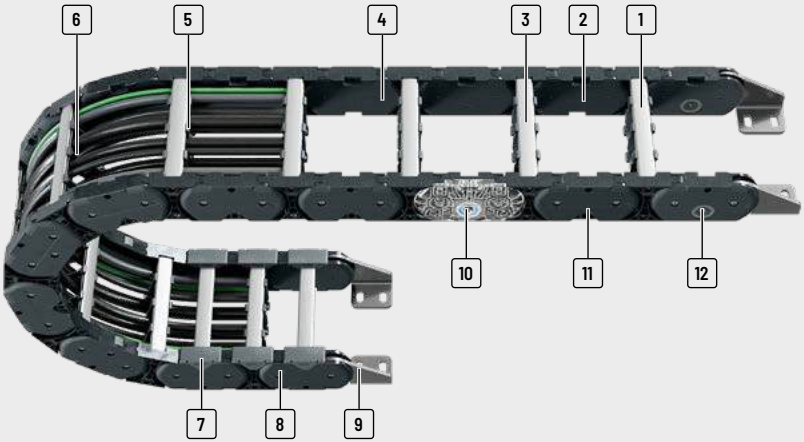
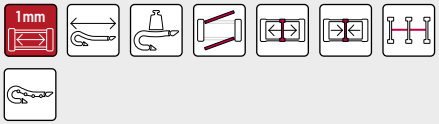
Subject to change without notice.



1 Aluminum stays available in **1 mm width sections**
2 Plastic chain link plates
3 Quick and easy opening to the inside or outside for cable laying
4 Cable-friendly interior – no interfering edges
5 Fixable dividers
6 Dividers and subdivision for separating the cables
7 Replaceable glide shoes for increased service life in gliding application
8 Robust, multiple stop system
9 End connectors made of seawater-resistant stainless steel
10 With integrated roll for standard guide channels
11 Easy replacement of chain links within the cable carrier
12 With roller damping

Features

» Massive, enclosed, stain-repellend stop system
» Massive sidebands through robust double fork-bracket-construction
» Sidebands easy to assemble
» Reinforced symmetrically arranged pin bore connection for better force transmission
» Integrated noise damping
» Quick and easy opening to the inside or outside for cable laying
» Soil-resistant outer contour
» Easy change of components
» Maintenance-free
» Linear force curve in the sideband
» Quiet and low-wear operating through polygon-optimized contour and radii
» Reduce drive power through less friction




Very smooth running of the roller system due to almost continuous running surface.


A non-slip structure on the running surface prevents one-sided roller wear after a standstill.


Roller chain for travel distances up to 1500 m.


RSD version with roller damping to reduce noise and wear by up to 50 %.

Subject to change without notice.

TKHP® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	B_i-grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKHP85											
		RMF	58	84	100 – 800	154 – 854	1	85	240 – 400	60	46
TKHP90											
		RMF	92	117	100 – 800	170 – 870	1	90	250 – 500	100	73
TKHP85-R / TKHP85-RSD											
		RMF	58	84.5	100 – 800	154 – 854	1	85	240 – 400	60	46
TKHP90-R / TKHP90-RSD											
		RMF	92	117.5	100 – 800	170 – 870	1	90	250 – 500	100	73

Subject to change without notice.

Unsupported arrangement			Gliding/Rolling arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
5.9	5	20	200	5	2.5	•	•	–	–	•	–	–	470
13.5	8	20	–	–	–	•	•	–	–	•	–	–	476
–	–	–	1200	5	50	•	•	–	–	•	–	–	482
–	–	–	1500	10	50	•	•	–	–	–	–	–	488

Subject to change without notice.

TKHP85

Pitch
85 mm

Inner height
58 mm

Inner widths
100 – 800 mm

Bending radii
240 – 400 mm

Stay variants



Aluminum stay RMF page **470**

Frame stay, solid

» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» **Inside/outside:** Threaded joint easy to release.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



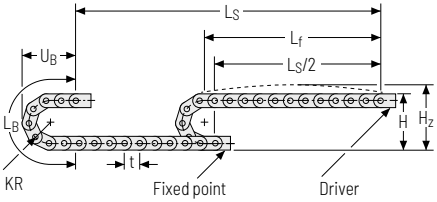
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

TKHP85 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

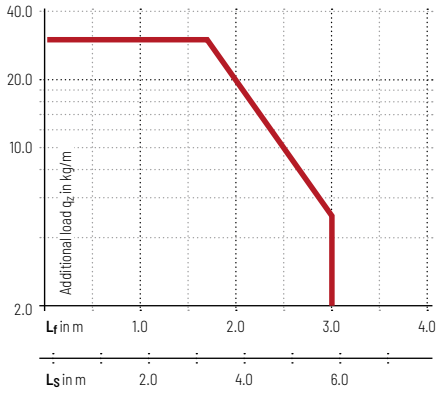


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
240	574	704	930	300
300	694	824	1120	360
350	794	924	1270	410
400	894	1024	1430	460

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 10 kg/m. For other inner widths, the maximum additional load changes.



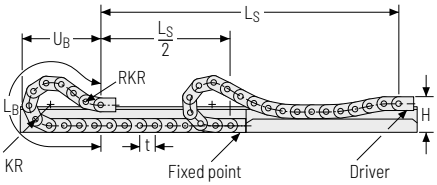
Speed
up to 5 m/s

Acceleration
up to 20 m/s²

Travel length
up to 5.9 m

Additional load
up to 30 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	LB [mm]	UB [mm]	qz max [kg/m]
240	252	400	2235	983	60
300	252	400	2830	1224	60
350	252	400	3255	1393	40
400	252	400	3765	1601	20

Speed
up to 5 m/s

Acceleration
up to 2.5 m/s²

Travel length
up to 200 m

Additional load
up to 60 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

TKHP85 RMF | Dimensions · Technical data

Aluminum stay RMF – frame stay solid

» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



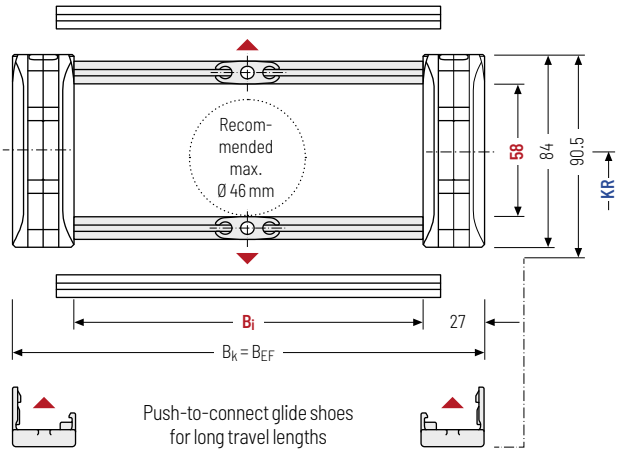


Stay arrangement on every 2nd chain link, **standard unsupported (HS: half-stayed)***

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**

* Gliding arrangement: Inner radius fully-stayed, Outer radius half-stayed.



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
58	84	90.5	100 – 800	B_i + 54	B_i + 54	240	300	350	400	6.02 – 13.12

* in 1 mm width sections

Order example

TKHP85	.	400	.	RMF	.	300	-	2125	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on every 2nd chain link on the inside plate.

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

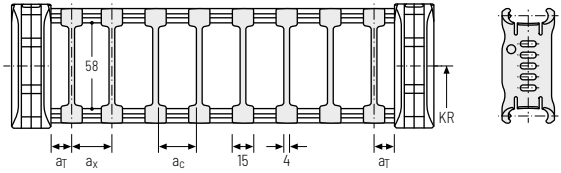
For applications with lateral acceleration and free hanging on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	7.5/10.5*	15	11	–	–
B	7.5/10.5*	15	11	5	–

* With glide shoes

The dividers can be moved within the cross section (version A) or fixed (version B).

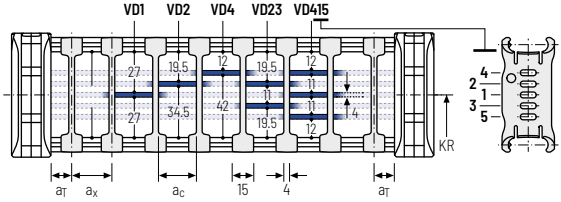


Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
A	7.5/10.5*	15	11	–	2
B	7.5/10.5*	15	11	5	2

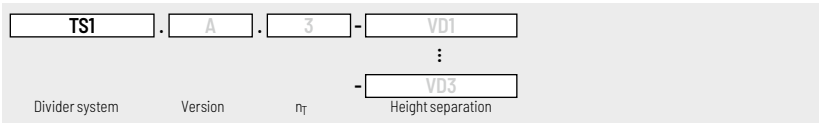
* With glide shoes

The dividers can be moved within the cross section (version A) or fixed (version B).



Order example





Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

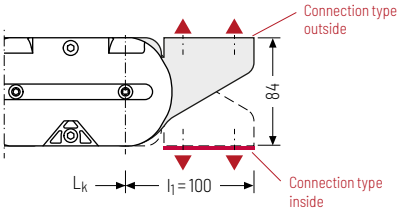
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

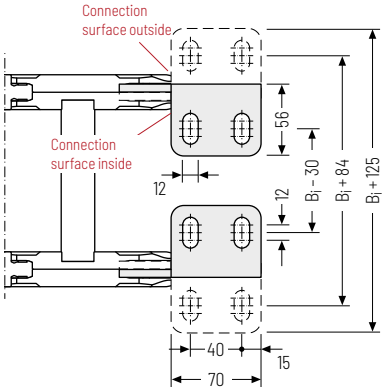
Subject to change without notice.

TKHP85 | End connectors

End connectors – steel short (standard)

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



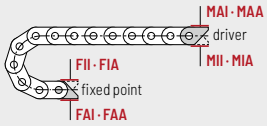


▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

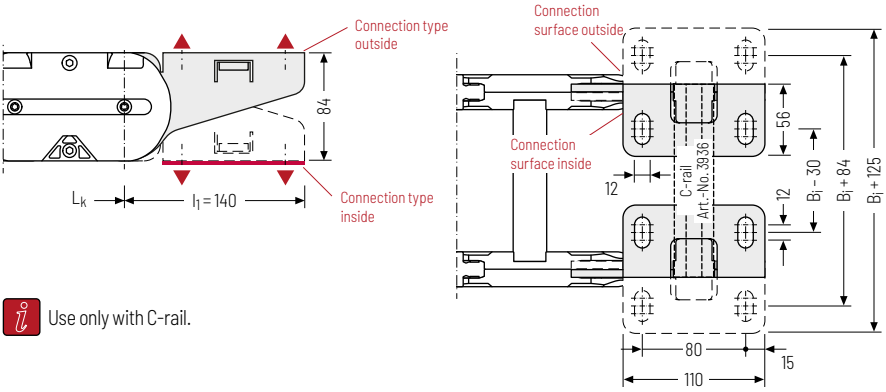
End connector	Connection point	Connection type	Connecting surface
Steel	F	A	I
Steel	M	A	I

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

End connectors LF – steel long

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



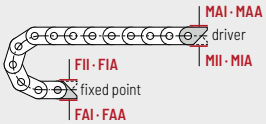
Use only with C-rail.

▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

Steel LF	.	F	A	I
Steel LF	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

Additional product information online

Installation instructions, etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your cable carrier here: **online-engineer.de**

Subject to change without notice.

TKHP90

Pitch
90 mm

Inner height
92 mm

Inner widths
100 – 800 mm

Bending radii
250 – 500 mm

Stay variants



Aluminum stay RMF ..... page **476**

Frame stay, solid

» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» **Inside/outside:** Threaded joint easy to release.



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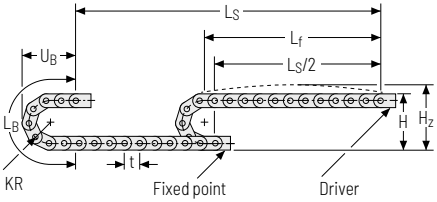
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

Unsupported arrangement

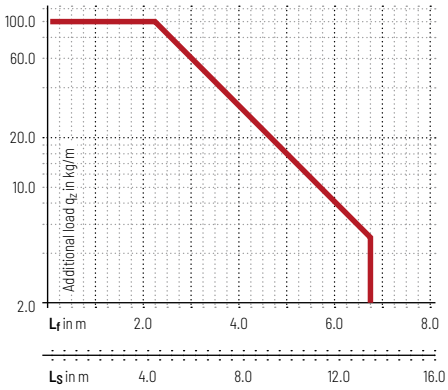


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
250	675.5	860	965	510
310	795.5	980	1154	570
360	895.5	1080	1311	620
500	1175.5	1360	1751	680

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 10 kg/m. For other inner widths, the maximum additional load changes.



Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 13.5 m

Additional load
up to 100 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

TKHP90 RMF | Dimensions · Technical data

Aluminum stay RMF – frame stay solid

» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

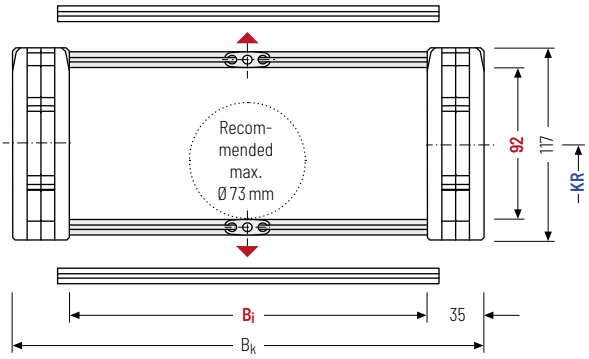


Stay arrangement on every 2nd chain link, **standard unsupported (HS: half-stayed)***

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**

* Gliding arrangement: Inner radius fully-stayed, Outer radius half-stayed.



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	KR [mm]				q_k [kg/m]
92	117	100 – 800	B_i + 70	250	310	360	500	10.37 – 17.47

* in 1 mm width sections

Order example

TKHP90	.	400	.	RMF	.	310	-	2700	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on every 2nd chain link on the inside plate.

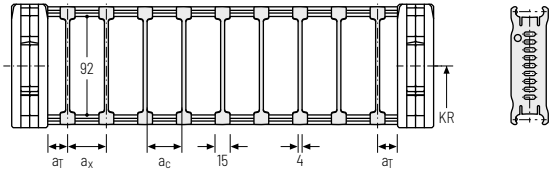
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and free hanging on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	7.5	15	11	–	–
B	10	15	11	5	–

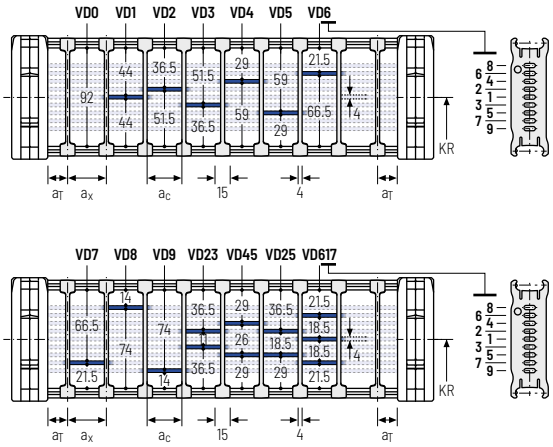
The dividers can be moved within the cross section (version A) or fixed (version B).



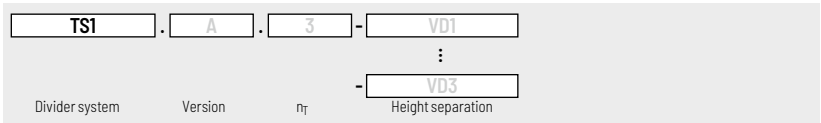
Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	7.5	15	11	–	–
B	10	15	11	5	–

The dividers can be moved within the cross section (version A) or fixed (version B).



Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

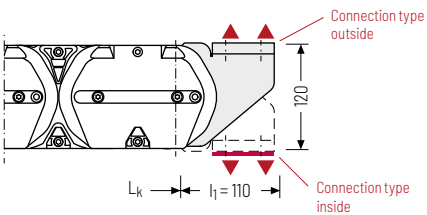
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

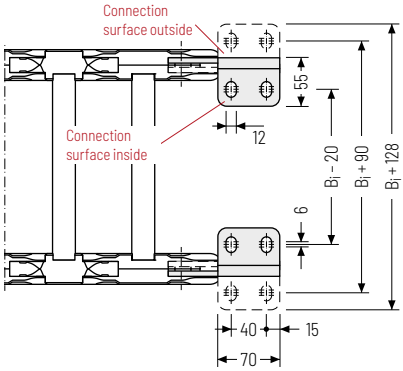
Subject to change without notice.

TKHP90 | End connectors

End connectors – steel short (standard)

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



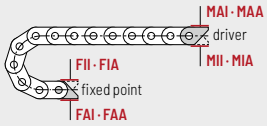


▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

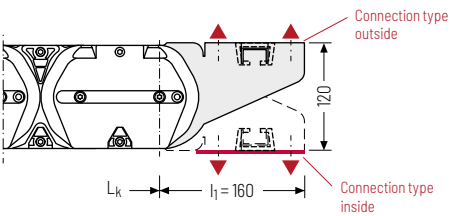
Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

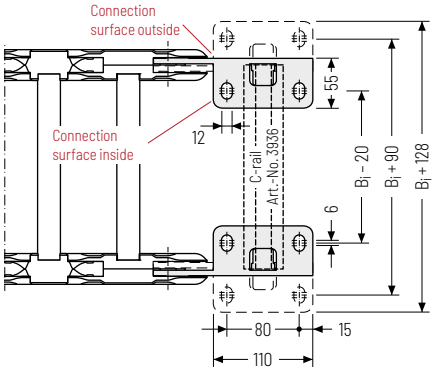
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

End connectors LF – steel long

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.





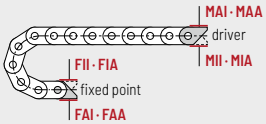
Use only with C-rail.

▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

Steel LF	.	F	A	I
Steel LF	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

TKHP85-R
TKHP85-RSD

High-Performance cable carrier with integrated roller

Pitch
85 mm

Inner height
58 mm

Inner widths
100 – 800 mm

Bending radii
240 – 400 mm

Stainless steel ball bearings with application-specific lubrication and plastic rollers ensure quiet and smooth operation. Integrated, low-wear damping systems minimize the mechanical load for the entire system.

The cable carrier type TKHP85-RSD (Shock Damping) uses roller damping. The rollers of the RSD variant are damped when they pass over each other, which reduces both the mechanical load and the noise pollution when they roll over by up to 50 %.

The use of roller damping is not always necessary. An undamped cable carrier system can also be used for low-speed applications.

- TKHP85-R with rollers
- TKHP85-RSD with rollers and shock absorber
- suitable for all long travel applications
- quiet and low-vibration operation
- space-saving and cost-optimized
- long service life – low maintenance
- easy access to rollers
- minimized loads on cable carrier and cables
- low push and pull forces
- high travel speed and acceleration
- large additional loads possible
- retrofit of existing systems
- exchange other makes up to 100 %
- integration of existing guide channels

Stay variants



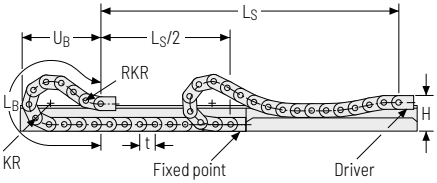
Aluminum stay RMF page **482**

Frame stay, solid

- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- **Inside/outside:** Threaded joint easy to release.

Subject to change without notice.

Rolling arrangement | Cable carrier with integrated roller



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]	$q_{z\,max}$ [kg/m]
240	252	400	2235	983	60
300	252	400	2830	1224	60
350	252	400	3255	1393	40
400	252	400	3765	1601	20

Speed
up to 5 m/s

Acceleration
up to 50 m/s²

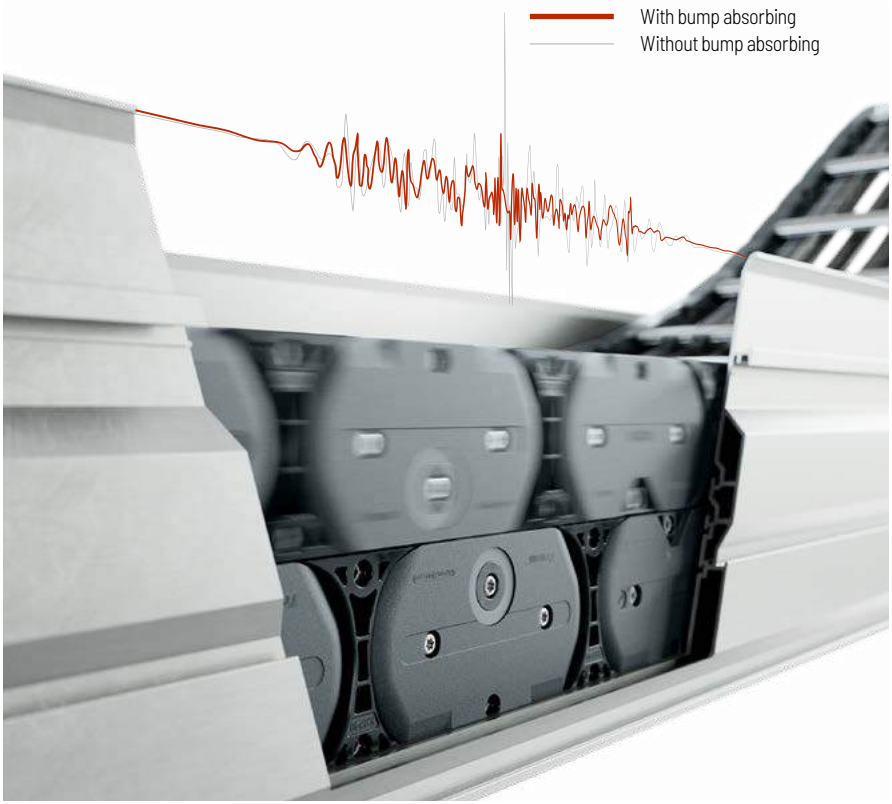
Travel length
up to 1200 m

Additional load
up to 60 kg/m

The rolling cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Our technical support can provide help for rolling arrangements:
technik@kabelschlepp.de



Subject to change without notice.

TKHP85-R / -RSD RMF | Dimensions · Technical data

Aluminum stay RMF – frame stay solid

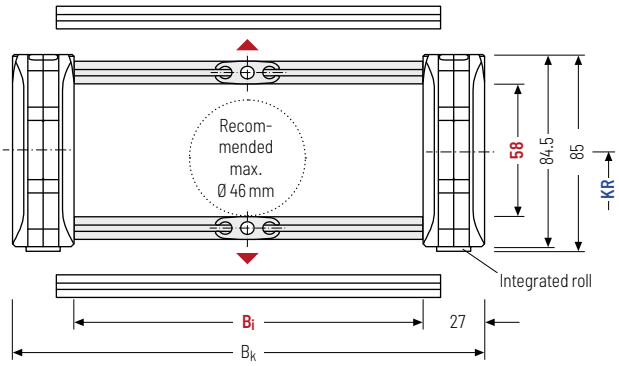
» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]				q_k [kg/m]
58	84.5	85	**100 – 800**	B_i + 54	**240**	**300**	**350**	**400**	6.02 – 13.12

* in 1 mm width sections

Order example

TKHP85-R	.	400	.	RMF	.	300	-	2125	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

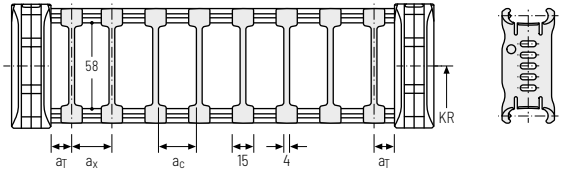
As a standard, the divider system is mounted on every 2nd chain link on the inside plate.

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and free hanging on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(version B)**.

Divider system TS0 without height separation

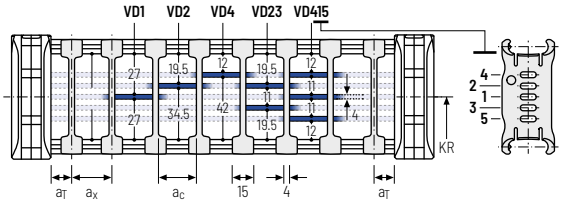
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	7.5	15	11	–	–
B	7.5	15	11	5	–



The dividers can be moved within the cross section (version A) or fixed (version B).

Divider system TS1 with continuous height separation

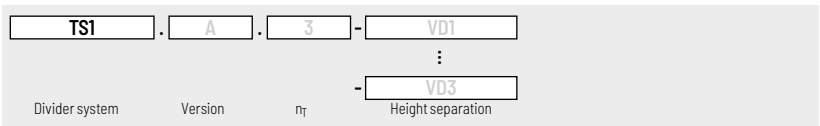
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	7.5	15	11	–	2
B	7.5	15	11	5	2



The dividers can be moved within the cross section (version A) or fixed (version B).

Order example





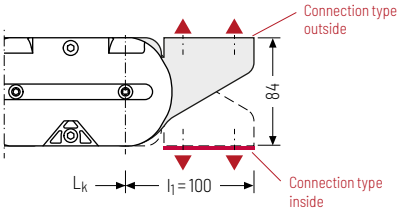
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

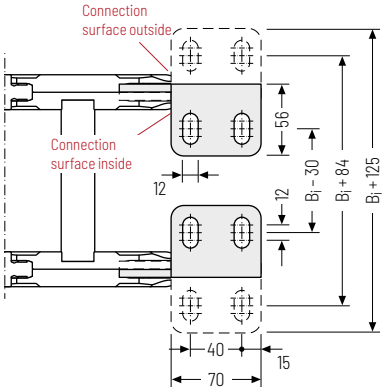
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

End connectors – steel short (standard)

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



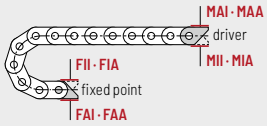


▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

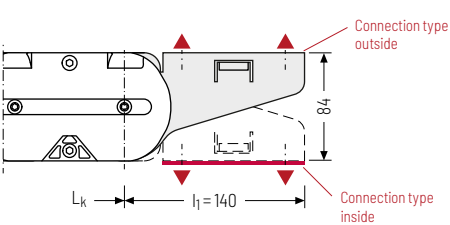
Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

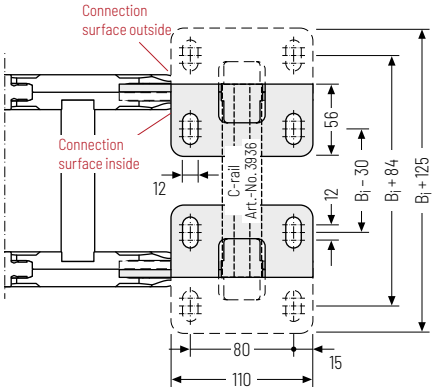
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

End connectors LF – steel long

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.





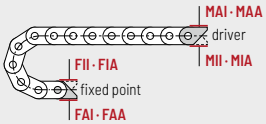
Use only with C-rail.

▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

Steel LF	.	F	A	I
Steel LF	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

TKHP90-R
TKHP90-RSD

High-Performance cable carrier with integrated roller

Pitch
90 mm

Inner height
92 mm

Inner widths
100 – 800 mm

Bending radii
250 – 500 mm

Stainless steel ball bearings with application-specific lubrication and plastic rollers ensure quiet and smooth operation. Integrated, low-wear damping systems minimize the mechanical load for the entire system.

The cable carrier type TKHP90-RSD (Shock Damping) uses roller damping. The rollers of the RSD variant are damped when they pass over each other, which reduces both the mechanical load and the noise pollution when they roll over by up to 50 %.

The use of roller damping is not always necessary. An undamped cable carrier system can also be used for low-speed applications.

- TKHP90-R with rollers
- TKHP90-RSD with rollers and shock absorber
- suitable for all long travel applications
- quiet and low-vibration operation
- space-saving and cost-optimized
- long service life – low maintenance
- easy access to rollers
- minimized loads on cable carrier and cables
- low push and pull forces
- high travel speed and acceleration
- large additional loads possible
- retrofit of existing systems
- exchange other makes up to 100 %
- integration of existing guide channels

Stay variants



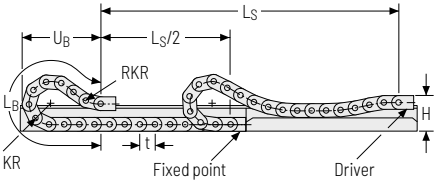
Aluminum stay RMF page **488**

Frame stay, solid

- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- **Inside/outside:** Threaded joint easy to release.

Subject to change without notice.

Rolling arrangement | Cable carrier with integrated roller



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]	$q_{z\,max}$ [kg/m]
250	351	600	1840	1030	100
310	351	600	2200	1230	100
360	351	600	2520	1400	90
500	351	600	3410	1880	75

Speed
up to 10 m/s

Acceleration
up to 50 m/s²

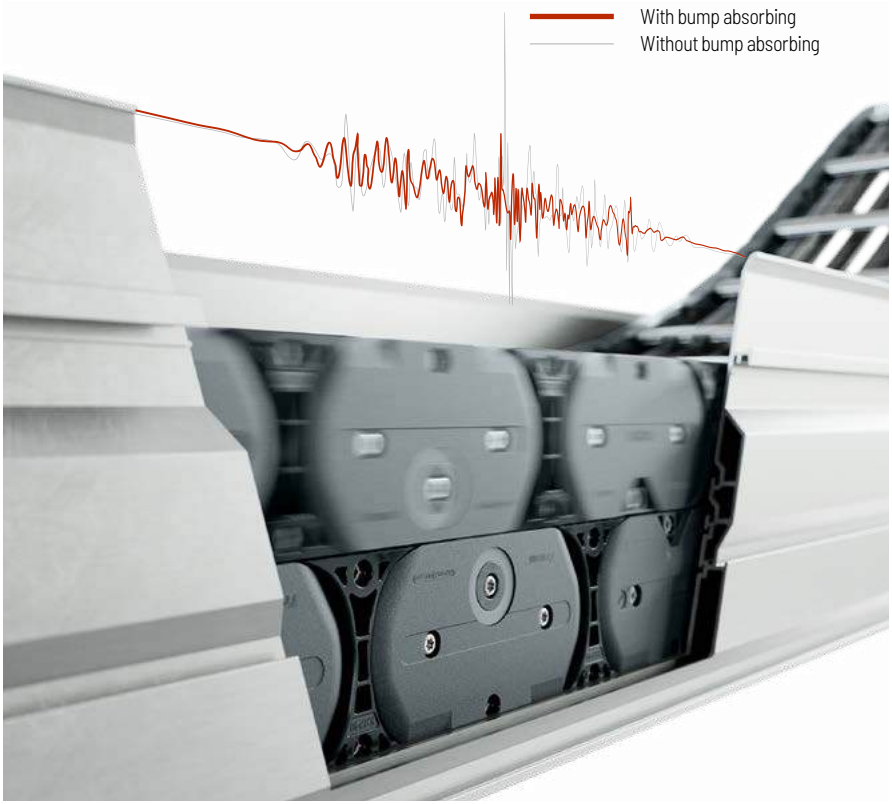
Travel length
up to 1500 m

Additional load
up to 100 kg/m

The rolling cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 6 adapted KR/RKR link plates.

Our technical support can provide help for rolling arrangements:
technik@kabelschlepp.de



Subject to change without notice.

TKHP90-R / -RSD RMF | Dimensions · Technical data

Aluminum stay RMF –
frame stay solid

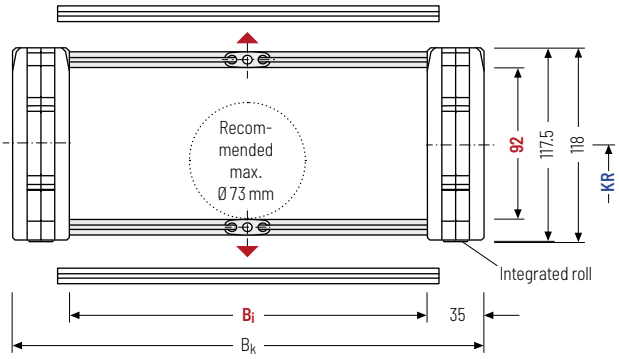
» Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 100 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]				q_k [kg/m]
92	117.5	118	**100 – 800**	B_i + 70	**250**	**310**	**360**	**500****	10.37 – 17.47

* in 1 mm width sections ** When using this KR please contact our technical support.

Order example

TKHP90-R	.	400	.	RMF	.	310	-	2700	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on every 2nd chain link on the inside plate.

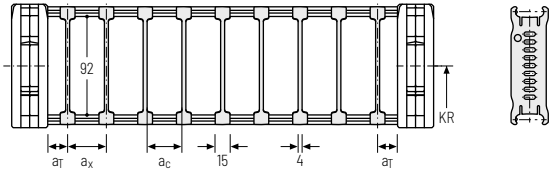
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and free hanging on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	7.5	15	11	–	–
B	10	15	11	5	–

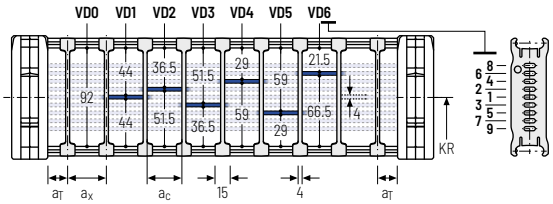
The dividers can be moved within the cross section (version A) or fixed (version B).

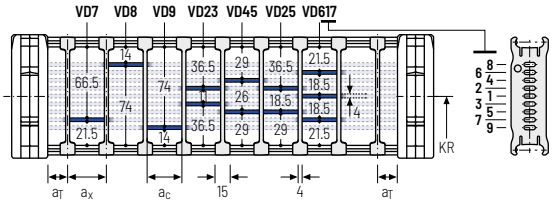


Divider system TS1 with continuous height separation

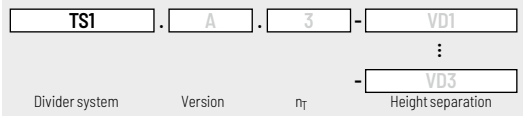
Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	7.5	15	11	–	–
B	10	15	11	5	–

The dividers can be moved within the cross section (version A) or fixed (version B).





Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

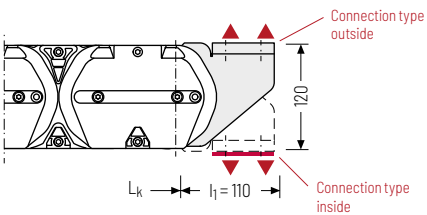
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

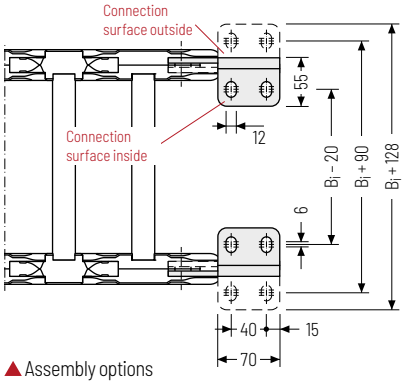
Subject to change without notice.

TKHP90-R / -RSD | End connectors

End connectors – steel short (standard)

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



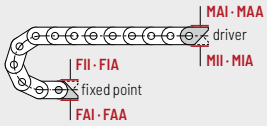


▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

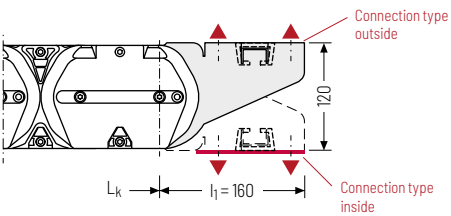
Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

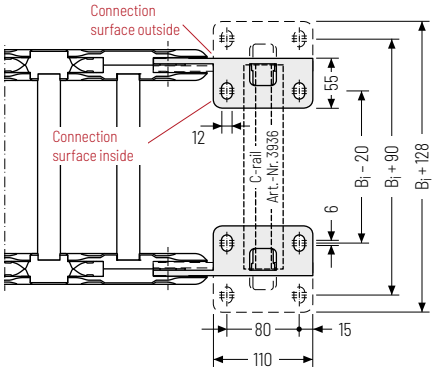
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

End connectors LF – steel long

The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.





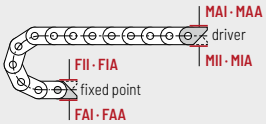
Use only with C-rail.

▲ Assembly options

Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside



Order example

Steel LF	.	F	A	I
Steel LF	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

Additional product information online

Installation instructions, etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads

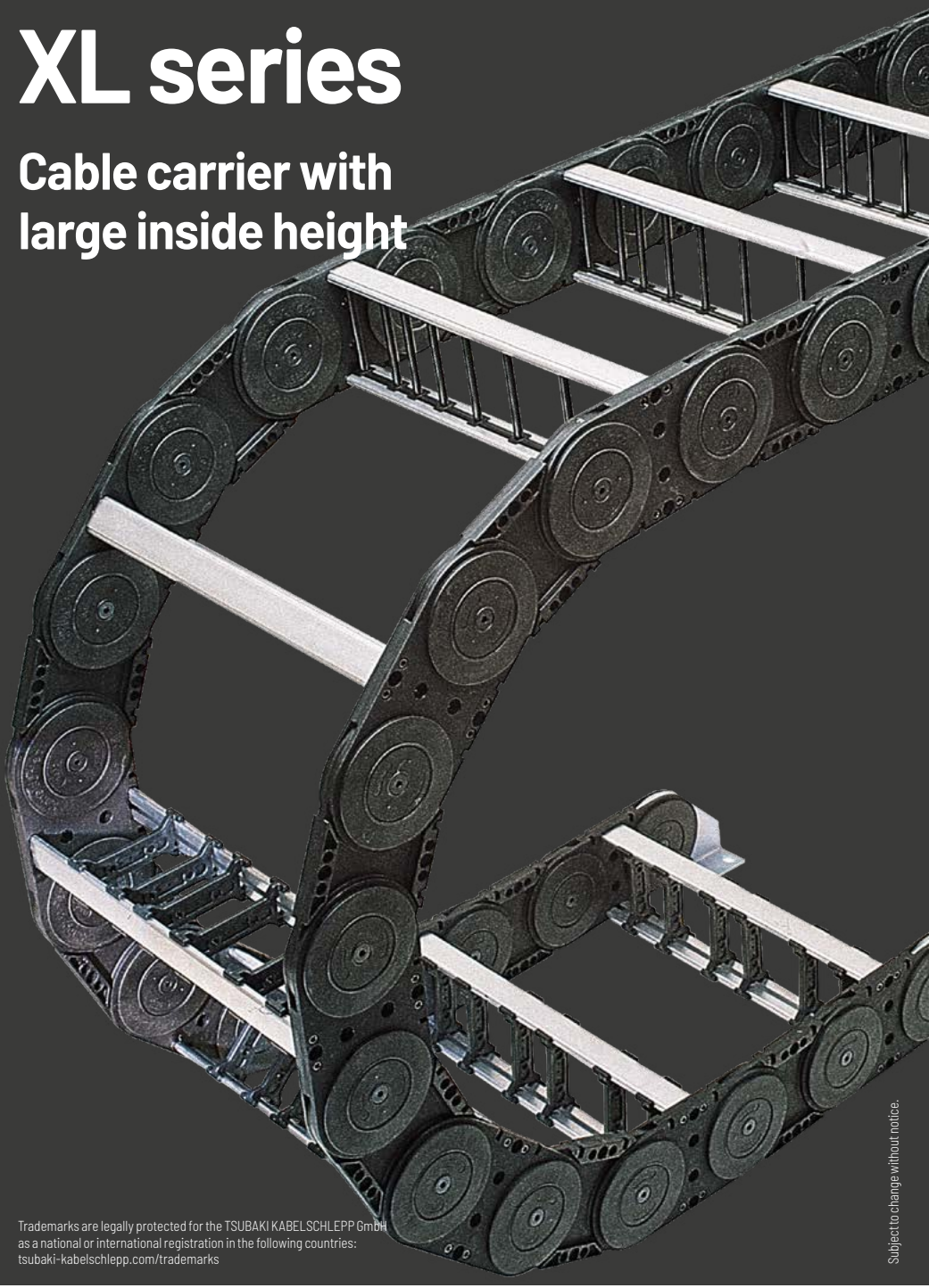


Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

XL series

Cable carrier with large inside height



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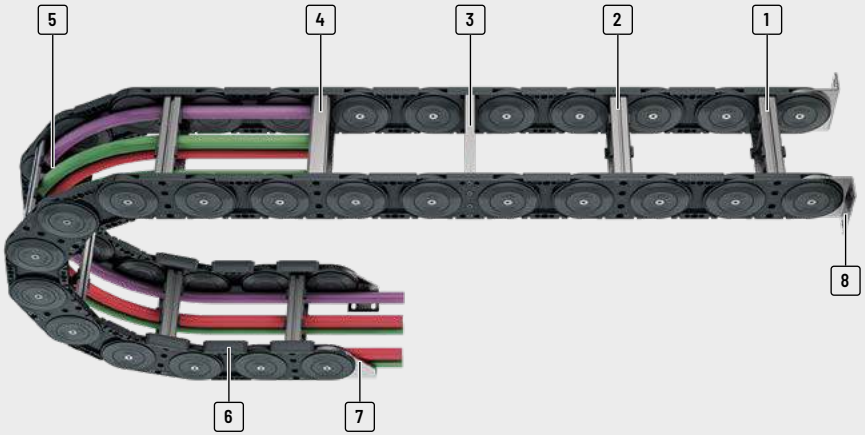
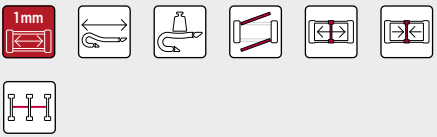
Subject to change without notice.



1 Aluminum stays available in **1 mm width sections**
2 Aluminum stays with 4 screw-fixing points for extreme loads
3 Aluminum hole stays
4 Plastic rolling stays
5 Can be opened on the inside and the outside for installation of cables and hoses
6 Replaceable glide shoes
7 Sturdy end connectors made of steel
8 Flange connection

Features

- » Sizes/dimensions
- » Low intrinsic weight
- » Optimum force transmission via the large-surface stroke system (2 disc principle)
- » Plastic side bands in combination with aluminum stays
- » Versions with aluminum stays available in 1 mm width sections up to 1000 mm inner width
- » Can be opened on both sides
- » Large selection of stay systems and separating options for cables
- » Optionally with strain relief





Bolted stays for maximum stability even for large cable carrier widths



Replaceable glide shoes for long service life for gliding applications



Sturdy end connectors made of steel (different connection variants)



Many separation options for the cables

Subject to change without notice.

XL series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
XL1650											
		RM	108	140	200 – 1000	268 – 1068	1	165	250 – 550	65	86
		LG	110	140	200 – 1000	268 – 1068	1	165	250 – 550	65	88
		RMR	108	140	200 – 1000	268 – 1068	1	165	250 – 550	65	84

* Further information on request.



XLT series

Also available as covered versions with covers system. More information can be found in chapter "XLT series" from page 674.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
11.75	4	25	350	2	2 – 3	•	–	–	•	•	•	•	498
11.75	4	25	350	2	2 – 3	–	–	–	–	•	•	•	*
11.75	4	25	350	2	2 – 3	•	–	–	–	•	•	•	*

Subject to change without notice.

XL1650

Pitch
165 mm

Inner height
108 mm

Inner widths
200 – 1000 mm

Bending radii
250 – 550 mm

Stay variants



Aluminum stay RM ..... page **498**

Frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joints easy to release.

Additional stay variants on request



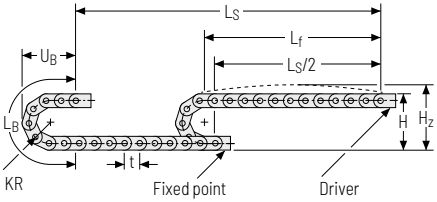
Aluminum stay LG
Optimum cable routing in the neutral bending line.



Aluminum stay RMR
Gentle cable guiding with rollers.

Subject to change without notice.

Unsupported arrangement

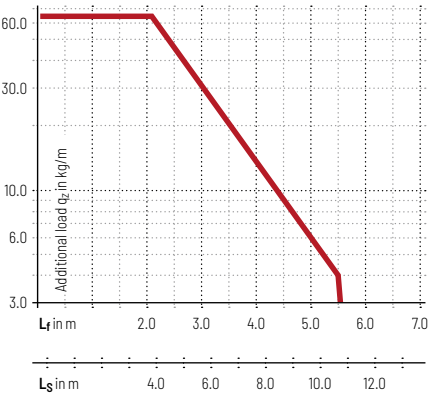


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
250	640	740	1115	485
300	740	840	1272	535
350	840	940	1430	585
400	940	1040	1587	635
450	1040	1140	1744	685
500	1140	1240	1901	735
550	1240	1340	2058	785

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 13 kg/m. For other inner widths, the maximum additional load changes.



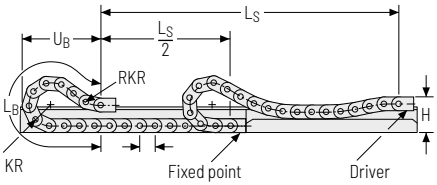
Speed
up to 4 m/s

Acceleration
up to 25 m/s²

Travel length
up to 11.75 m

Additional load
up to 65 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 350 m

Additional load
up to 65 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

We recommend the use of glide shoes for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

XLC1650 RM | Dimensions · Technical data

Aluminum stay RM –
Frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joints easy to release.

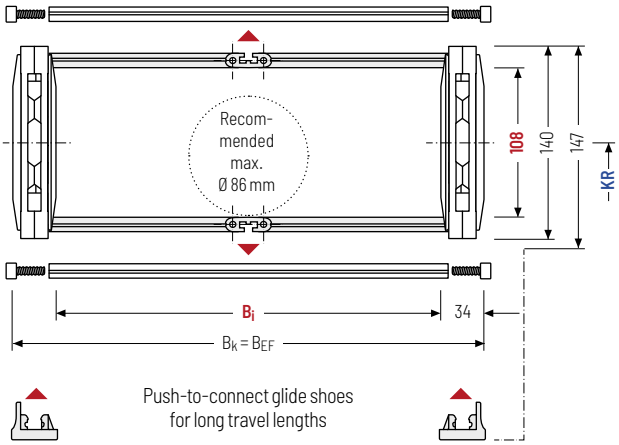
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 200 – 1000 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
108	140	147	**200 – 1000**	B_i + 68	B_i + 68	**250**	**300**	**350**	**400**	**450**	**500**	**550**	10.5 – 15.3

* in 1 mm width sections

Order example

XLC1650	.	600	.	RM	.	350	-	4125	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

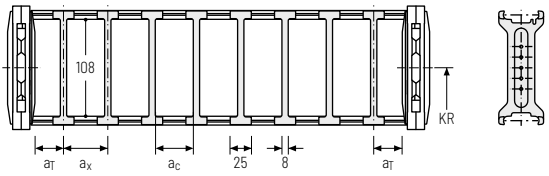
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	25	17	–

The dividers can be moved in the cross section.

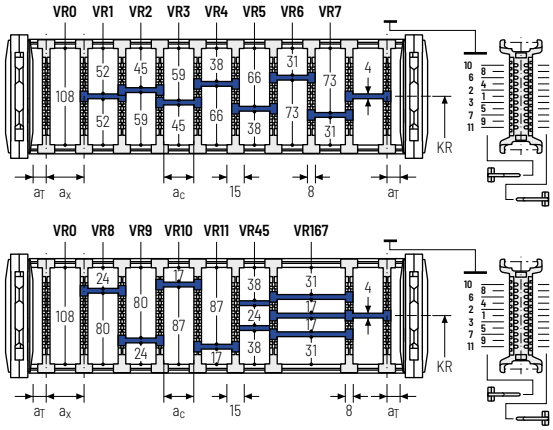


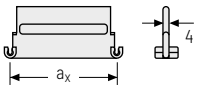
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	1	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



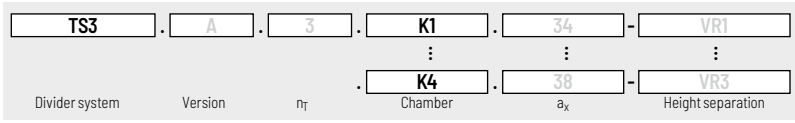


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

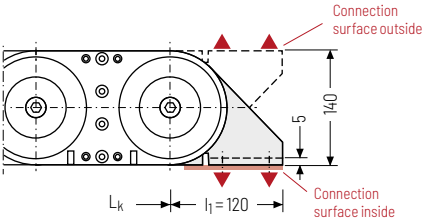


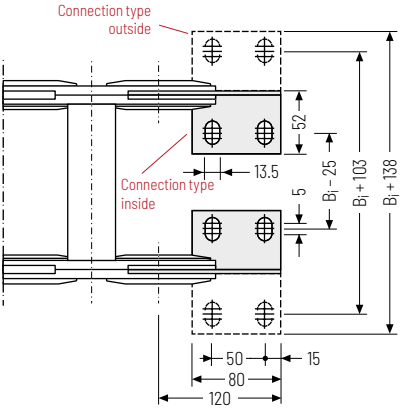
Please state the designation of the divider system **(TS0, TS3)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

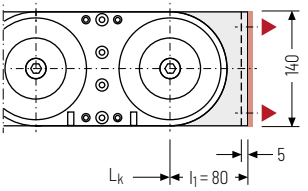
Subject to change without notice.

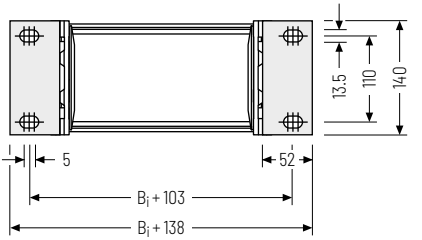
End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver an be combined and changed later on, if necessary.

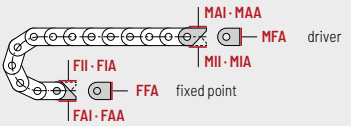








▲ Assembly options



Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

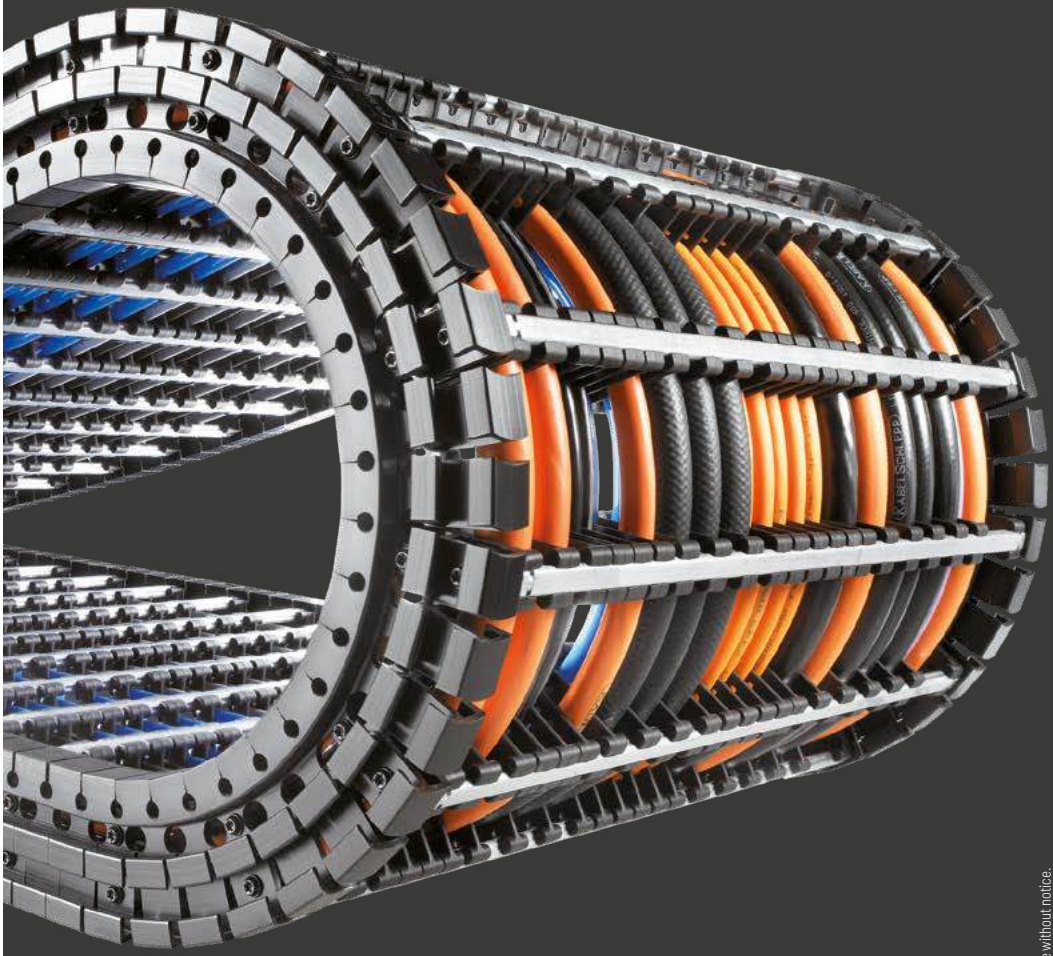
We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.


Kabelscheibe

QUANTUM® series

Light, extremely quiet and low-vibration for high speeds and accelerations



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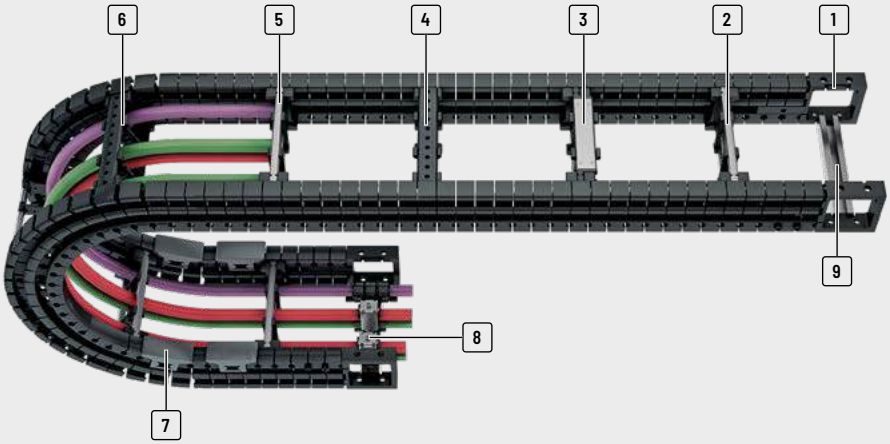


1 Universal end connectors (UMB)
2 Aluminum stays available in **1 mm width sections**
3 Aluminum stays in reinforced design
4 Plastic stays available in **8** or **16 mm width sections**
5 Can be opened quickly on the inside and the outside for cable laying
6 Fixable dividers
7 Replaceable glide shoes
8 Strain relief combs
9 C-rail for strain relief elements

Virtually no polygon effect

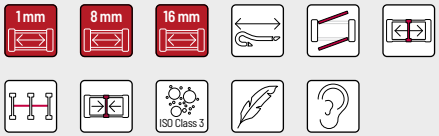


QUANTUM® Low-vibration operation

Cable carrier with polygon effect

Features

» Cleanroom compatible: no links, no link wear
» Extremely quiet, 31 db (A)*
» Extremely light
» For high accelerations up to 300 m/s^2
» For high operating speeds up to 40 m/s
» Extremely long service life: ≥ 25 million motion cycles
» TÜV type tested as per 2PfG 1036/10.97
» Large selection of stay systems and separating options for cables



* Tested: Q060.100.100 by TÜV Rheinland. The sound pressure level for the measured area was measured at a distance of 0.5 m for smooth and jerky movements.



Ideal for highly dynamic applications



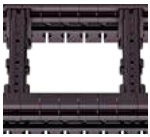
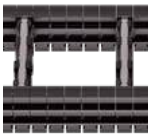
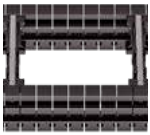
3D movements: the driver connection can be moved laterally and can be rotated by up to ±30°



Side bands made from special plastic and steel cables in the support floor for an extremely long service life

Subject to change without notice.

QUANTUM® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
Q040											
		RE	28	40	28 – 284	68 – 324	8	15	60 – 180	2.5	22
Q060											
		RS	38	60	38 – 500	90 – 552	1	20	100 – 300	5	30
		RE	42	60	68 – 276	120 – 328	8	20	100 – 300	5	33
Q080											
		RS	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		RV	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		RE	58	80	58 – 570	130 – 642	16	25	170 – 500	8	46
Q100											
		RS	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		RV	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		RE	72	98	74 – 570	156 – 652	16	30	180 – 600	12	57

Cleanroom compatible and long service life

Continuous side bands are used. In contrast to conventional hole-and-bolt connections, hardly any wear occurs (link abrasion), which makes QUANTUM® ideal for use in cleanrooms.

Extremely long service life through

» No link abrasion due to absence of hole-and-bolt connections

» Continuous side bands made from special plastic with integrated steel cables

Ideal for highly dynamic applications – extruded side bands

The QUANTUM® runs extremely quietly and with low vibrations. The absence of links and the very small pitch means that the so-called polygon effect is reduced to a minimum. Due to the very quiet running, the QUANTUM® cable carrier system is ideal for applications with low-vibration linear drives.

Subject to change without notice.

QUANTUM® series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
3.2	40	300	30	2	3	•	•	•	–	•	•	–	508
5	30	160	50	3	2 – 3	•	•	•	•	•	•	–	514
5	30	160	50	3	2 – 3	•	•	–	•	•	•	–	518
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	524
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	528
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	532
7.8	20	70	95	3	2 – 3	•	•	–	•	•	•	–	538
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	542
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	546

Subject to change without notice.

Q040

Pitch
15 mm

Inner height
28 mm

Inner widths
28 – 284 mm

Bending radii
60 – 180 mm

Stay variants



Plastic stay RE ..... page **508**

Frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

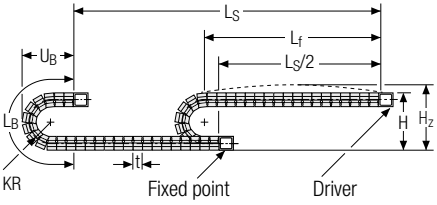


TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Unsupported arrangement

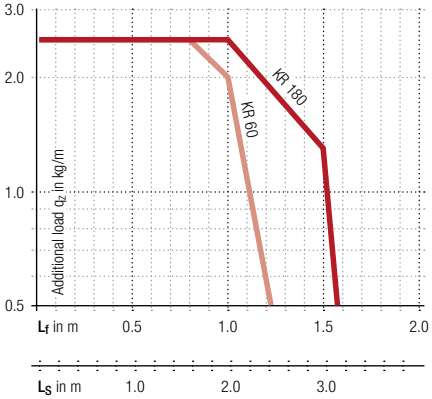


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
60	175	369	178
75	205	416	193
90	235	463	208
110	275	526	228
150	355	651	268
180	415	746	298

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.8 kg/m. For other inner widths, the maximum additional load changes.



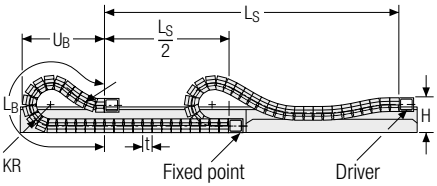
Speed
up to 40 m/s

Acceleration
up to 300 m/s²

Travel length
up to 3.2 m

Additional load
up to 2.5 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 3 m/s²

The gliding cable carrier has to be routed in a channel. See p. 866.

Travel length
up to 30 m

Additional load
up to 2.5 kg/m

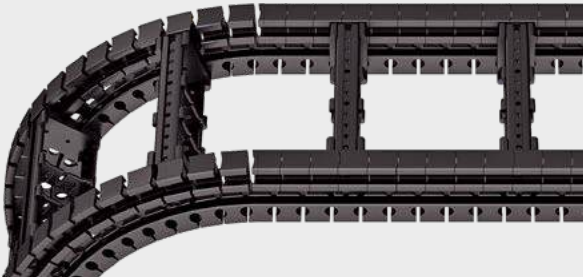
Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

Q040 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

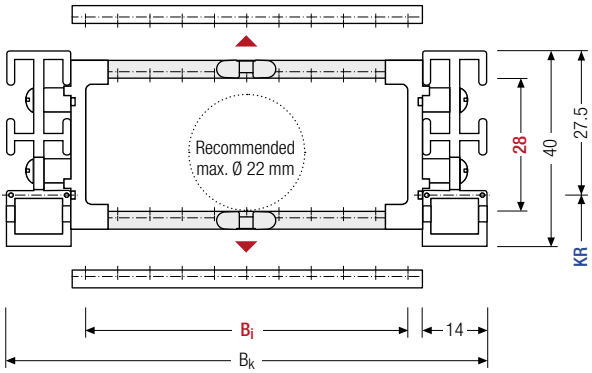
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm — B_i 28 – 284 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]											B_k [mm]	KR [mm]		q_k [kg/m]
28	40	28	36	44	52	60	68	76	84	92	100	108	B_i + 40	60	75	0.63 – 0.98
		116	124	132	140	148	156	164	172	180	188	196		90	110	
		204	212	220	228	236	244	252	260	268	276	284		150	180	

Order example

Q040	.	108	.	RE	.	150	-	1290		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

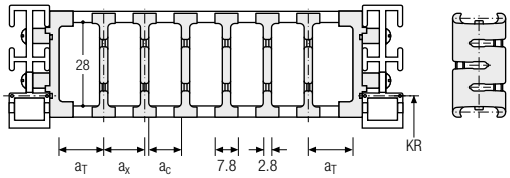
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	8	8	5.2	–	–
B	14	8	5.2	8	–

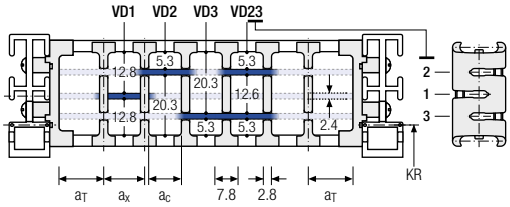
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	8	20	8	5.2	–	2
B	14	22	8	5.2	8	2

The dividers are movable within the cross section (version A) or fixed (version B).

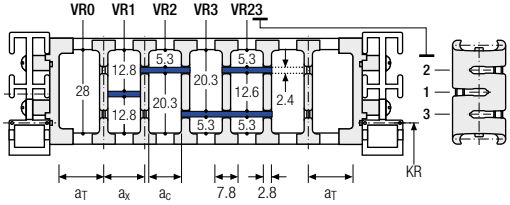


Divider system TS2 with partial height separation

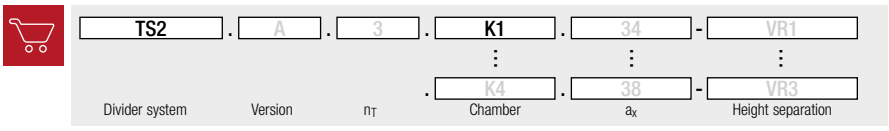
Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
B	14	8*/24	5.2*/21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).



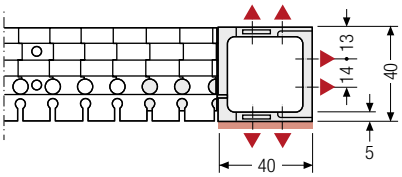
Order example



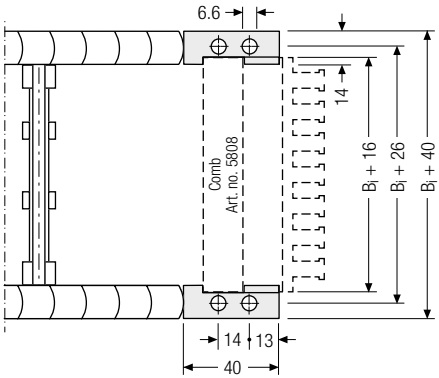
Subject to change without notice.

Universal end connectors UMB – **plastic** (standard)

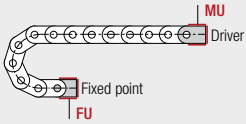
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.



▲ Assembly options



Recommended tightening torque:
5 Nm for screws M5 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.



Q060

Pitch
20 mm

Inner heights
38 – 42 mm

Inner widths
38 – 500 mm

Bending radii
100 – 300 mm

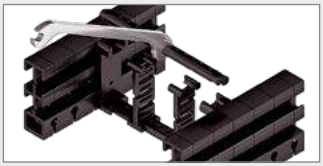
Stay variants



Aluminum stay RS page 514

Frame stay, narrow "The standard"

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 518

Frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



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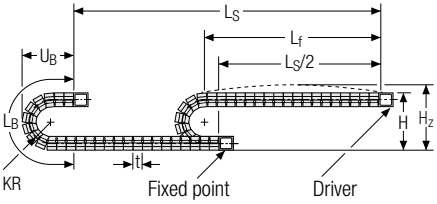
Subject to change without notice.

Unsupported arrangement

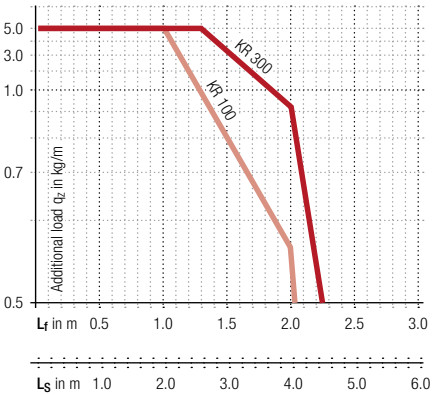


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
100	288	554	264
120	328	617	284
150	388	711	314
190	468	837	354
250	588	1025	414
300	688	1182	464

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.5 kg/m. For other inner widths, the maximum additional load changes.



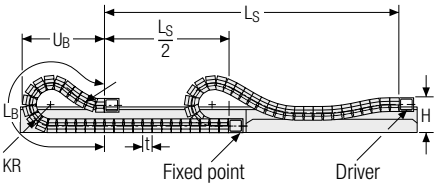
Speed
up to 30 m/s

Acceleration
up to 160 m/s²

Travel length
up to 5 m

Additional load
up to 5 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 50 m

Additional load
up to 5 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

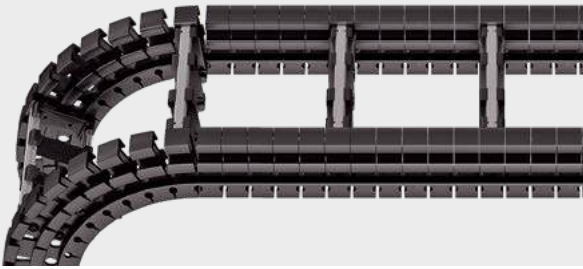
Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

Q060 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

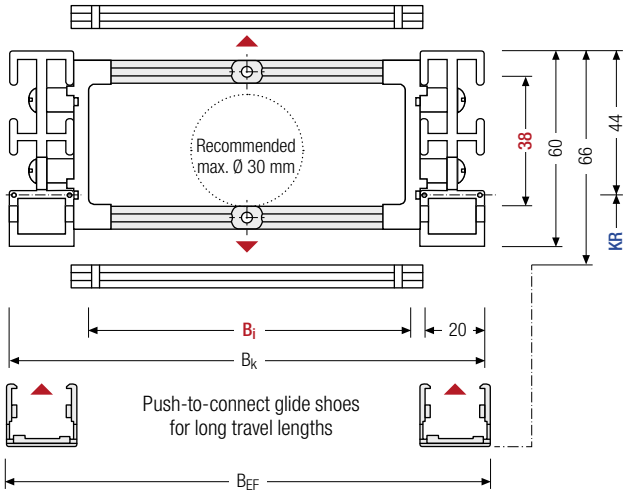
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

1 mm — B_i 38 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{3} \times 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_K [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
38	60	66	38 – 500	B_i + 52	B_i + 56	100	120	150	190	250	300	1.25 – 2.40

* in 1 mm width sections

Order example

Q060	.	200	.	RS	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

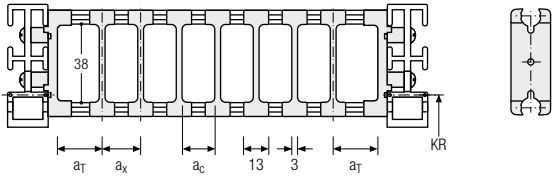
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	13	10	2

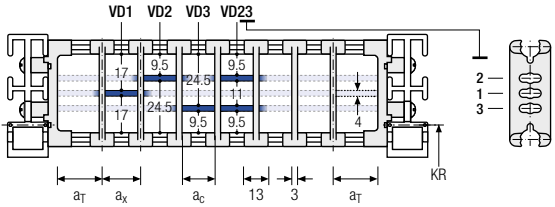
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	20	13	10	2

The dividers can be moved in the cross section.

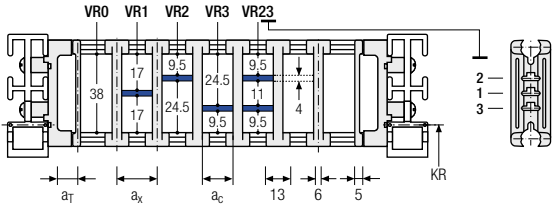


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	8.5	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 3 mm).





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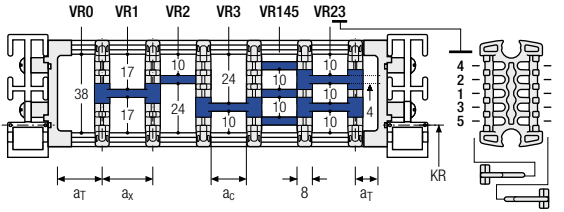
Subject to change without notice.

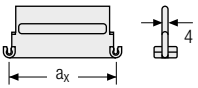
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	11	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR5
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

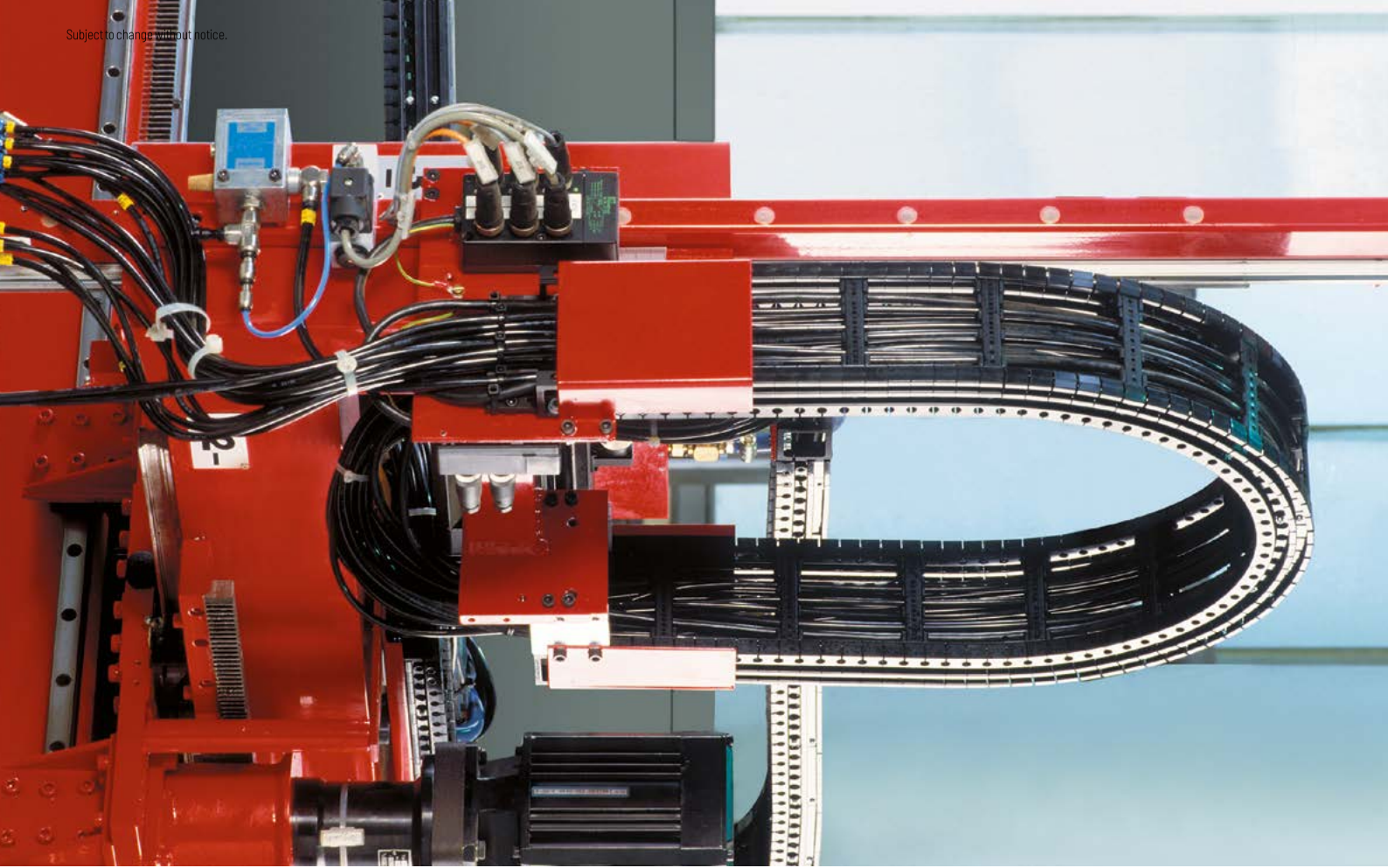
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

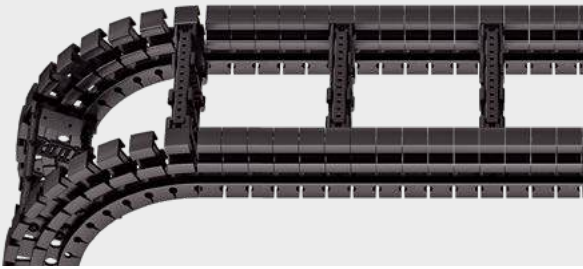
Subject to change without notice.



Q060 RE | Dimensions · Technical data

Plastic stay RE – frame screw-in stay

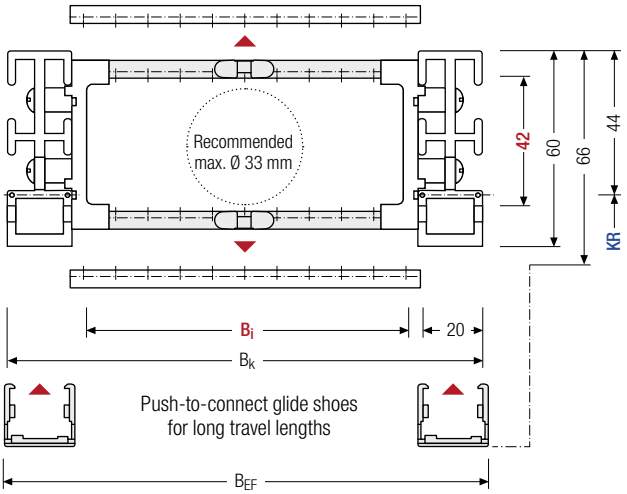
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm — B_i 68 – 276 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{3} \times 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
42	60	66	68	76	84	92	100	108	116	124	132	B_i + 52	B_i + 56	100	120	1.16 – 1.54
			140	148	156	164	172	180	188	196	204			150	190	
			212	220	228	236	244	252	260	268	276			250	300	

Order example

Q060	.	196	.	RE	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

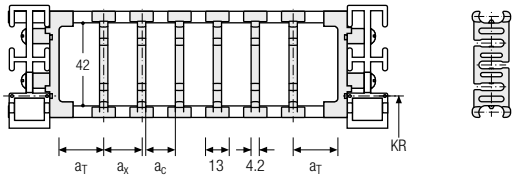
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	14	13	8.8	–	–
B	14	16	11.8	8	–

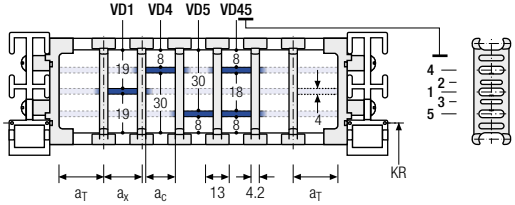
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	14	25	13	8.8	–	2

The dividers can be moved in the cross section.





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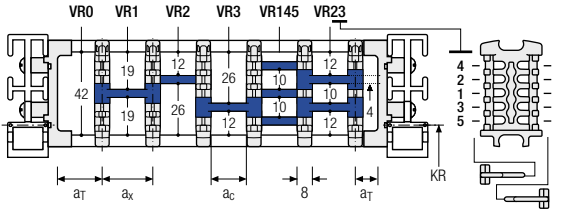
Subject to change without notice.

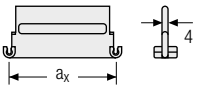
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	11	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.

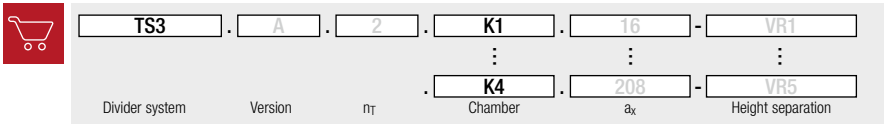


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR4 and VR5 are not possible when using twin dividers.

Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



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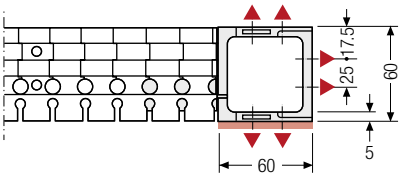
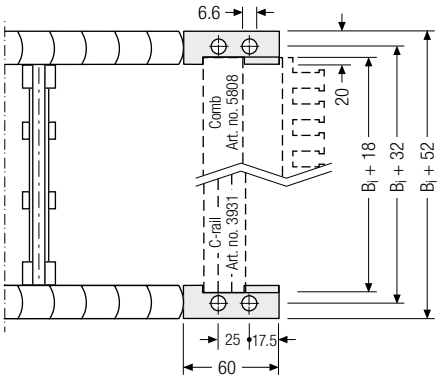
Subject to change without notice.

Universal end connectors UMB – plastic (standard)

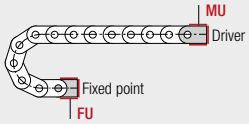
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
10 Nm



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Q080

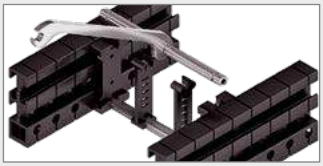
Pitch
25 mm

Inner height
58 mm

Inner widths
50 – 600 mm

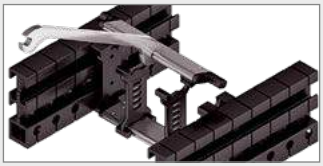
Bending radii
170 – 500 mm

Stay variants



Aluminum stay RS ..... page **524**

Frame stay, narrow "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV ..... page **528**

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE ..... page **532**

Frame screw-in stay
- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



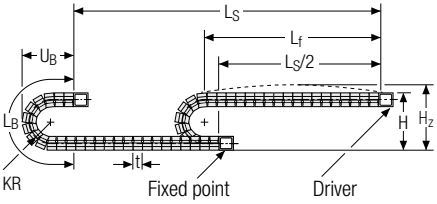
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at

tsubaki-kabelschlepp.com/traxline

Subject to change without notice.

Unsupported arrangement

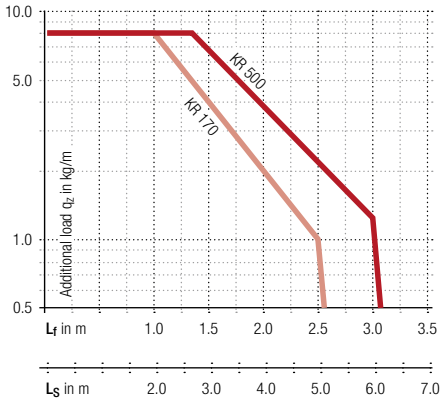


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
170	457	834	379
200	517	928	409
250	617	1085	459
320	757	1305	529
420	957	1619	629
500	1117	1870	709

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.5 kg/m. For other inner widths, the maximum additional load changes.



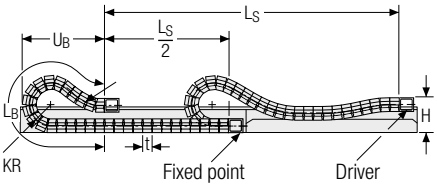
Speed
up to 25 m/s

Acceleration
up to 100 m/s²

Travel length
up to 6.4 m

Additional load
up to 8 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 80 m

Additional load
up to 8 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

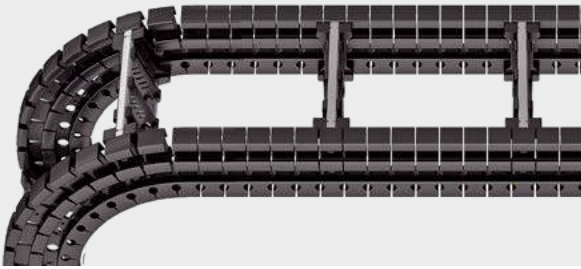
Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

Q080 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

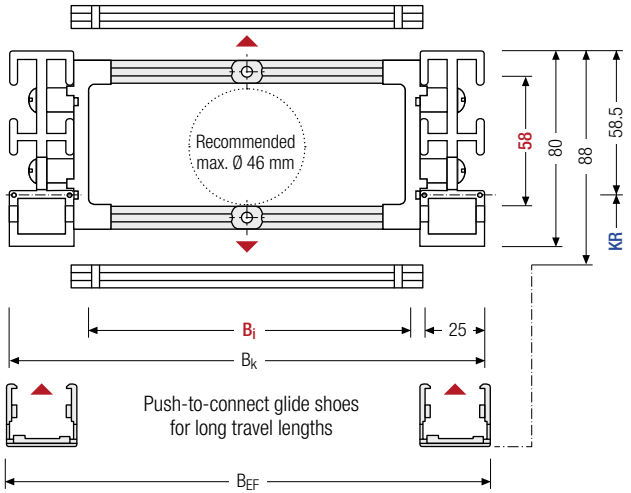
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 50 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	50 – 600	B_i + 72	B_i + 79.5	170	200	250	320	420	500	1.90 – 2.25

* in 1 mm width sections

Order example

Q080	.	400	.	RS	.	250	-	1600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

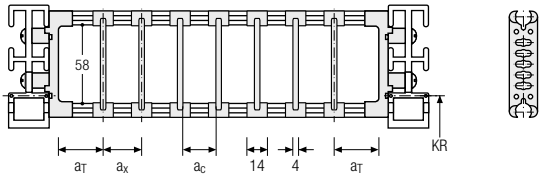
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	14	10	2

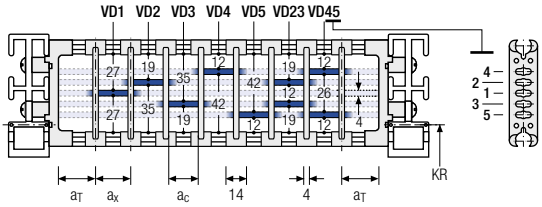
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	25	14	10	2

The dividers can be moved in the cross section.

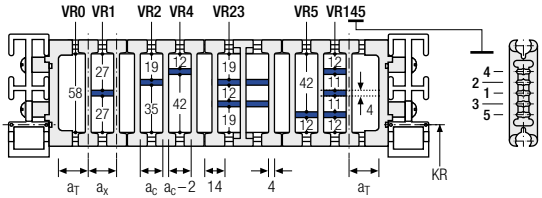


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	23	19	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Please note that the real dimensions may deviate slightly from the values indicated here.



TRAXLINE® cables for cable carriers

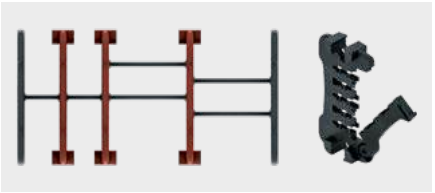
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

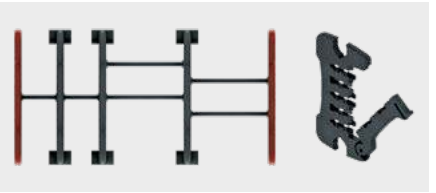
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



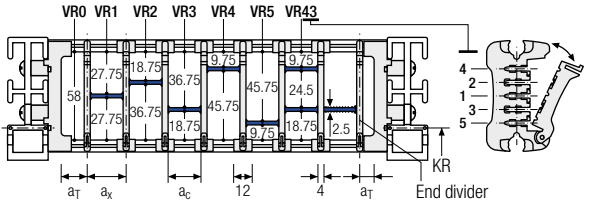
End divider

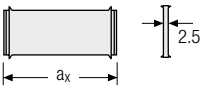


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	10.5 / 6.5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1....)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

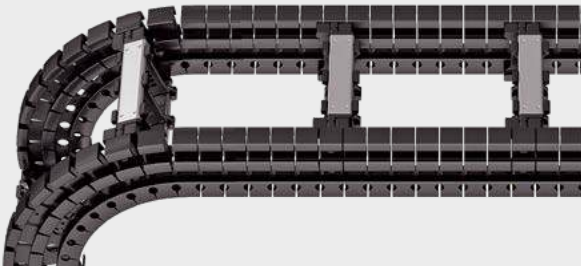
Subject to change without notice.

Subject to change without notice.



Aluminum stay RV –
Frame stay reinforced

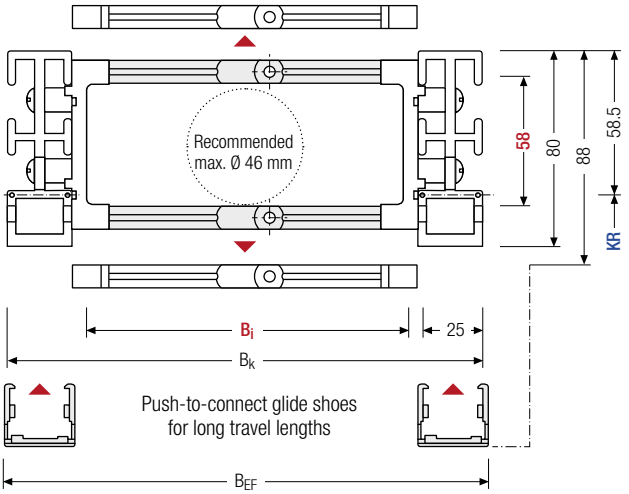
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm
B_i 50 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	50 – 600	B_i + 72	B_i + 79.5	170	200	250	320	420	500	2.10 – 2.90

* in 1 mm width sections

Order example

Q080	.	400	.	RV	.	250	-	1600	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

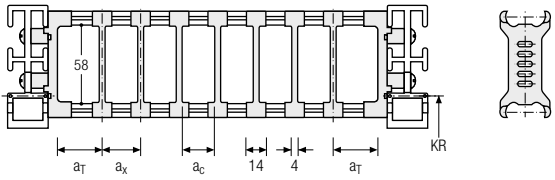
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	14	10	2

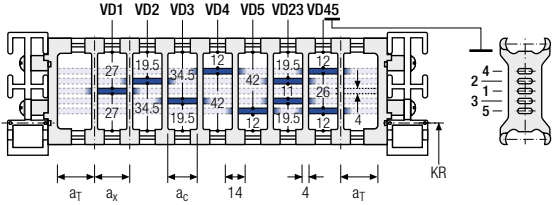
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	25	14	10	2

The dividers can be moved in the cross section.

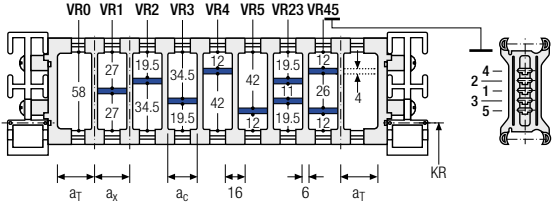


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



TRAXLINE® cables for cable carriers

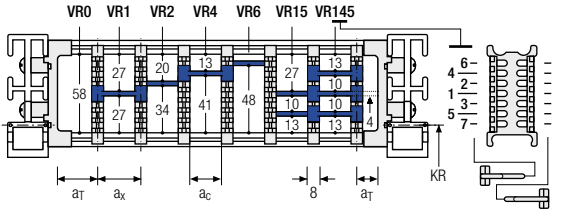
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

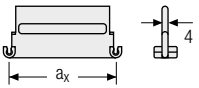
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR6 and VR7 are not possible when using twin dividers.

Order example

TS3	. A	. 3	. K1	. 16	- VR1
			⋮	⋮	⋮
			. K4	. 208	- VR7
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1....)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

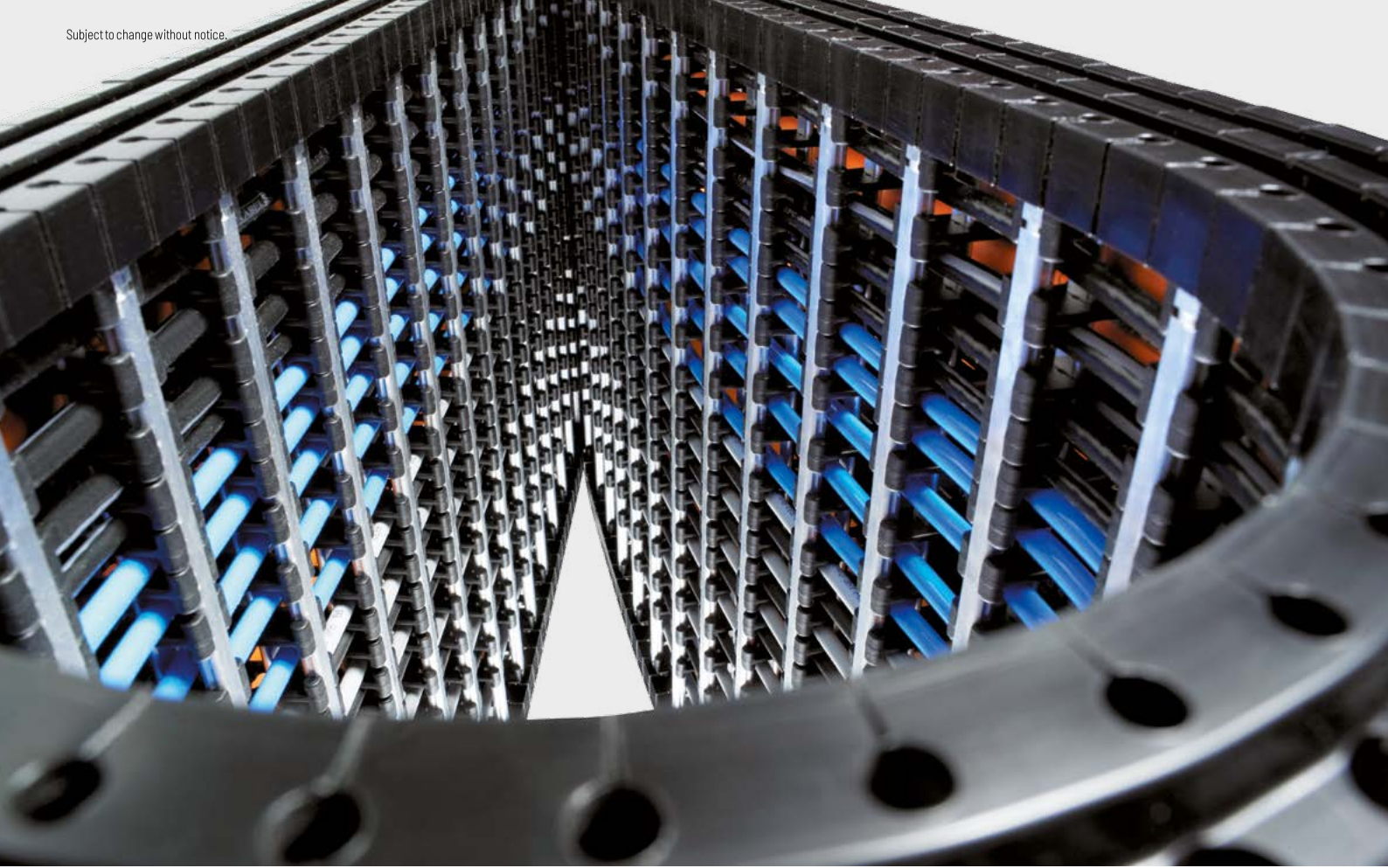
More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

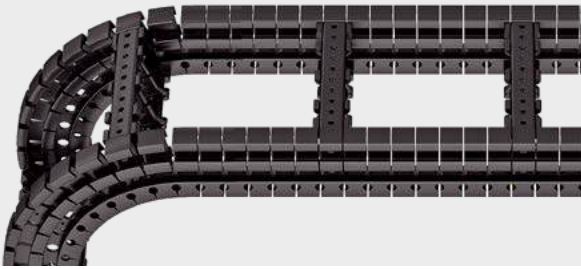
Subject to change without notice.



Q080 RE | Dimensions · Technical data

Plastic stay RE –
frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.

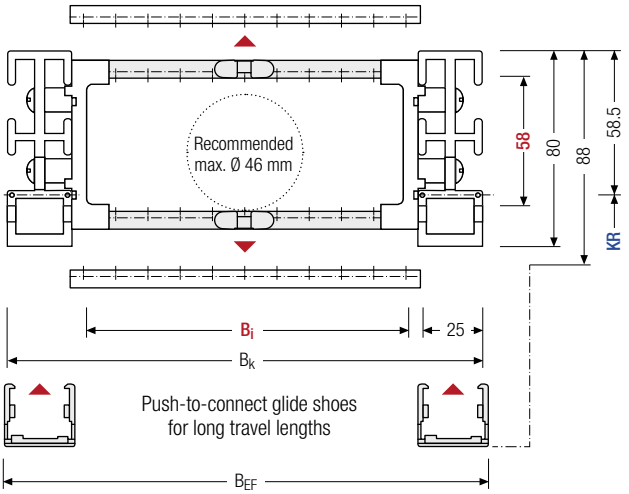


Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm

B_i 58 – 570 mm in **16 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
58	80	88	58	74	90	106	122	138	154	170	186	$B_i + 72$	$B_i + 79.5$	170	200	1.93 – 2.70
			202	218	234	250	266	282	298	314	330			250	320	
			346	362	378	394	410	426	442	458	474			420	500	
			490	506	522	538	554	570								

Order example

Q080	.	196	.	RE	.	250	-	1600	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

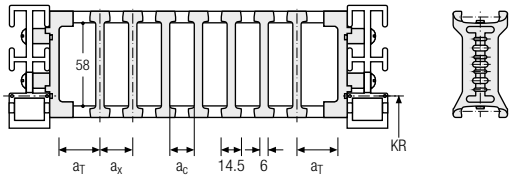
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	12	14.5	8.5	–	–
B	13	16	10	16	–

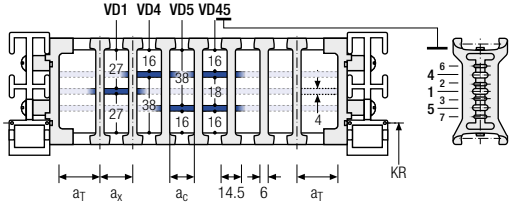
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [grid]	$n_{T\ min}$
A	12	25	14.5	8.5	–	2
B	13	25	16	10	16	2

The dividers are movable within the cross section (version A) or fixed (version B).

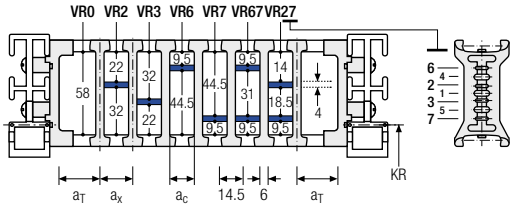


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	14.5*/21	8.5*/15	2
B	13	16*/32	10*/26	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).





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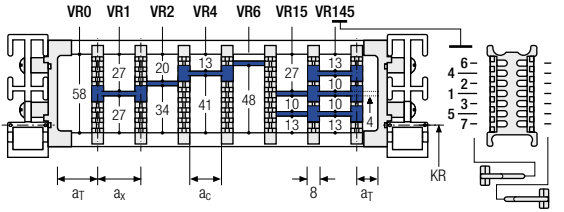
Subject to change without notice.

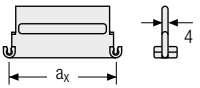
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	2	.	K1	.	16	-	VR1
						⋮		⋮		⋮
					.	K4	.	208	-	VR5
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1....)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



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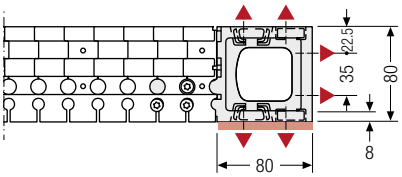
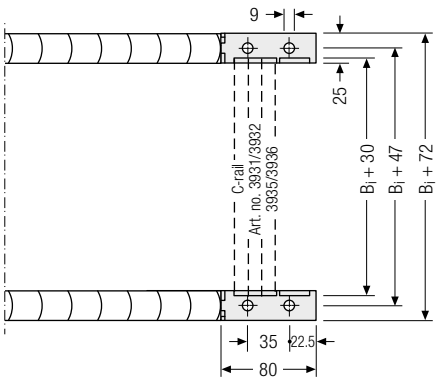
Subject to change without notice.

Universal end connectors UMB – plastic (standard)

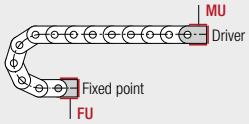
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
30 Nm for screws M8 - 8.8
18 Nm for screws M8 - 12.9



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Q100

Pitch
30 mm

Inner height
72 mm

Inner widths
70 – 600 mm

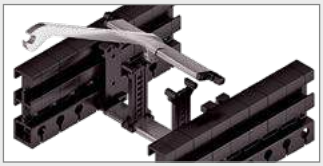
Bending radii
180 – 600 mm

Stay variants



Aluminum stay RS page 538

Frame stay, narrow "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV page 542

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 546

Frame screw-in stay
- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



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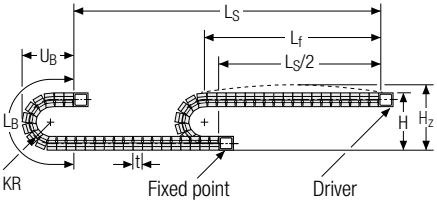
Subject to change without notice.

Unsupported arrangement

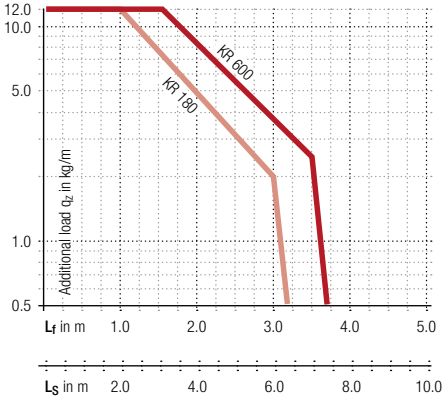


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
180	503	926	432
250	643	1145	502
300	743	1302	552
370	883	1522	622
460	1063	1805	712
600	1343	2244	852

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.25 kg/m. For other inner widths, the maximum additional load changes.



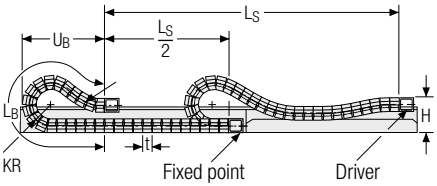
Speed
up to 20 m/s

Acceleration
up to 70 m/s²

Travel length
up to 7.8 m

Additional load
up to 12 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 95 m

Additional load
up to 12 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Subject to change without notice.

Aluminum stay RS –
frame stay narrow

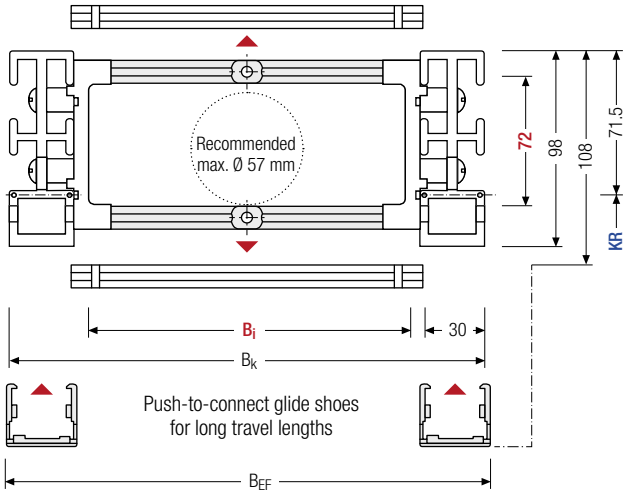
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 70 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	70 – 600	B_i + 82	B_i + 89.5	180	250	300	370	460	600	2.6 – 3.4

* in 1 mm width sections

Order example

Q100	.	400	.	RS	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

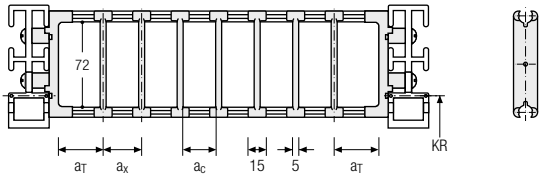
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	15	10	2

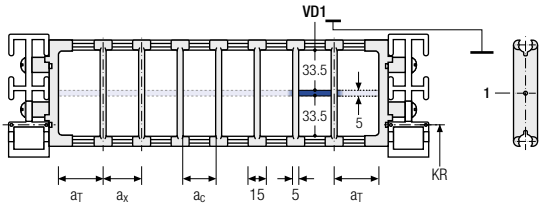
The dividers can be moved in the cross section.



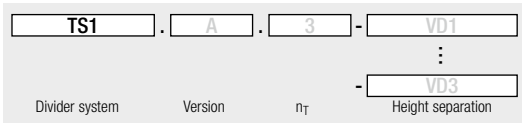
Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	25	15	10	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

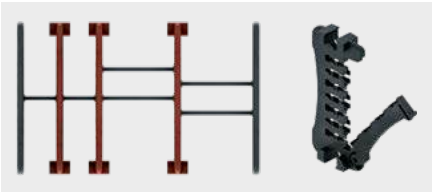
When using divider systems with height separation **(TS1)**, please additionally state the positions (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

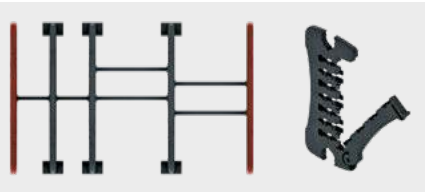
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



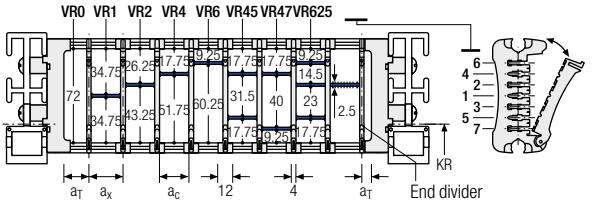
End divider

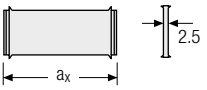


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	10.5 / 6.5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]																
a_C (nominal width of inner chamber) [mm]																
14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

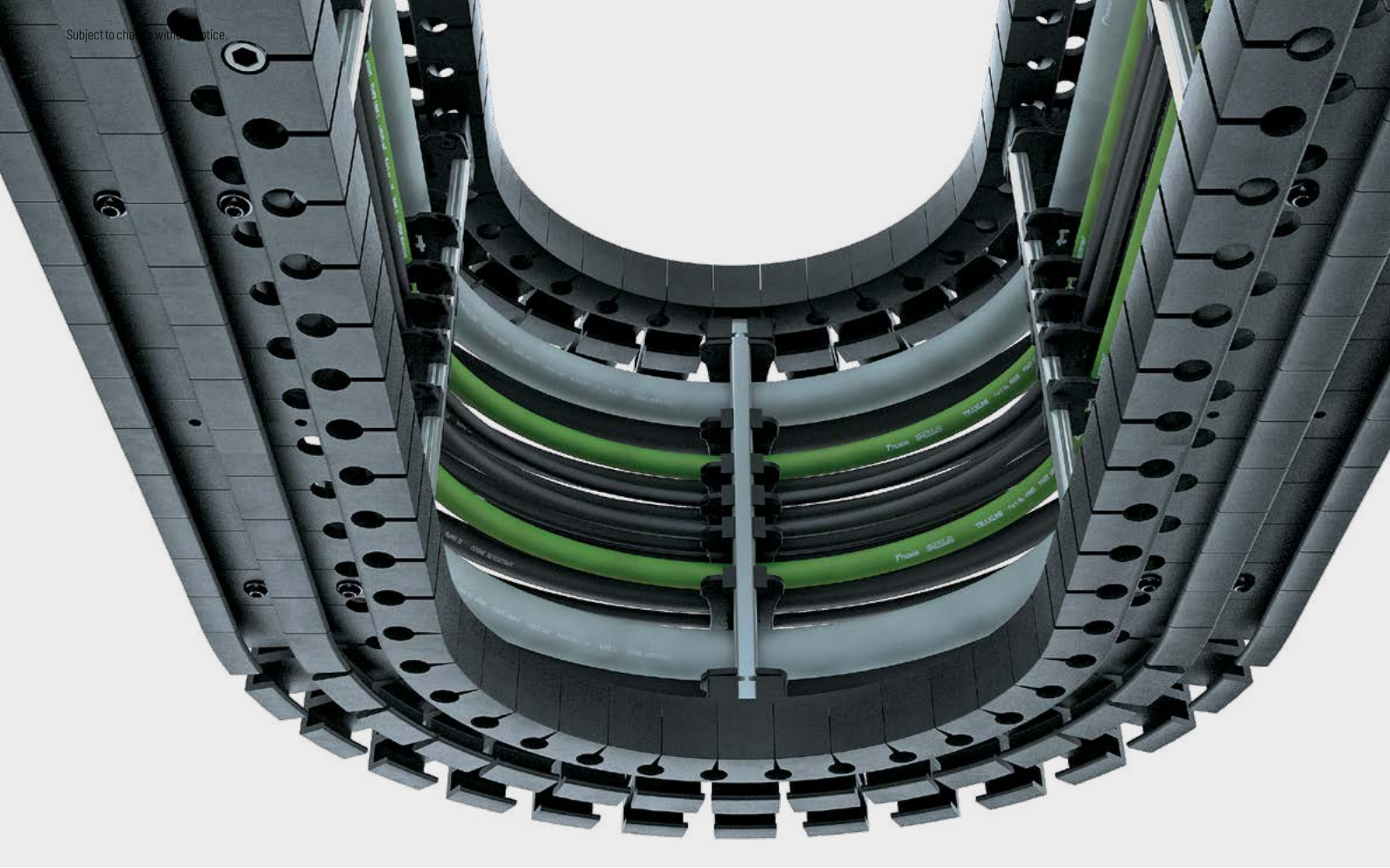
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice.



Aluminum stay RV –
Frame stay reinforced

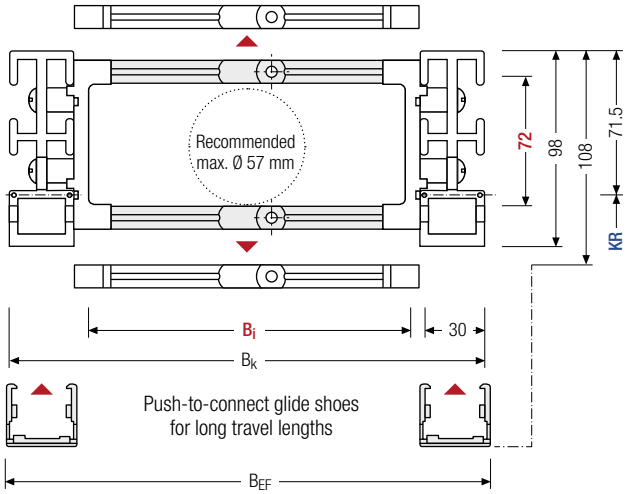
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm
B_i 70 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	70 – 600	B_i + 82	B_i + 89.5	180	250	300	370	460	600	2.8 – 4.6

* in 1 mm width sections

Order example

Q100	.	400	.	RV	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

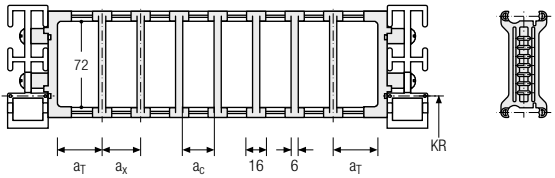
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	16	10	2

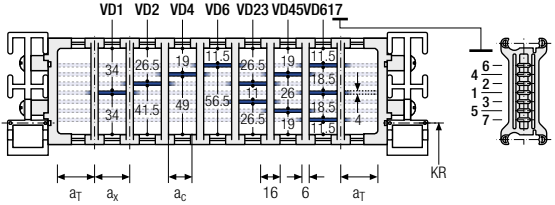
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	25	16	10	2

The dividers can be moved in the cross section.

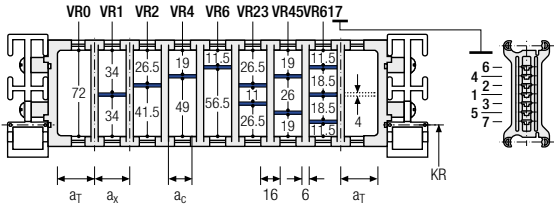


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 6 mm).



TRAXLINE® cables for cable carriers

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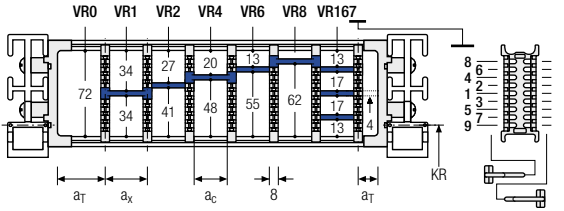
Subject to change without notice.

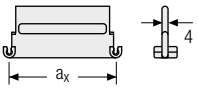
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16/42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Order example

TS3	. A	. 3	. K1	. 16	- VR1
			⋮	⋮	⋮
			. K4	. 208	- VR9
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

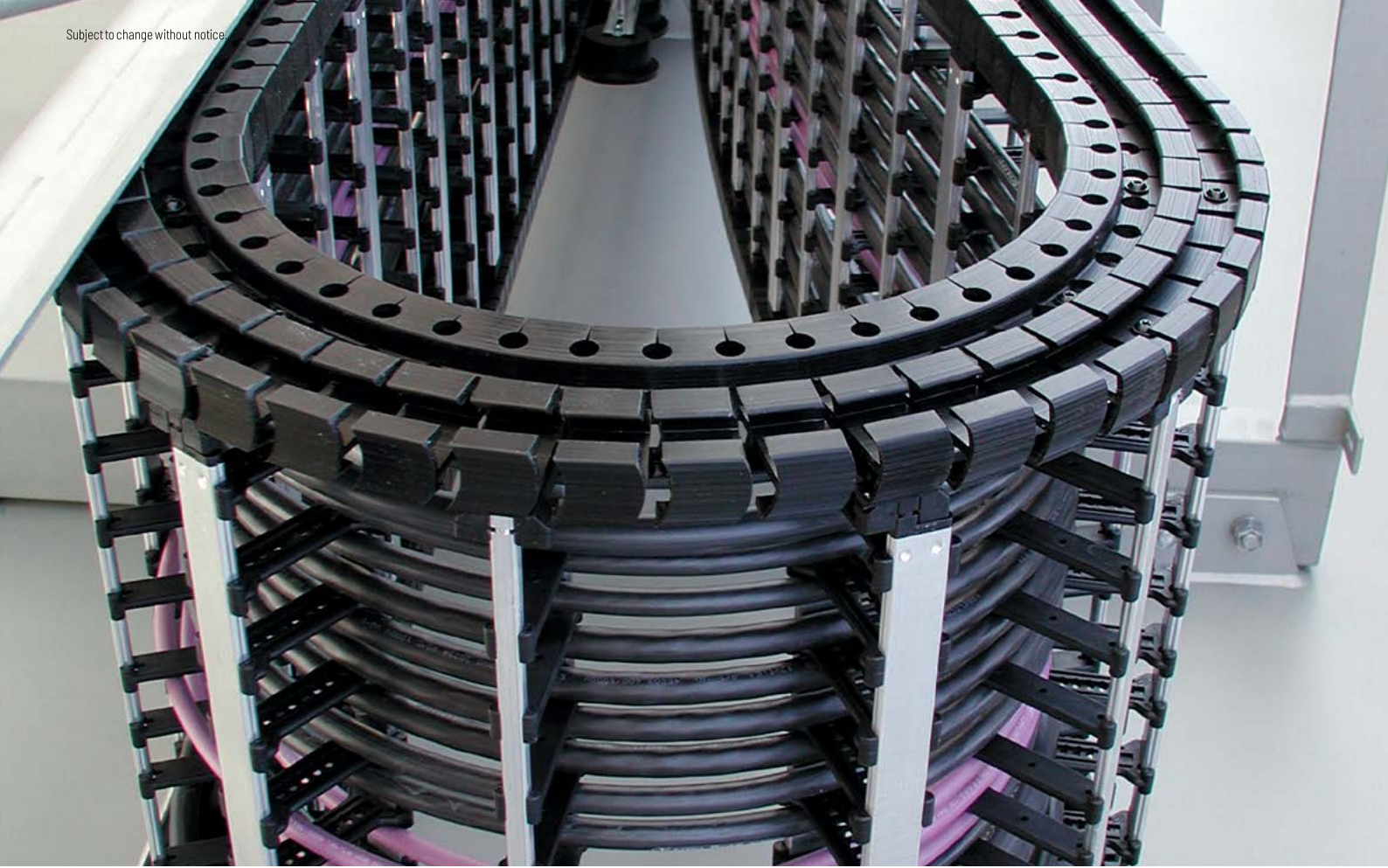
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.



Plastic stay RE – frame screw-in stay

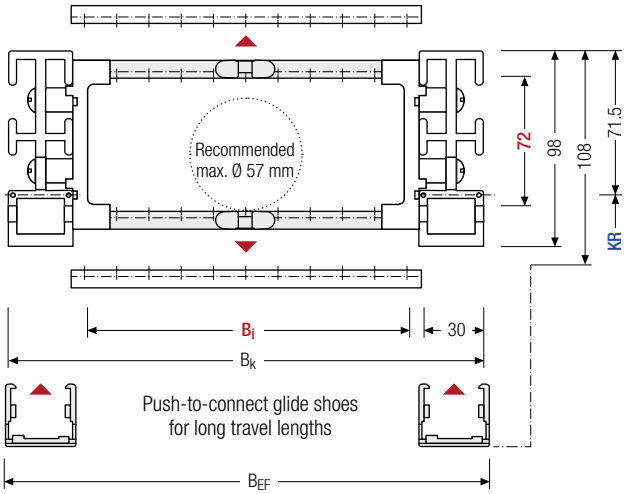
- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm — B_i 74 – 570 mm in **16 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
72	98	108	74	90	106	122	138	154	170	186	202	$B_i + 82$	$B_i + 89.5$	180	250	2.74 – 3.67
			218	234	250	266	282	298	314	330	346			300	370	
			362	378	394	410	426	442	458	474	490			460	600	
			506	522	538	554	570									

Order example

Q100	.	346	.	RE	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

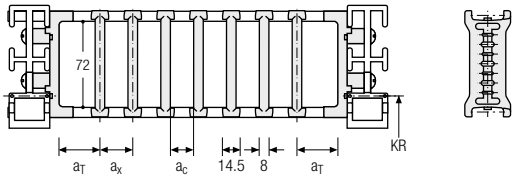
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	14.5	6.5	–	–
B	13	16	8	16	–

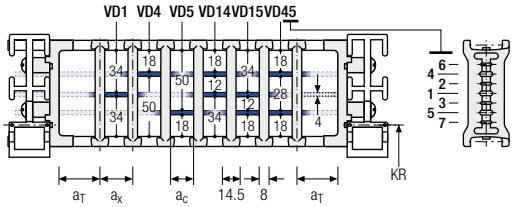
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	25	14.5	6.5	–	2
B	13	29	16	8	16	2

The dividers are movable within the cross section (version A) or fixed (version B).

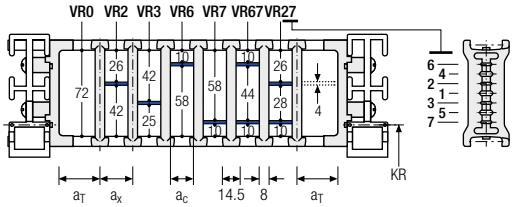


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	14.5*/20	6.5*/12	–	2
B	13	16*/32	8*/24	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are fixed by the height separation; the grid is movable in the cross section (version A) or fixed (version B).

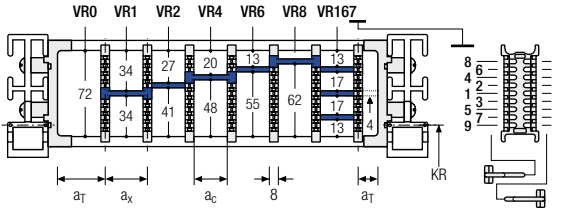


Subject to change without notice.

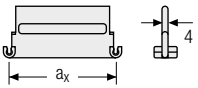
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16/42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.

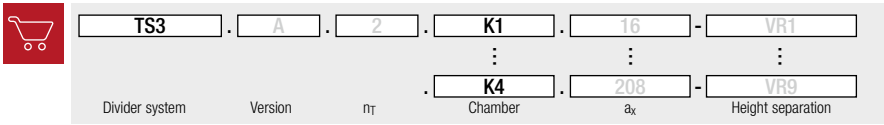


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.



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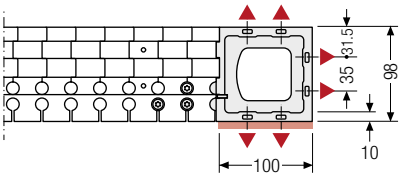
TRAXLINE® cables for cable carriers

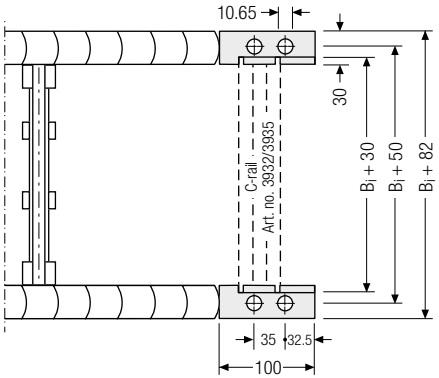
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

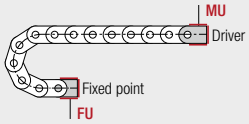
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
49 Nm for screws M10 - 8.8
55 Nm for screws M10 - 12.9



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

TKR series

Extremely quiet and low-vibration for highly dynamic applications*



product design award 2006

TSUBAKI ECO LINK

* Some features can be different for certain types for design reasons.

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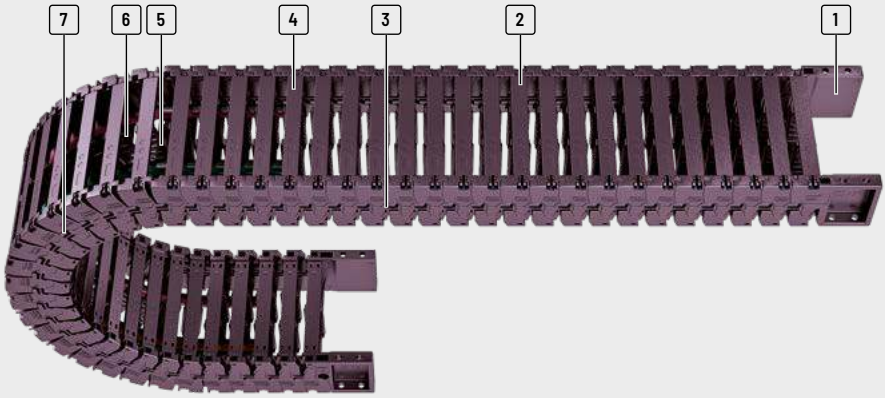
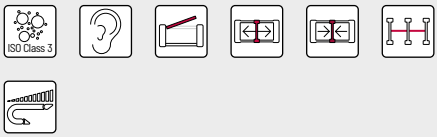
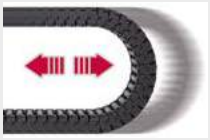


1 Variable connection for quick assembly
2 Easy and quick to open
3 Extremely quiet and low-vibration operation
4 Can be opened at any position
5 Fixable dividers
6 Many separation options for the cables
7 Chain link and joint connection with captive connection

Features

» Long service life
» Ideal for highly dynamic applications
» High side stability
» Cleanroom compatible (ISO Class 3)
» Modular design allows easy shortening and extending





Ideal for highly dynamic applications



UMB end connector to the connection from the face side, from the top or from the bottom



Molded, captive connecting elements

Subject to change without notice.

TKR series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKR0150											
		030	22	27.5	20 – 60	34 – 74	–	15	40 – 75	2	17.5
TKR0200											
		030	28	37	40 – 120	56 – 136	–	20	55 – 150	2.5	22
TKR0260											
		030	40	54	50 – 200	76 – 226	–	26	75 – 150	8	32
TKR0280											
		030	52	66	50 – 200	80 – 230	–	28	75 – 200	10	41
TKR0370											
		RE	28	35	40 – 80	59 – 99	–	37	55 – 100	2.4	25

* For values > 20 m/s², please contact us, we are happy to advise you.

Cleanroom compatible and long service life

The movable connectors are directly molded on the chain links. In contrast to conventional bore-hole bolt connections, hardly any wear occurs (link abrasion), which makes the TKR type excellent for use in clean rooms.

The special design of the connecting elements additionally increases the service life of the system.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1.75	5	200*	–	–	–	•	•	–	–	•	–	–	556
2.75	5	200*	–	–	–	•	•	–	–	•	–	–	562
3.9	5	200*	–	–	–	•	•	–	•	•	–	–	568
4.9	5	200*	–	–	–	•	•	–	•	•	–	–	574
2.8	5	200*	–	–	–	•	•	–	–	•	–	–	580

Ideal for highly dynamic applications

The TKR features extremely quiet and low-vibration operation. The so-called polygon effect is reduced to a minimum. Ideal areas of application are in particular in handling and assembly systems, robots, metrology devices, pick-and-place machines, printing and textile machines. Due to the **very quiet running**, the TKR types are ideal for **low-vibration applications with linear drives**.

Subject to change without notice.

TKR0150

Pitch
15 mm

Inner height
22 mm

Inner widths
20 – 60 mm

Bending radii
40 – 75 mm

Stay variants



Design 030 ..... page **556**

Frame with outside detachable crossbar

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable.



TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

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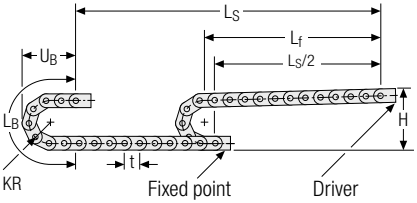
TKR0150 | Installation dim. | Unsupported

Unsupported arrangement

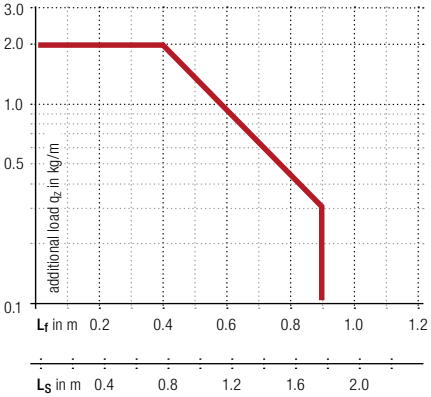


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
40	120	156	70
50	140	187	80
75	190	266	105

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.3 kg/m at B_i 20 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 1.75 m

Additional load
up to 2.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

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TKR0150.030 | Dimensions · Technical data

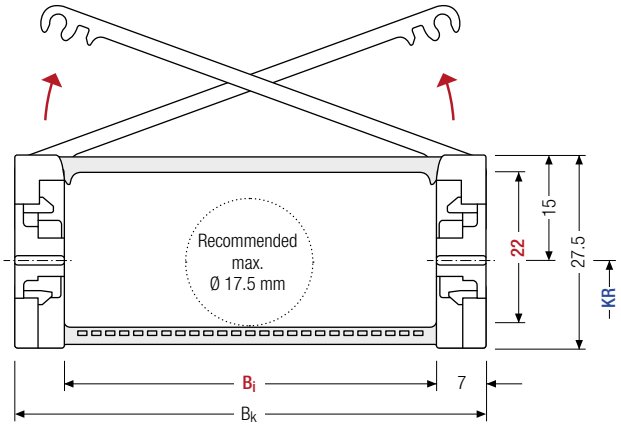
Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 20 – 60 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for even number of chain links

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]			q_k [kg/m]
22	27.5	20	40	60	$B_i + 14$	40	50	75	0.3 – 0.5

Order example

TKR0150	.	60	.	030	.	75	-	800	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

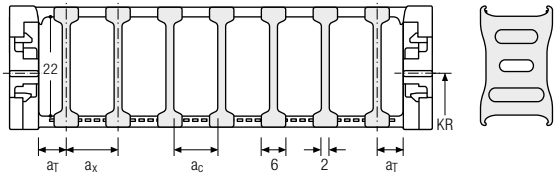
As standard, the divider system is mounted on every 2nd chain link

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The arresting cams click into place in the locking grids in the crossbars **(version B)**.

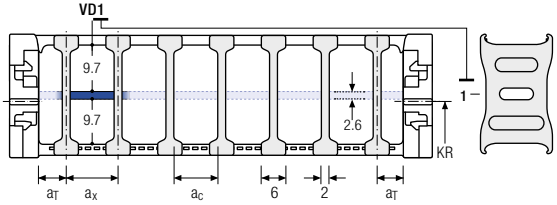
Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	5	6	4	–	–
B	6	6	4	2	–



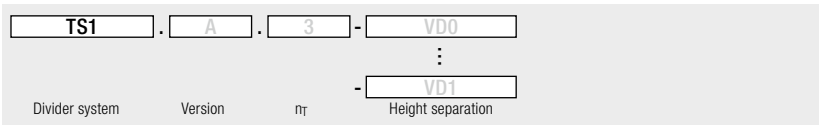
Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	5	6	4	–	2
B	6	6	4	2	2



Order example





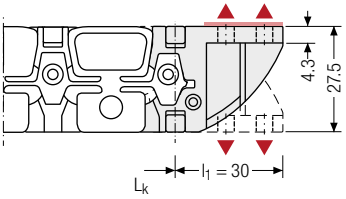
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

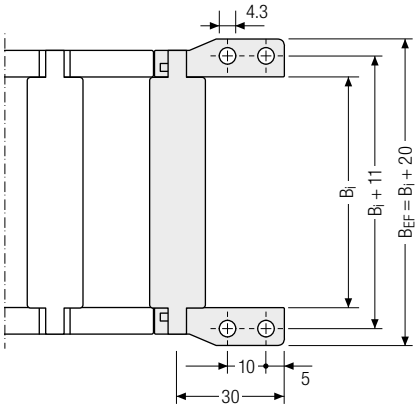
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

One-part end connectors – plastic

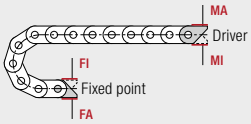
The plastic end connectors can be **connected from above or from below**. The connection type can be changed by changing the orientation of the end connector.





▲ Assembly options

Recommended tightening torque:
0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

Plastic	.	F	A
Plastic	.	M	A
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice



TKR0200

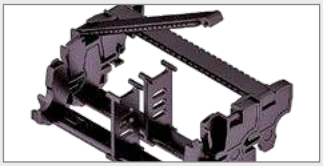
Pitch
20 mm

Inner height
28 mm

Inner widths
40 – 120 mm

Bending radii
55 – 150 mm

Stay variants



Design 030 ..... page **562**

Frame with outside detachable crossbar

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable
- **Inside:** detachable

Fraunhofer IPA TESTED® DEVICE
TSUBAKIMOTO CHAIN CO.
TKR0200WS0855
Report No. KA 1008-531



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

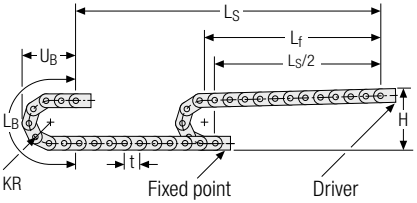


TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Unsupported arrangement

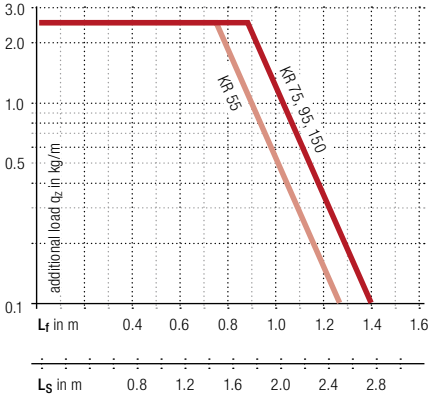


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
55	182	253	116
75	222	316	136
95	262	379	156
150	372	552	211

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.6 kg/m at B_i 40 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 2.75 m

Additional load
up to 2.5 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

TKR0200.030 | Dimensions · Technical data

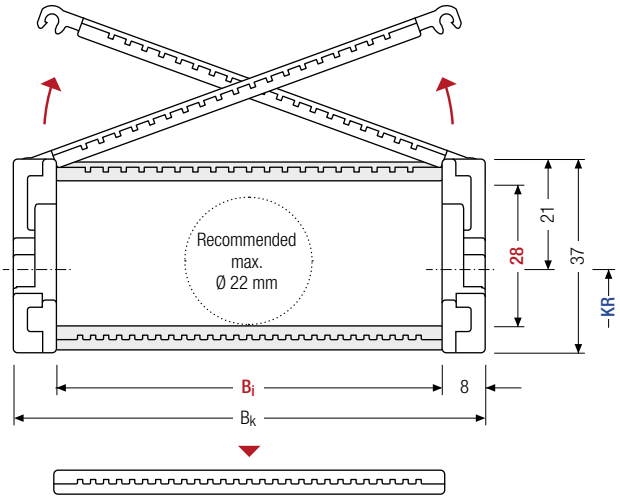
Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable
- **Inside:** detachable



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 40 – 120 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]				q_k [kg/m]
28	37	40	50	60	80	100	120	B_i + 16	55	75	95	150	0.6 – 1.0

Order example

TKR0200	.	80	.	030	.	95	-	800	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

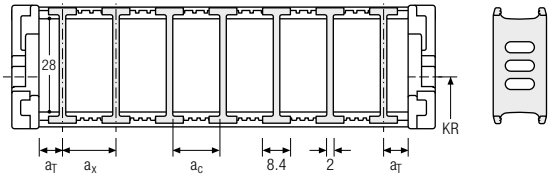
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	4	8	6	–	–
B		8	6	4	–

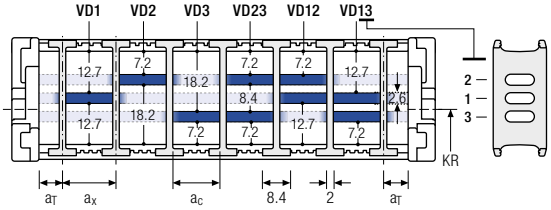
B_i [mm]	40	50	60	80	100	120
$a_{T\ min}$ [mm]	4	5	6	4	6	6



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	4	8	6	–	2
B		8	6	4	2

B_i [mm]	40	50	60	80	100	120
$a_{T\ min}$ [mm]	4	5	6	4	6	6



Order example



TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

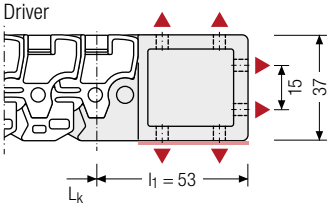
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

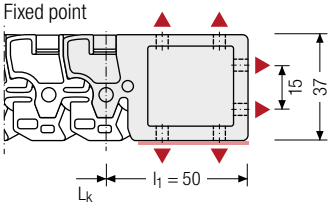
UMB end connectors UMB – plastic

The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

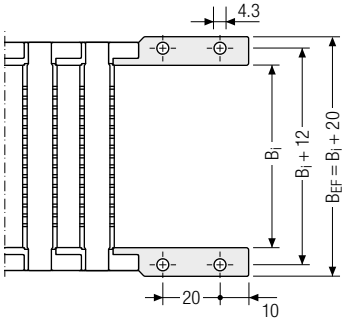
Driver



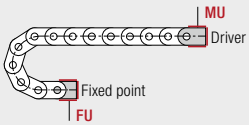
Fixed point



▲ Assembly options



Recommended tightening torque: 0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to changes without notice.



TKR0260

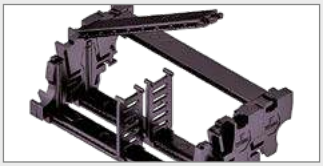
Pitch
26 mm

Inner height
40 mm

Inner widths
50 – 200 mm

Bend radii
75 – 150 mm

Stay variants



Design 030 ..... page **568**

Frame with outside detachable crossbar

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable
- **Inside:** detachable



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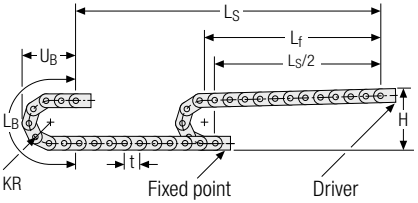
Subject to change without notice.

Unsupported arrangement

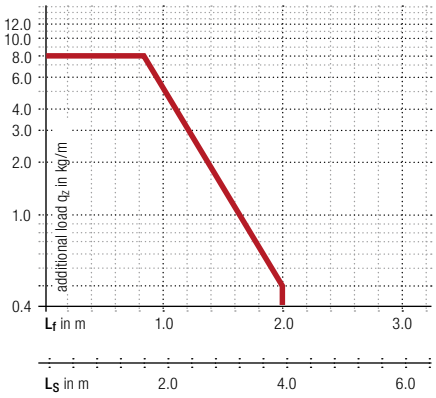


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
75	238	340	156
100	288	418	181
125	338	497	206
150	388	575	231

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.5 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 3.9 m

Additional load
up to 8.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

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TKR0260.030 | Dimensions · Technical data

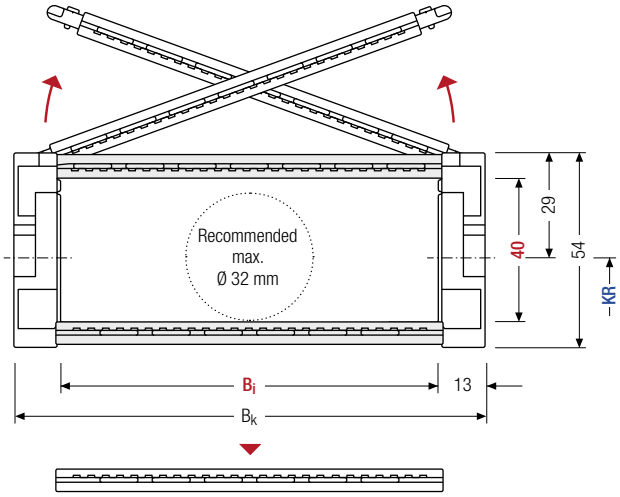
Stay variant 030 – with outside opening and detachable crossbars



- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable
- **Inside:** detachable

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 200 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]								B_k [mm]	KR [mm]				q_k [kg/m]
40	54	50	62	75	87	100	125	150	200	B_i + 26	75	100	125	150	1.5 – 2.7

Order example

TKR0260	.	100	.	030	.	125	-	800	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

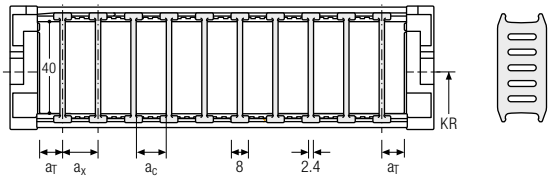
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	n_T min
A	3	8	5.6	–	–
B	•	8	5.6	4	–

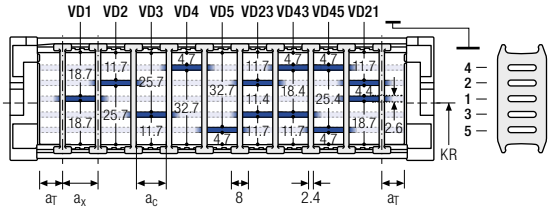
B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	n_T min
A	3	8	5.6	–	2
B	•	8	5.6	4	2

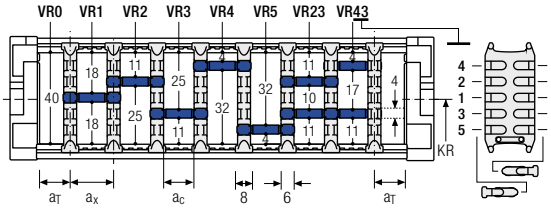
B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



Divider system TS3 with height separation made of aluminum partitions

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	n_T min
A	3	26	20	–	2
B	•	28	22	4	2

B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



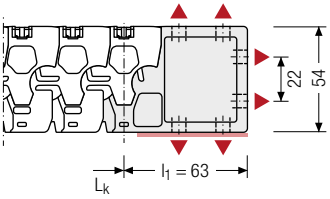
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

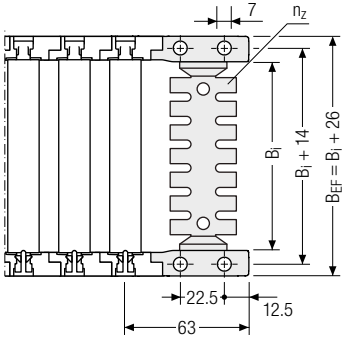
Aluminum section subdivisions are only available with $a_x > 26$ mm .

Subject to change without notice.

UMB end connectors UMB – plastic

The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

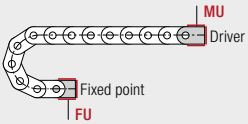




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
50	76	2 x 3
62	88	–
75	101	2 x 5
87	113	–
100	126	2 x 7
125	151	2 x 9
150	176	2 x 11
200	226	–

Recommended tightening torque: 0.6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Subject to change without notice.
Subject to change.



TKR0280

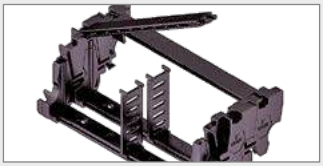
Pitch
28 mm

Inner height
52 mm

Inner widths
50 – 200 mm

Bending radii
75 – 200 mm

Stay variants



Design 030 ..... page **574**

Frame with outside detachable crossbar

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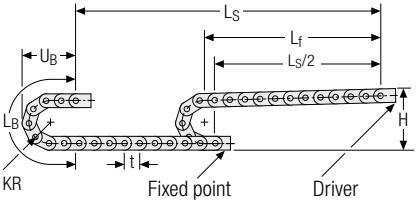
Unsupported arrangement

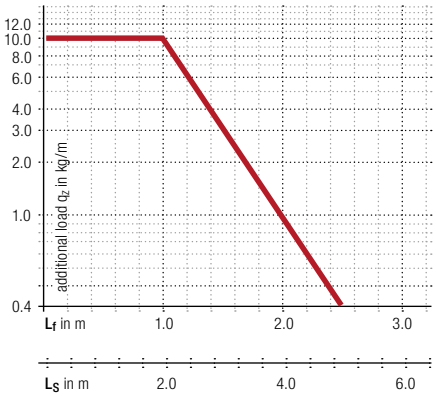


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
75	252	348	167
100	302	427	192
150	402	584	242
200	502	741	292

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.0 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 4.9 m

Additional load
up to 10.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

TKR0280.030 | Dimensions · Technical data

Stay variant 030 – with outside opening and detachable crossbars



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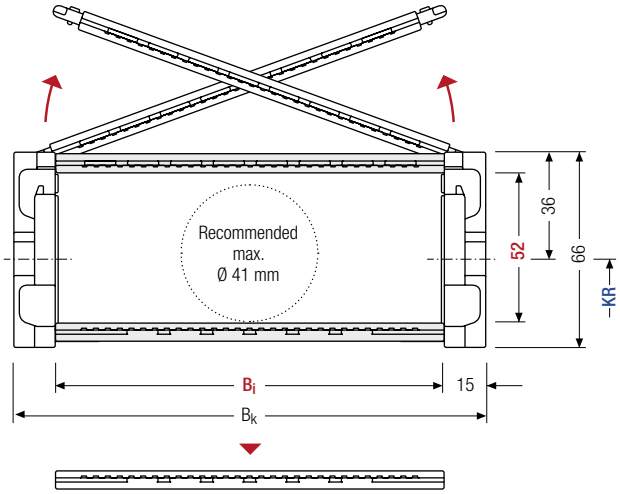
- **Outside:** Swivable and detachable
- **Inside:** detachable

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 200 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]								B_k [mm]	KR [mm]				q_k [kg/m]
52	66	50	62	75	87	100	125	150	200	B_i + 30	75	100	150	200	2.0 – 3.2

Order example

TKR0280	.	100	.	030	.	150	-	840	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

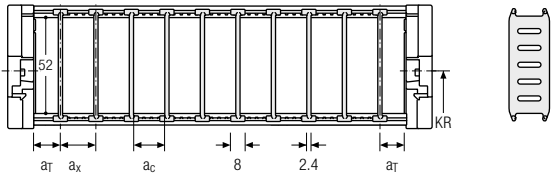
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	3	8	5.6	–	–
B	•	8	5.6	4	–

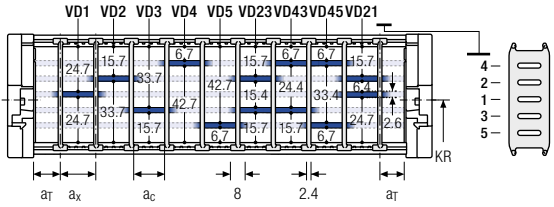
B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	3	8	5.6	–	2
B	•	8	5.6	4	2

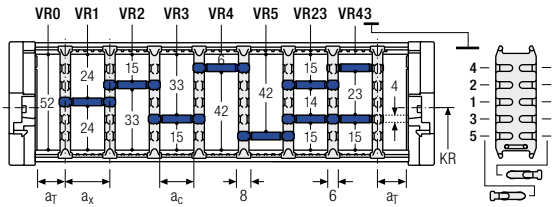
B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



Divider system TS3 with height separation made of aluminum partitions

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	3	26	20	–	2
B	•	28	22	4	2

B_i [mm]	50	62	75	87	100	125	150	200
$a_{T\ min}$ [mm]	5	7	5.5	3.5	6	6.5	7	4



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

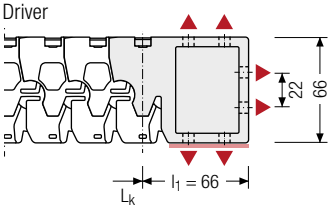
Aluminum section subdivisions are only available with $a_x > 26$ mm .

Subject to change without notice.

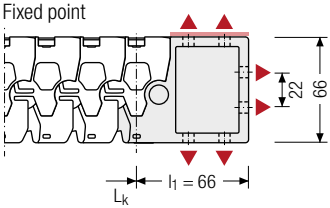
UMB end connectors UMB – plastic

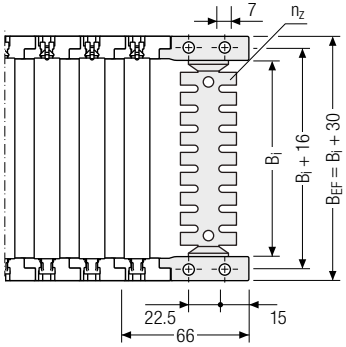
The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

Driver



Fixed point

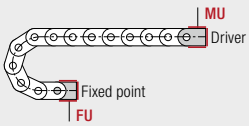




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
50	80	2 x 3
62	92	–
75	105	2 x 5
87	117	–
100	130	2 x 7
125	155	2 x 9
150	180	2 x 11
200	230	–

Recommended tightening torque: 0.6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.



TKR0370

Pitch
37 mm

Inner height
28 mm

Inner widths
40 – 80 mm

Bending radii
55 – 100 mm

Stay variants



Plastic stay RE ..... page **580**

Frame screw-in stay

- Plastic stay for light to medium loads. Assembly without screws.
- **Outside/inside:** to open by rotating.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

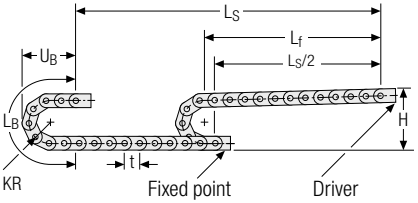


TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Unsupported arrangement

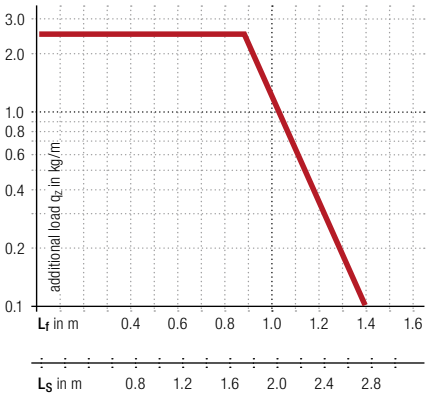


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
75	252	348	167
100	302	427	192
150	402	548	242
200	502	741	292

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.55 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 2.8 m

Additional load
up to 2.4 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



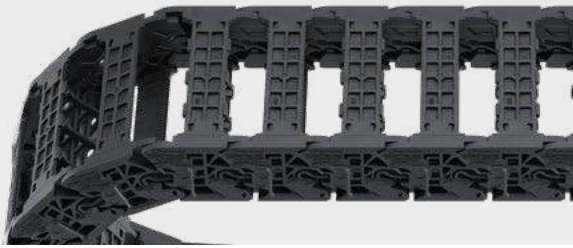
Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

TKR0370 RE | Dimensions · Technical data

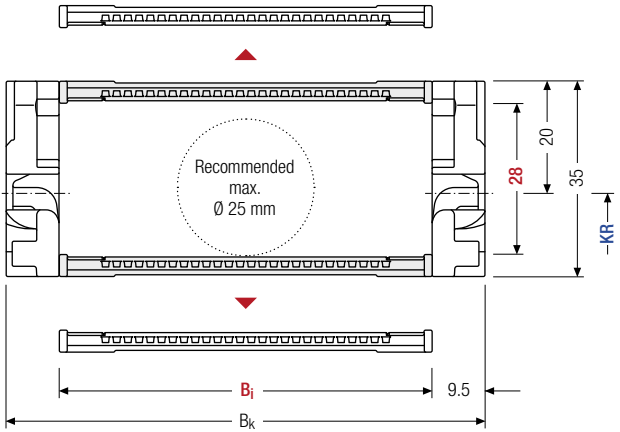
Plastic stay RE –
screw-in frame stay

- Plastic stay for light and medium loads. Assembly without screws.
- Available in 5 widths.
- **Outside/inside:** to open by rotating.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 40 – 80 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]			q_k [kg/m]
28	35	40	50	60	70	80	B_i + 19	55	75	100	0.53 – 0.61

Order example

TKR0370	.	80	.	RE	.	75	-	703	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

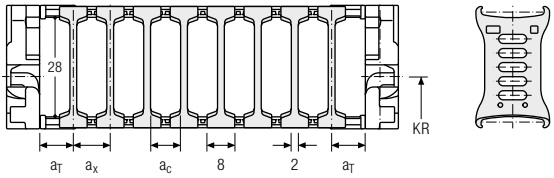
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	a_X Raster [mm]	n_T min
A	7.5	8	6	–	–
B		8	6	2	–

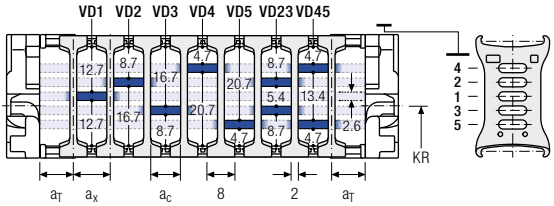
B_i [mm]	40	50	60	70	80
$a_{T\ min}$ [mm]	8	9	8	9	8



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	a_X Raster [mm]	n_T min
A	7.5	8	6	–	2
B		8	6	2	2

B_i [mm]	40	50	60	70	80
$a_{T\ min}$ [mm]	8	9	8	9	8



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

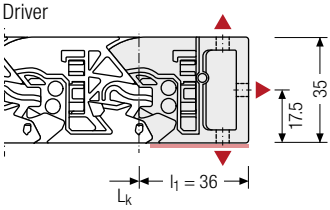
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

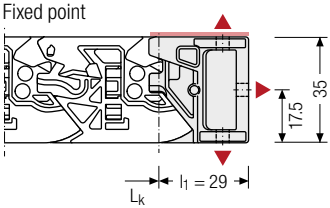
UMB end connectors UMB – plastic

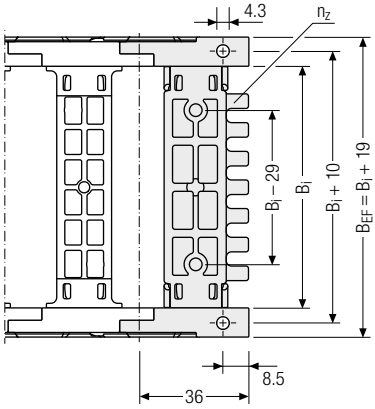
The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

Driver



Fixed point

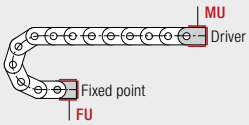




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
40	59	3
50	69	4
60	79	5
70	89	6
80	99	7

Recommended tightening torque: 0.6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Subject to change without notice.



TUBES-PLASTIC

Covered solid plastic and hybrid cable carriers

These covered product types ensure optimum protection of the cables and hoses against chips and other dirt. Variable separations within the cable carrier allow reliable and efficient partitioning. Hoses ans cables with larger diameters can also be accommodated and guided.

- Covered cable carriers with plastic or aluminum cover systems
- Aluminum cover systems in 1 mm width sections
- To protect cables and hoses against chips or dirt
- Easy and quick to open inside and outside



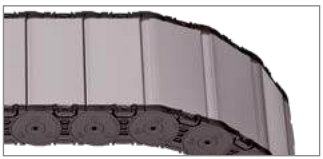
TKA series ..... Page **586**

Chip-tight right to the end



UAT series ..... Page **618**

Extremer Leitungsschutz in rauen Umgebungsbedingungen



MT series ..... Page **628**

Variable, closed cable carrier with extensive range of accessories

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration. Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!





XLT series ..... Page **674**

Tubes with variable cable carrier widths

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

TKA series

Chip-tight right to the end



TKA55 product design award 2013

TKA55* IP54 getestet & bescheinigt tested & attested TÜV NORD

TKA55 German Design Award NOMINEE 2014

TSUBAKI ECO LINK

* Refers to type TKA55 with Bi 50 – 175.
More information on certification can be found at:
tsubaki-kabelschlepp.com/tka-ip54

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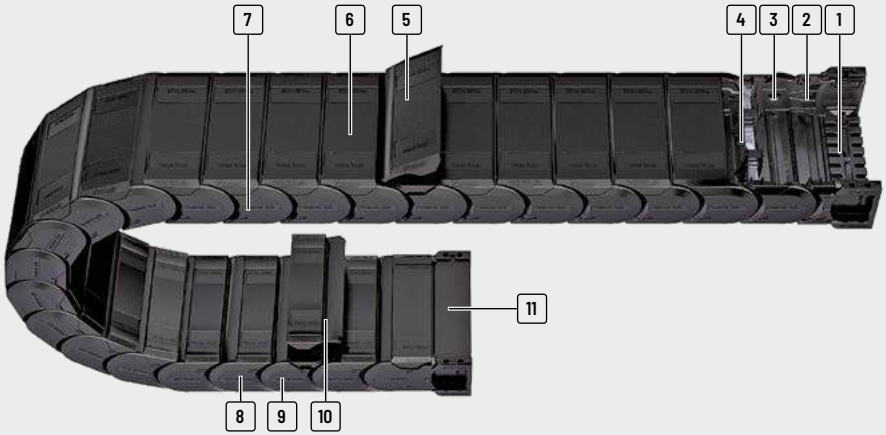


1 End connectors with optional strain relief

2 Interior gentle on the cables without projecting edges

3 Integrated noise damping

4 Dividers and height separations for separating the cables

5 Quick and easy opening from any position

6 Secure cover attachment even under severe stresses (e.g. from hydraulic lines)

7 Chain links made of glass-fiber reinforced plastic

8 Bolt/hole connection and stroke system covered completely

9 Designs with inward or outward opening crossbars

10 Covers completely detachable on one side

11 Cover sheet for universal end connectors

Features

» Excellent cable protection in the connector area

» Chip and dirt resistant due to smooth surfaces

» Extensive unsupported length

» High torsional rigidity

» Low noise emission

» Easy-to-open cover with simultaneously high retention force on the chain link during operation

» Measurement scale for easy alignment of the dividers

» TKA55: IP54 tested and certified*





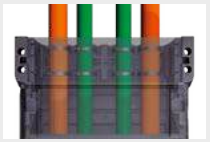
Optimized utilization of the interior space; vertical and horizontal inner distribution possible



Easy-open covers from any position offer secure fastening



Triple-stroke system for extensive unsupported length



Universal end connector with option for integrating strain relief elements

Subject to change without notice.

TKA series | Overview

Type		Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKA30												
			060	20.5	28.5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
			080	20.5	28.5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
TKA38												
			060	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
			080	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
TKA45												
			060	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28.5
			080	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28.5
TKA55												
			060	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36
			080	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36

Subject to change without notice.

TKA series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
3.5	10	50	80	2.5	25	•	•	–	–	•	•	–	592
3.5	10	50	80	2.5	25	•	•	–	–	•	•	–	593
3.9	10	50	120	2.5	20	•	•	–	–	•	•	–	598
3.9	10	50	120	2.5	20	•	•	–	–	•	•	–	599
4.7	9	45	125	3	20	•	•	–	•	•	•	–	604
4.7	9	45	125	3	20	•	•	–	•	•	•	–	605
6.5	8	40	150	3	15	•	•	–	•	•	•	–	612
6.5	8	40	150	3	15	•	•	–	•	•	•	–	613

Subject to change without notice.

TKA30

Pitch
30.5 mm

Inner height
20.5 mm

Inner widths
15 – 65 mm

Bending radii
55 – 180 mm

Stay variants



Design 060 page **592**

Covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



Design 080 page **593**

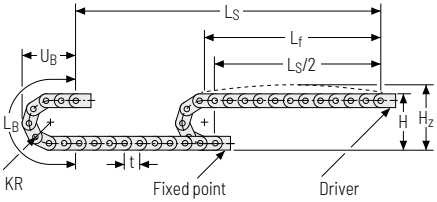
Covered on both sides with outside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Outside:** very quick release.

Subject to change without notice.

TKA30 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

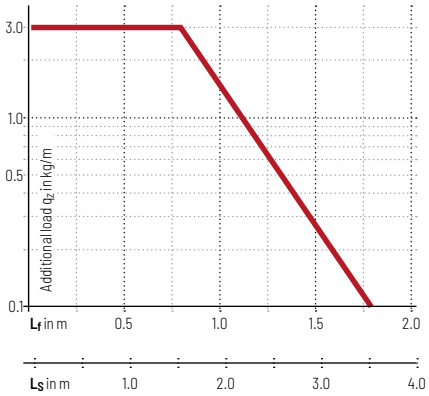


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
55	139	164	234	100
75	179	204	297	120
95	219	244	359	140
125	279	304	454	170
145	319	344	516	190
180	389	414	626	225

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.67 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



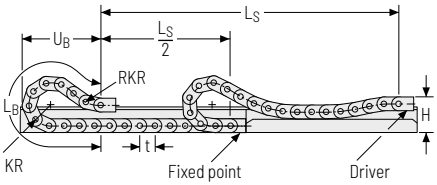
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 3.5 m

Additional load
up to 3 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 3 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Subject to change without notice.

TKA30.060 | Dimensions · Technical data

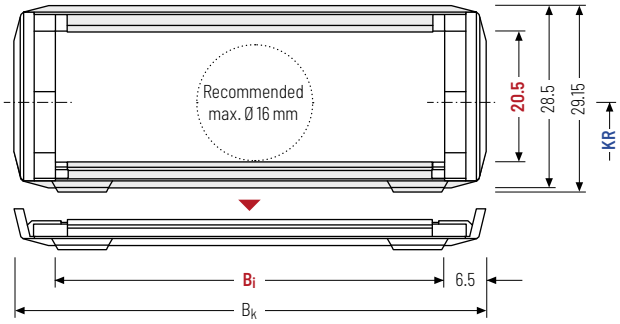
Stay variant 060 – covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]			q_k [kg/m]
20.5	28.5	29.15	15	20	25	B_i + 13	55	75	95	0.48 – 0.76
			38	50	65		125	145	180	

Order example

TKA30	.	060	.	50	.	125	-	915		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

TKA30.080 | Dimensions · Technical data

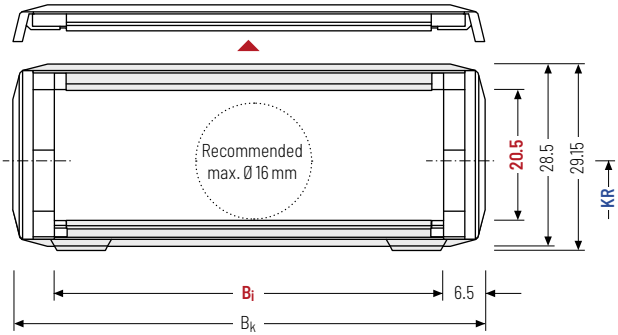
Stay variant 080 – covered on both sides with outside detachable cover



- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 15 – 65 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]			q_k [kg/m]
20.5	28.5	29.15	15 38	20 50	25 65	B_i + 13	55 125	75 145	95 180	0.48 – 0.76

Order example

TKA30	.	080	.	50	.	125	-	915		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

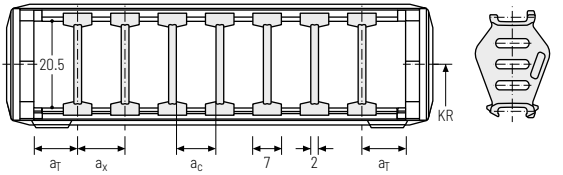
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3.5	7	5	–	–
B		8	6	2	–

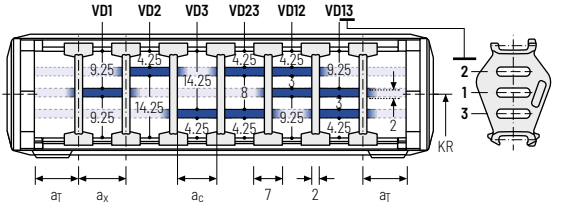
B_i [mm]	15	20	25	38	50	65
$a_{T\,min}$ [mm]	7.5	8	8.5	9	9	8.5



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3.5	7	5	–	2
B		8	6	2	2

B_i [mm]	15	20	25	38	50	65
$a_{T\,min}$ [mm]	7.5	8	8.5	9	9	8.5



Order example



TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

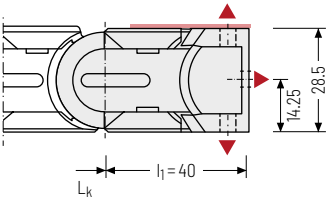
Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

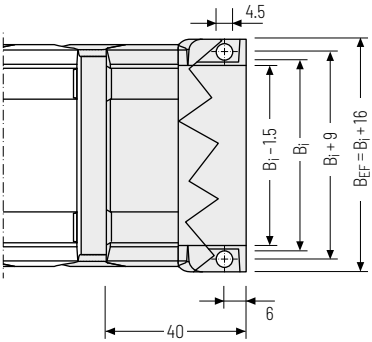
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

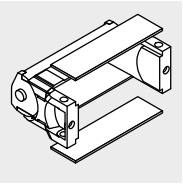
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.



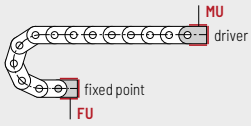


▲ Assembly options

Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 12



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 924.

Subject to change without notice.

TKA38

Pitch
38.5 mm

Inner height
26 mm

Inner widths
25 – 130 mm

Bending radii
70 – 230 mm

Stay variants



Design 060 ..... page **598**

Covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



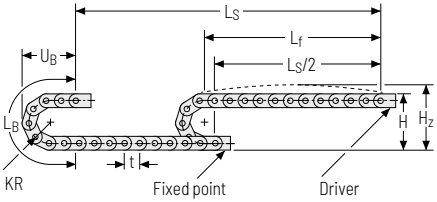
Design 080 ..... page **599**

Covered on both sides with outside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Outside:** very quick release.

Subject to change without notice.

Unsupported arrangement

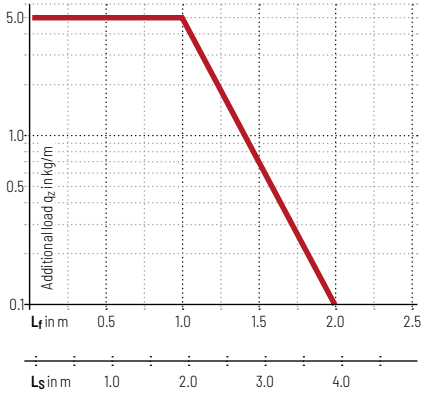


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
70	176	201	297	127
95	226	251	375	152
120	276	301	454	177
145	326	351	532	202
170	376	401	611	227
195	426	451	689	252
230	496	521	799	287

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.13 kg/m at B_i 78 mm. For other inner widths, the maximum additional load changes.



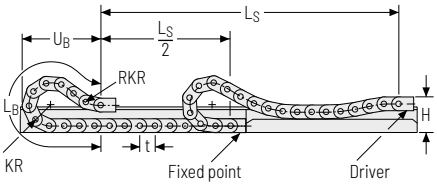
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 3.9 m

Additional load
up to 5 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 20 m/s²

Travel length
up to 120 m

Additional load
up to 5 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Subject to change without notice.

TKA38.060 | Dimensions · Technical data

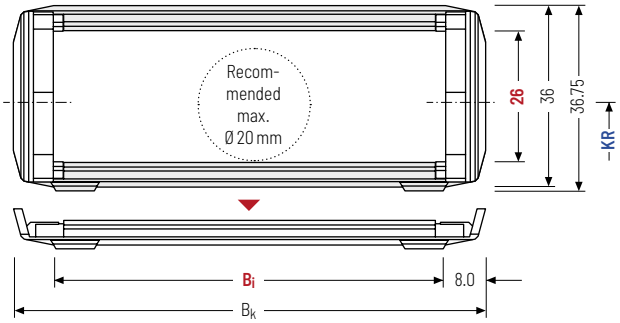
Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 130 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
26	36	36.75	25 78	38 103	58 130	B_i + 16	70 170	95 195	120 230	145	0.77 – 1.47

Order example

TKA38	.	060	.	78	.	145	-	1155	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

TKA38.080 | Dimensions · Technical data

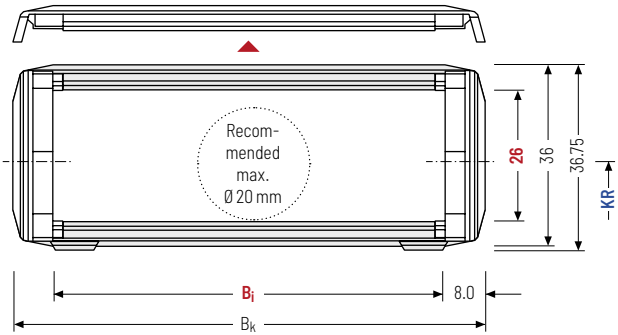
Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 25 – 130 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
26	36	36.75	25	38	58	B_i + 16	70	95	120	145	0.77 – 1.47
			78	103	130		170	195	230		

Order example

TKA38	.	080	.	78	.	145	-	1155	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

TKA38 | Inner distribution | TS0 · TS1

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

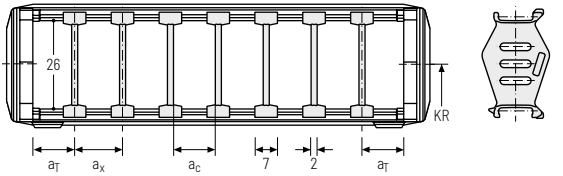
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3.5	7	5	–	–
B		8	6	2	–

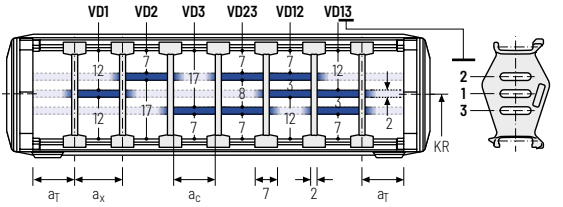
B_i [mm]	**25**	**38**	**58**	**78**	**103**	**130**
$a_{T\,min}$ [mm]	8.5	9	9	9	7.5	9



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3.5	7	5	–	2
B		8	6	2	2

B_i [mm]	**25**	**38**	**58**	**78**	**103**	**130**
$a_{T\,min}$ [mm]	8.5	9	9	9	7.5	9



Order example



TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

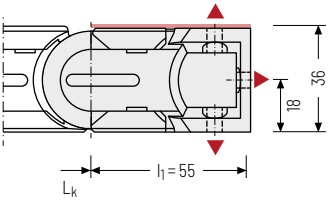
Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

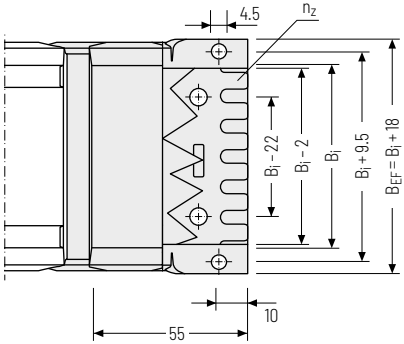
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

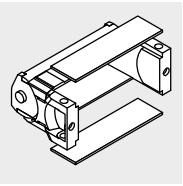




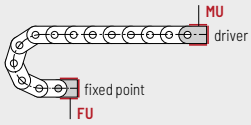
▲ Assembly options

Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 20

B_i [mm]	B_{EF} [mm]	n_z
25	43	2
38	56	3
58	76	5
78	96	7
103	121	9
130	148	11



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Subject to change without notice.

TKA45

Pitch
45.5 mm

Inner height
36 mm

Inner widths
50 – 150 mm

Bending radii
82 – 230 mm

Stay variants



Design 060 ..... page **604**

Covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



Design 080 ..... page **605**

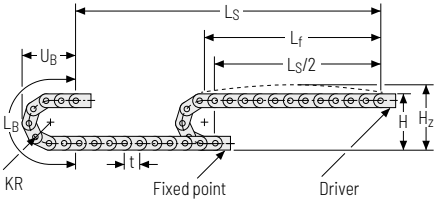
Covered on both sides with outside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Outside:** very quick release.

Subject to change without notice.

TKA45 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

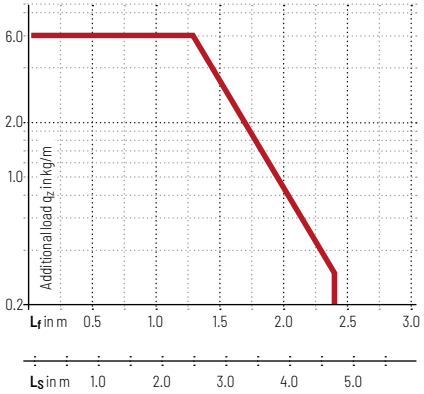


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
82	214	249	348	153
95	240	275	389	166
125	300	335	483	196
145	340	375	546	216
170	390	425	625	241
200	450	485	719	271
230	520	555	814	301

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.29 kg/m at B_i 150 mm. For other inner widths, the maximum additional load changes.



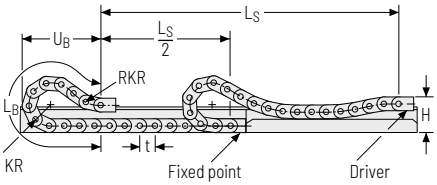
Speed
up to 9 m/s

Acceleration
up to 45 m/s²

Travel length
up to 4.7 m

Additional load
up to 6 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 20 m/s²

Travel length
up to 125 m

Additional load
up to 6 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Subject to change without notice.

TKA45.060 | Dimensions · Technical data

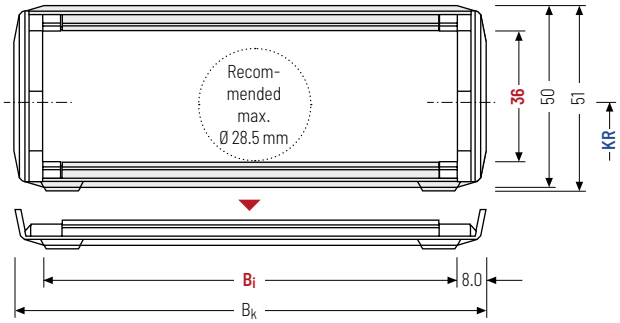
Stay variant 060 – covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 150 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
36	50	51	50	75	100	B_i + 16	82	95	125	145	1.34 – 2.29
			125	150			170	200	230		

Order example

TKA45	.	060	.	125	.	170	-	1456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

TKA45.080 | Dimensions · Technical data

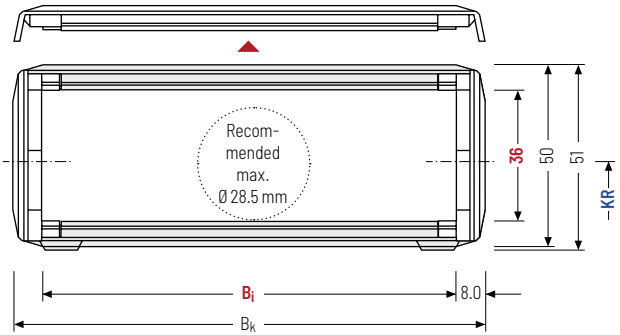
Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 150 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
36	50	51	50	75	100	B_i + 16	82	95	125	145	1.34 – 2.29
			125	150			170	200	230		

Order example

TKA45	.	080	.	125	.	170	-	1456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

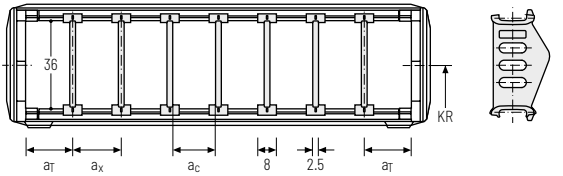
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	4	8	5.5	–	–
B		8	5.5	2	–

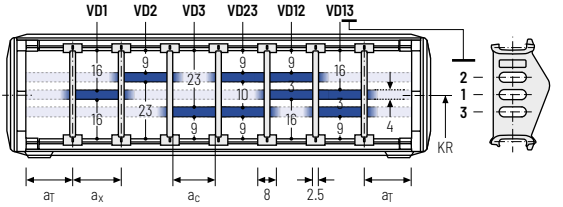
B_i [mm]	50	75	100	125	150
$a_{T\,min}$ [mm]	11	11.5	12	12.5	11



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	4	8	5.5	–	2
B		8	5.5	2	2

B_i [mm]	50	75	100	125	150
$a_{T\,min}$ [mm]	11	11.5	12	12.5	11



Order example



TS1 . A . 3 - VD0 ⋮ - VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard. the divider **A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section. **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider version A



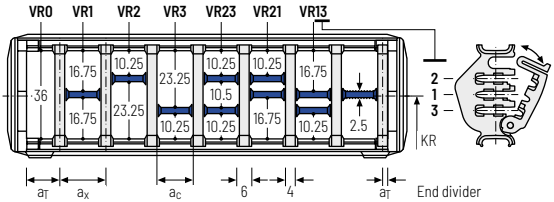
End divider

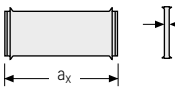


Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions. the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]																
a_c (nominal width of inner chamber) [mm]																
14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1....)**. version and number of dividers per cross section [n_T]. In addition. please also enter the chambers [K] from left to right. as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

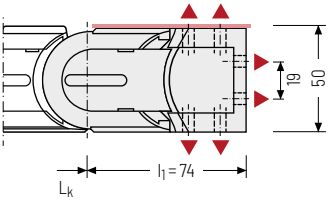
Subject to change without notice.

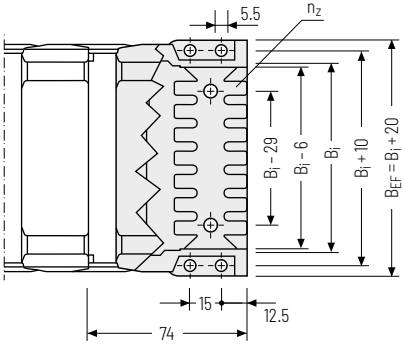


Subject to change without notice

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

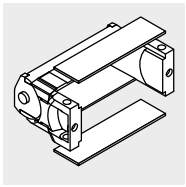




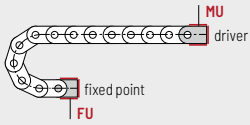
▲ Assembly options

Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

B_i [mm]	B_{EF} [mm]	n_z
50	70	2 x 3
75	95	2 x 5
100	120	2 x 7
125	145	2 x 9
150	170	2 x 11



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Subject to change without notice.

TKA55

Pitch
55.5 mm

Inner height
45 mm

Inner widths
50 – 250 mm

Bending radii
100 – 300 mm

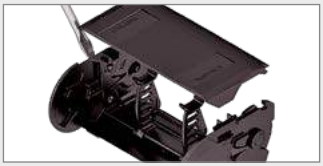
Stay variants



Design 060 ..... page **612**

Covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



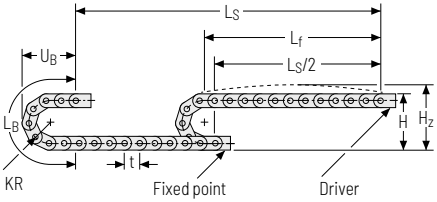
Design 080 ..... page **613**

Covered on both sides with outside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Outside:** very quick release.

Subject to change without notice.

Unsupported arrangement

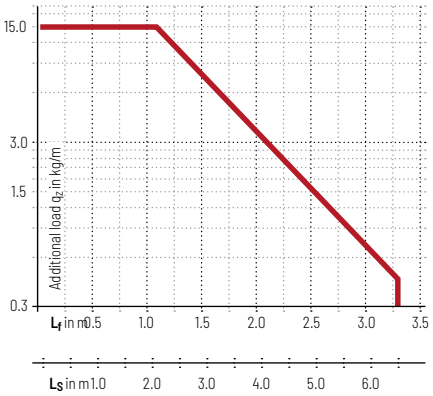


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
100	264	304	425	188
120	304	344	488	208
140	344	384	551	228
170	404	454	645	258
195	454	494	725	283
225	514	554	818	313
250	564	604	896	338
300	664	704	1211	388

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.95 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



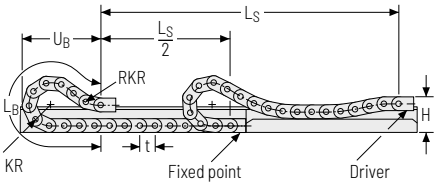
Speed
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 6.5 m

Additional load
up to 15 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 15 m/s²

Travel length
up to 150 m

Additional load
up to 15 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Subject to change without notice.

TKA55.060 | Dimensions · Technical data

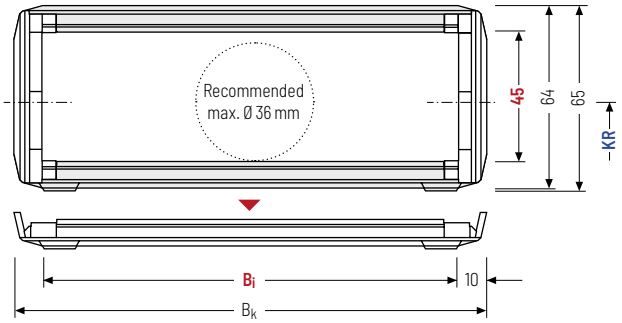
Stay variant 060 – covered on both sides with inside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips or spray water.
» Fully detachable on one side in any position.
» **Inside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	KR [mm]				q_k [kg/m]
45	64	65	50	75	100	125	150	B_i + 20	100	120	140	170	1.95 – 4.28
			175	200	225	250			195	225	250	300	

Order example

TKA55	.	060	.	200	.	225	-	2553	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

TKA55.080 | Dimensions · Technical data

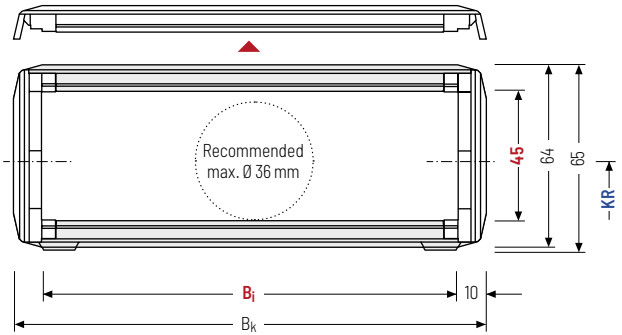
Stay variant 080 – covered on both sides with outside detachable cover



- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 50 – 250 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]					B_k [mm]	KR [mm]				q_k [kg/m]
45	64	65	50	75	100	125	150	B_i + 20	100	120	140	170	1.95 – 4.28
			175	200	225	250			195	225	250	300	

Order example

TKA55	.	080	.	200	.	225	-	2553	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

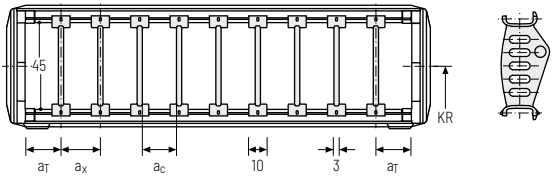
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	5	10	7	–	–
B		10	7	2	–

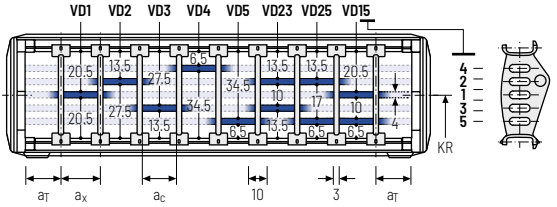
B_i [mm]	50	75	100	125	150
$a_{T\,min}$ [mm]	13	11.5	12	12.5	13
B_i [mm]	175	200	225	250	
$a_{T\,min}$ [mm]	11.5	12	12.5	13	



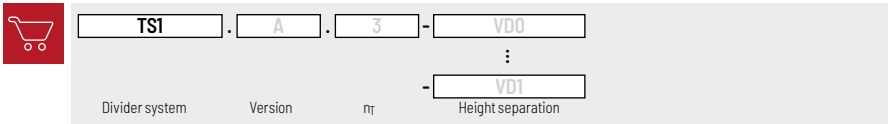
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	5	10	7	–	2
B		10	7	2	2

B_i [mm]	50	75	100	125	150
$a_{T\,min}$ [mm]	13	11.5	12	12.5	13
B_i [mm]	175	200	225	250	
$a_{T\,min}$ [mm]	11.5	12	12.5	13	



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard. the divider **A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section. **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

Divider version A



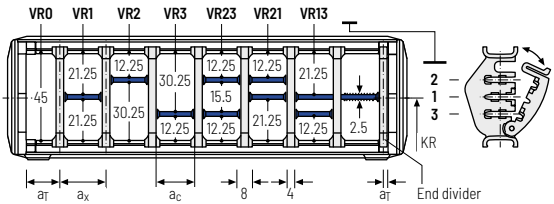
End divider

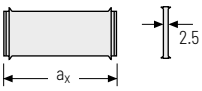


Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions. the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_c (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1...)**. version and number of dividers per cross section [n_T]. In addition. please also enter the chambers [K] from left to right. as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

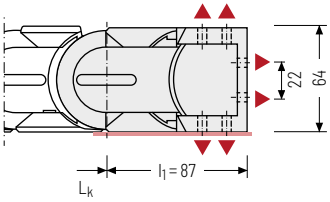
Subject to change without notice.

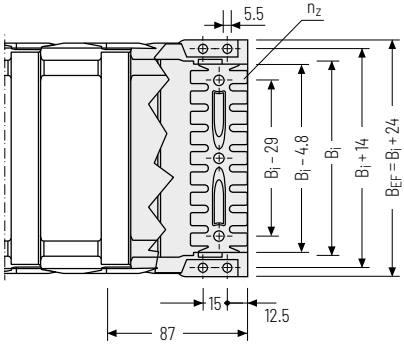


Subject to change without notice.

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

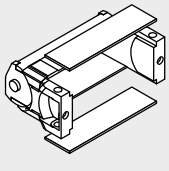




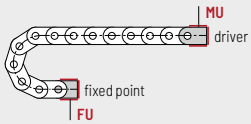
▲ Assembly options

Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

B_i [mm]	B_{EF} [mm]	n_z
50	74	2 x 3
75	99	2 x 5
100	124	2 x 7
125	149	2 x 9
150	174	2 x 11
175	199	2 x 13
200	224	–
225	249	–
250	274	–



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

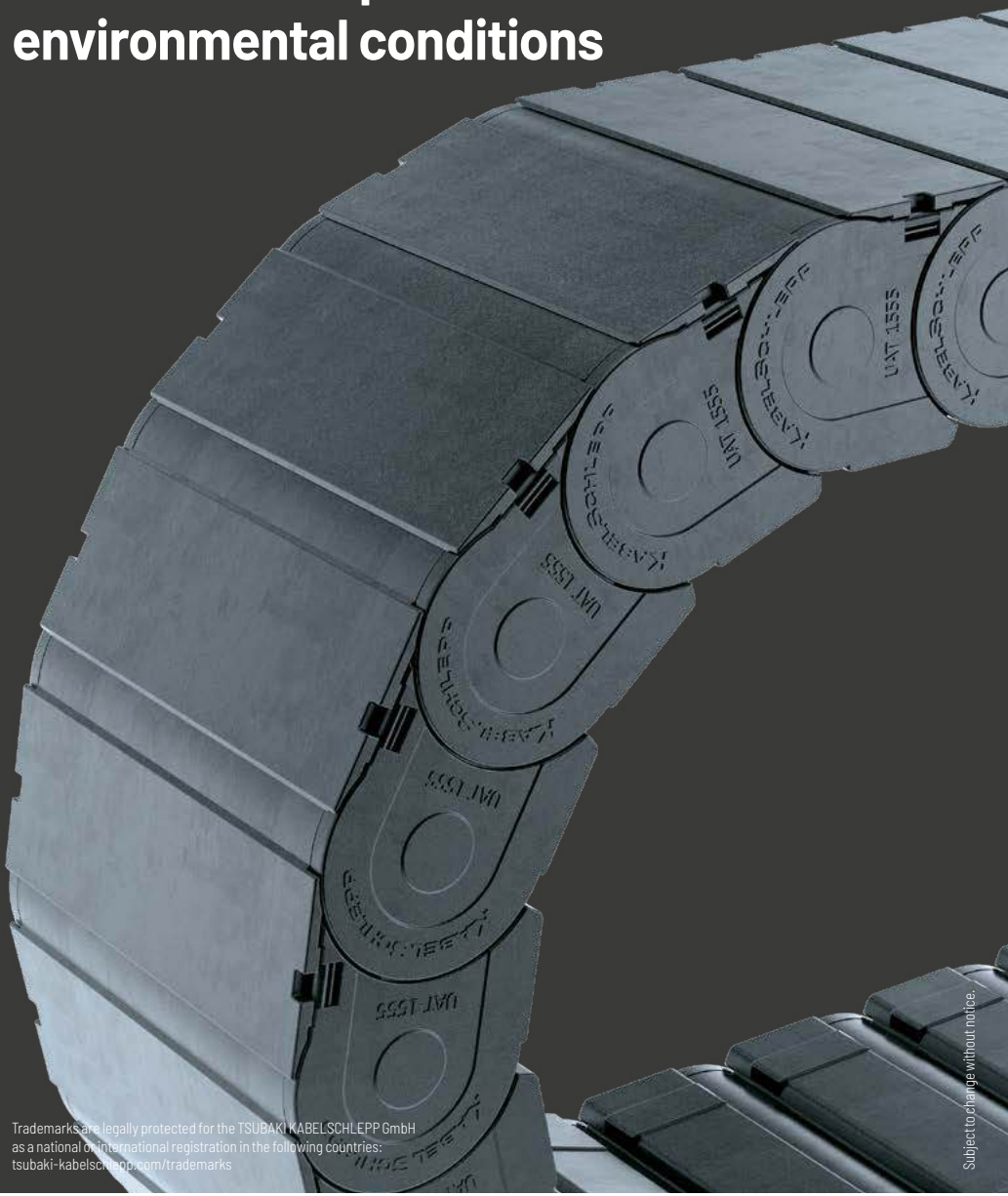
Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Subject to change without notice.

UAT series

Extreme cable protection in harsh environmental conditions



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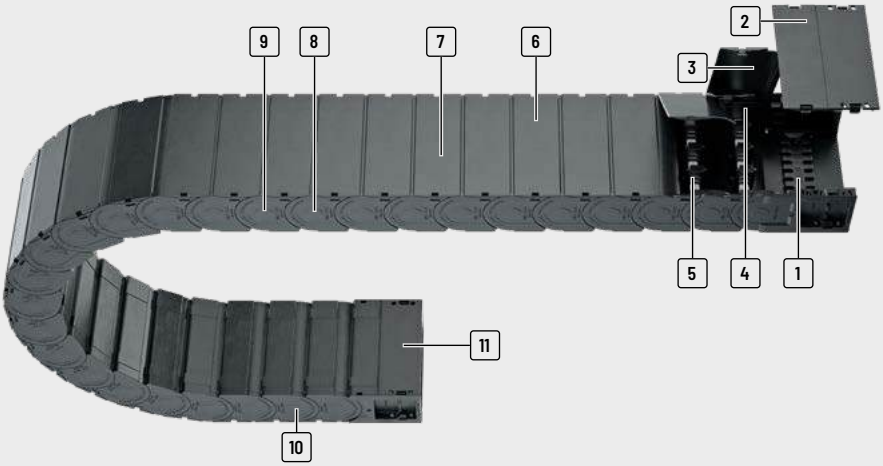
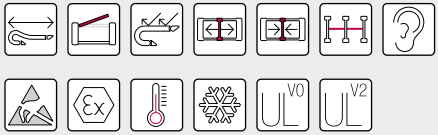


1 Connectors with optional strain relief
2 Completely detachable covers
3 Easy and quick to open
4 Gentle on the cables – interior space without projecting edges
5 Dividers and height separations for cable separation
6 Designs with outward opening covers
7 Secure hold of the covers also under heavy load (e.g. by the use of hydraulic cables)
8 Chain links made of plastic
9 Extensive unsupported length
10 Very quiet thanks to integrated noise damping system
11 Cover system also in the connection

Features

» outstanding protection for the cables
» quick cable laying – outside opening designs
» very quiet thanks to internal noise damping system
» large unsupported length
» high-quality visual design
» for unsupported and gliding arrangements
» sliding surfaces with wear volume integrated in the inner cover





Simply unlock cover with a screwdriver



Detach the cover from the chain link



Divider system TS1



Optional strain relief comb – also placed on top of one another

Subject to change without notice.

UAT series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
UAT1555											
		080	50	69	75 – 175	Bi + 21	–	55.5	100 – 300	15	40

Subject to change without notice.

UAT series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**Travel length** ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**TS0**	**TS1**	**TS2**	**TS3**	**vertical hanging or standing**	**lying on the side**	**rotating arrangement**	
6.5	8	40	150	3	15	•	•	–	–	•	•	–	622

Subject to change without notice.

UAT1555

Pitch
55.5 mm

Inner height
50 mm

Inner widths
75 – 175 mm

Bending radii
100 – 300 mm

Stay variants



Design 080 page **624**

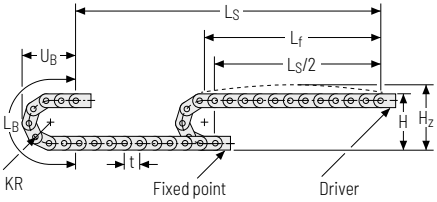
Covered on both sides with outside detachable cover

» Plastic cover for rough environmental conditions with dirt, chips and dust.
» Fully detachable on one side in any position.
» **Inside:** very quick release.

Subject to change without notice.

UAT1555 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

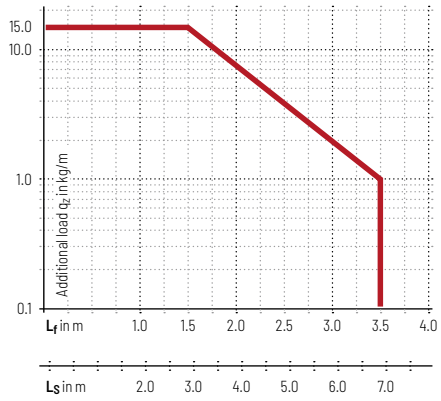


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
100	268	298	425	190
125	318	348	504	215
150	368	398	582	240
175	418	448	661	265
200	468	498	739	290
225	518	548	818	315
250	568	598	896	340
300	668	698	1053	390

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.9 kg/m at B_i 125 mm. For other inner widths, the maximum additional load changes.



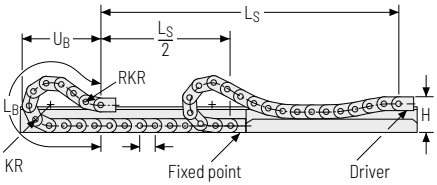
Speed
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 6.5 m

Additional load
up to 15 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 15 m/s²

Travel length
up to 150 m

Additional load
up to 15 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Subject to change without notice.

UAT1555.080 | Dimensions · Technical data

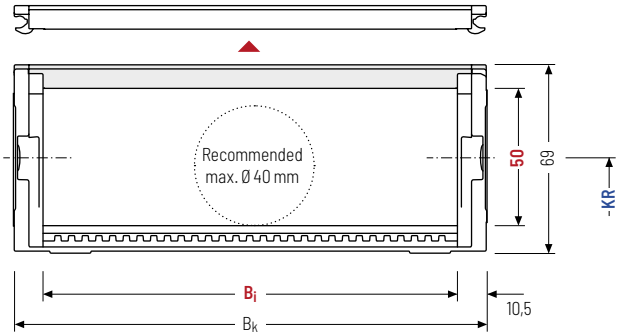
Stay variant 080 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt and chips.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Stay arrangement on each chain link **(VS: fully-stayed)**

B_i 75 – 175 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
50	69	75	125	175	B_i + 21	100	125	150	175	2.43 – 3.44
						200	225	250	300	

Order example

UAT1555	.	080	.	175	.	225	-	2553		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

UAT1555 | Inner distribution | TS3

Divider systems

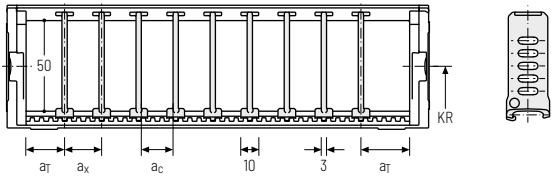
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids in the covers **(version B)**.

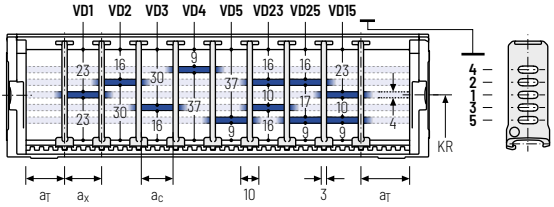
Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x Grid [mm]	n_T min
A	5	10	7	–	–
B	7.5	10	7	5	–

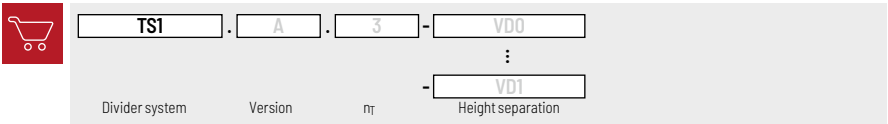


Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x Grid [mm]	n_T min
A	5	10	7	–	2
B	7.5	10	7	5	2



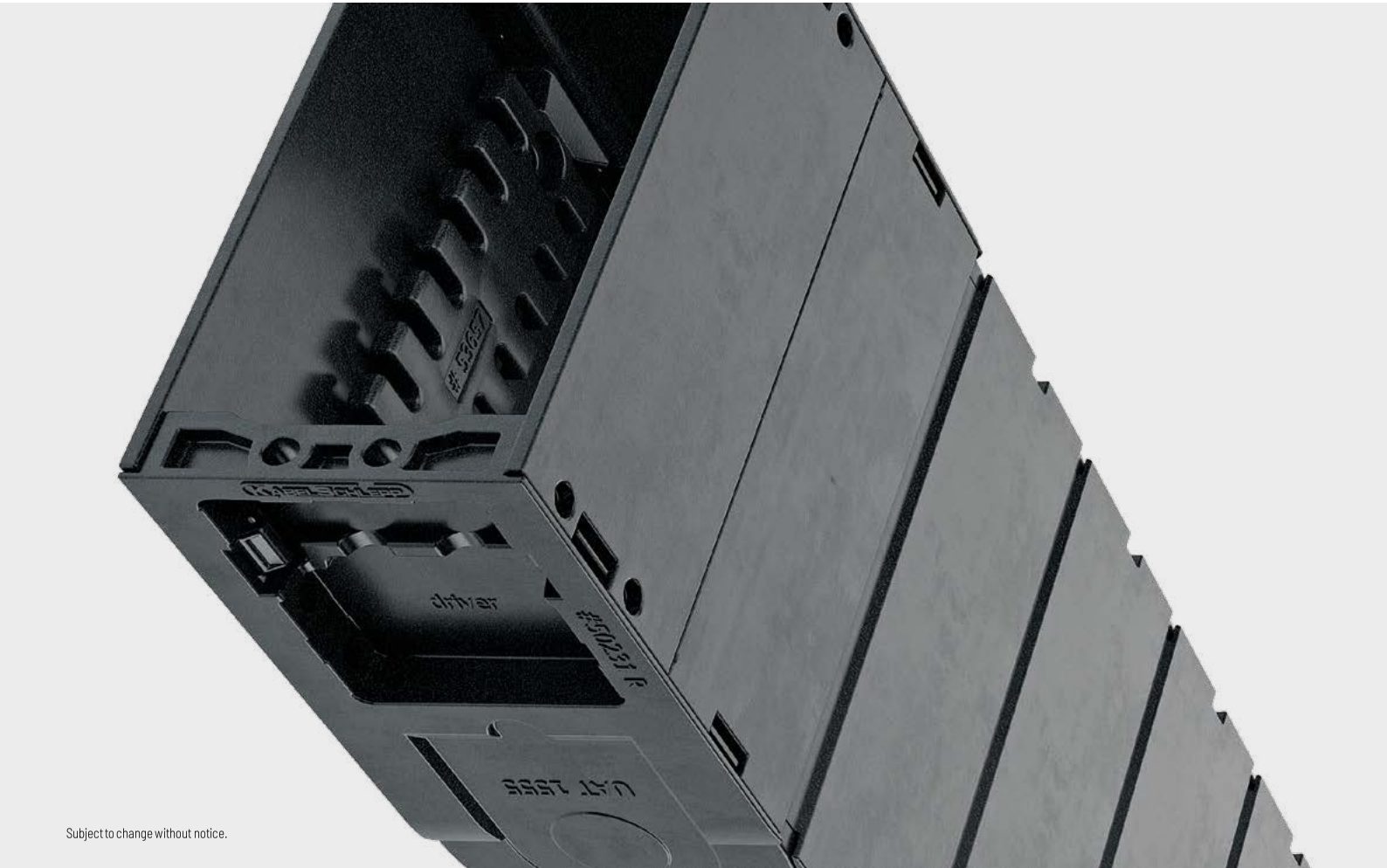
Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

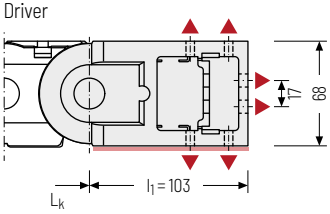


Subject to change without notice.

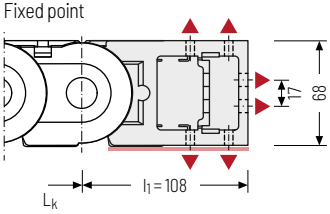
Universal end connectors UMB – plastic (standard)

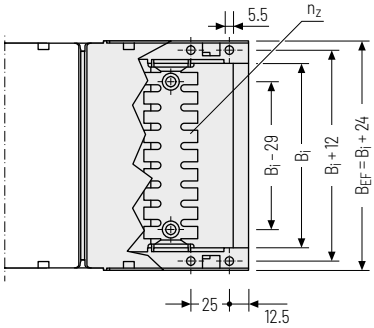
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

Driver



Fixed point

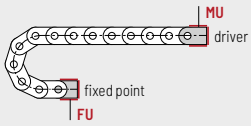




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
75	99	2 x 5
125	149	2 x 9
175	199	2 x 13

Recommended tightening torque:
5 Nm for cheese-head screws ISO 4762 - M5 x 8.8



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Subject to change without notice.

MT series

Variable, closed cable carrier with extensive range of accessories



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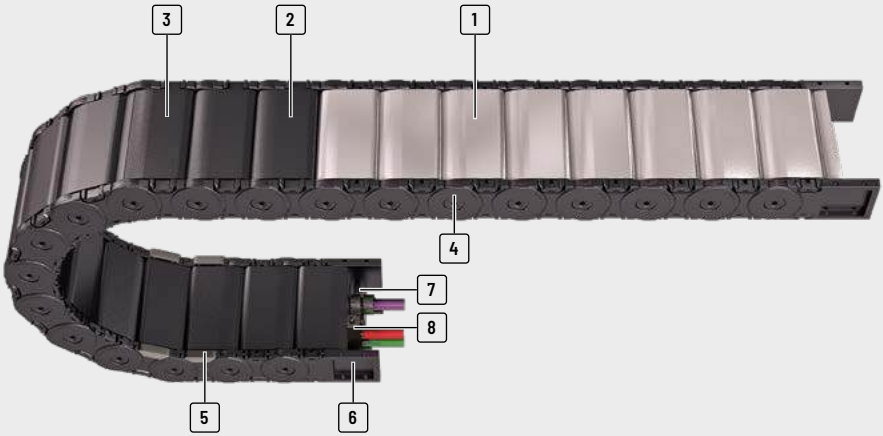
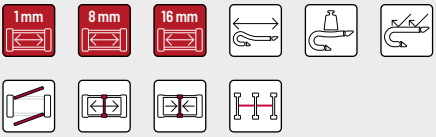


1 Aluminum cover available in **1 mm width sections**
2 Plastic cover available in **8** or **16 mm width sections**
3 Can be opened quickly on the inside and the outside for cable laying
4 Locking bolts
5 Replaceable glide shoes
6 Universal end connectors (UMB)
7 C-rail for strain relief elements
8 Strain relief elements

Features

» Encapsulated, dirt-resistant stroke system
» Stable side bands through robust link plate design
» Easy assembly of side bands through bars with easy-to-assemble locking bolts
» Long service life due to minimized hinge wear owing to the "life extending 2 disc principle"
» Large selection of vertical and horizontal stay systems and separation options for your cables
» Versions with aluminum cover system available in 1 mm width sections up to 800 mm inner width
» Versions with plastic cover system available in 8 or 16 mm width sections




Minimized hinge wear owing to the "life extending 2 disc principle"

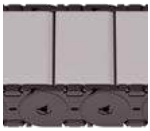
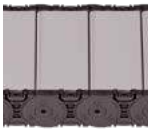

Sturdy link plate design, encapsulated stroke system


Easy to assemble through locking bolts


Replaceable glide shoes for long service life for gliding applications

Subject to change without notice.

MT series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
MT0475											
		RMD 01	26	39	33 – 180	41 – 197	1	47.5	75 – 300	3	20
		RMD 02	26	39	33 – 180	41 – 197	1	47.5	75 – 300	3	20
		RDD 01	26	39	24 – 280	41 – 297	8	47.5	75 – 300	3	20
		RDD 02	26	39	24 – 280	41 – 297	8	47.5	75 – 300	3	20
MT0650											
		RMD	38.5	57	100 – 500	134 – 534	1	65	115 – 350	25	30
		RDD	38.5	57	50 – 258	84 – 292	8	65	95 – 350	25	30
MT0950											
		RMD	54.5	80	100 – 600	139 – 639	1	95	200 – 380	35	43
		RDD	54.5	80	77 – 349	116 – 388	16	95	140 – 380	35	43
MT1250											
		RMD	68.5	96	150 – 800	195 – 845	1	125	260 – 500	65	61
		RDD	68.5	96	103 – 359	148 – 404	16	125	220 – 500	65	61
MT1300											
		RMD	87	120	100 – 800	150 – 850	1	130	240 – 500	70	69

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**Travel length** ≤ [m]	**v_{max}** ≤ [m/s]	**a_{max}** ≤ [m/s²]	**TS0**	**TS1**	**TS2**	**TS3**	**vertical hanging or standing**	**lying on the side**	**rotating arrangement**	
2.7	10	50	–	–	–	•	•	–	–	•	•	–	634
2.7	10	50	–	–	–	•	•	–	–	•	•	–	636
2.7	10	50	–	–	–	•	•	•	–	•	•	–	638
2.7	10	50	–	–	–	•	•	•	–	•	•	–	640
4.8	10	35	170	8	20	•	•	–	–	•	•	–	646
4.8	10	35	170	8	20	•	•	–	–	•	•	–	648
7.4	10	25	230	8	20	•	•	•	–	•	•	–	654
7.4	10	25	230	8	20	•	•	•	•	•	•	–	656
9.7	10	20	270	8	20	•	•	•	–	•	•	–	662
9.7	10	20	270	8	20	•	•	•	•	•	•	–	664
10.8	10	20	300	8	20	•	•	–	•	•	•	–	670

Subject to change without notice.

MT0475

Pitch
47.5 mm

Inner height
26 mm

Inner widths
24 – 280 mm

Bending radii
75 – 300 mm

Stay variants



Aluminum cover RMD 01 ..... page **634**

Cover with hinge in the inner radius

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** release by rotating 90°.
» **Inside:** swivable to both sides.



Aluminum cover RMD 02 ..... page **636**

Cover with hinge in the outer radius

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



Plastic cover RDD 01 ..... page **638**

Cover with hinge in the inner radius

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** release by rotating 90°.
» **Inside:** swivable to both sides.



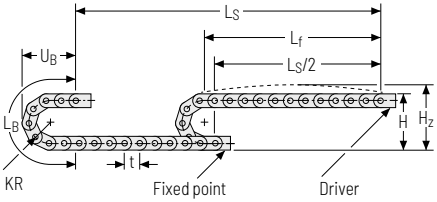
Plastic cover RDD 02 ..... page **640**

Cover with hinge in the outer radius

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.

Subject to change without notice.

Unsupported arrangement

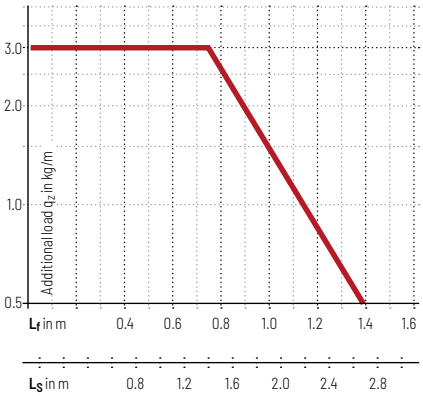


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
75	189	214	331	142
100	239	264	410	167
130	299	324	504	197
160	359	384	598	227
200	439	464	724	267
250	539	564	881	317
300	639	664	1038	367

Load diagram for unsupported length
depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.7 kg/m. For other inner widths, the maximum additional load changes.



Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.7 m

Additional load
up to 3.0 kg/m

Subject to change without notice.

MT0475 RMD 01 | Dimensions · Technical data

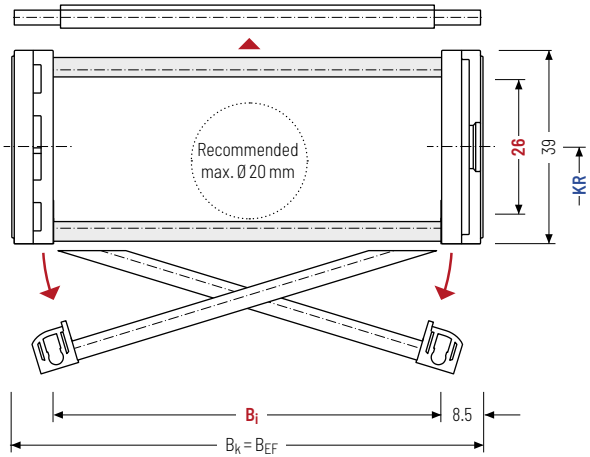
Aluminum cover RMD 01 – cover with hinge in the inner radius



» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **1 mm sections**.
» **Outside**: release by turning 90°.
» **Inside:** swivable to both sides.

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 33 – 180 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
26	39	33 – 180	B_i + 17	B_i + 17	75	100	130	160	1.40 – 4.92
					200	250	300		

* in 1 mm width sections

Order example

MT0475	.	128	.	RMD 01	.	100	-	1425	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

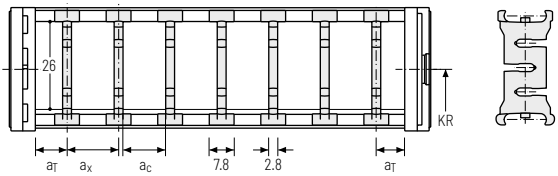
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	7.8	5	–

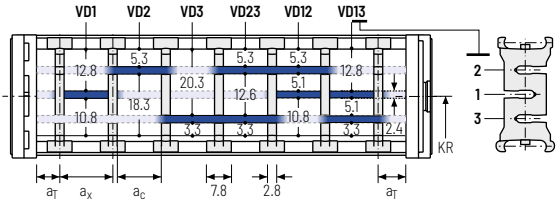
The dividers can be moved in the cross section.



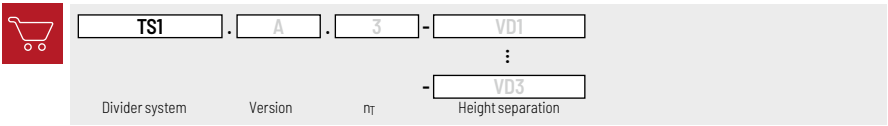
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	20	7.8	5	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MT0475 RMD 02 | Dimensions · Technical data

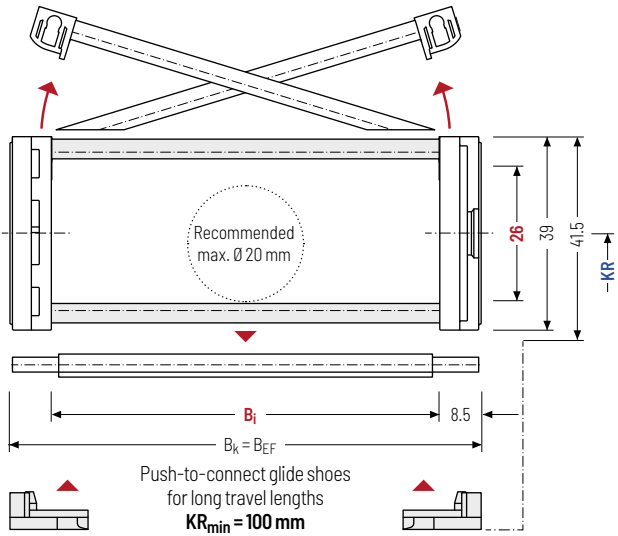
Aluminum cover RMD 02 – cover with hinge in the outer radius

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **1 mm sections**.
» **Outside**: swivable to both sides.
» **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 33 – 180 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
26	39	41.5	33 – 180	B_i + 17	B_i + 17	75	100	130	160	1.40 – 4.92
						200	250	300		

* in 1 mm width sections

Order example

MT0475	.	128	.	RMD 02	100	-	1425	VS
Type		B_i [mm]		Stay variant	KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

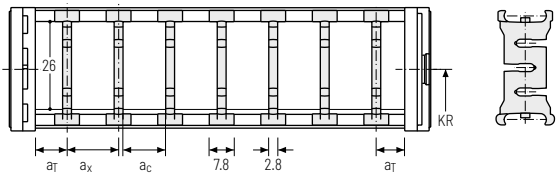
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	7.8	5	–

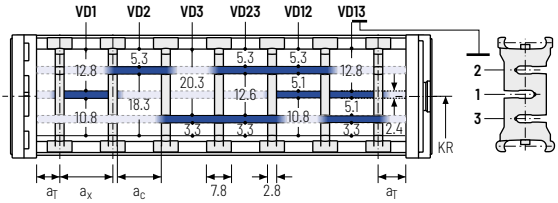
The dividers can be moved in the cross section.



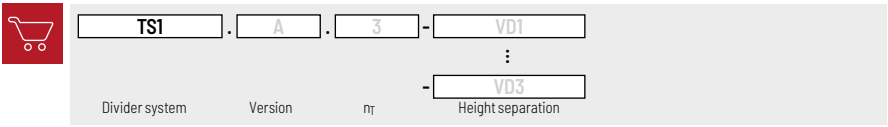
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	20	7.8	5	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MT0475 RDD 01 | Dimensions · Technical data

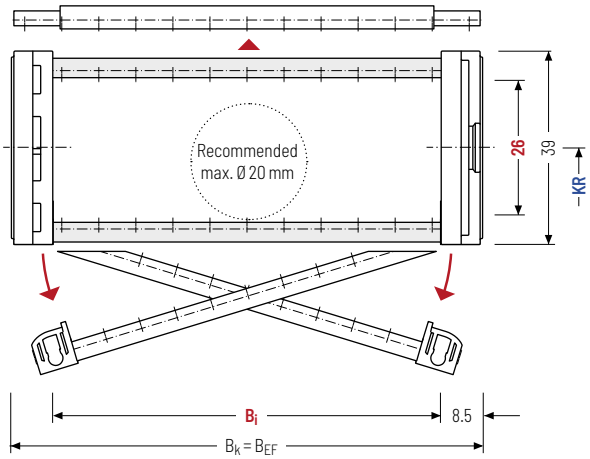
Plastic cover RDD 01 – cover with hinge in the inner radius



- Plastic cover system with hinge for light and medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside:** release by rotating 90°.
- **Inside:** swivable to both sides.

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 24 – 280 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
26	39	24	32	40	48	56	64	72	80	88	B_i + 17	B_i + 17	75	100	0.90 – 4.41
		96	104	112	120	128	136	144	152	160			130	160	
		168	176	184	192	200	208	216	224	232			200	250	
		240	248	256	264	272	280						300		

Order example

MT0475	.	128	.	RDD 01	.	100	-	1425	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

MT0475 RDD 01 | Inner distribution | TS0 · TS1 · TS2

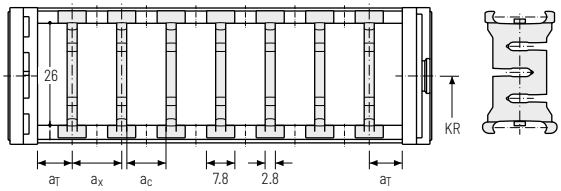
Divider systems

As a standard, the divider system is assembled at every 2nd chain link.

For applications with lateral acceleration and laying on the side, the dividers or the complete divider system (dividers with height separations) are fixed in the cross section. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

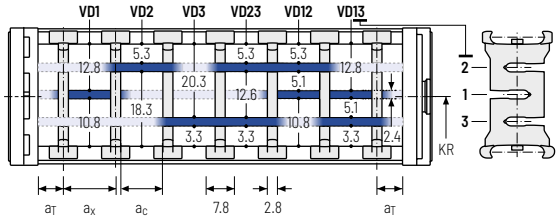
Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	6	7.8	5	8	–



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	6	7.8	5	8	2

The dividers are fixed in the cross section (version B).

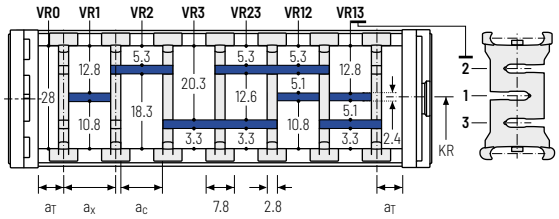


Divider system TS2 with partial height separation

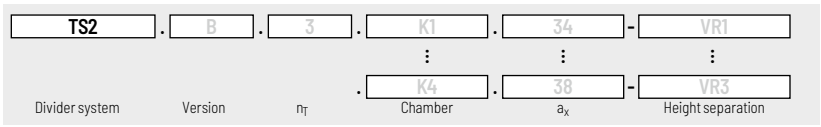
Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	12	8*/ 24	5.2*/ 21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**.
The dividers are fixed by the height separation, the grid is fixed in the cross section (version B).



Order example



Subject to change without notice.

MT0475 RDD 02 | Dimensions · Technical data

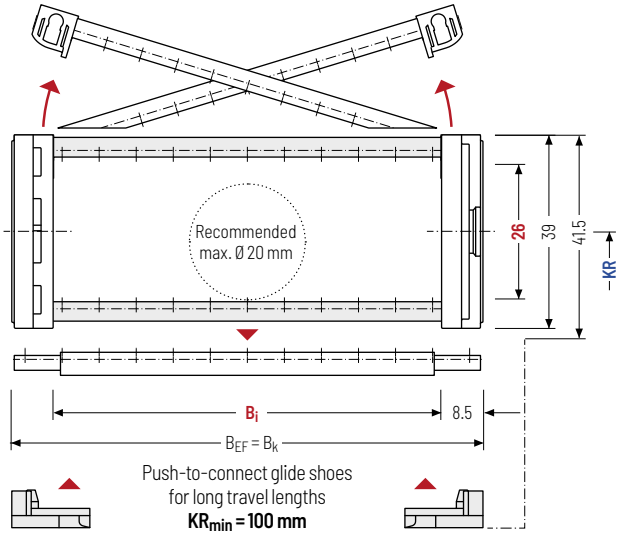
Plastic cover RDD 02 – cover with hinge in the outer radius



» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **8 mm sections**.
» **Outside**: swivable to both sides.
» **Inside:** release by turning 90°.

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 24 – 280 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
26	39	24	32	40	48	56	64	72	80	88	B_i + 17	B_i + 17	75	100	0.90 – 4.41
		96	104	112	120	128	136	144	152	160			130	160	
		168	176	184	192	200	208	216	224	232			200	250	
		240	248	256	264	272	280						300		

Order example

MT0475	.	128	.	RDD 02	.	100	-	1425		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

MT0475 RDD 02 | Inner distribution | TS0 · TS1 · TS2

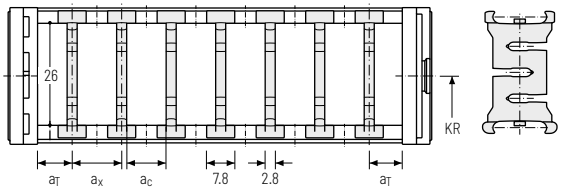
Divider systems

As a standard, the divider system is assembled at every 2nd chain link.

For applications with lateral acceleration and laying on the side, the dividers or the complete divider system (dividers with height separations) are fixed in the cross section. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

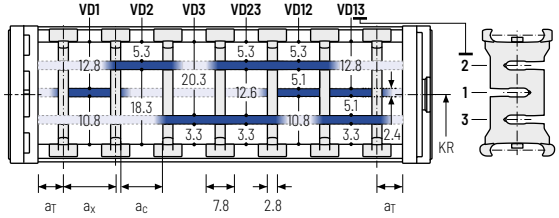
Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	6	7.8	5	8	–



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	6	7.8	5	8	2

The dividers are fixed in the cross section (version B).

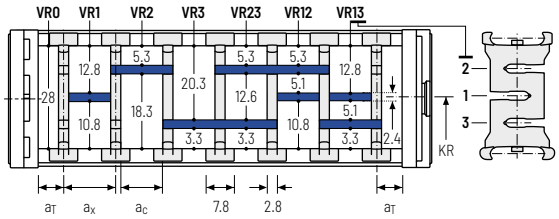


Divider system TS2 with partial height separation

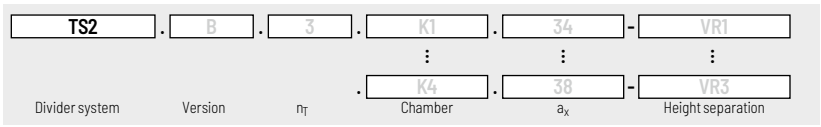
Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	12	8*/ 24	5.2*/ 21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**.
The dividers are fixed by the height separation, the grid is fixed in the cross section (version B).



Order example

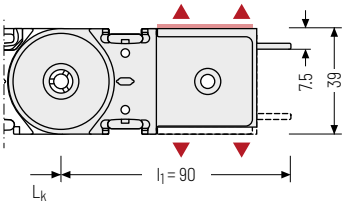


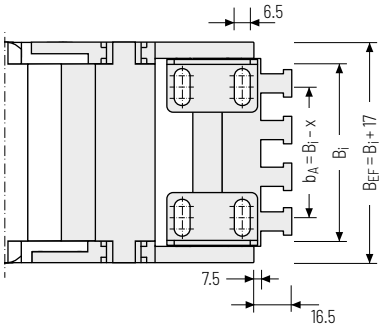
Subject to change without notice.

MT0475 | End connectors | Plastic/steel

End connectors – plastic/steel (with strain relief)

Link end connector made of plastic, end connector made of sheet steel with screw-fixed aluminum strain relief. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

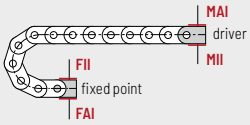




▲ Assembly options

B_i [mm]	x [mm]	n_z
40	17.5	3
56	21.5	4
80	17.5	6
104	19.0	8
128	19.5	9
152	17.5	11
192	18.5	14

Other widths only available without strain relief.



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

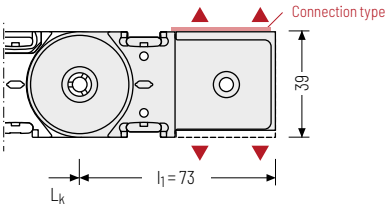
Order example

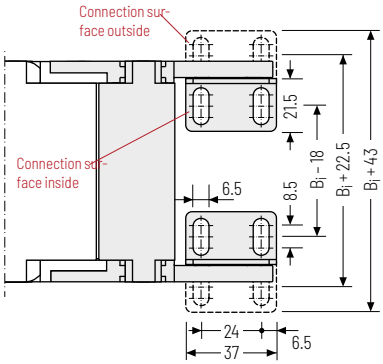
Plastic/steel	.	F	A	I
Plastic/steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

Subject to change without notice.

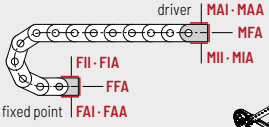
End connectors – plastic/steel

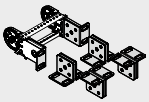
Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options





Connection point
F – fixed point
M – driver

Connection surface
A – connection surface outside
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection

Order example

Plastic/steel	.	F	A	A
Plastic/steel	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

MT0650

Pitch
65 mm

Inner height
38.5 mm

Inner widths
50 – 500 mm

Bending radii
95 – 350 mm

Stay variants



Aluminum cover RMD page **646**

Cover with hinge in the outer radius "standard"

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning 90°.



Plastic cover RDD page **648**

Cover with hinge in the outer radius "standard"

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



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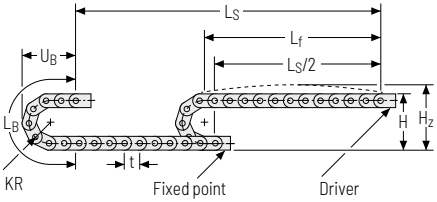
Subject to change without notice.

Unsupported arrangement



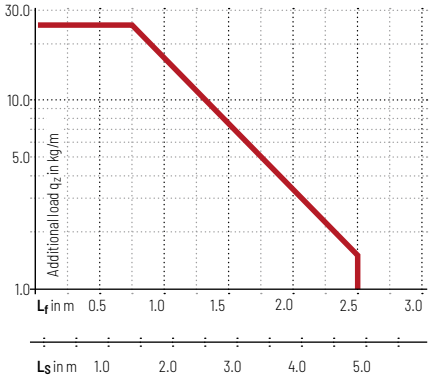
KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
95*	247	282	429	189
115	287	322	492	209
145	347	382	586	239
175	407	442	680	269
220	497	532	822	314
260	577	612	948	354
275	607	642	994	369
300	657	692	1073	394
350	757	792	1230	444

* not RMD

Load diagram for unsupported length
depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.5 kg/m. For other inner widths, the maximum additional load changes.



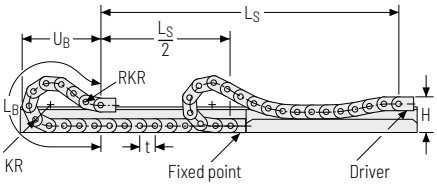
Speed
up to 10 m/s

Acceleration
up to 35 m/s²

Travel length
up to 4.8 m

Additional load
up to 25 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
95*	171	300	1180	560
115	171	300	1310	605
145	171	300	1440	640
175	171	300	1635	705
220	171	300	1950	810
260	171	300	2275	926
275	171	300	2405	973
300	171	300	2535	1014
350	171	300	2925	1152

* not RMD

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 170 m

Additional load
up to 25 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MT0650 RMD | Dimensions · Technical data

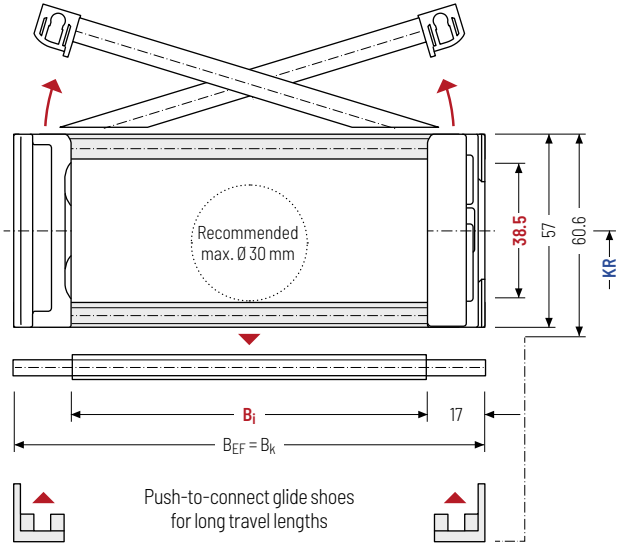
Aluminum cover RMD – cover with hinge in the outer radius

- Aluminum cover system with hinge for light and medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside**: swivable to both sides.
- **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 100 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
38.5	57	60.6	62.2	100 – 500	B_i + 34	B_i + 34	115	145	175	220	3.73 – 10.12
							260	275	300	350	

* in 1 mm width sections

Order example

MT0650	.	300	.	RMD	.	175	-	1430		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

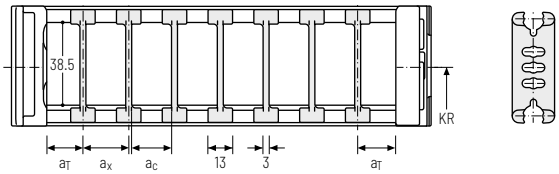
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	16	13	10	–

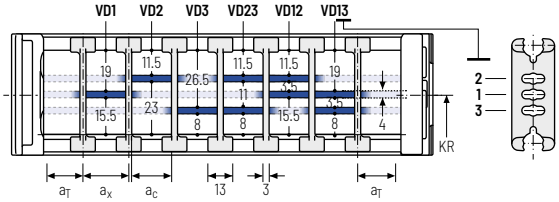
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	16	40	13	10	2

The dividers can be moved in the cross section.



Order example



TS1 . A . 3 - VD1
⋮
- VD3

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

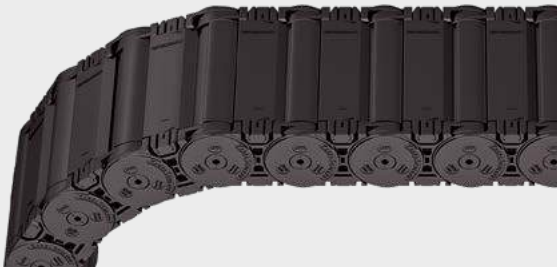
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MT0650 RDD | Dimensions · Technical data

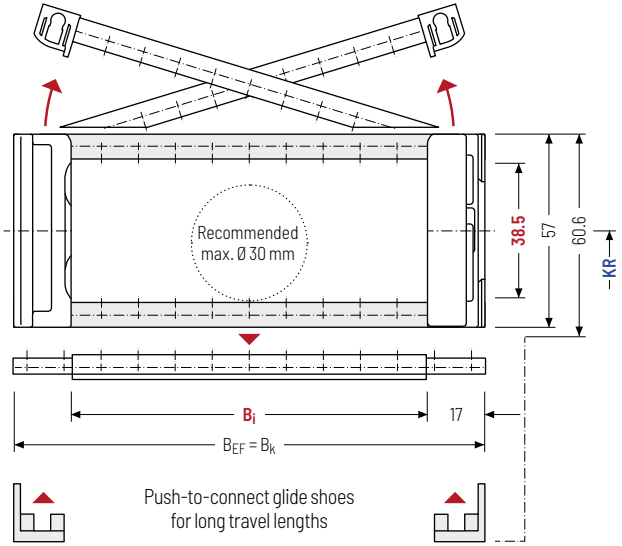
Plastic cover RDD –
cover with hinge in the outer radius

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **8 mm sections**.
» **Outside**: swivable to both sides.
» **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 50 – 258 mm in **8 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]						B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
38.5	57	60.6	62.2	50	58	66	74	82	90	B_i + 34	B_i + 34	95	115	2.40 – 3.70
				98	106	114	122	130	138			145	175	
				146	154	162	170	178	186			220	260	
				194	202	210	218	226	234			275	300	
				242	250	258						350		

Order example

MT0650	.	300	.	RDD	.	175	-	1430		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

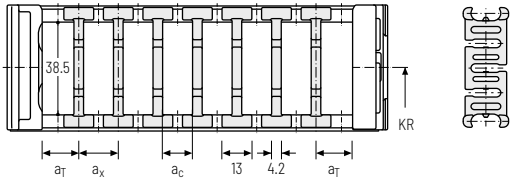
As a standard, the divider system is assembled at every 2nd chain link.

For applications with lateral acceleration and laying on the side, the dividers or the complete divider system (dividers with height separations) are fixed in the cross section. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
B	13	16	11,8	8	–

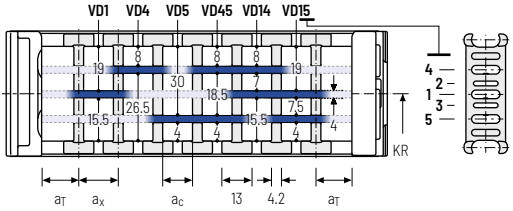
The dividers are fixed in the cross section (version B).



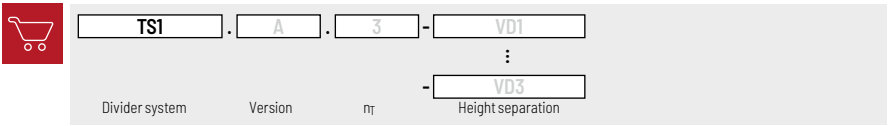
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
B	13	21	16	11,8	8	2

The dividers are fixed in the cross section (version B).



Order example



Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

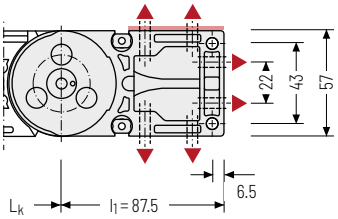
When using divider systems with height separation **(TS1)**, please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

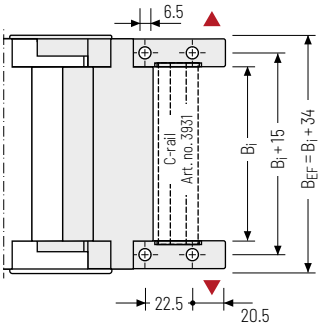
Subject to change without notice.

MT0650 | End connectors

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**

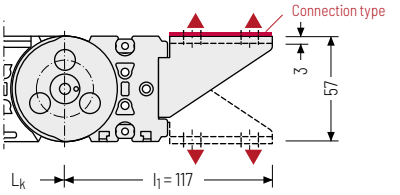


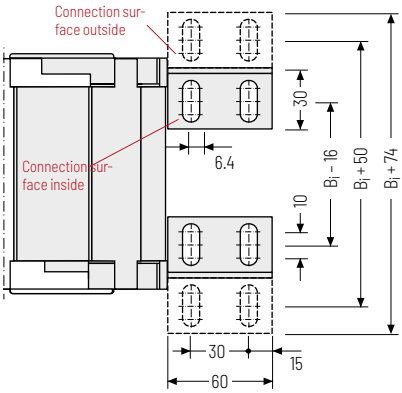


Recommended tightening torque: 11 Nm for cheese-head screws ISO 4762 - M6 - 8.8

End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

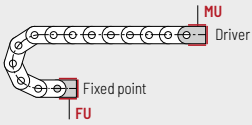




▲ Assembly options

Connection point
F – fixed point
M – driver

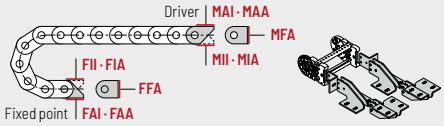
Connection type
U – universal end connector



Connection point
F – fixed point
M – driver

Connection surface
A – connection surface outside
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



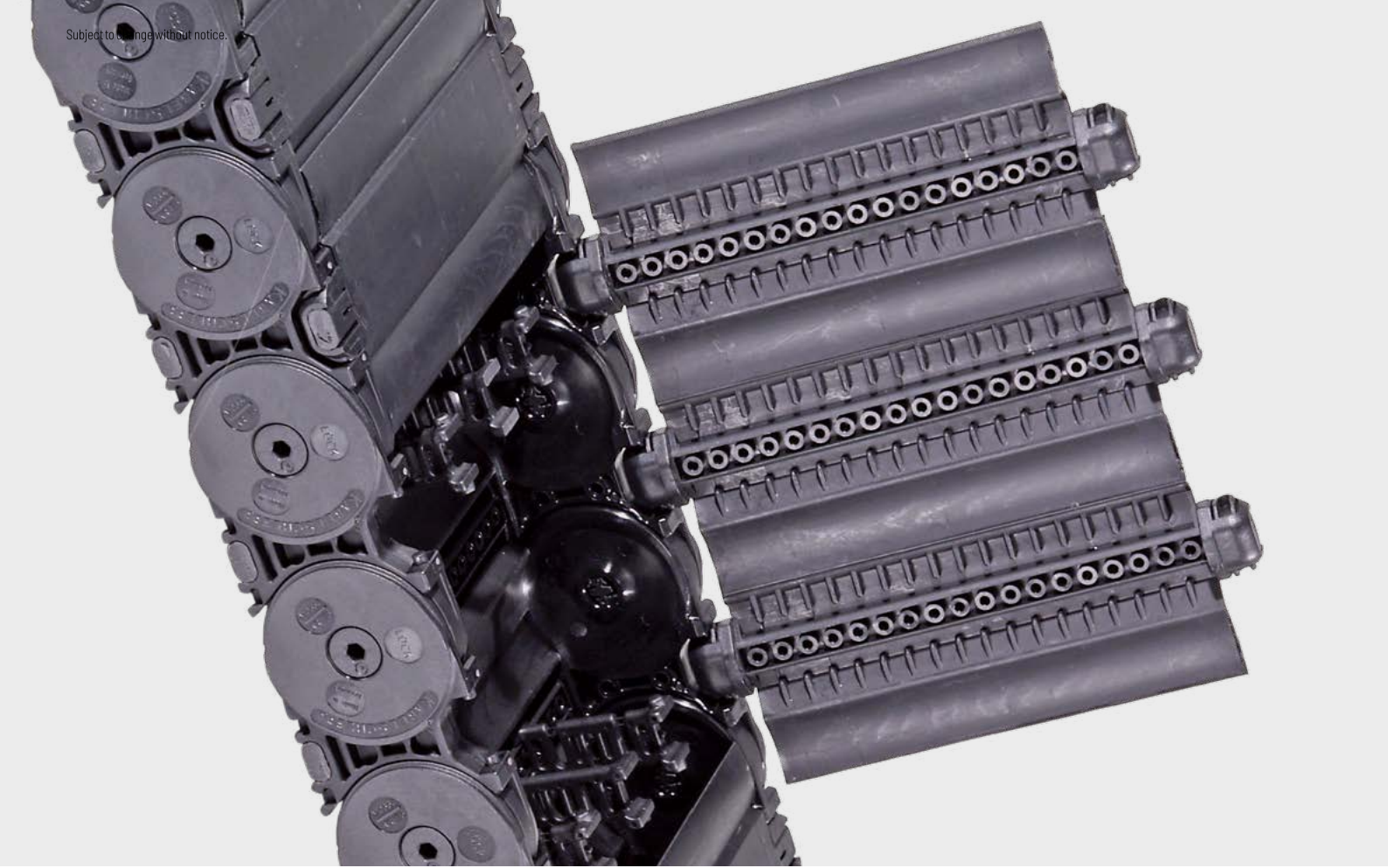
Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Subject to change without notice.



MT0950

Pitch
95 mm

Inner heights
54.5 mm

Inner widths
77 – 600 mm

Bending radii
140 – 380 mm

Stay variants



Aluminum cover RMD page **654**

Cover with hinge in the outer radius "standard"

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning 90°.



Plastic cover RDD page **656**

Cover with hinge in the outer radius "standard"

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



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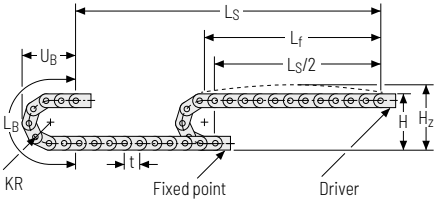
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

MT0950 | Installation dim. | Unsupported · Gliding

Unsupported arrangement



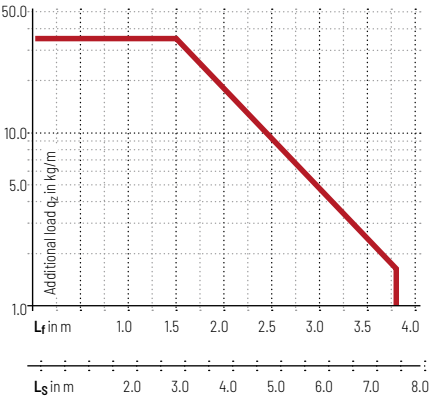
KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
140*	360	405	630	275
170*	420	465	725	305
200	480	525	819	335
260	600	645	1007	395
290	660	705	1102	425
320	720	765	1196	445
380	840	885	1384	515

* not RMD

Load diagram for unsupported length
depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 7 kg/m. For other inner widths, the maximum additional load changes.



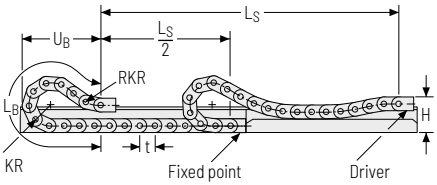
Speed
up to 10 m/s

Acceleration
up to 25 m/s²

Travel length
up to 7.4 m

Additional load
up to 35 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
140*	240	500	1580	740
170*	240	500	1710	773
200	240	500	1995	888
260	240	500	2565	1114
290	240	500	2755	1183
320	240	500	3040	1296
380	240	500	3610	1523

* not RMD

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 230 m

Additional load
up to 35 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MT0950 RMD | Dimensions · Technical data

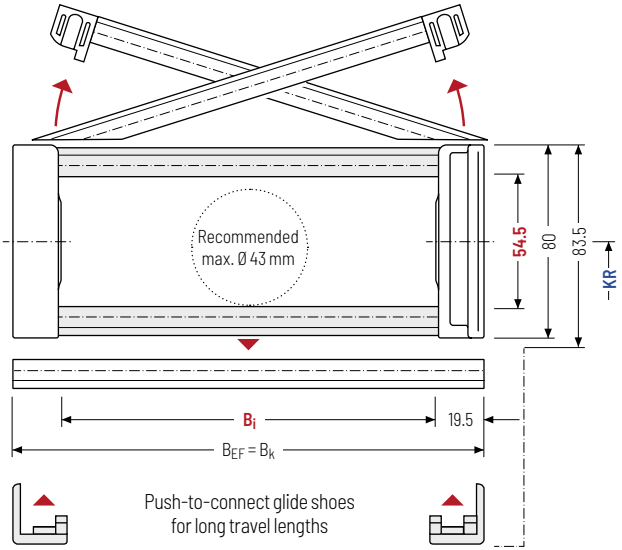
Aluminum cover RMD – cover with hinge in the outer radius

- Aluminum cover system with hinge for light and medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside**: swivable to both sides.
- **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 100 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
54.5	80	83.5	86	100 – 600	B_i + 39	B_i + 39	200	260	290	320	380	6.12 – 17.13

* in 1 mm width sections

Order example

MT0950	.	400	.	RMD	.	200	-	2850	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

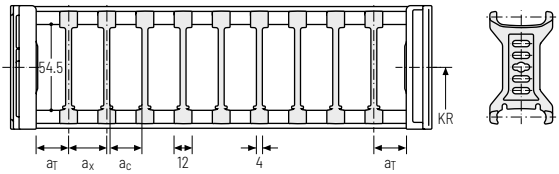
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	3.5	12	8	–

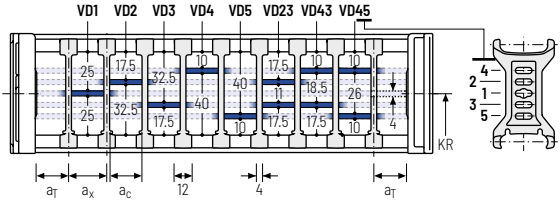
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	3.5	25	12	8	2

The dividers can be moved in the cross section.

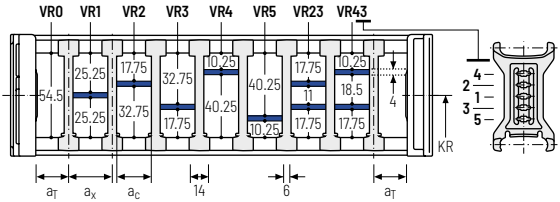


Divider system TS2 with partial height separation

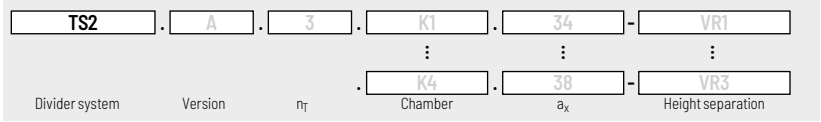
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4.5	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1 – TS2)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MT0950 RDD | Dimensions · Technical data

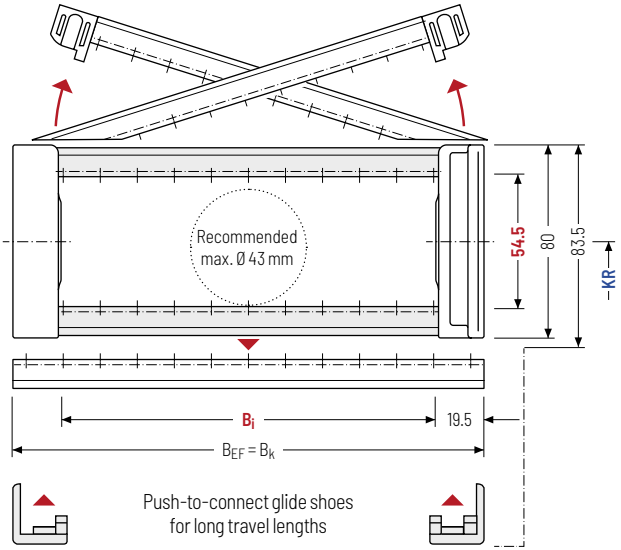
Plastic cover RDD –
cover with hinge in the outer radius

- Plastic cover system with hinge for light and medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside**: swivable to both sides.
- **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 77 – 349 mm in **16 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]						B_k [mm]	B_{EF} [mm]	KR [mm]			q_k [kg/m]
54.5	80	83.5	86	77	93	109	125	141	157	B_i + 39	B_i + 39	140	170	200	4.3 – 7.7
				173	189	205	221	237	253			260	290	320	
				269	285	301	317	333	349			380			

Order example

MT0950	.	269	.	RDD	.	200	-	2850	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

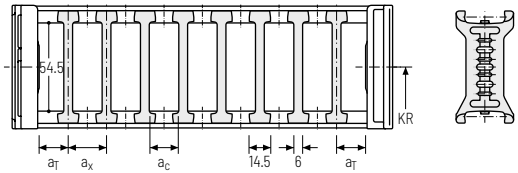
As a standard, the divider system is assembled at every 2nd chain link.

For applications with lateral acceleration and laying on the side, the dividers or the complete divider system (dividers with height separations) are fixed in the cross section. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
B	22,5	16	10	16	–

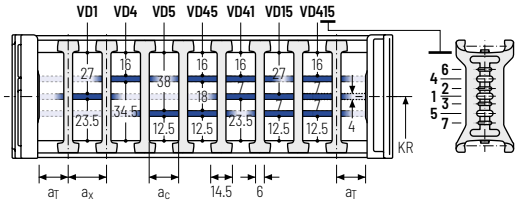
The dividers are fixed in the cross section (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
B	22,5	22,5	16	10	16	2

The dividers are fixed in the cross section (version B).

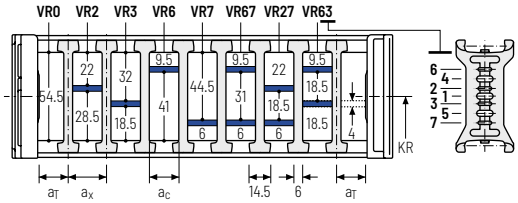


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	n_T min
B	22,5	16*/32	10*/26	16	2

* for VR0

With grid distribution **(16 mm grid)**.
The dividers are fixed by the height separation, the grid is fixed in the cross section (version B).



More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

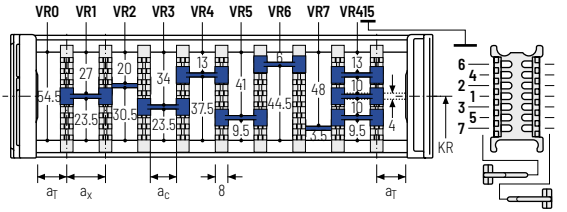
Subject to change without notice.

MT0950 RDD | Inner distribution | TS3

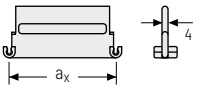
Divider system TS3 with height separation made of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	6,5	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions in 1 mm width sections with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]												
a_C (nominal width of inner chamber) [mm]												
16	**32**	**48**	**64**	**80**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**
8	24	40	56	72	88	104	120	136	152	168	184	200

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. B	. 3	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**

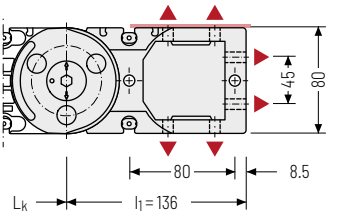


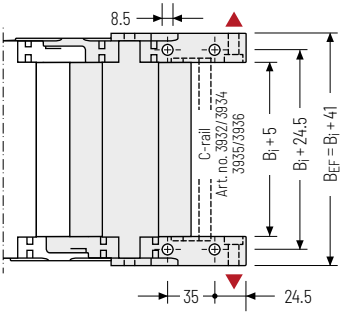
Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**

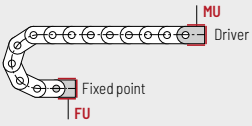




Recommended tightening torque: 27 Nm for cheese-head screws ISO 4762 - M8 - 8.8

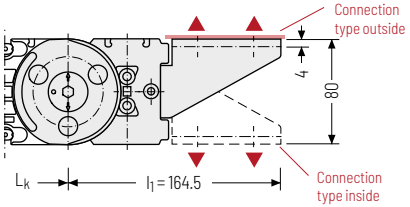
Connection point
F – fixed point
M – driver

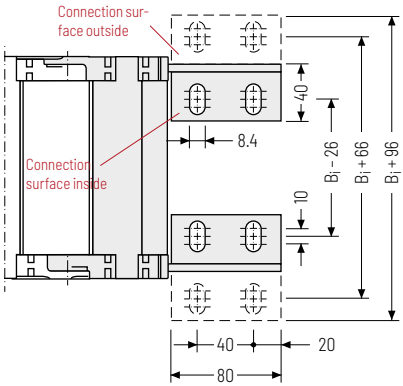
Connection type
U – universal end connector



End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



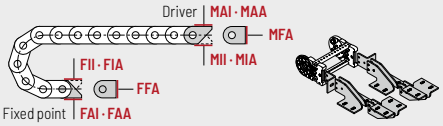


▲ Assembly options

Connection point
F – fixed point
M – driver

Connection surface
A – connection surface outside
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

MT1250

Pitch
125 mm

Inner height
68.5 mm

Inner widths
103 – 800 mm

Bending radii
220 – 500 mm

Stay variants



Aluminum cover RMD page **662**

Cover with hinge in the outer radius "standard"

» Aluminum cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning 90°.



Plastic cover RDD page **664**

Cover with hinge in the outer radius "standard"

» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» **Outside:** swivable to both sides.
» **Inside:** release by turning by 90°.



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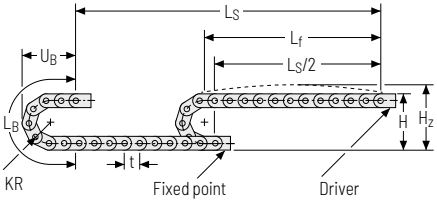
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

MT1250 | Installation dim. | Unsupported · Gliding

Unsupported arrangement



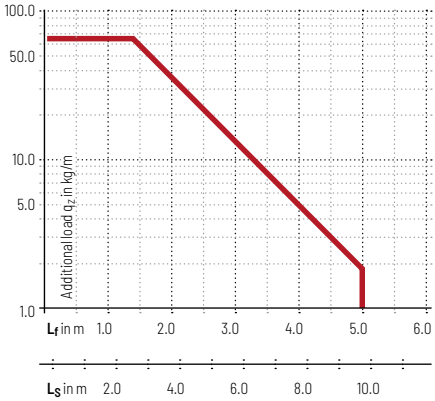
KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
220*	536	586	942	393
260	616	666	1067	433
300	696	746	1193	473
340	776	826	1319	513
380	856	906	1444	553
500	1096	1146	1821	673

* not RMD

Load diagram for unsupported length
depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 8.0 kg/m. For other inner widths, the maximum additional load changes.



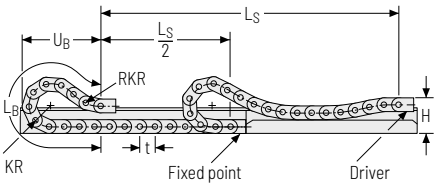
Speed
up to 10 m/s

Acceleration
up to 20 m/s²

Travel length
up to 9.7 m

Additional load
up to 65 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	LB [mm]	UB [mm]
220*	288	500	2250	1015
260	288	500	2500	1095
300	288	500	2750	1177
340	288	500	3125	1318
380	288	500	3375	1403
500	288	500	4375	1770

* not RMD

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 270 m

Additional load
up to 65 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MT1250 RMD | Dimensions · Technical data

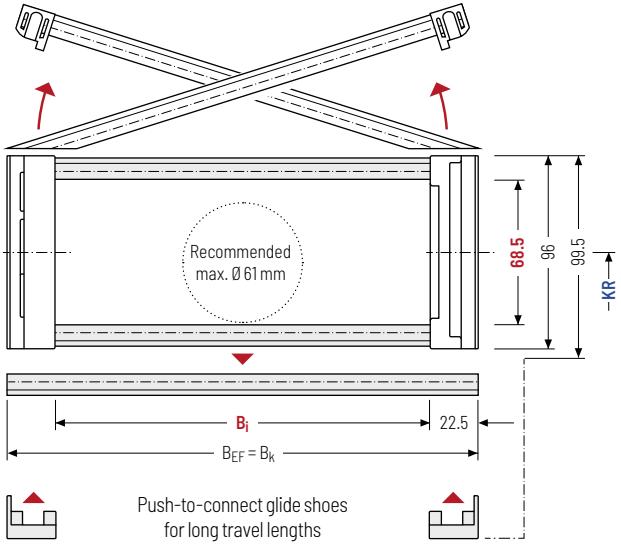
Aluminum cover RMD – cover with hinge in the outer radius

- Aluminum cover system with hinge for light and medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside**: swivable to both sides.
- **Inside:** release by turning 90°.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 150 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
68.5	96	99.5	103	150 – 800	B_i + 45	B_i + 45	260	300	340	380	500	9.29 – 26.34

* in 1 mm width sections

Order example

MT1250	.	600	.	RMD	.	300	-	4250		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

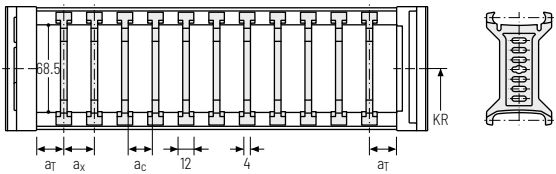
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	12	8	–

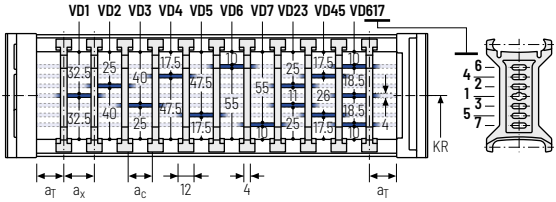
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	6	25	12	8	2

The dividers can be moved in the cross section.

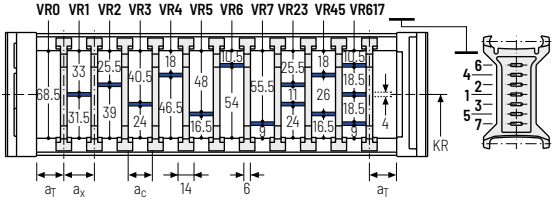


Divider system TS2 with partial height separation

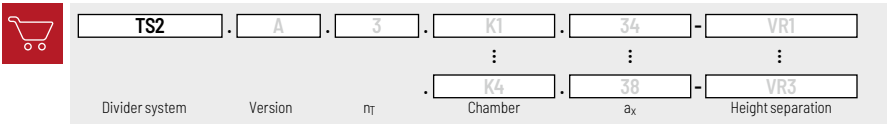
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1 – TS2)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

MT1250 RDD | Dimensions · Technical data

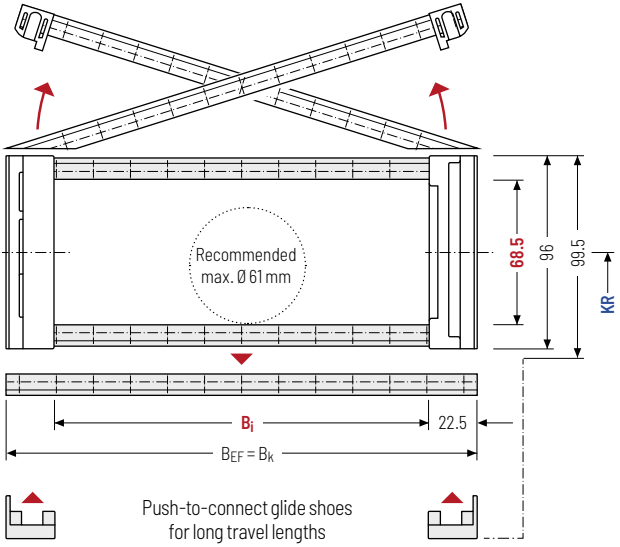
Plastic cover RDD –
cover with hinge in the outer radius



» Plastic cover system with hinge for light and medium loads. Assembly without screws.
» Available customized in **16 mm sections**.
» **Outside**: swivable to both sides.
» **Inside:** release by turning 90°.

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_i 103 – 359 mm in **16 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]						B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
68.5	96	99.5	103	103	119	135	151	167	183	$B_i + 45$	$B_i + 45$	220	260	5.7 – 8.9
				199	215	231	247	263	279			300	340	
				295	311	327	343	359				380	500	

Order example

MT1250	.	295	.	RDD	.	300	-	4250		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

MT1250 RDD | Inner distribution | TS0 · TS1 · TS2

Divider systems

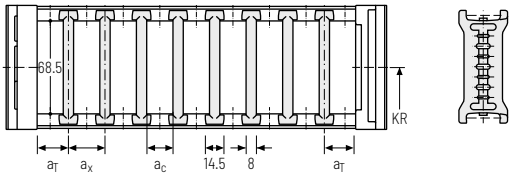
As a standard, the divider system is assembled at every 2nd chain link.

For applications with lateral acceleration and laying on the side, the dividers or the complete divider system (dividers with height separations) are fixed in the cross section. The arresting cams click into place in the locking grids in the crossbars **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
B	19,5	16	8	16	–

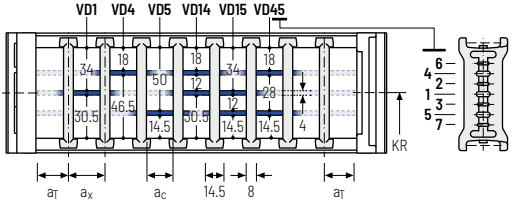
The dividers are fixed in the cross section (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
B	19,5	19,5	16	8	16	2

The dividers are fixed in the cross section (version B).

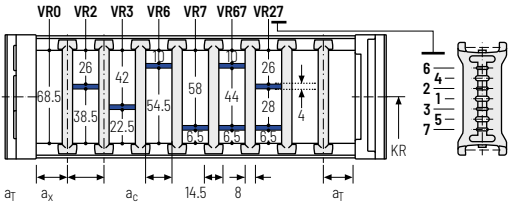


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
B	19,5	16*/32	8*/24	16	2

* for VR0

With grid distribution **(16 mm grid)**.
The dividers are fixed by the height separation, the grid is fixed in the cross section (version B).



More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

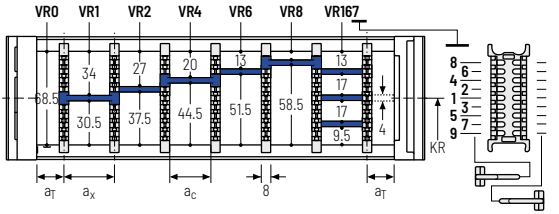
MT1250 RDD | Inner distribution | TS3

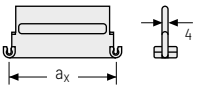
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
B	4 / 16*	16 / 42**	8	2

* For VR0
** For aluminum partitions.

The dividers are fixed by the partitions, the complete divider system is fixed in the cross section.





Aluminum partitions in 1 mm width sections with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]												
a_C (nominal width of inner chamber) [mm]												
16	**32**	**48**	**64**	**80**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**
8	24	40	56	72	88	104	120	136	152	168	184	200

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Order example

TS3	. B	. 3	. K1	. 34	- VR1
			⋮	⋮	⋮
			. K4	. 38	- VR3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**

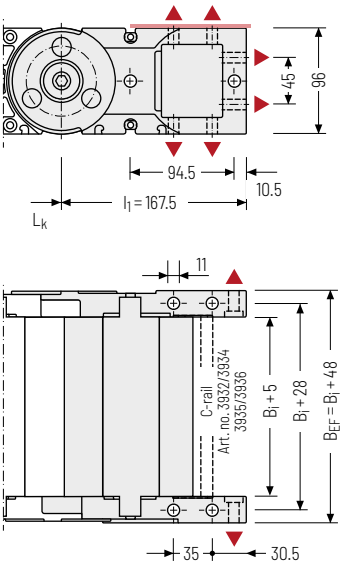


Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Universal end connectors UMB – plastic (standard)

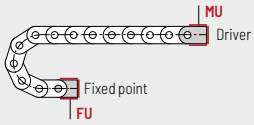
The universal end connectors (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**



Recommended tightening torque: 54 Nm
for cheese-head screws ISO 4762 - M10 - 8.8

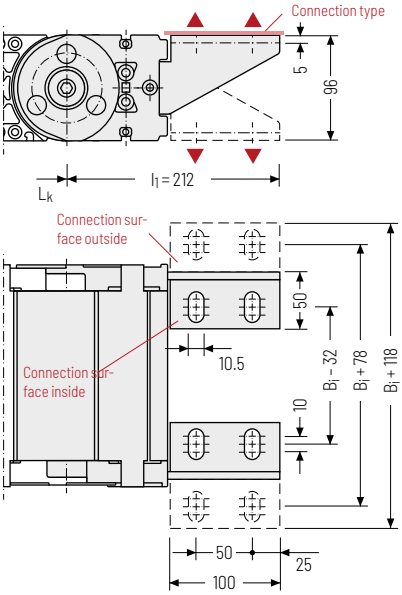
Connection point
F – fixed point
M – driver

Connection type
U – universal end connector



End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

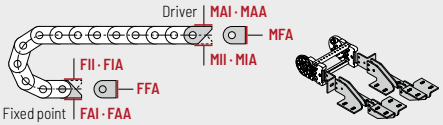


▲ Assembly options

Connection point
F – fixed point
M – driver

Connection surface
A – connection surface outside
I – connection surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

MT1300

Pitch
130 mm

Inner height
87 mm

Inner widths
100 – 800 mm

Bending radii
240 – 500 mm

Stay variants



Aluminum cover RMD ..... page **670**

Solid cover

» Aluminum cover system for heavy loads and maximum cable carrier widths. Threaded joint on both sides.
» **Outside/inside:** threaded joint easy to release.



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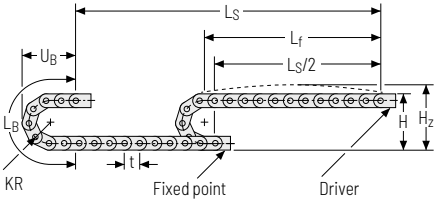
Subject to change without notice.

MT1300 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

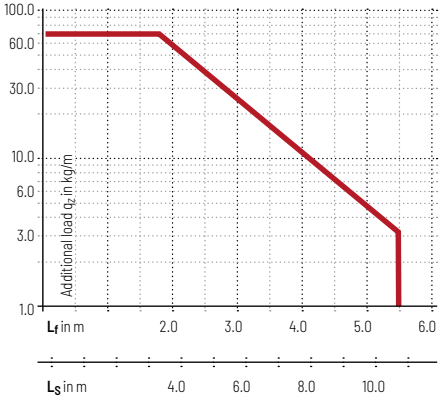


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
240	660	720	1014	430
280	740	800	1140	470
320	820	880	1266	510
360	900	960	1391	550
400	980	1040	1517	590
500	1180	1240	1831	690

Load diagram for unsupported length
depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 8.0 kg/m. For other inner widths, the maximum additional load changes.



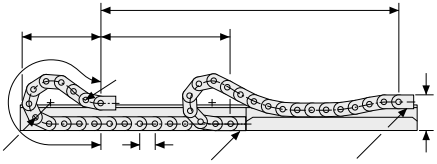
Speed
up to 10 m/s

Acceleration
up to 20 m/s²

Travel length
up to 10.8 m

Additional load
up to 70 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	GO module RKR [mm]	L_B [mm]	U_B [mm]
240	360	500	2470	1125
320	360	500	2880	1240
360	360	500	3140	1331
500	360	500	4310	1756

Speed
up to 8 m/s

Acceleration
up to 20 m/s²

Travel length
up to 300 m

Additional load
up to 70 kg/m

The gliding cable carrier must be guided in a channel.
See p. 866.

The GO module mounted on the driver is a defined sequence of 4 adapted KR/RKR link plates.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

MT1300 RMD | Dimensions · Technical data

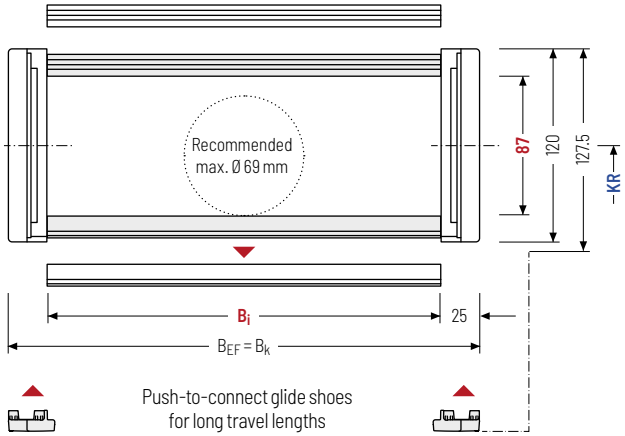
Aluminum cover RMD –
Solid cover

» Aluminum cover system for heavy loads and maximum cable carrier widths. Threaded joints on both sides.
» Available customized in **1 mm sections**.
» **Outside/inside:** threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 100 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
87	120	127.5	100 – 800	B_i + 50	B_i + 50	240	280	320	360	400	500	8.80 – 27.40

* in 1 mm width sections

Order example

MT1300	.	360	.	RMD	.	360	-	2600		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

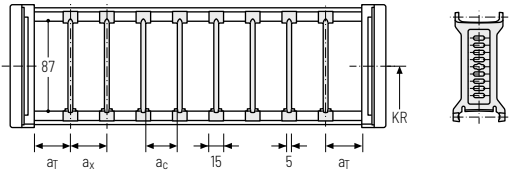
As a standard, the divider system is mounted on every 2nd chain link.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RMD stay, available as an accessory **(version B)**.

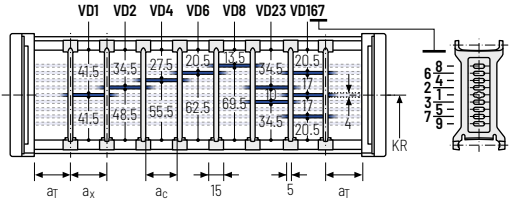
Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	15	10	–	–
B	15	15	10	5	–



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	25	15	10	–	2
B	15	25	15	10	5	2

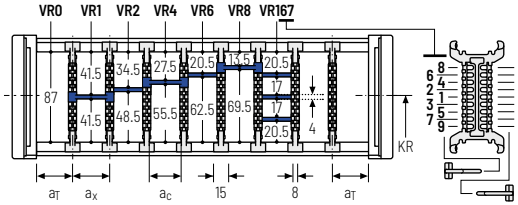


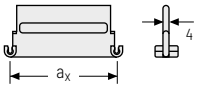
Divider system TS3 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	n_T min
A	12	16/42*	8	2

* For aluminum partitions

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.





Aluminum partitions in 1 mm width sections with **a_X > 42 mm** are also available.

a_X (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

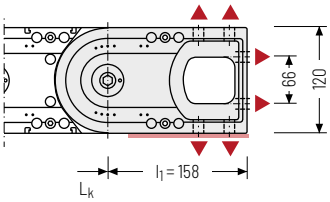
When using **plastic partitions with a_X > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

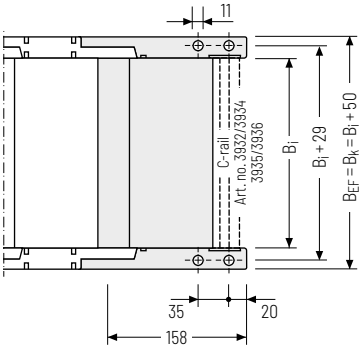
Subject to change without notice.

MT1300 | End connectors

Universal end connectors UMB – plastic (standard)

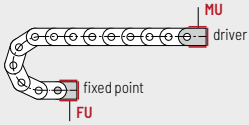
The universal end connectors (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**





▲ Assembly options

Recommended tightening torque: 54 Nm
for cheese-head screws ISO 4762 - M10 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – Universal mounting bracket

Order example

UMB	.	F	A
UMB	.	M	A
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.:
Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

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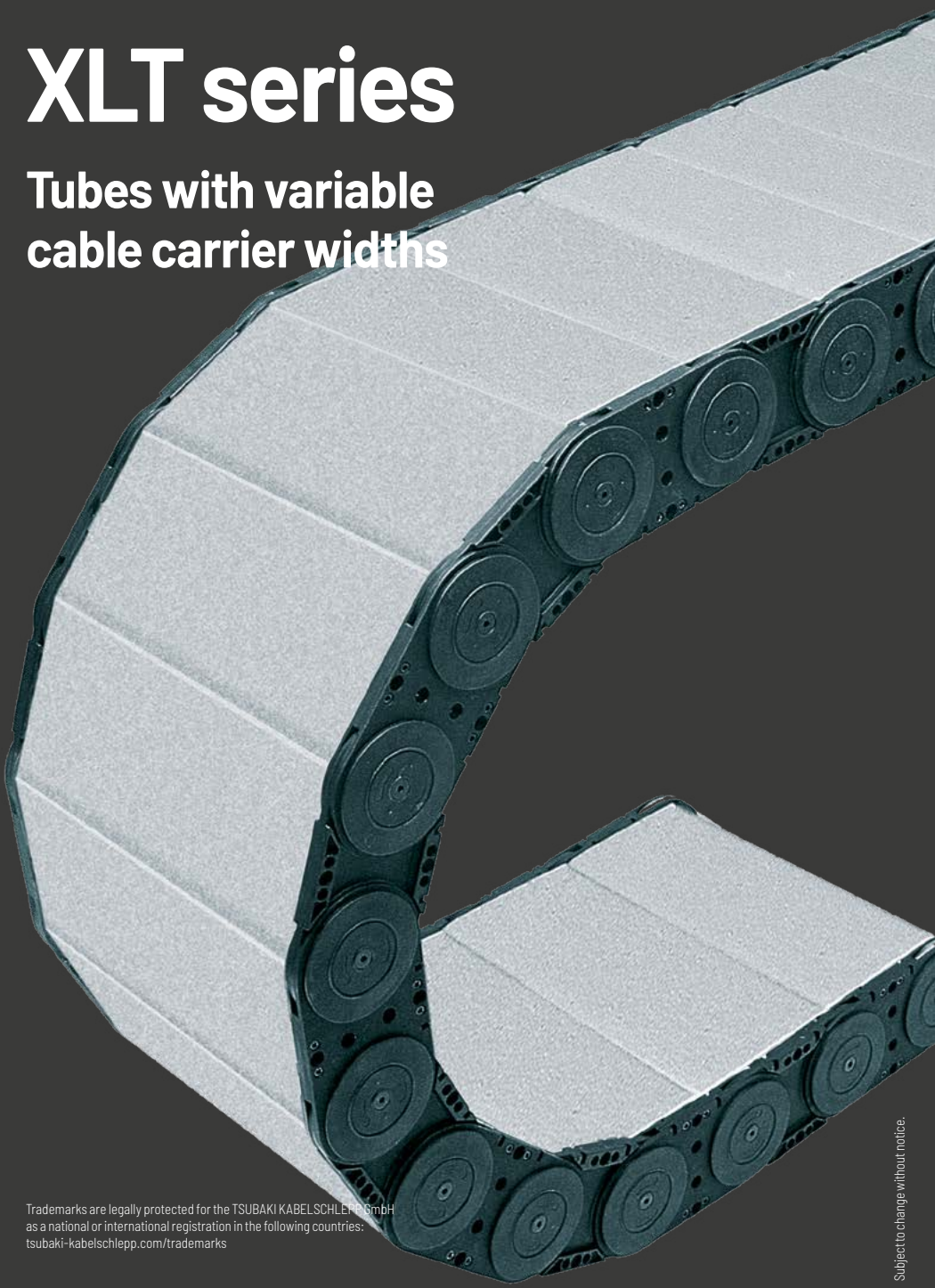
XLT series

Tubes with variable cable carrier widths



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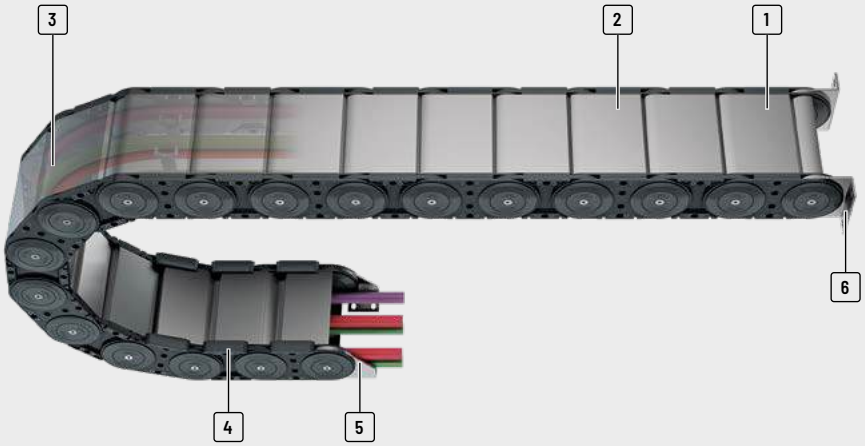
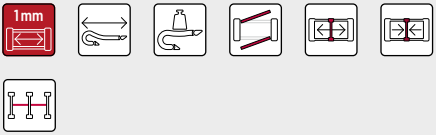


1 Aluminum covers available in **1 mm width sections**
2 4 screw-fixing points for extreme loads
3 Can be opened on the inside and the outside for installation of cables and hoses
4 Replaceable glide shoes
5 Sturdy end connectors made of steel
6 Flange connection

Features

» Sizes/dimensions
» Low intrinsic weight
» Optimum force transmission via the large-surface stroke system (2 disc principle)
» Plastic side bands in combination with aluminum stays
» Versions with aluminum stays available in 1 mm width sections up to 1000 mm inner width
» Can be opened on both sides
» Large selection of separating options for cables and hoses
» Optionally with strain relief




Bolted covers systems for maximum stability even for large cable carrier widths


Replaceable glide shoes for long service life for gliding applications


Sturdy end connectors made of steel (different connection variants)


Many separation options for the cables

Subject to change without notice.

XLT series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
XLT1650											
		RMD	105	140	200 – 1000	268 – 1068	1	165	300 – 550	65	84

Subject to change without notice.

XLT series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
11.75	4	25	350	2	2 – 3	•	–	–	•	•	•	–	680

Subject to change without notice.

XLT1650

Pitch
165 mm

Inner heights
105 mm

Inner widths
200 – 1000 mm

Bending radii
300 – 550 mm

Stay variants



Aluminum stay RMD page **680**

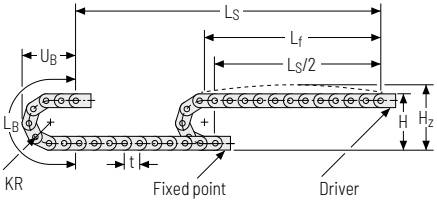
Aluminum cover system

» Bolted aluminum covers for maximum stability
» For applications generating swarf or coarse contamination
» **Inside/outside:** Threaded joint easy to release.

Subject to change without notice.

XLT1650 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

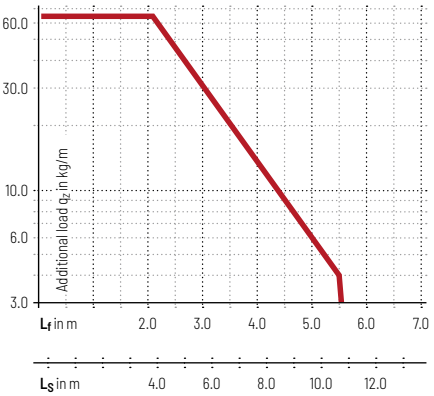


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
300	740	840	1272	535
350	840	940	1430	585
400	940	1040	1587	635
450	1040	1140	1744	685
500	1140	1240	1901	735
550	1240	1340	2058	785

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 13 kg/m. For other inner widths, the maximum additional load changes.



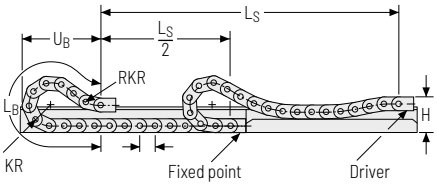
Speed
up to 4 m/s

Acceleration
up to 25 m/s²

Travel length
up to 11.75 m

Additional load
up to 65 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 2-3 m/s²

Travel length
up to 350 m

Additional load
up to 65 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

We recommend the use of glide shoes for gliding applications.

Subject to change without notice.

XLT1650 RMD | Dimensions · Technical data

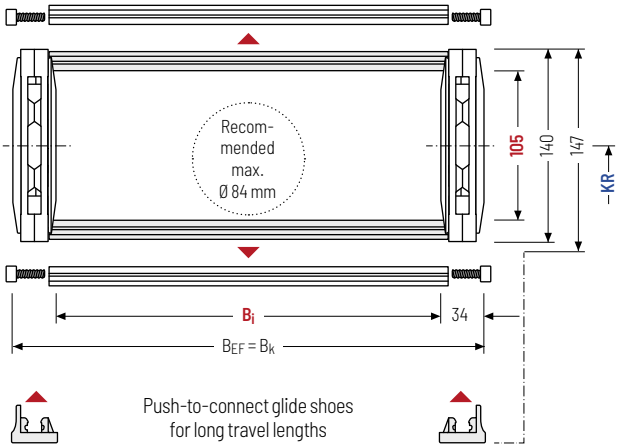
Aluminum stay RMD – aluminum cover system

- Bolted aluminum covers for maximum stability
- For applications generating swarf or coarse contamination
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_i 200 – 1000 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
105	140	147	200 – 1000	B_i + 68	B_i + 68	300	350	400	450	500	550	10.5 – 15.3

* in 1 mm width sections

Order example

XLT1650	.	420	.	RMD	.	350	-	2850		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

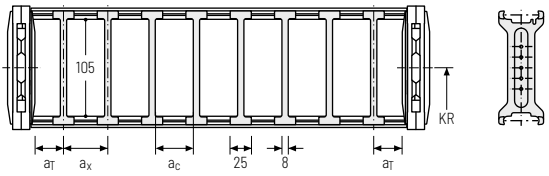
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	6	25	17	–

The dividers can be moved in the cross section.

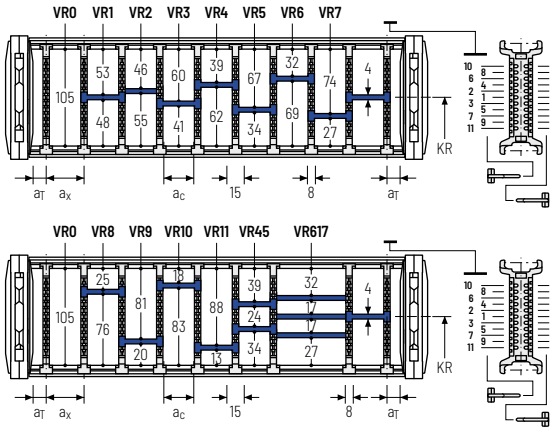


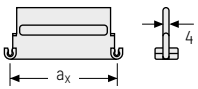
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	1	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



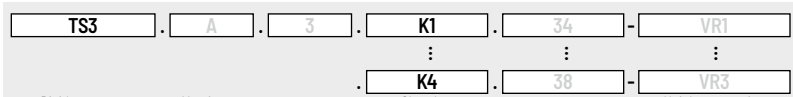


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

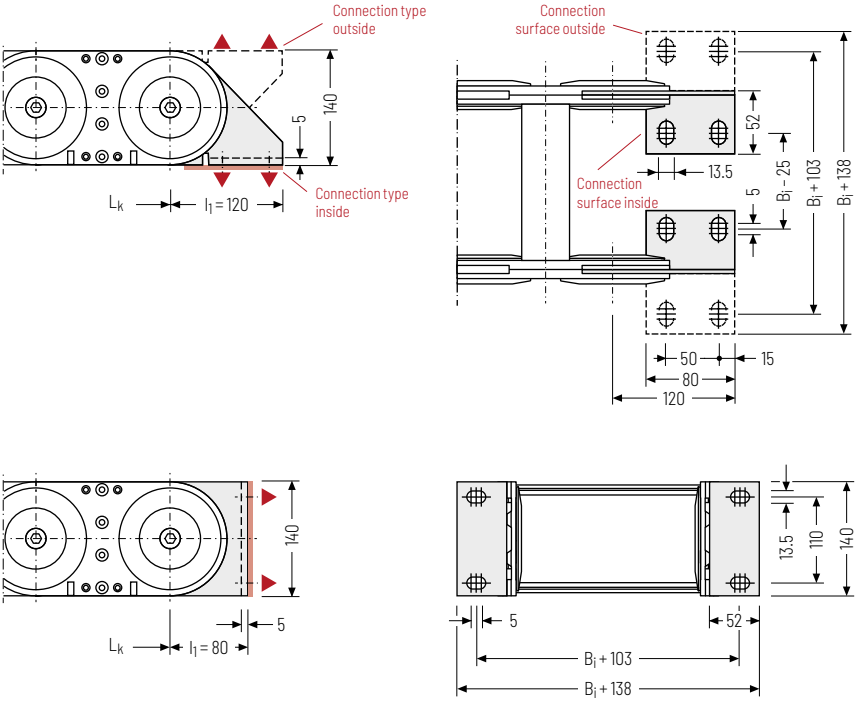


Please state the designation of the divider system **(TS0, TS3)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

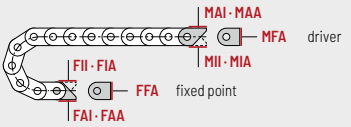
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver an be combined and changed later on, if necessary.



▲ Assembly options



Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside
F – flange connection

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connecting surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.



3D-LINE

Cable carriers for 3D applications

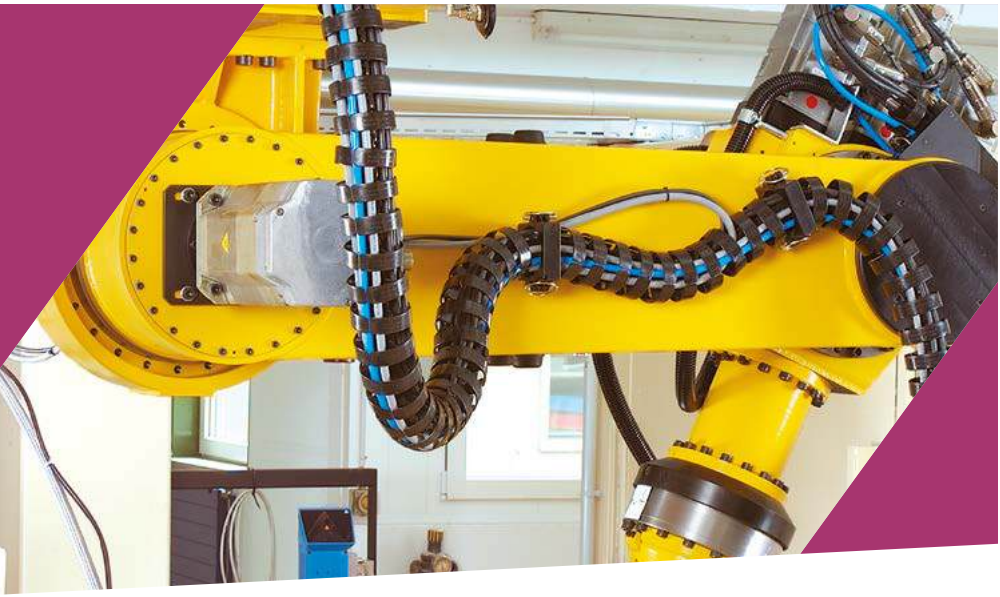
Multidimensional rotation and swivel motions require cable carriers that follow the movements reliably while securely guiding and protecting cables and hoses. The cable carriers from the 3D-Line combine these special characteristics and are therefore particularly suitable for applications in robotics and automation.

- Ideal for maximum freedom of movement for 3D applications
- Three-dimensional swivel and rotation movements, for example on robots for use from robot base to robot wrist
- Extending the service life of cables in 3D applications through defined minimum bending radius and separation and guiding of the cables
- For extremely high tensile forces and accelerations



Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!





ROBOTRAX® System ..... Page **686**

Cable carrier for 3D movements

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Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
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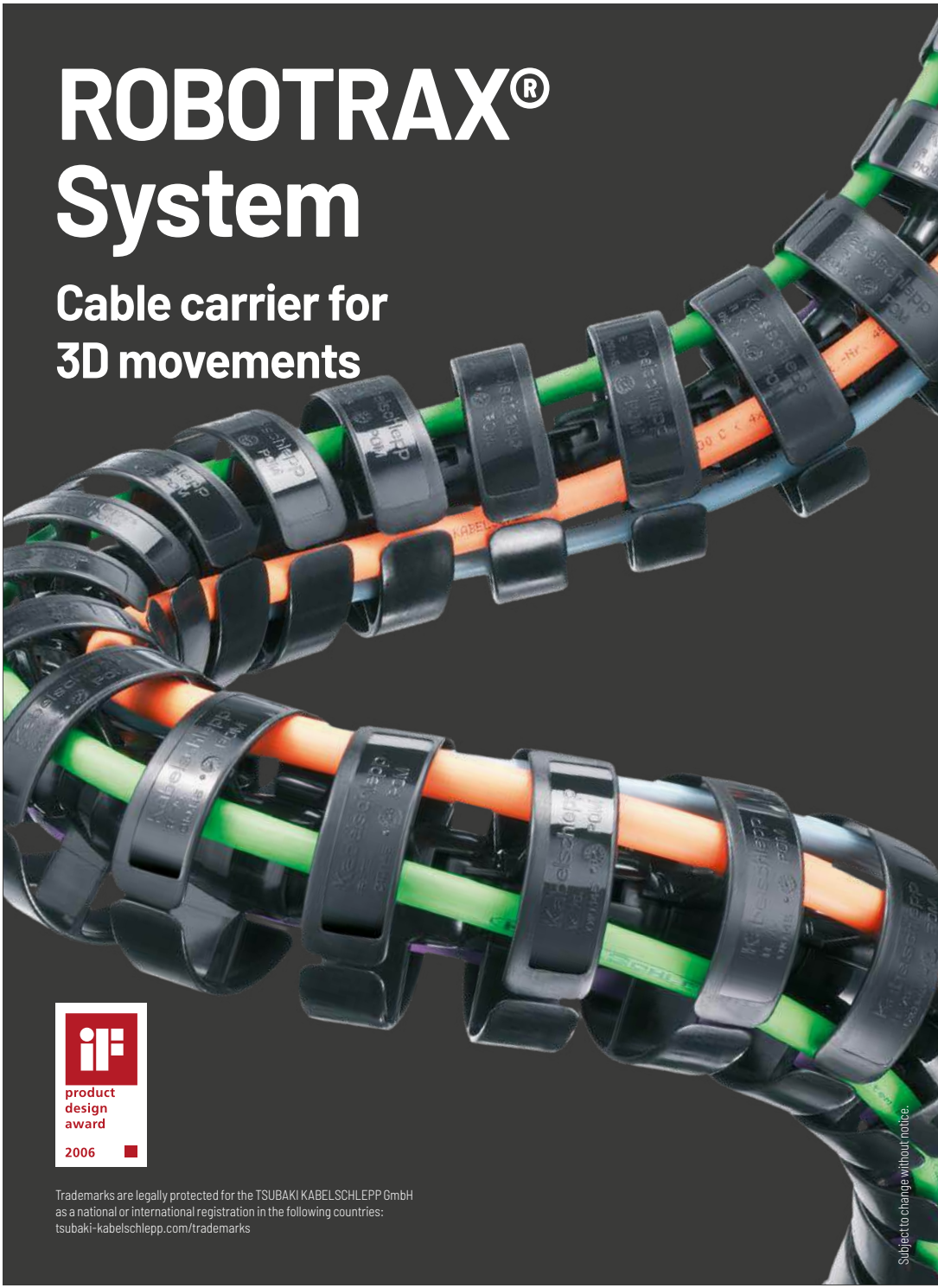
ROBOTRAX® System

Cable carrier for 3D movements



product design award 2006

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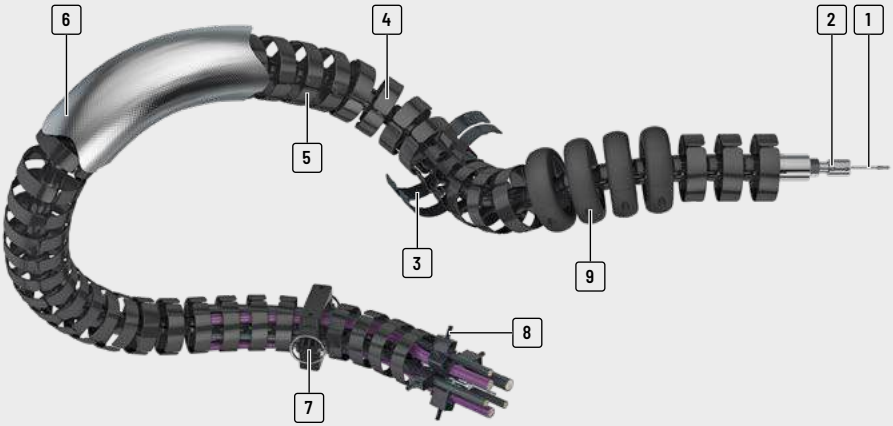


1 Steel cable for transferring extremely high tensile forces

2 Tension piece for locking the chain links

3 Type with toolless opening swivel crossbars and divider module available

4 Open design
- Fast cable laying as the cables are simply pressed in
- Easy checking of all cables

5 Special plastic for long service life

6 Protective covers or heat shields made from different materials are available for different environmental conditions

7 Quick-release bracket for fixing and continuation

8 Strain relief with LineFix clamps

9 Protection against hard impacts, excessive abrasion and premature wear as well as limitation of the bending radius through protector

Features

» Suitable for three-dimensional swivel and rotation movements

» Ideal for a long service life of the cables:
- The bending radius does not fall below the minimum when using protectors
- The cables can be separated in three chambers

» Also ideal for turntables



Swiveling crossbars and divider module (R140X)



Active return mechanism with the PBU pull back unit (R040 – R100)



Fast cable laying by simply pressing in the cables (R040 – R100)



Strain relief for secure fixing of the cables

Subject to change without notice.

ROBOTRAX® System | Overview

Type	Opening variant	h_i [mm]	B_i [mm]	D_a [mm]	t [mm]	KR [mm]	Radial link rotation on 1 m length [°]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]	Page
R040										
		10	27	40	21.5	70 [75]	± 450	0.7	8.5	690
R056										
		14	39	56	32	90 [105]	± 300	1.1	11	690
R075										
		22	52	75	40	125 [140]	± 215	4	18	690
R085										
		24	54	85	40	130 [170]	± 215	5	20	690
R100										
		31	64	100	40	130 [175]	± 215	6	27	690

Values in [ ] apply when using protectors

Type	Opening variant	h_i [mm]	B_i [mm]	D_a [mm]	t [mm]	KR [mm]	Radial link rotation on 1 m length [°]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]	Page
R140X										
		48	74	140	50	125 [225]	± 200	10	42	691

Values in [ ] apply when using protectors

Subject to change without notice.

Subject to change without notice.



ROBOTRAX®

Pitch
21.5 – 40 mm

Inner heights
10 – 31 mm

Inner widths
27 – 64 mm

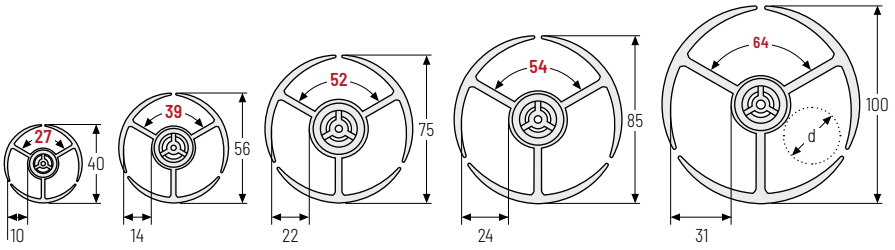
Bending radii
70 – 130 mm

Chain links single part

The basic structure of ROBOTRAX® consists of plastic links. These have spherical snap-on connections on both sides. This allows the individual links to be snapped together to form a cable carrier.

Protectors ensure that the bending radius does not fall below the minimum in any direction. The links can be rotated in the radial direction (see table values). The cables can be separated in three chambers.





R040 R056 R075 R085 R100

Dimensions

Type	t [mm]	KR [mm]	Radial rotation possible on 1 m length [°]	d* [mm]	Number of links per m
R040	21.5	70 [75]	± 450	2 – 8.5	47
R056	32	90 [105]	± 300	2 – 11	31
R075	40	125 [140]	± 215	3 – 18	25
R085	40	130 [170]	± 215	3 – 20	25
R100	40	130 [175]	± 215	3 – 27	25

Values in [] apply when using protectors
*We recommend a maximum cable diameter of 70 % of the highest specified value

Order example

R040	.	010	.	70	-	1075
Type		Design*		KR [mm]		L_k [mm]

* Type 010: cables are simply pressed in

Calculating the cable carrier length

Cable carrier length L_k

$L_k = n \times t$

Subject to change without notice.

Pitch
50 mm

Inner height
48 mm

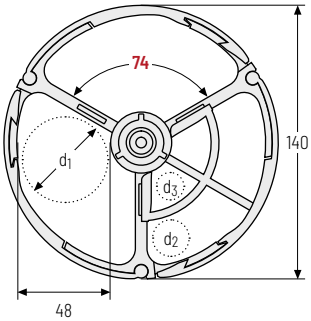
Inner width
74 mm

Bending radius
125 mm

Chain links with crossbars

The basic construction is similar to the ROBOTRAX® types with single part design. Swiveling crossbars with snap locks make it easy to open and safely close the cable carrier. In addition, the three chambers can be divided horizontally and vertically by a divider module for precisely separating cables and hoses.





R140X

Dimensions and order

Type	t [mm]	KR [mm]	Radial rotation possible on 1 m length [°]	d_1 [mm]	d_2 [mm]	d_3 [mm]	Number of links per m
R140X	50	125 [225]	± 200	42	18	15	20

Values in [] apply when using protectors

Order example

R140X	.	030	.	125	-	1500
Type		Design*		KR [mm]		L_k [mm]

* Type 030: Outside opening crossbars

Calculating the cable carrier length

Cable carrier length L_k

$L_k = n \times t$

Subject to change without notice.

Mounting kit

Fast movements of the robot arms generate high accelerations and therefore high tensile forces on the cable carrier.

To transfer these tensile forces, ROBOTRAX® has a hole at the center of each chain link through which the steel cable is pulled. This steel cable takes on the function of force transmission.

The steel cable is fixed with a clamping piece on one side. ROBOTRAX® permits accelerations up to 10 g.

The clamping piece can be used to easily set the chain links to the desired tension and adjust them at any time.

Long service life of the cables and hoses:
The forces are primarily transmitted by the cable carrier and not by cables and hoses.

The mounting set consists of steel cable, clamping and tension piece for up to 5 m cable carrier length.



Quick-release brackets

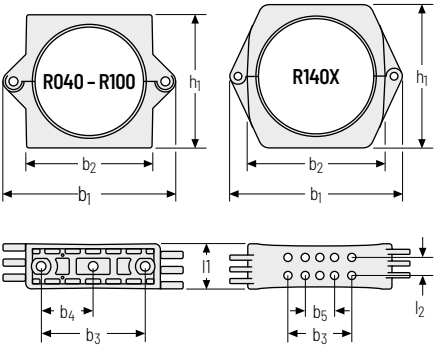
The ROBOTRAX® is fixed and continued with quick-release brackets which are attached with screws. The quick-release brackets fit on any chain link of the respective size. This means the fixing points can be individually adjusted to the motion sequence.

Locking bolt:
100% recyclable, cost-effective locking bolt, optimized for installation space and environment. The bolt can be assembled and disassembled without tools.
(Also available as a screwed version)



Dimensions

	R040	R056	R075	R085	R100	R140X
h_1 [mm]	54	70	86	105	120	164
l_1 [mm]	15	22	28	30	32	50
l_2 [mm]	–	–	–	–	–	20
b_1 [mm]	82	86	110	133	150	197.4
b_2 [mm]	50	63	82	96	112	158
b_3 [mm]	36	48	64	72	70	70
b_4 [mm]	18	24	32	36	35	35
b_5 [mm]	–	–	–	–	–	32
Screws	2xM4	2xM4	2xM6	2xM8	2xM8	4xM8



Please state the desired type series and quantity when ordering.

Subject to change without notice.

Heat shield/protective cover

Heat shield: The heat shield made from aluminum-coated textile fibers protects the ROBOTRAX® system and inserted cables against flying sparks, weld spatter and radiated heat.

Protective cover: The protective cover made from coated polyester protects against aggressive cutting fluids, hydraulic oils, fine dust and paint spatter.

Please state the desired type series and quantity when ordering.



Strain relief for cable ties

(available for all types)
For secure fixing of the cables.

The strain relief can be used on either end.

Please state the desired type series and quantity when ordering.



Strain relief LFR

(for types R075, R085, R100 and R140X)
Secure cable fixing, gentle on the cables.

Multi-layer cable fixing is also possible with double and triple LineFix® clamps. Several systems can be installed in sequence.

LineFix® strain reliefs – see page 926.

Please state the desired type series and quantity when ordering.



Subject to change without notice.

PBU pull back unit

(for types R040, R056, R075, R085 and R100)

Please state the number, robot type and type series when ordering.

PBU: With fast movement sequences and large work envelopes, the relatively long carriers knock against the robot arm. The repeated impact significantly reduces the service life of the cable carrier and the cables within, and the entire system can fail. Downtimes cause high costs and problems in the manufacturing process – so they have to be avoided.

- Compact design: fewer interfering contours and lower risk of collision
- Maximum flexibility for cable carrier routing
- No maintenance on the retraction element required
- Standard mounting for KUKA, ABB and FANUC

PBU is available for new robots, regardless of size, manufacturer, type or application, as well as retrofits and upgrades for existing workcells. It can be mounted vertically, horizontally or upside down. The extension length of the LSH 3 is 350 mm.





	R040	R056	R075	R085	R100
Hz [mm]	187	187	221	221	268

Type	Fotensile forces F [N]
PBU Light	40.0
PBU Standard	80.0
PBU Heavy	110.0

Protector

The service life of the cable carriers and cables is significantly reduced by impact during fast movement sequences and in large work envelopes. The Protector protects the cable carrier against hard impacts, excessive abrasion and premature wear, while also acting as a limitation for the smallest bending radius. Downtimes are minimized. Not the entire cable carrier has to be replaced, but only the Protector in some cases.

Please state the desired type series and quantity when ordering.



Subject to change without notice.

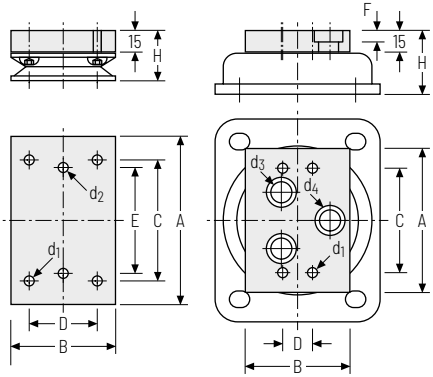
Turntable for quick-release bracket

One additional degree of freedom on the attachments points. When mounted on a turntable, the quick-release bracket can rotate as well, to offer increased flexibility during complex robot movements.



Dimensions

	R040	R056	R075	R085	R100	R140X
A [mm]	57	65	82	96	112	96
B [mm]	57	57	57	70	70	70
C [mm]	43	43	43	75	75	70
D [mm]	43	43	43	45	45	20
E [mm]	36	48	64	72	70	–
F [mm]	–	–	–	–	–	8
H [mm]	27.5	27.5	27.5	34	34	43
d_1 [mm]	M6	M6	M6	M6	M6	M8
d_2 [mm]	M4	M4	M6	M8	M8	–
d_3 [mm]	–	–	–	–	–	14
d_4 [mm]	–	–	–	–	–	20



Please state the desired type series and quantity when ordering.

Set consisting of

Sample image



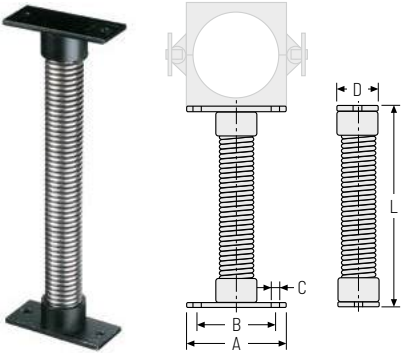
Coil spring for quick-release bracket

If the quick-release bracket is mounted on a coil spring, it can move elastically in all directions, deflect in 3 dimensions and spring back.



Dimensions

	R040	R056	R075	R085	R100
A [mm]	52	64	82	96	112
B [mm]	36	48	64	72	70
C [mm]	5	5	6.5	8.5	8.5
D [mm]	26	30	34	34	34
L [mm]	110	110	–	–	–
	150	150	–	–	–
	–	–	165	165	165
	–	190	–	–	–
	–	–	230	230	230
	–	–	315	315	315
	–	–	465	465	465



Please state the desired type series and quantity when ordering.

Subject to change without notice.

Cobot holder

(for types R040 and R056)

The ROBOTRAX® cobot holder was specially developed for sizes R040 and R056 as well as for corrugated tubes from the FIPLOCK® series (23-48). As a high-quality solution for industrial use, the sturdy steel straps offer non-slip support up to 100 N centrifugal force and thus ensure the trouble-free function of the cobot and the attached cables and hoses in continuous operation. It can be mounted on various surfaces and on diameters between 50-130 mm. The anti-twist design, an easily accessible lock and a protective rubber profile provide additional safety and support.

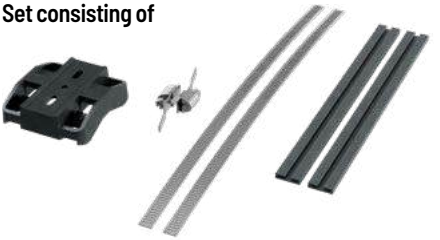
The cobot holder is versatile - from handling and quality assurance, assembly and laboratory automation to logistics, medical technology and service robotics - and ensures precision, safety and efficiency.



	R040 Order no. Set	R056 Order no. Set
Set for Ø 50-70 mm	60552	60556
Set for Ø 70-90 mm	60553	60557
Set for Ø 90-110 mm	60554	60558
Set for Ø 110-130 mm	60555	60559

Please state the desired type series and quantity when ordering.

Set consisting of



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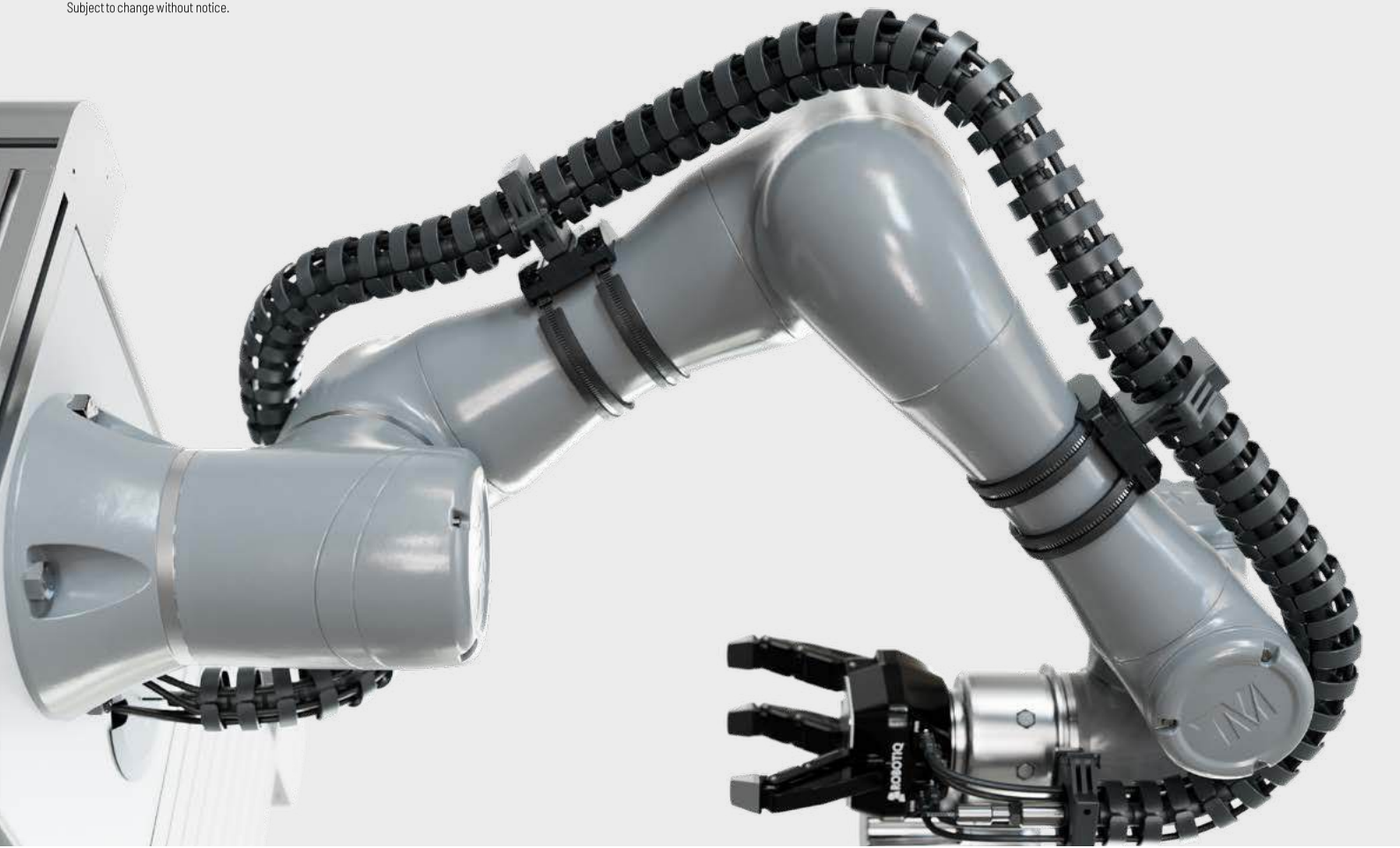

Special solutions

Cable carriers for special applications

Whether customized solutions or cable carriers for special applications. In the chapter "special solutions" you will find cable carsiers for specific requirements with adapted properties such as products for the clean room to protect your cables and hoses.

- Practical solutions for special applications
- Application-dependent individual configuration possible
- Solutions for use with ISO Class 1 and ISO Class 2



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FLATVEYOR® ..... Page 700

Cable management system solution for cleanroom applications



FLATVEYOR® ZP ..... Page 704

Sustainable cable management system solution for cleanroom applications



CLEANVEYOR® ..... Page 708

For highly requirement of cleanroom applications, achieve to ISO Class 1

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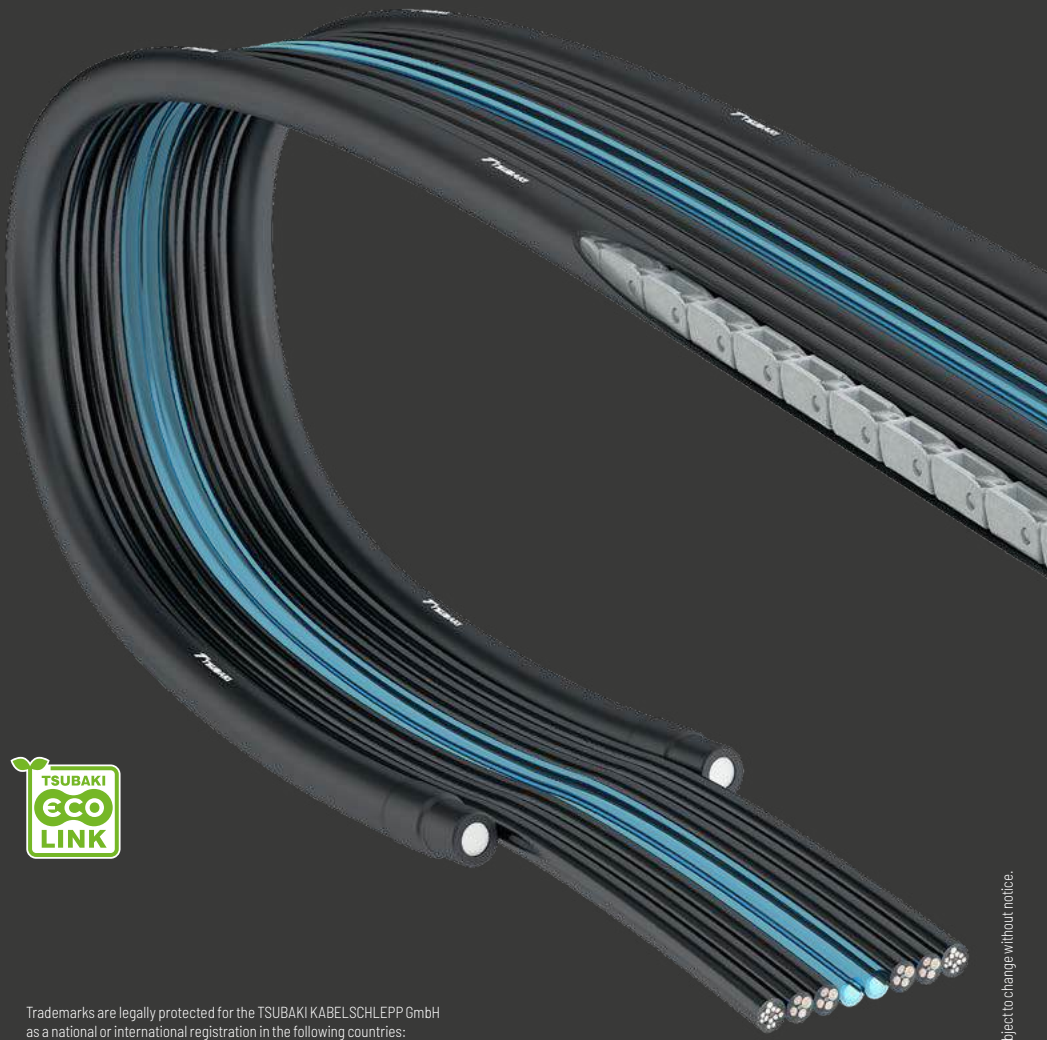
FLATVEYOR®

Cable management system solution for cleanroom applications



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1 Flexibility PVC cables from our lineup, based on your specifications

2 Polyurethane air tubes, based on your specifications

3 Stopper for support members

4 Support members on both sides for a free-standing guiding

5 Covered tube for support members

Features

» No friction occurs: Cleanroom IPA ISO Class 2 certified

» Solve particle issues generated from the friction of cable carriers and cables

» Usable with long travel strokes

» Easy to make a clean for maintenance

» Minimizes bouncing

» Quiet

» Compact & lightweight

» High speed operation

» Line up cables with excellent flexibility and elasticity





FLATVEYOR® is a free-standing flat cable system with internal support members to keep straight movement with high speed, high acceleration.

Subject to change without notice.

FLATVEYOR®

FLATVEYOR® is a free-standing flat cable guiding system that makes full use of our cable carrier technology and experience.

From pharmaceutical industry through medical technology to high-tech industry – all of them require an especially low-particle environment and "technical cleanliness" for their production processes. FLATVEYOR® can support to reduce the downtime and improve your productivity.

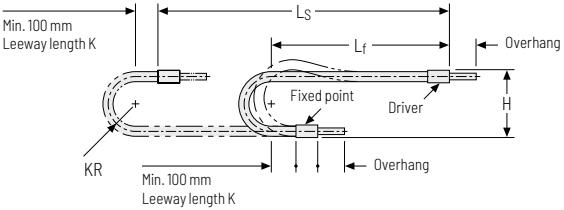
FLATVEYOR® is a free-standing flat cable system with internal support members to keep straight movement with a high speed.

No hopping, No sagging, No falling over sideways!
The support members act as reliable guides which can be moved in one direction along the intended minimum bending radius, whereby the cables and tubes are guided reliably.



Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	Travel length* ≤ [mm]
40	103-123	1600
70	213-233	2200
100	273-293	2800
130	333-353	2800

* with an additional load of 0.4 kg/m

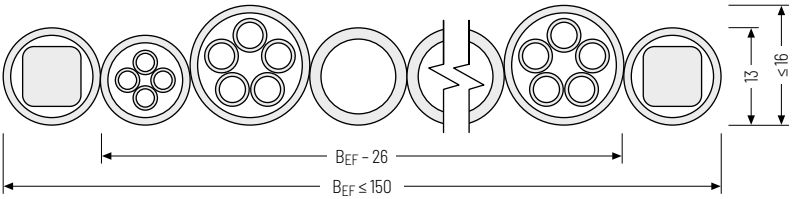
Speed
up to 2 m/s

Acceleration
up to 4 m/s²

Temperature range
-10 to 80 °C

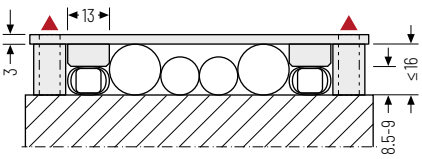
Cable-Ø
up to 16 mm

Dimensions

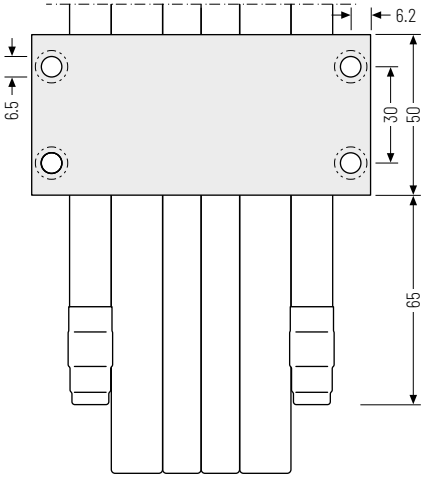


Connection clamps – aluminum

The aluminum clamps can be connected **from above or below**.



▲ Assembly options



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FLATVEYOR® ZP

Sustainable cable management system solution for cleanroom applications



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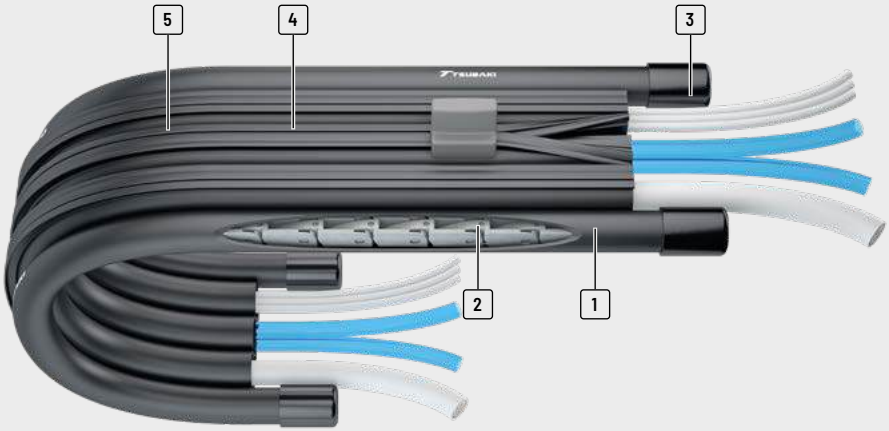


1 Openable tubes
2 Very easy to close for openable tubes with a supplied tool
3 Stopper for support members
4 Support members on both sides for a free-standing guiding
5 Covered tube for support members

Features

» No friction occurs: Clean class ISO Class 2 based on in-house test results. Solve particle issues generated from the friction of cable carriers and cables
» Very easy & convenient to replace and use your own cables and tubes at your site
» The particularly durable and smoothly moving hoses can be easily opened and closed with the supplied tool
» Sustainable & Cost down!
» Cable replacement does not require changing the complete system
» Quiet
» Compact & lightweight
» Specifications can be determined easily and quickly




Easy replacement of cables and hoses


Clean class equivalent to ISO class 2


Available in black or white

Subject to change without notice.

FLATVEYOR® ZP

FLATVEYOR® ZP combines the advantages of a FLATVEYOR (flat cable system) with the structure of a cable carrier. FLATVEYOR® ZP reduces the downtime and improves the productivity. Users benefit from a simple replacement process for cables and hoses. In addition, existing cables and hoses can be installed, which reduces costs and provides more sustainability in procurement. There is no need to replace the entire sytem.

FLATVEYOR® ZP is a free-standing flat cable system with internal support members to keep straight movement with a high speed.

No hopping, No sagging, No falling over sideways!
The support members act as reliable guides which can be moved in one direction along the intended minimum bending radius, whereby the cables and tubes are guided reliably.

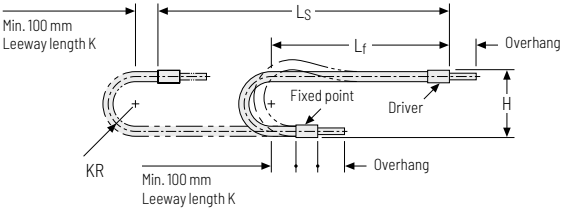
About the openable tubes

» TSUBAKI KABELSCHLEPP's original tube with excellent flexibility, durability and smoothness
» Zip structure is a very flexible to open and close, but does not open when moving due to the high durability by our original tube
» 2 Support members with both sides + openable tubes
» Openable tubes: Selection is available from 1 to 8
» Color: White or black is a standard model color



Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	Travel length* ≤ [mm]
70	223-243	1600
100	283-303	1800
130	343-363	1800

* with an additional load of 0.4 kg/m

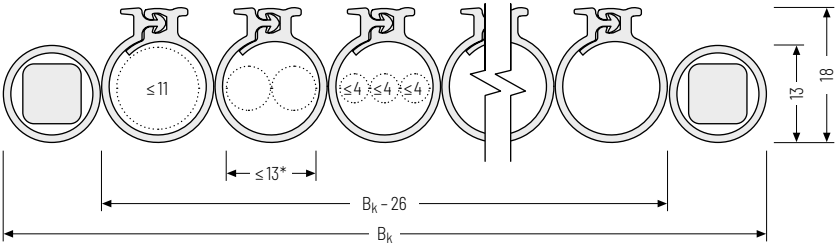
Speed
up to 2 m/s

Acceleration
up to 2 m/s²

Temperature range
-10 to 60 °C

Cable-Ø
up to 11 mm

Dimensions

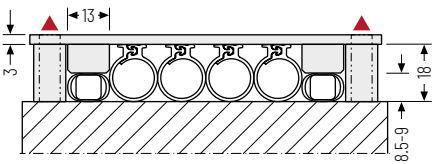


Openable tubes	Bk [mm]	Openable tubes	Bk [mm]	Openable tubes	Bk [mm]	Openable tubes	Bk [mm]
1 tube	41	3 tubes	71	5 tubes	101	7 tubes	131
2 tubes	56	4 tubes	86	6 tubes	116	8 tubes	146

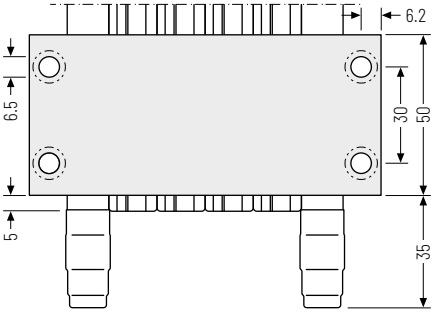
* The difference in outside diameters of adjacent cables and tubes should be 5 mm or less

Connection clamps – aluminum

The aluminum clamps can be connected **from above or below**.



▲ Assembly options



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CLEANVEYOR®

For highly requirement of cleanroom applications, achieve to ISO Class 1



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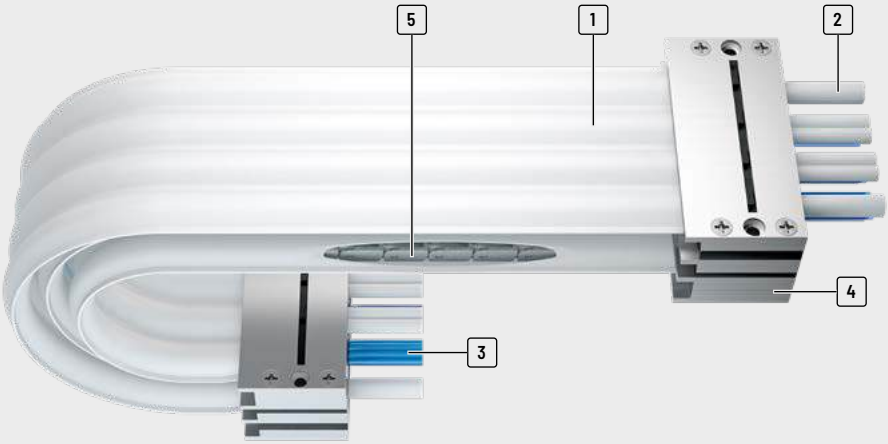


1 Pods/Chambers: will select suitable Pods, based on your specifications

2 Flexibility cables from our lineup, based on your specifications

3 Air tubes, based on your specifications

4 Clamp: will select suitable clamp, based on your specifications

5 Support members: on both internal sides of Pods for a free-standing guiding

Features

- » Cleanroom IPA ISO Class 1 certified
- » Solve particle issues generated from the friction of cable carriers and cables
- » Usable with long travel strokes
- » Quiet
- » High speed operation
- » Line up cables with excellent flexibility and elasticity
- » Fast installation due to preassembled complete system
- » High durability with over 10 million bending cycles





No friction due to the use of pods



Cleanroom IPA ISO Class 1 certified



High travel speed: up to 2 m/sec

Subject to change without notice.

CLEANVEYOR®

CLEANVEYOR® is an extremely top-class solution with a free-standing guiding system that makes full use of our cable carrier technology and experience.

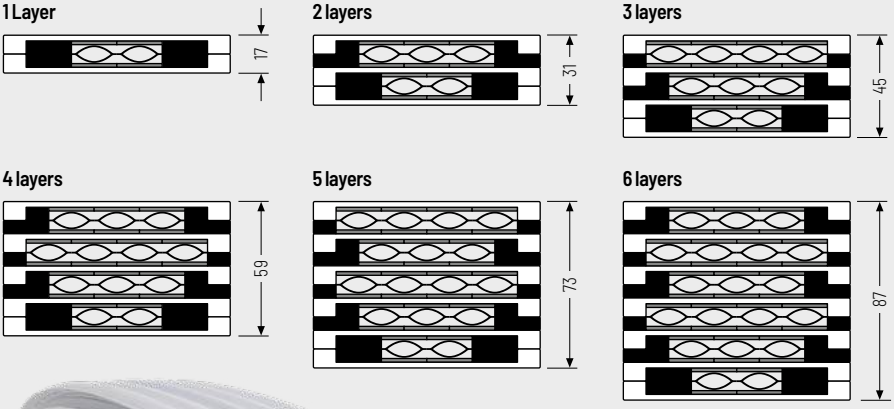
Maximum purity and hygiene!

It comes as no surprise that clean rooms, processes and products are a must! Because any contamination leads to costly incidents, scrap or useless laboratory results.

CLEANVEYOR® can contribute to lowering total costs, to lead reduction of defective products.

Layering example

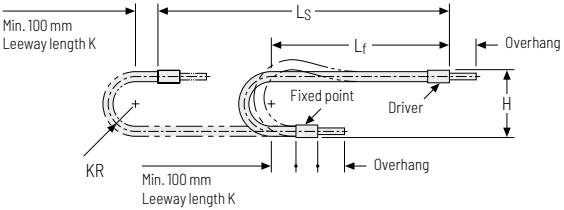
CLEANVEYOR® supports a multi-layer structure with up to 6 layers.





Subject to change without notice.

Unsupported arrangement



KR [mm]	Travel length* ≤ [mm]
40	1600
70	2200
100	2800
130	2800

* with an additional load of 0.4 kg/m

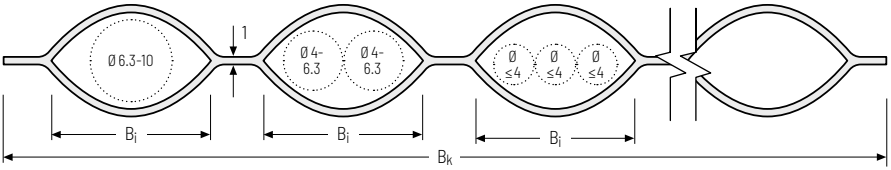
Speed
up to 2 m/s

Acceleration
up to 4 m/s²

Temperature range
-10 to 80 °C

Cable-Ø
3 to 10 mm

Pod types and dimensions



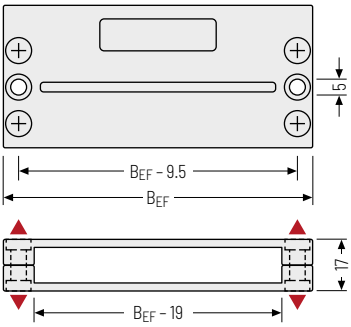
Quantity Pods	Bi [mm]*	Connection width [mm]*	Bk [mm]
1 Pod	19	2.3	23.6
2 Pods	19	2.3	44.9
3 Pods	19	2.3	66.2
4 Pods	19	2.3	87.5

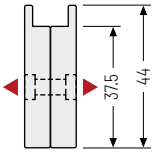
Quantity Pods	Bi [mm]*	Connection width [mm]*	Bk [mm]
5 Pods	19	2.3	108.8
6 Pods	19	2.3	130.1
7 Pods	19	2.3	151.4
8 Pods	19	2.3	172.7

* Dimensions when flat without cables/hoses (closed)

Connection clamps – aluminum

The aluminum clamps can be connected **from above or below**.





▲ Assembly options

Clamp type	BEF [mm]
For 2 Pods	57.2
For 3 Pods	76.3
For 4 Pods	95.4
For 5 Pods	114.5
For 6 Pods	133.6
For 7 Pods	152.7
For 8 Pods	171.8

Subject to change without notice.

STEEL-LINE

Steel cable carriers for extreme applications

Special applications require the use of special cable carriers. Our steel and stainless steel cable carriers are ideal for extreme heat or other very rough ambient conditions, such as in mining, smelting or oil production. Standardized separating options offer best possible protection for cables and hoses even under strong mechanical strain.

- Robust design for strong mechanical strain
- High additional loads and extensive unsupported lengths possible
- Ideal for extreme and rough ambient conditions
- Heat-resistant



Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Subject to change without notice.





LS/LSX series ..... page 714

Cost-effective steel cable carriers with lightweight design



S/SX series ..... page 740

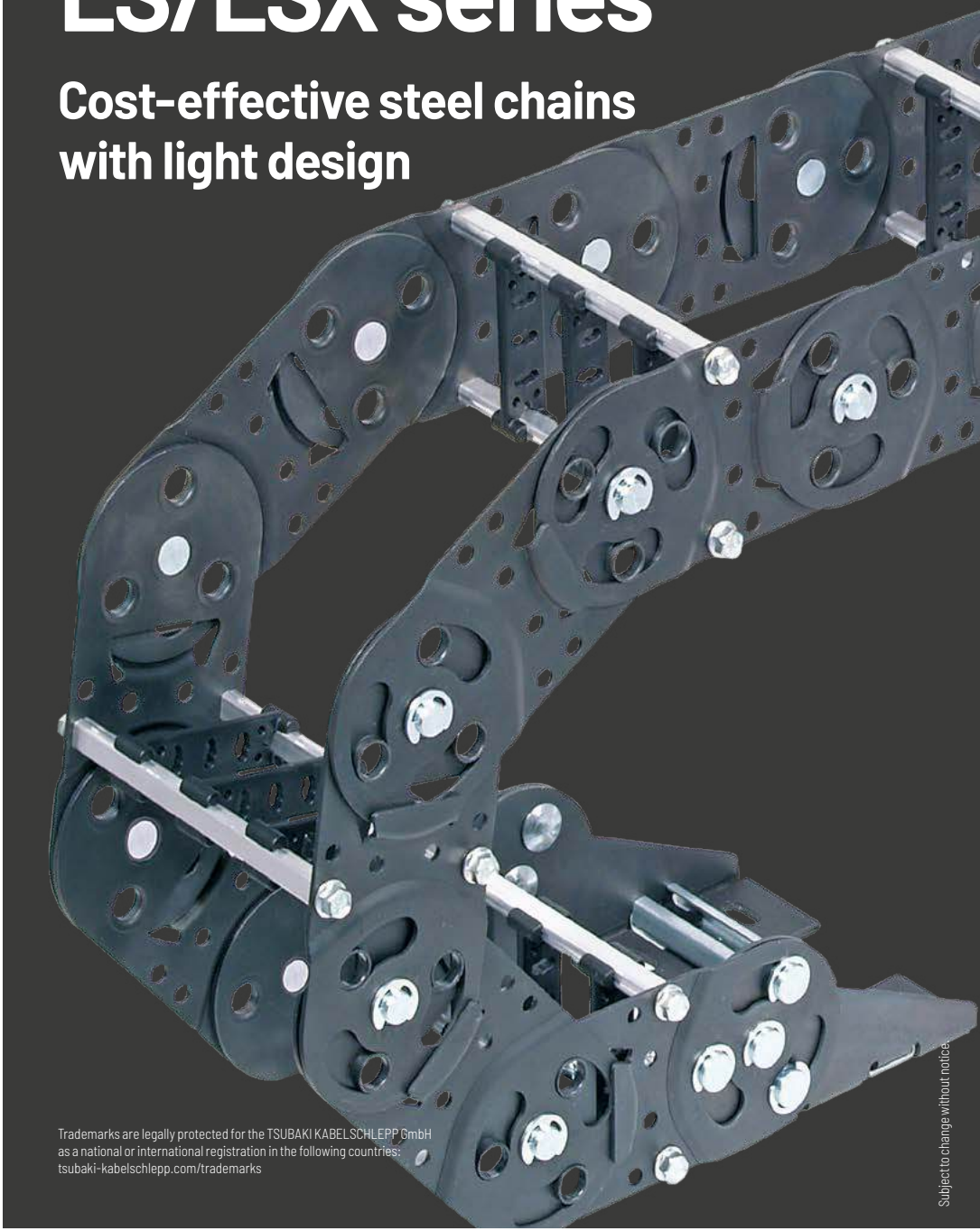
Extremely robust and stable steel cable carriers

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

LS/LSX series

Cost-effective steel chains with light design



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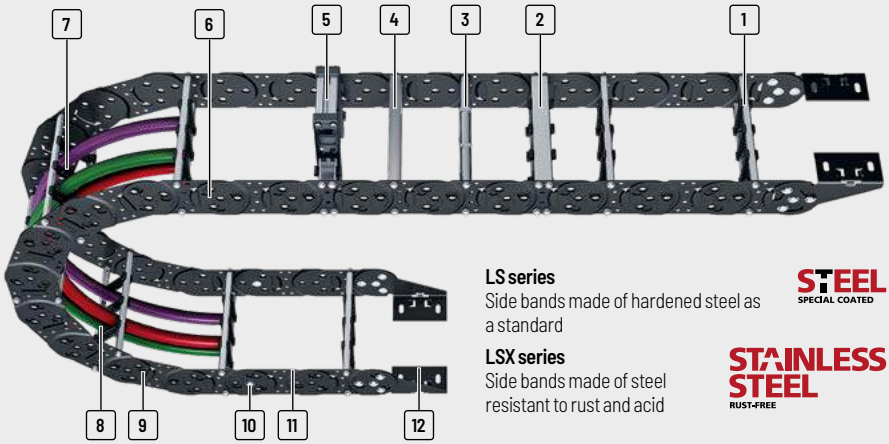


LS series
Side bands made of hardened steel as a standard

STEEL SPECIAL COATED

LSX series
Side bands made of steel resistant to rust and acid

STAINLESS STEEL RUST-FREE

1 All stays available in **1 mm width sections**
2 4-fold bolted aluminum stays for extreme loads
3 Rolling stays
4 Aluminum hole stays
5 Mounting frame stays
6 Stops integrated into link plate – no additional bolts required
7 Different separation options for the cables
8 Plastic or steel dividers
9 Weight-optimized side bands made of hardened steel or stainless steel
10 Optional center bolt for applications with high loads
11 Good ratio of inner to outer width – no end divider required
12 End connectors for different connection variants

Features

» Weight-optimized one-part link plate design
» Better value than comparable steel cable carriers
» Significantly higher unsupported lengths compared to plastic cable carriers of a similar size
» Integrated radius and pre-tension stops – in a good value design
» Bolted stay systems, solid end connectors
» Cover with steel band available on request
» Also possible as a double band solution
» Good corrosion resistance

The design

The weight-optimized link plate design makes the cable carriers very light yet highly sturdy. For the LS series, the unsupported length is significantly higher compared to plastic cable carriers of a similar size.




Weight-optimized link plates consist of only one plate – the stop system is integrated


Lightweight side bands without additional bolts – hardened steel or stainless steel


Optional: Center bolts and circlip for applications with high loads


Optional: C-rail for strain relief elements attached in the connection

Subject to change without notice.

LS/LSX series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	B_i-grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
LS/LSX1050											
		RS2	58	80	84 – 384	100 – 400	1	105	105 – 430	35	46
		RV	58	80	84 – 584	100 – 600	1	105	105 – 430	35	46
		RR	54	80	84 – 484	100 – 500	1	105	105 – 430	35	43
		LG	48	80	54 – 554	100 – 600	1	105	105 – 430	35	38
		RMAI	58 (200)	80 (226)	184 – 384	200 – 400	1	105	195 – 430	35	–
		RMAO	58 (200)	80 (226)	184 – 384	200 – 400	1	105	105 – 430	35	–

Sturdy and durable, even under extreme conditions

Double-band steel cable carrier LS1050

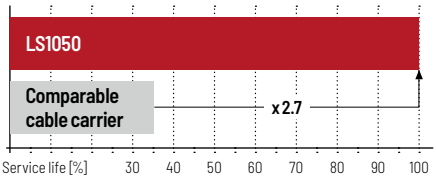
- Up to 40% longer unsupported lengths compared to LS1050 with standard side band with the same additional load, as part of the load diagram
- Very high additional loads: up to 40 kg/m possible
- Long service life even with high dynamic loads
- High travel speeds



Longer service life through hardened side bands

The hardened surface significantly increases the service life of the LS1050. Tests were carried out on cable carriers with identical designs.

The LS1050 is therefore ideal for applications with many travel cycles, for example in 3-shift operation.

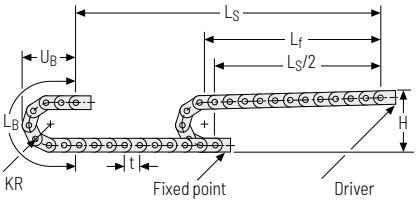


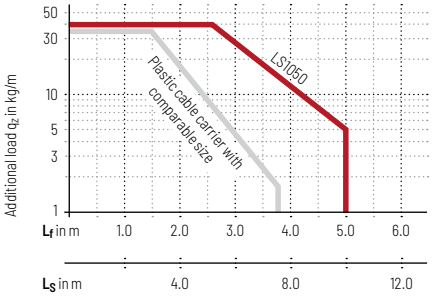
Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
9.5	5	10	–	–	–	•	•	•	•	•	–	–	722
9.5	5	10	–	–	–	•	•	•	•	•	–	–	726
9.5	5	10	–	–	–	•	•	–	–	•	–	–	730
9.5	5	10	–	–	–	–	–	–	–	•	–	–	732
9.5	5	10	–	–	–	•	–	–	–	•	–	–	734
9.5	5	10	–	–	–	•	–	–	–	•	–	–	736

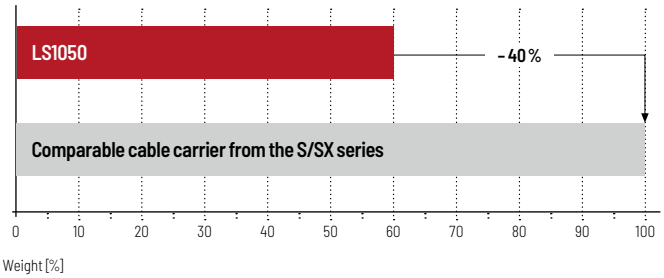
Significantly higher unsupported lengths compared to plastic cable carriers of a similar size

Load diagram for unsupported length depending on the additional load





Weight-optimized through adapted link plate design



Subject to change without notice.

LS/LSX1050

Pitch
105 mm

Inner height
48 – 58 mm

Chain widths
100 – 600 mm

Bending radii
105 – 430 mm

Stay variants



Aluminum stay RS 2 ..... page **722**

Frame stay narrow, bolted

» Quick to open and close.
» Aluminum profile bars for light to medium loads. Easy threaded connection.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay RV ..... page **726**

Frame stay, reinforced

» Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
» **Inside/outside:** Threaded joint easy to release.



Tube stay RR ..... page **730**

Frame stay, tube version

» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
» **Inside/outside:** Screw connection detachable.



Aluminum stay LG ..... page **732**

Frame stay, split

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Inside/outside:** Threaded joint easy to release.

Subject to change without notice.

Stay variants



Aluminum stay RMAI page 734

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Inside:** Screw-fixing easy to release.



Aluminum stay RMAO page 736

Mounting frame stay

» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» **Outside:** Screw-fixing easy to release.



TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



TRAXLINE® cables for cable carriers

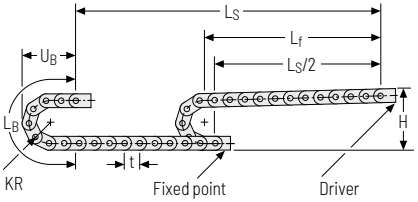
Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.



Subject to change without notice.

Unsupported arrangement



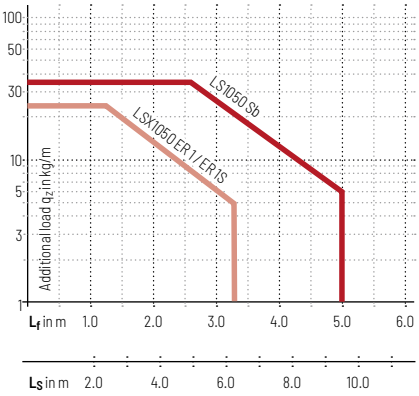
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
105	330	540	250
125	370	603	270
155	430	697	300
195	510	823	340
260	640	1027	405
295	710	1137	440
325	770	1231	470
365	850	1357	510
430	980	1561	575

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 3.8$ kg/m. For other inner widths, the maximum additional load changes.



Speed
up to 5 m/s

Acceleration
up to 10 m/s²

Travel length
up to 9.5 m

Additional load
up to 35 kg/m



Information on selecting center bolts and stay arrangement

- Cable carrier length < 4 m: half-stayed arrangement as a standard
- Cable carrier length > 4 m: fully-stayed arrangement required
- Stay width B_{St} > 400 mm: fully-stayed arrangement required
- Travel speed > 2.5 m/s: fully-stayed arrangement required
- Use of support rollers: Center bolt **and** fully-stayed arrangement required

Subject to change without notice.

LS/LSX1050 RS 2 | Dimensions · Technical Data

Aluminum stay RS 2 –
frame stay narrow, threaded joint

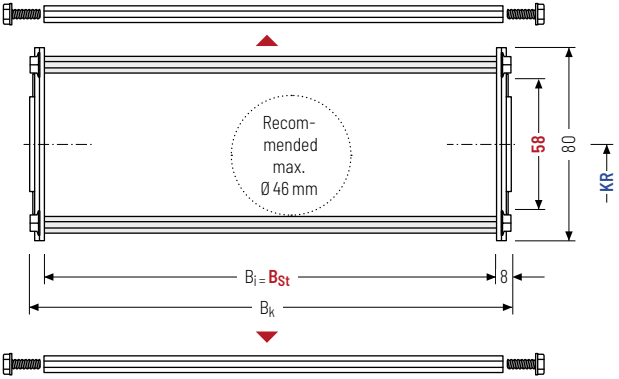
- Quick to open and close
- Aluminum profile bars for light to medium loads. Simple threaded joint.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 100 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]					q_k [kg/m]
58	80	84 – 384	**84 – 384**	B_{St} + 16	105 – 295	125 – 325	155 – 365	195 – 430	260	3.63 – 4.11

* in 1 mm width sections

Order example

LS1050	.	180	.	RS 2	.	125	.	Sb	-	2415	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

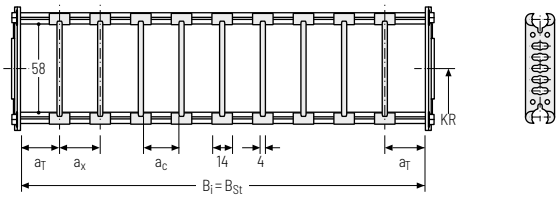
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The socket additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm as well as 16.5 and 21.5 mm **(version B).**

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	7	14	10	–

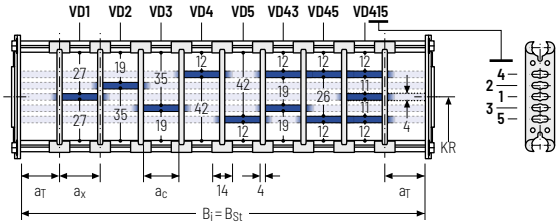
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	7	25	14	10	2

The dividers can be moved in the cross section.

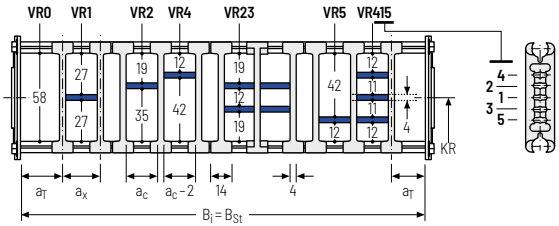


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	7	23	19	2

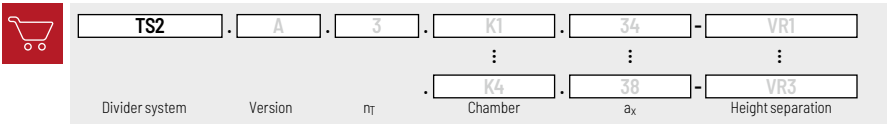
With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Please note that the real dimensions may deviate slightly from the values indicated here.

Order example

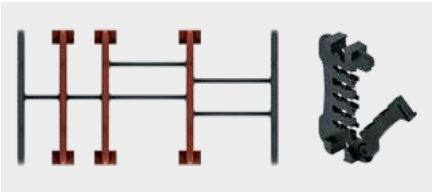


Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



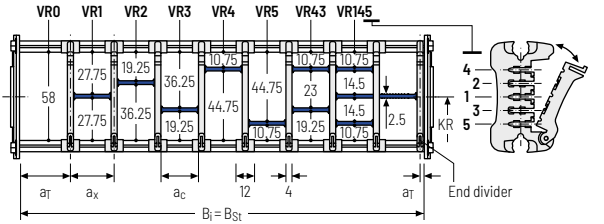
End divider

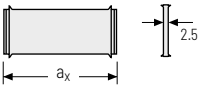


Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	6 / 2*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





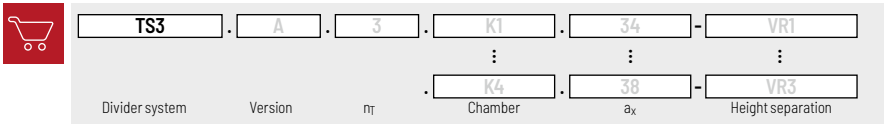
a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example



Please state the designation of the divider system (TS0, TS1,...), version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation (TS1, TS3) please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice



LS/LSX1050 RV | Dimensions · Technical Data

Aluminum stay RV – frame stay reinforced

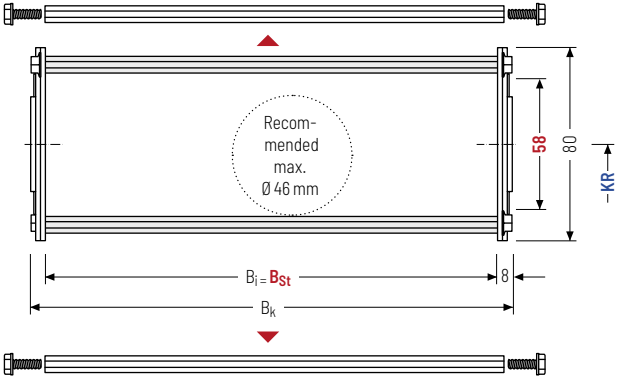
» Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 100 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]					q_k [kg/m]
58	80	84 – 584	**84 – 584**	B_{St} + 16	**105 – 295**	**125 – 325**	**155 – 365**	**195 – 430**	**260**	4.00 – 5.95

* in 1 mm width sections

Order example

LS1050	.	180	.	RV	.	125	.	Sb	-	2415	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

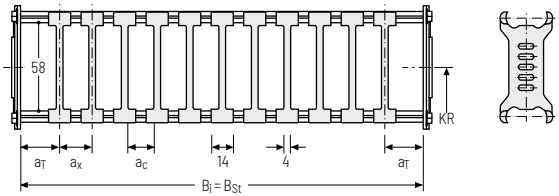
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	14	10	–

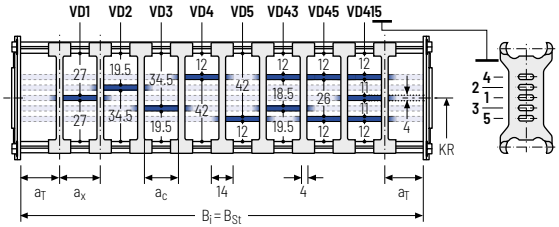
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7	25	14	10	2

The dividers can be moved in the cross section.

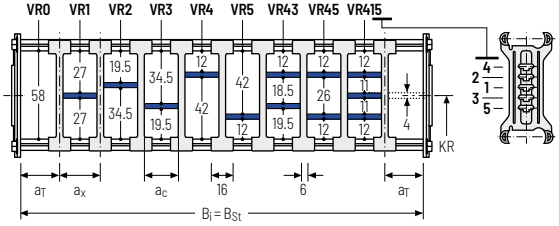


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	8	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).





TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

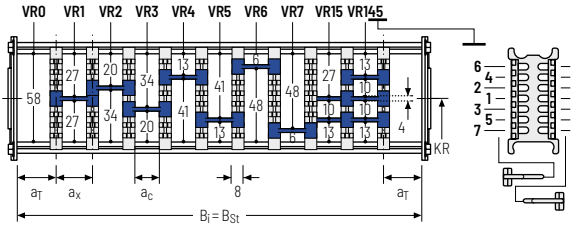
Subject to change without notice.

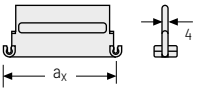
Divider system TS3 with height separation made of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]

a_c (nominal width of inner chamber) [mm]

16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_X] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

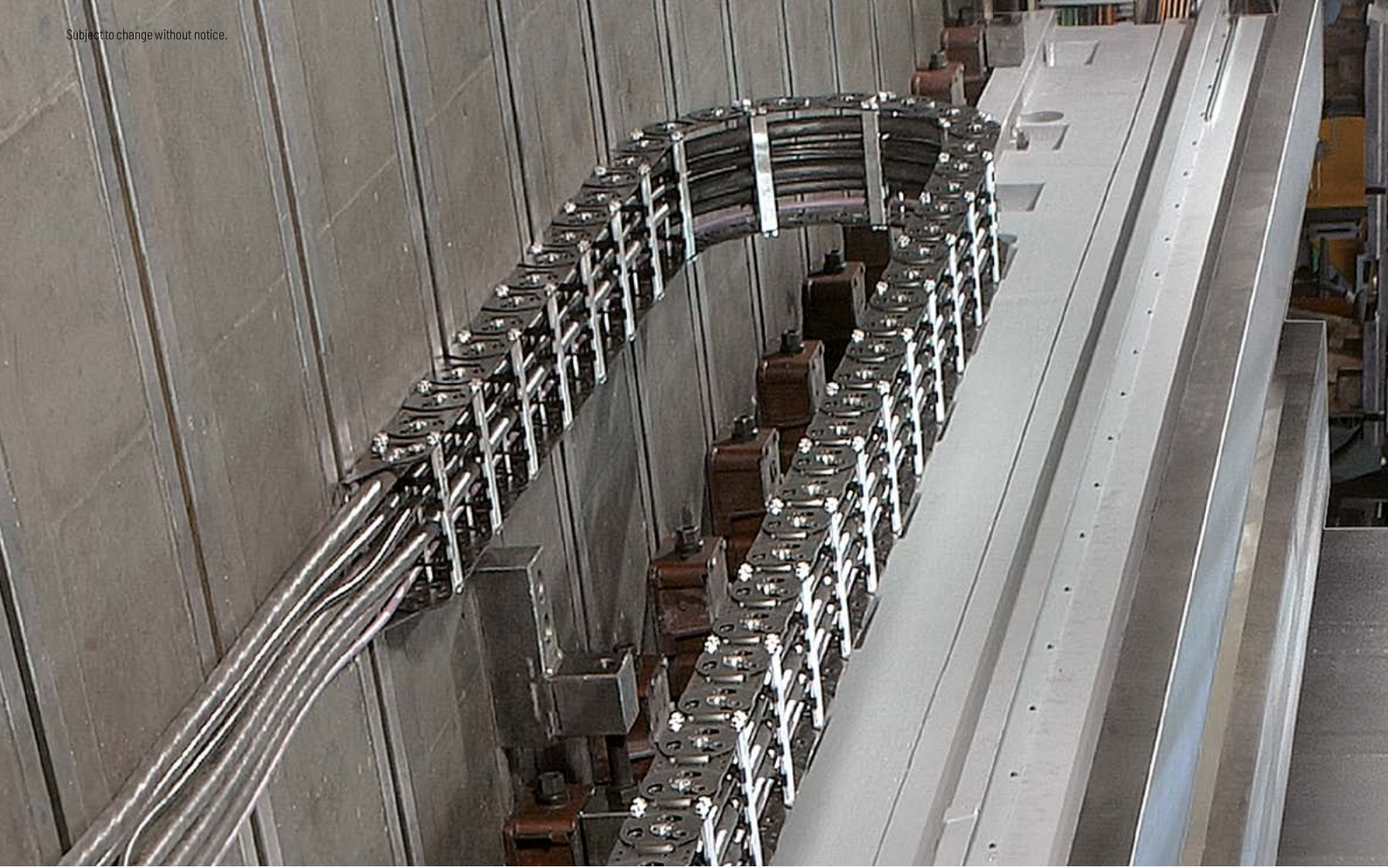
Assembly instructions etc.:
Additional info via your smartphone or check online at
tsubaki-kabelschlepp.com/downloads



Configure your cable carrier here:
online-engineer.de

Subject to change without notice.

Subject to change without notice.



LS/LSX1050 RR | Dimensions · Technical data

Tube stay RR –
frame stay, tube version

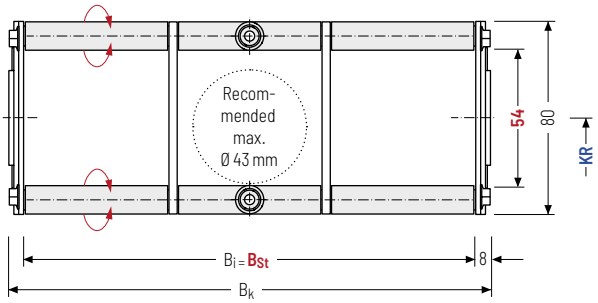


» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
» Available customized in **1 mm width sections**.
» **Inside/outside: Screw connection detachable**
» **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 100 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]					q_k [kg/m]
54	80	84 – 484	84 – 484	B_{St} + 16	105	125	155	195	260	4.25 – 7.80
					295	325	365	430		

* in 1 mm width sections

LS1050	.	180	RR	.	125	.	Sb	-	2415	HS
Type		B_{St} [mm]	Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

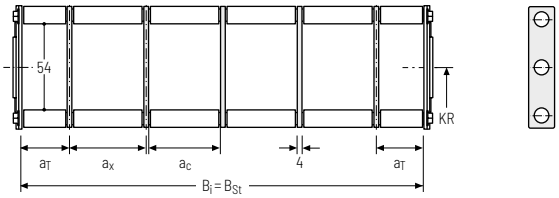
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

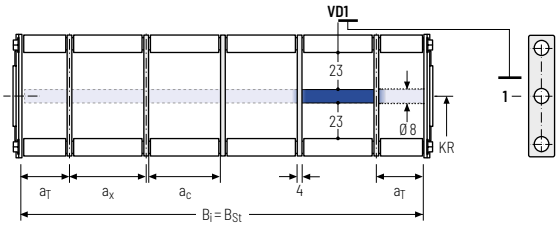
Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	20	20	16	–

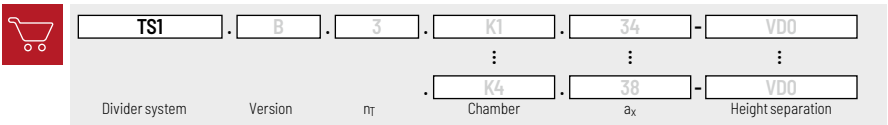


Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	20	25	20	16	2



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).



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tsubaki-kabelschlepp.com/traxline

Subject to change without notice.

LS/LSX1050 LG | Dimensions · Technical data

Aluminum stay LG – hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

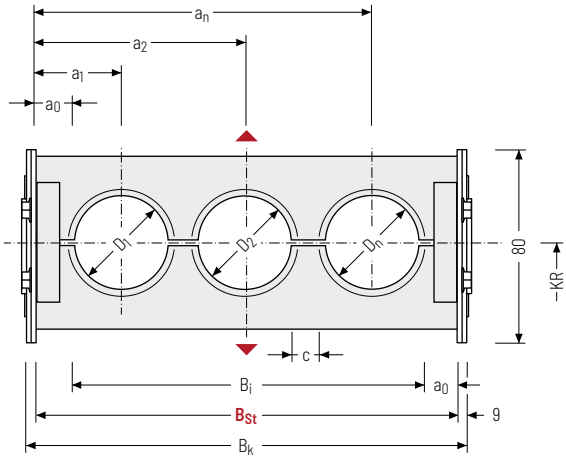
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 100 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{\Sigma} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]					q_k 50 %** [kg/m]
48	12	80	54 – 554	82 – 582	B_{St} + 18	4	14	105 – 295	125 – 325	155 – 365	195 – 430	260	4.00 – 7.99

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

LS1050	.	180	LG	.	125	.	Sb	-	2415	HS
Type		B_{St} [mm]	Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.


TSUBAKI
TRAXLINE

LS/LSX1050 RMAI | Dimensions · Technical Data

Aluminum stay RMAI – mounting frame stay

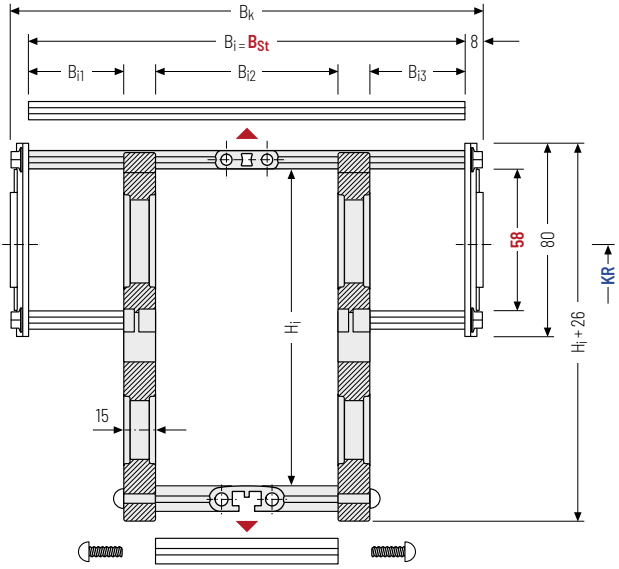


» Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
» The mounting frame stay is mounted on the inside in the bending radius.
» Available customized in **1 mm width sections**.
» **Inside:** Screw-fixing easy to release.

Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]	h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i2\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]		
58	130	80	184 – 384	35	84	35	184 – 384	B_{St} + 16	195	260	295
	160								325	365	430
	200										

* in 1 mm width sections

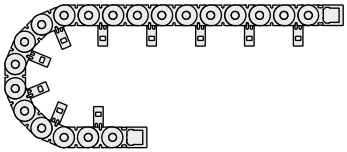
Order example

LS1050	.	280	.	RMAI	.	195	.	Sb	-	2415		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

RMAI – assembly to the inside:
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 195 mm
H_i = 160 mm: KR_{min} = 260 mm
H_i = 200 mm: KR_{min} = 260 mm





TOTALTRAX® complete systems

Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

Subject to change without notice.

LS/LSX1050 RMA0 | Dimensions · Technical Data

Aluminum stay RMA0 – mounting frame stay

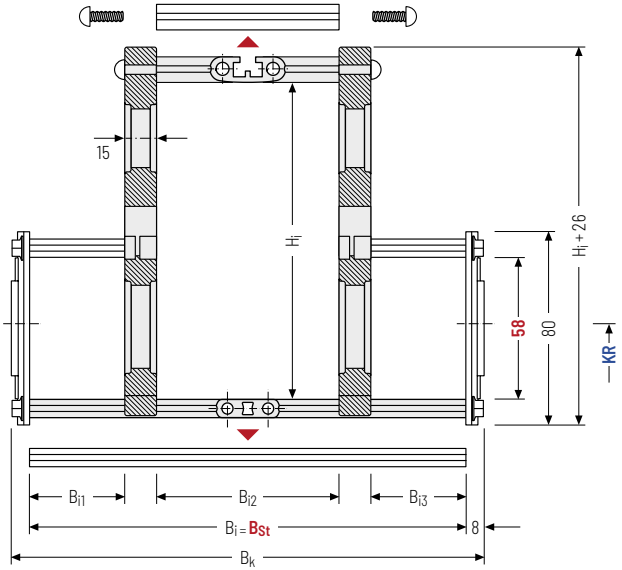
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay is mounted on the outside in the bending radius.
- Available customized in **1 mm width sections**.
- **Outside:** Screw-fixing easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

h_i [mm]	H_i [mm]	h_G [mm]	B_i [mm]	$B_{i1\,min}$ [mm]	$B_{i2\,min}$ [mm]	$B_{i3\,min}$ [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]		
58	130	80	184 – 384	35	84	35	184 – 384	B_{St} + 16	105	125	155
	160								195	260	295
	200								325	365	430

* in 1 mm width sections

Order example

LS1050	.	280	.	RMA0	.	195	.	Sb	-	2415		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

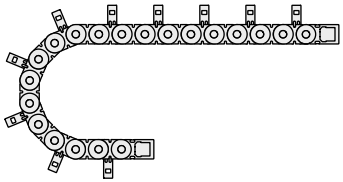
Subject to change without notice.

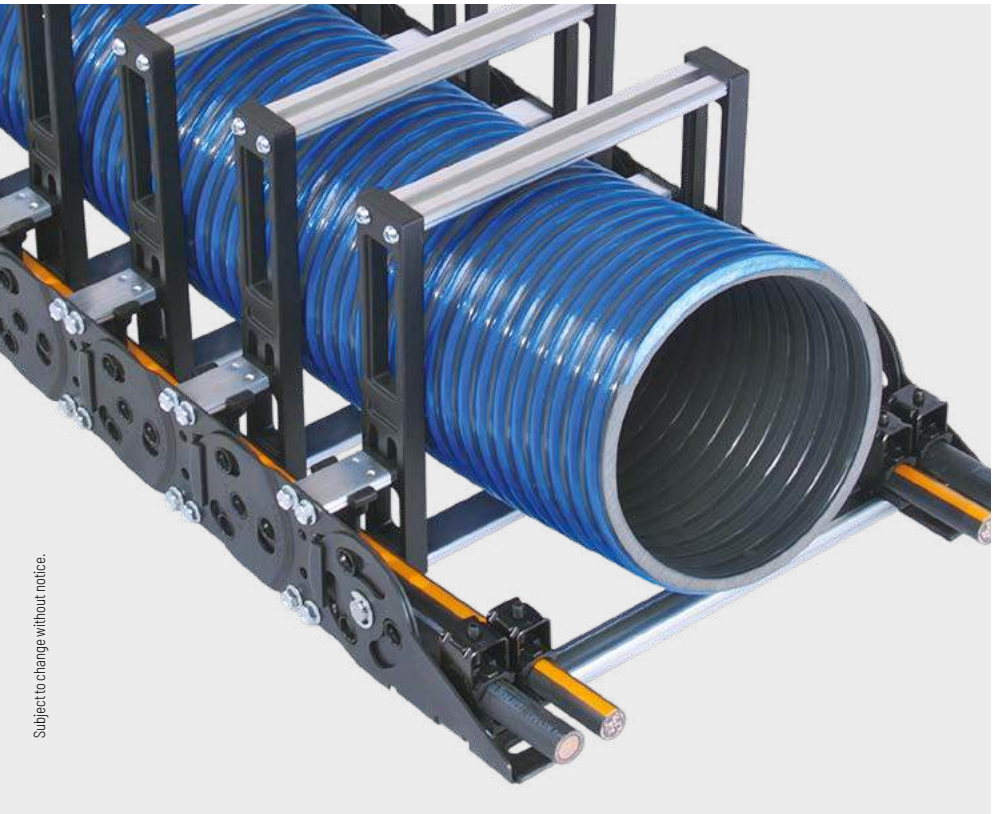
LS/LSX1050 RMA0 | Dimensions · Technical Data

RMA0 – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

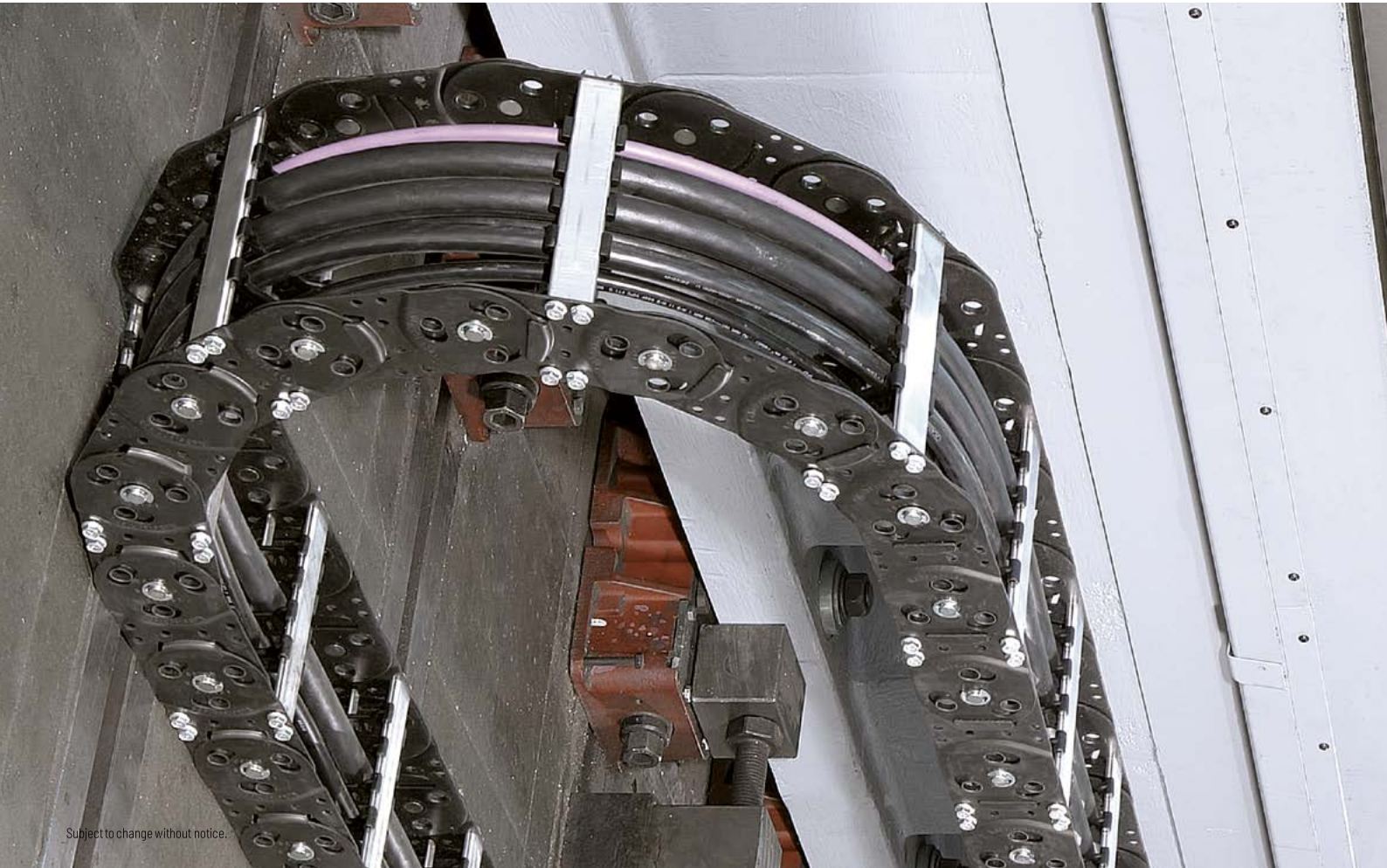
Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.





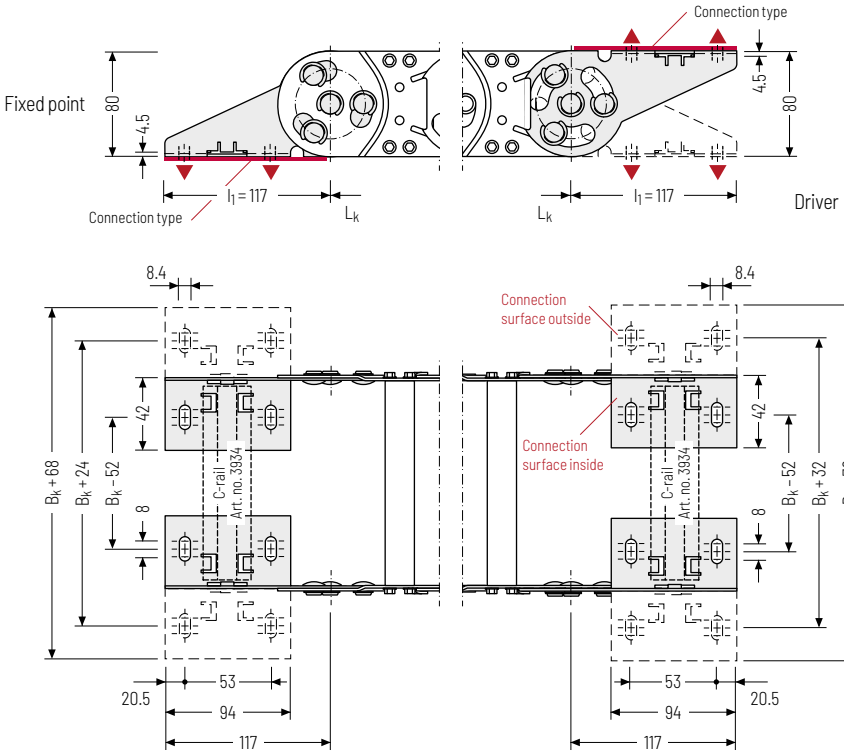
Subject to change without notice.



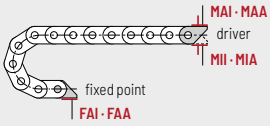
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options



Connection point
F – fixed point
M – driver

Connecting surface
A – connecting surface outside
I – connecting surface inside

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 924.

Subject to change without notice.

S/SX series

Extremely robust and sturdy steel cable carriers



* Only S/SX 1252B and S/SX 1802B

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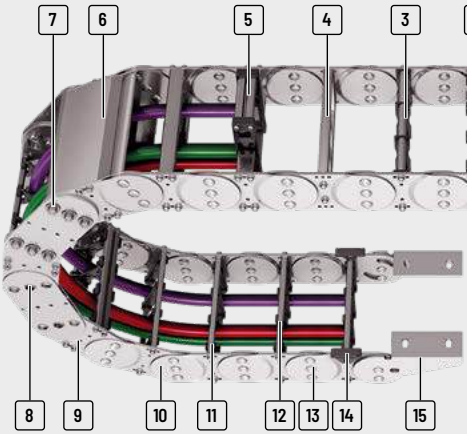


S series
Side bands made of galvanized steel

SX series
Side bands made of steel resistant to rust and acid

STEEL ZINC-PLATED

STAINLESS STEEL RUST-FREE

1 All stays available in **1 mm width sections**
2 Aluminum stays with 4 screw-fixing points for extreme loads
3 Roller stays
4 Aluminum hole stays
5 Mounting frame stays
6 Aluminum cover available in **1 mm width sections**
7 Joint design with hardened bolts for long service life
8 Bolted and riveted joint connections possible
9 Straight link plate design (S/SX1252/ 1252B and S/SX1802/1802B)
10 Cranked link plate design
11 Different separation options for the cables
12 Opening inside and outside
13 Extremely robust side bands
14 Replaceable glide shoes
15 End connectors for different connection variants

Features

» Extremely robust, sturdy steel cable carriers for heavy mechanical loads and rough environmental conditions
» Side bands made of galvanized steel (S series) or corrosion-resistant and acid-resistant steel (SX series) in three qualities: ER 1 / ER 1S and ER 2
» Very sturdy link plates, each consisting of two individual plates
» Very extensive unsupported lengths even with large additional loads
» Bolted stay systems, solid end connectors
» Joint design with multi stroke system and hardened bolt
» Explosion protection with classification EX II 2 GD as per ATEX RL

The design

Proven steel cable carriers with extremely sturdy link plates and dedicated joint design with multi stroke system and hardened bolt. The extremely sturdy design allows extensive unsupported lengths and high possible additional loads.




Sandwich design: Link plates consist of two plates


Glide shoes available for gliding applications


Stroke system with hardened bolt and circlips


Also available as covered variants with cover system or steel band cover, p. 824 and p. 936

Subject to change without notice.

S/SX series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
S/SX0650											
		RS 1	31	50	65 – 265	100 – 300	1	65	75 – 400	30	24
		RS 2	31	50	69 – 369	100 – 400	1	65	75 – 400	30	24
		RR	26	50	69 – 369	100 – 400	1	65	75 – 400	30	20
		LG	34	50	35 – 465	70 – 500	1	65	75 – 400	30	26
		RMA	31 (200)	50 (224)	155 – 355	200 – 400	1	65	75 – 400	30	–
S/SX0950											
		RS 1	46	68	107 – 257	150 – 300	1	95	125 – 600	45	36
		RS 2	46	68	113 – 363	150 – 400	1	95	125 – 600	45	36
		RM	43	68	88 – 563	125 – 600	1	95	125 – 600	45	34
		RR	42	68	115 – 465	150 – 500	1	95	125 – 600	45	33
		LG	50	68	82 – 557	125 – 600	1	95	125 – 600	45	38
		RMR	40	68	108 – 558	150 – 600	1	95	125 – 600	45	32
S/SX1250											
		RS 1	72	94	152 – 352	200 – 400	1	125	145 – 1000	50	57
		RS 2	72	94	156 – 456	200 – 500	1	125	145 – 1000	50	57
		RV	72	94	154 – 554	200 – 600	1	125	145 – 1000	50	57
		RM	69	94	151 – 751	200 – 800	1	125	145 – 1000	50	55
		RR	66	94	160 – 560	200 – 600	1	125	145 – 1000	50	52
		LG	76	94	82 – 752	130 – 800	1	125	145 – 1000	50	59
		RMA	72 (200)	94 (226)	154 – 554	200 – 600	1	125	145 – 1000	50	–
		RMR	66	94	153 – 753	200 – 800	1	125	145 – 1000	50	52

* More information can be found in our technical manual.
** Depending on the specific application, additional gliding elements or rollers are required.
*** Application-specific, values on request.

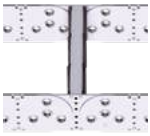
Subject to change without notice.

S/SX series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement**	
5.8	2.5	5	***	1	2	•	•	***	–	•	•	•	750
5.8	2.5	5	***	1	2	•	•	***	–	•	•	•	752
5.8	2.5	5	***	1	2	•	•	–	–	•	•	•	754
5.8	2.5	5	***	1	2	–	–	–	–	•	•	•	756
5.8	2.5	5	***	1	2	•	–	–	–	•	•	–	*
8.8	2.5	5	***	1	2	•	•	***	–	•	•	•	760
8.8	2.5	5	***	1	2	•	•	***	–	•	•	•	762
8.8	2.5	5	***	1	2	•	•	–	–	•	•	•	764
8.8	2.5	5	***	1	2	•	•	–	–	•	•	•	766
8.8	2.5	5	***	1	2	–	–	–	–	•	•	•	768
8.8	2.5	5	***	1	2	•	–	–	–	•	•	•	*
13.5	2.5	5	***	1	2	•	•	–	•	•	•	•	774
13.5	2.5	5	***	1	2	•	•	–	•	•	•	•	778
13.5	2.5	5	***	1	2	•	•	•	•	•	•	•	782
13.5	2.5	5	***	1	2	•	•	•	–	•	•	•	786
13.5	2.5	5	***	1	2	•	•	–	–	•	•	•	788
13.5	2.5	5	***	1	2	–	–	–	–	•	•	•	790
13.5	2.5	5	***	1	2	•	–	–	–	•	•	–	*
13.5	2.5	5	***	1	2	•	–	–	–	•	•	•	*

Subject to change without notice.

S/SX series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
S/SX1800											
		RM	108	140	188 – 938	250 – 1000	1	180	265 – 1300	60	86
		RR	104	140	201 – 751	250 – 800	1	180	265 – 1300	60	83
		LG	110	140	121 – 941	180 – 1000	1	180	265 – 1300	60	88
S/SX2500											
		RM	183	220	175 – 1125	250 – 1200	1	250	365 – 1395	100	146
		LG	180	220	174 – 1124	250 – 1200	1	250	365 – 1395	100	144
S/SX3200											
		LG	220	300	181 – 1416	250 – 1500	1	320	470 – 1785	150	176
S/SX5000											
		***	150	200	133 – 1083	250 – 1200	1	200	500 – 1200	100	–
S/SX6000											
		***	240	300	177 – 1377	300 – 1500	1	320	700 – 1500	150	–

* More information can be found in our technical manual.
** Depending on the specific application, additional gliding elements or rollers are required.
*** Application-specific.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement**	
17.8	2	3	***	0.8	2	•	•	–	•	•	•	•	796
17.8	2	3	***	0.8	2	•	•	–	–	•	•	•	798
17.8	2	3	***	0.8	2	–	–	–	–	•	•	•	800
23.7	1	3	–	–	–	•	•	•	–	•	•	•	804
23.7	1	3	–	–	–	–	–	–	–	•	•	•	808
24	1	2.5	–	–	–	–	–	–	–	•	•	•	812
11	2	3	–	–	–	–	•	–	–	•	•	•	816
16.7	1.5	2	–	–	–	–	•	–	–	•	•	•	817

Subject to change without notice.

S/SX series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
S/SX7000											
		***	370	450	200 – 1650	350 – 1800	1	450	900 – 2400	600	–
S/SX8000											
		***	578	600	200 – 1650	350 – 1800	1	550	900 – 2400	800	–
S/SX9000											
		***	Custom sizes from a cable carrier width of 350 mm								

** Depending on the specific application, additional gliding elements or rollers are required.
*** Application-specific.



S/SX tubes

Also available as covered variants with cover system or steel band cover.
More information can be found in chapter "S/SX tubes" from p. 824.

Subject to change without notice.

S/SX series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement**	
24.9	0.5	0.3	–	–	–	–	•	–	–	•	•	•	818
24.9	0.5	0.3	–	–	–	–	•	–	–	•	•	•	819
													822

Subject to change without notice.

S/SX0650

Pitch
65 mm

Inner height
26 – 34 mm

Chain widths
70 – 500 mm

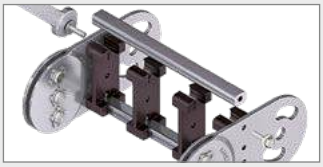
Bending radii
75 – 400 mm

Stay variants



Aluminum stay RS 1 ..... page **750**

Frame stay narrow "The standard"
» Aluminum profile bars for light to medium loads.
» **Outside:** release by turning by 90°.
» **Inside:** Threaded joints easy to release.



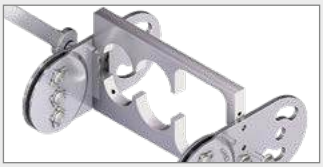
Aluminum stay RS 2 ..... page **752**

Frame stay narrow, bolted
» Aluminum profile bars for light to medium loads. Simple threaded joint.
» **Outside/inside:** Threaded joints easy to release.



Aluminum stay RR ..... page **754**

Frame stay, tube version
» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
» **Inside/outside:** Screw connection detachable.



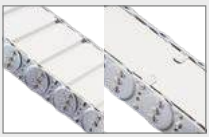
Aluminum stay LG ..... page **756**

Frame stay, split
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Inside/outside:** Threaded joint easy to release.

Additional stay variants on request



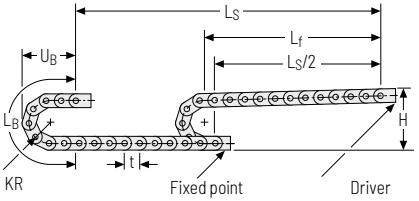
Aluminum stay RMA
For guiding very large cable diameters



S/SX tubes
Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 824.

Subject to change without notice.

Unsupported arrangement



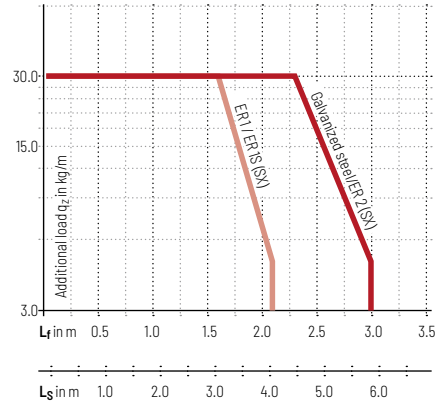
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
75	225	496	230
95	265	558	250
115	305	621	270
125	325	653	280
135	345	684	290
145	365	716	300
155	385	747	310
175	425	810	330
200	475	888	355
250	575	1045	405
300	675	1202	455
400	875	1516	555

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 4.5$ kg/m. For other inner widths, the maximum additional load changes.



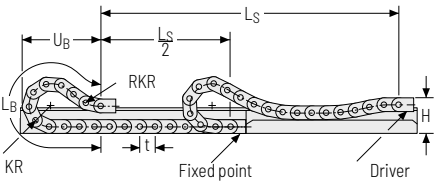
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 5.8 m

Additional load
up to 30 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 30 kg/m

Subject to change without notice.

S/SX0650 RS 1 | Dimensions · Technical data

Aluminum stay RS 1 – frame stay narrow

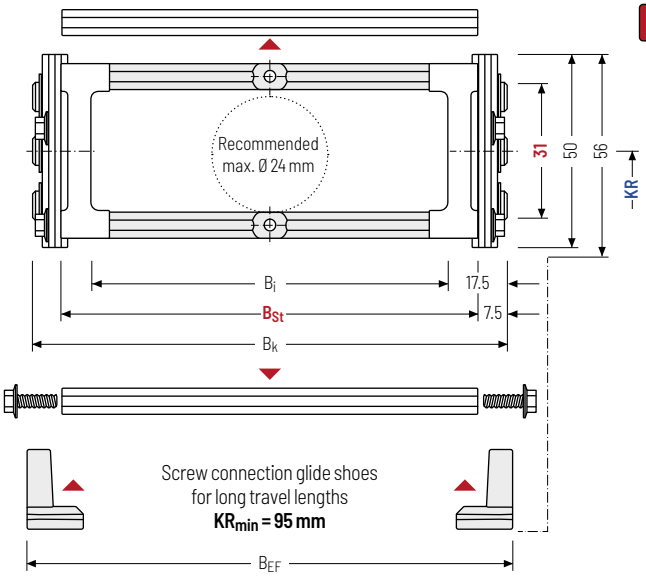
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Outside:** release by rotating 90°.
- **Inside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k from 100 – 300 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
31	50	56	65 – 265	**85 – 285**	B_{St} + 15	B_{St} + 20	**75**	**95**	**115**	**125**	**135**	**145**	3.95 – 4.82
							155	**175**	**200**	**250**	**300**	**400**	

* in 1 mm width sections

Order example

SX0650	.	180	.	RS 1	.	135	.	St	-	1430	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

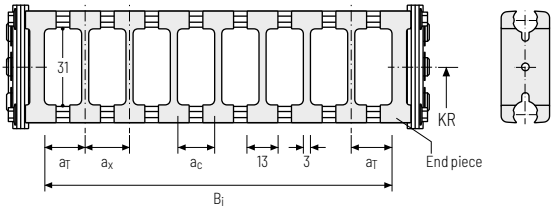
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	–

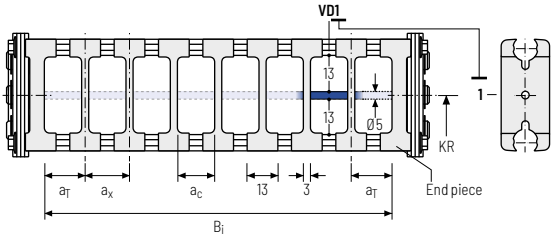
The dividers can be moved in the cross section.



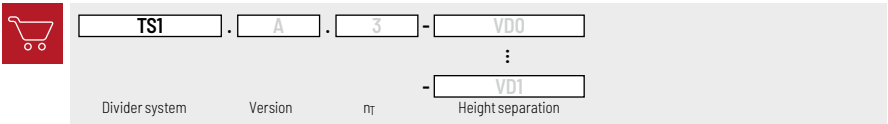
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end pieces are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

S/SX0650 RS 2 | Dimensions · Technical data

Aluminum stay RS 2 –
frame stay narrow, threaded joint

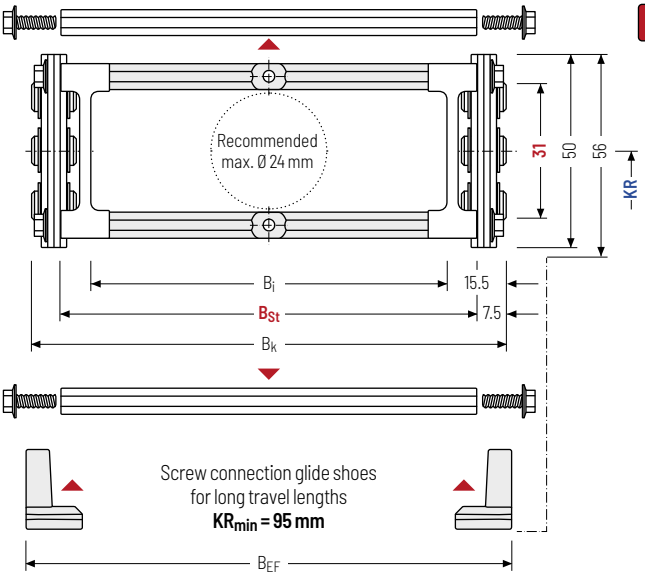
- Quick to open and close
- Aluminum profile bars for light to medium loads. Simple threaded joint
- Available customized in **1 mm width sections**.
- **Outside/inside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 100 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
31	50	56	69 – 369	85 – 385	B_{St} + 15	B_{St} + 20	75	95	115	125	135	145	3.95 – 5.25
							155	175	200	250	300	400	

* in 1 mm width sections

Order example

S0650	.	180	.	RS 2	.	135	.	St	-	1430		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

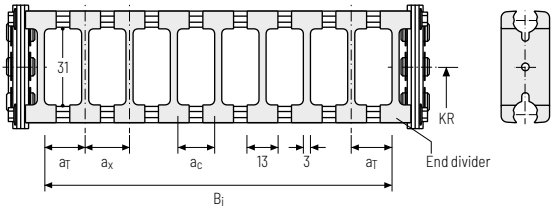
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	–

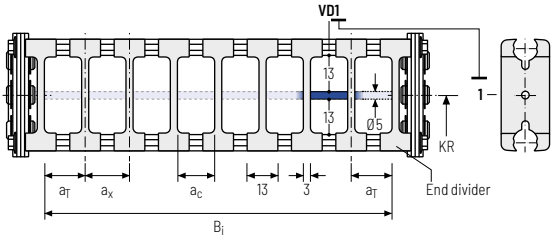
The dividers can be moved in the cross section.



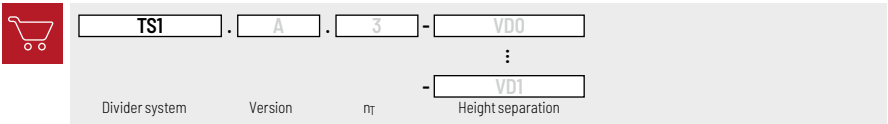
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

Tube stay RR –
frame stay, tube version

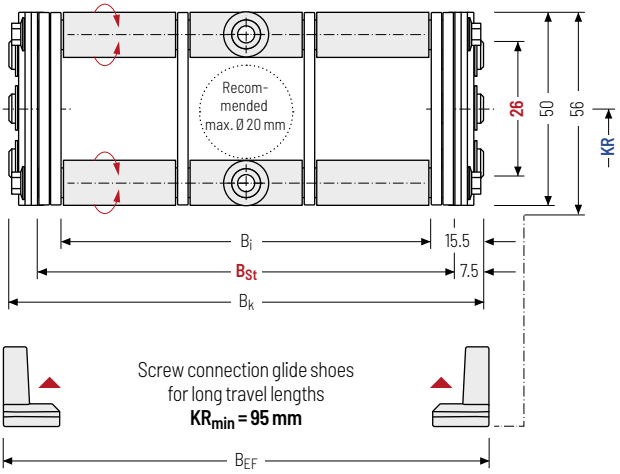


» Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
» Available customized in **1 mm width sections**.
» **Inside/outside:** Screw connection detachable
» **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k from 100 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
26	50	56	69 – 369	85 – 385	B_{St} + 15	B_{St} + 20	75	95	115	125	135	145	4.77 – 8.67
							155	175	200	250	300	400	

* in 1 mm width sections

Order example

S0650	.	180	.	RR	.	135	.	St	-	1430		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

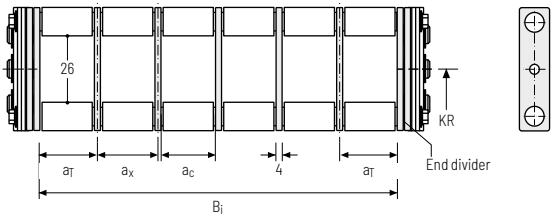
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

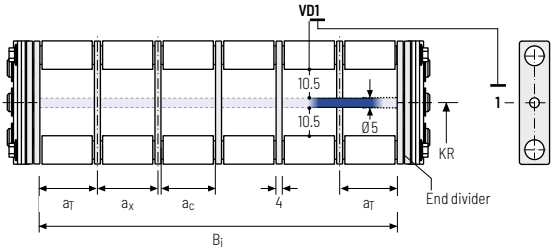
Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
B	20	25	21	–



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
B	20	25	21	2



Order example

TS1	.	B	.	3	.	K1	.	34	-	VD0
						⋮		⋮		⋮
					.	K4	.	38	-	VD0
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

S/SX0650 LG | Dimensions · Technical data

Aluminum stay LG –
hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

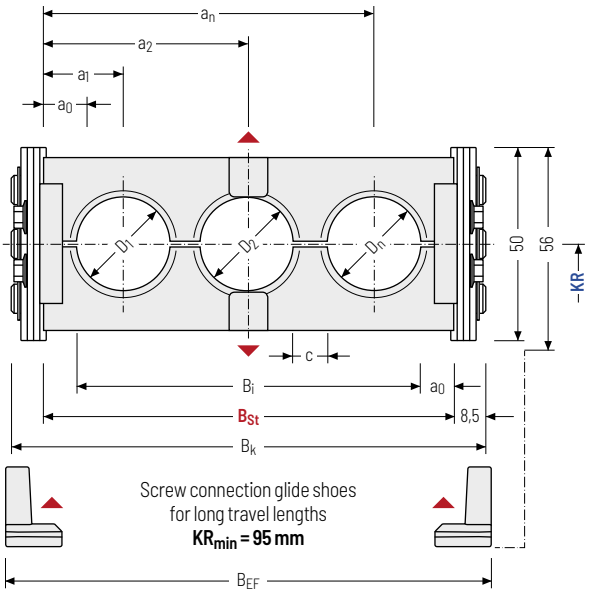
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 70 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$B_{St} = \sum D + \sum c + 2\,a_0$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
34	10	50	56	35	53	B_{St}	B_{St}	4	9	75	95	115	125	3.96
				–	–	+	+			135	145	155	175	–
				465	483	17	22			200	250	300	400	6.46

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

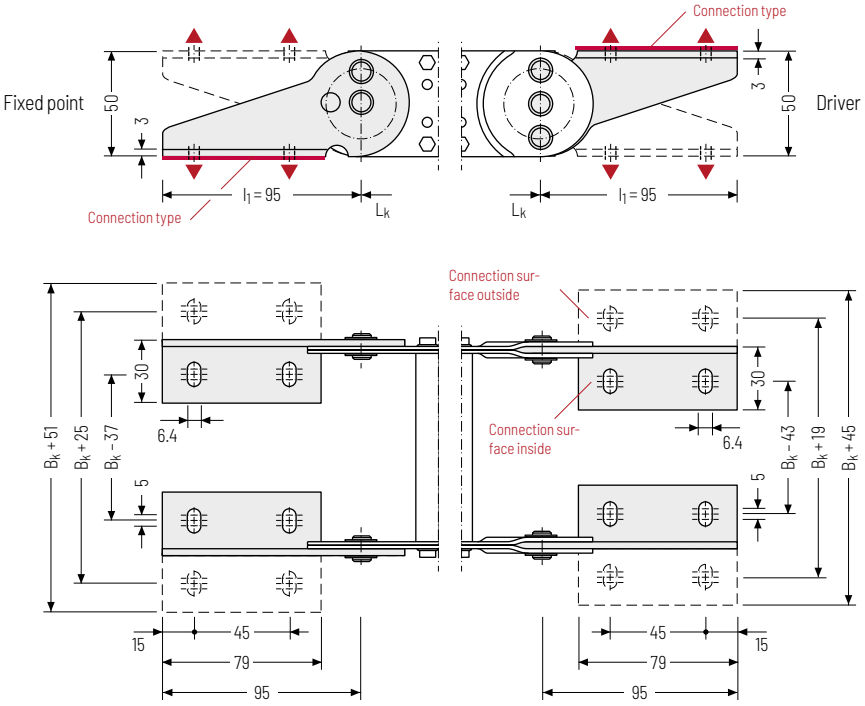
Order example

S0650	.	180	.	LG	.	135	.	St	-	1430		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

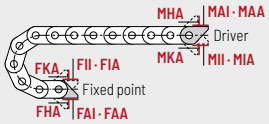
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint to outside (standard)
- **I** – threaded joint to inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Connection surface
- **I** – connection surface inside (standard)
- **A** – connection surface outside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 70 mm.

Order example

End connector	Connection point	Connection type	Connection surface
Steel	F	A	I
Steel	M	A	I

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

S/SX0950

Pitch
95 mm

Inner heights
42 – 50 mm

Chain widths
125 – 600 mm

Bending radii
125 – 600 mm

Stay variants



Aluminum stay RS 1 ..... page **760**

Frame stay narrow "The standard"
» Aluminum profile bars for light to medium loads.
» **Outside:** release by turning by 90°.
» **Inside:** Threaded joints easy to release.



Aluminum stay RS 2 ..... page **762**

Frame stay narrow, bolted
» Aluminum profile bars for light to medium loads. Simple threaded joint.
» **Outside/inside:** Threaded joints easy to release.



Aluminum stay RM ..... page **764**

Frame stay, solid
» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joints easy to release.



Tube stay RR ..... page **766**

Frame stay, tube version
» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
» **Inside/outside:** Screw connection detachable.



Aluminum stay LG ..... page **768**

Frame stay, split
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Inside/outside:** Threaded joint easy to release.

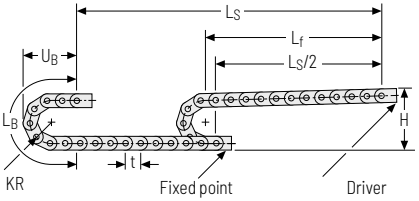
Additional stay variants on request

Aluminum stay RMR
Gentle cable guiding with rollers.

S/SX tubes
Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 824.

Subject to change without notice.

Unsupported arrangement



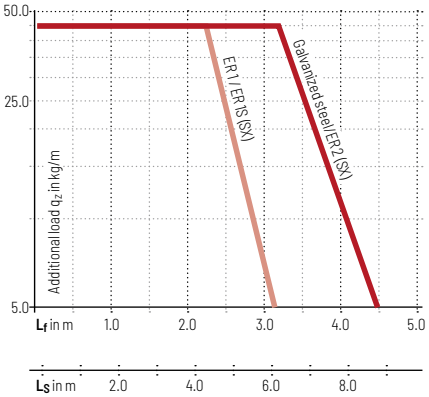
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
125	352	773	350
140	382	820	365
170	442	914	395
200	502	1008	425
260	622	1197	485
290	682	1291	515
320	742	1385	545
350	802	1480	575
410	922	1668	635
600	1302	2264	825

Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 7.6$ kg/m. For other inner widths, the maximum additional load changes.



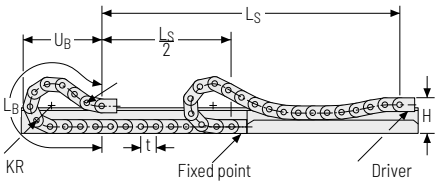
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 8.8 m

Additional load
up to 45 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 45 kg/m

Subject to change without notice.

S/SX0950 RS 1 | Dimensions · Technical data

Aluminum stay RS 1 – frame stay narrow

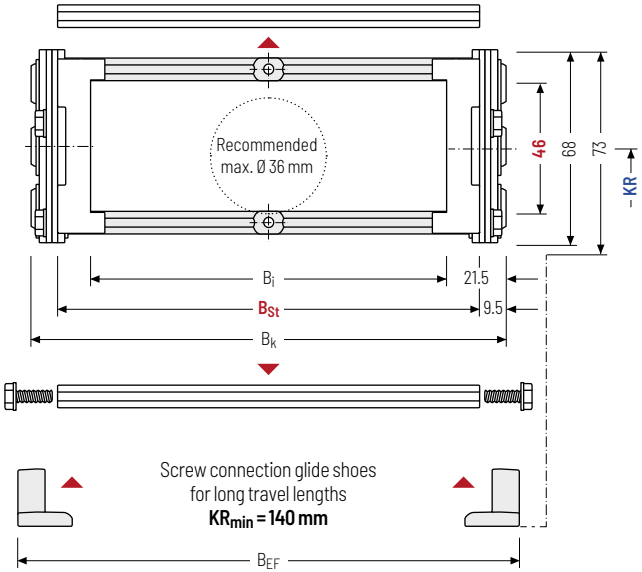
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Outside:** release by rotating 90°.
- **Inside:** Threaded joint easy to release



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 150 – 300 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
46	68	73	107 – 257	131 – 281	B_{St} + 19	B_{St} + 28	125	140	170	200	260	7.55 – 7.95
							290	320	350	410	600	

* in 1 mm width sections

Order example

S0950	.	150	.	RS 1	.	200	.	St	-	2375		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

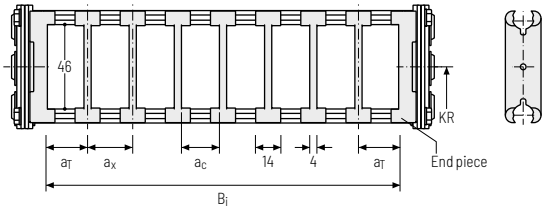
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	–

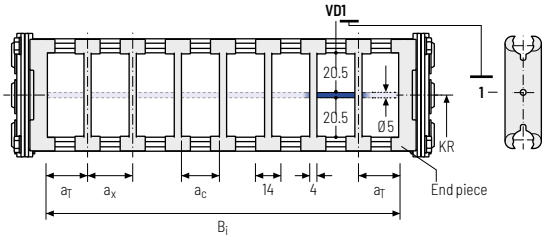
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

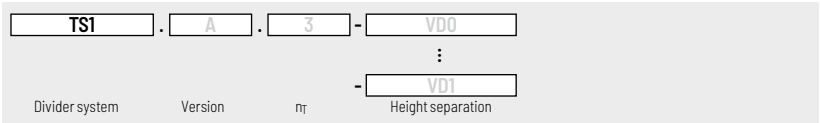
Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	2

The dividers can be moved in the cross section.



Order example





Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end pieces are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

S/SX0950 RS 2 | Dimensions · Technical data

Aluminum stay RS 2 –
frame stay narrow, threaded joint

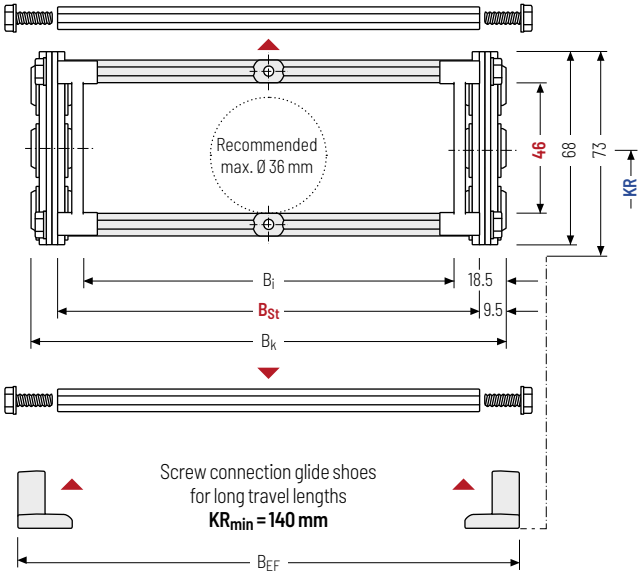
- Quick to open and close
- Aluminum profile bars for light to medium loads. Simple threaded joint
- Available customized in **1 mm width sections**.
- **Outside/inside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 150 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
46	68	73	113 – 363	131 – 381	B_{St} + 19	B_{St} + 28	125	140	170	200	260	7.55
							290	320	350	410	600	8.21

* in 1 mm width sections

Order example

S0950	.	150	.	RS 2	.	200	.	St	-	2375		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

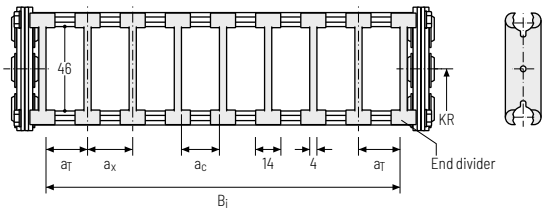
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	–

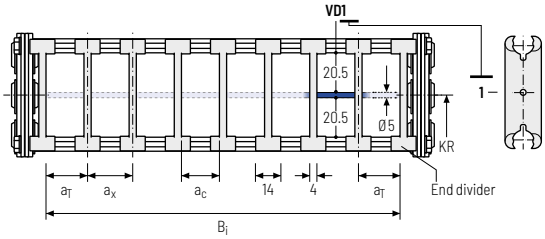
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

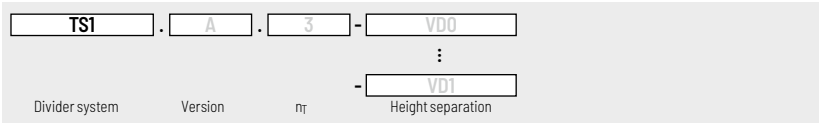
Vers.	$a_{T\,min}$ [mm]	$a_{X\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	2

The dividers can be moved in the cross section.



Order example





Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

Aluminum stay RM – frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joints easy to release.

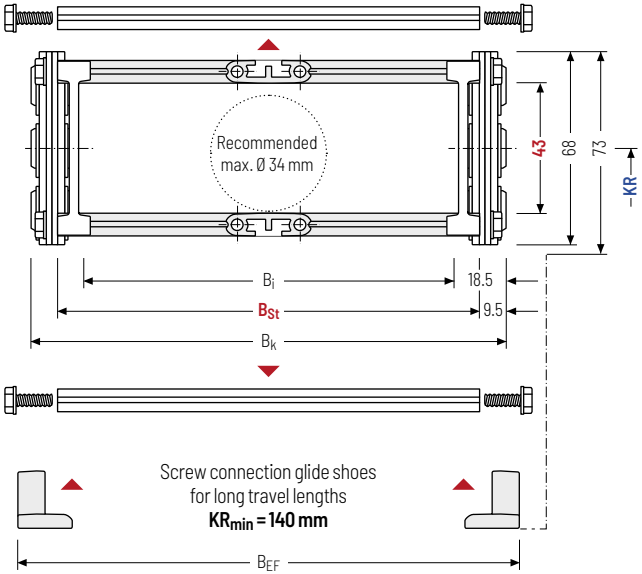
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k from 125 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
43	68	73	88 – 563	106 – 581	B_{St} + 19	B_{St} + 28	125	140	170	200	260	7.78 – 10.68
							290	320	350	410	600	

* in 1 mm width sections

Order example

S0950	.	150	.	RM	.	200	.	St	-	2375		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

S/SX0950 RM | Inner distribution | TS0 · TS1

Divider systems

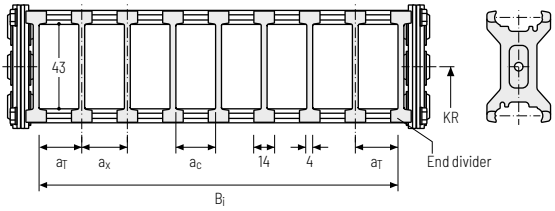
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	10	14	10	–

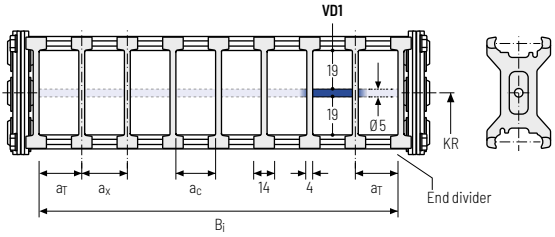
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

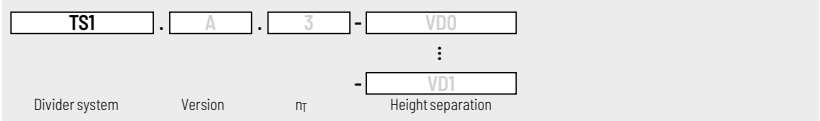
Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	10	14	10	2

The dividers can be moved in the cross section.



Order example





Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

Tube stay RR –
frame stay, tube version

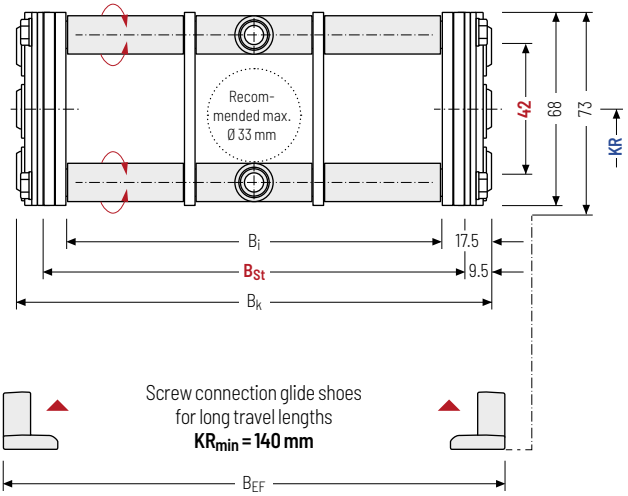
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Inside/outside:** Screw connection detachable
- **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 150 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
42	68	73	115 – 465	**131 – 481**	B_{St} + 19	B_{St} + 28	**125**	**140**	**170**	**200**	**260**	8.42 – 11.75
							290	**320**	**350**	**410**	**600**	

* in 1 mm width sections

Order example

S0950	.	150	.	RR	.	200	.	St	-	2375		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

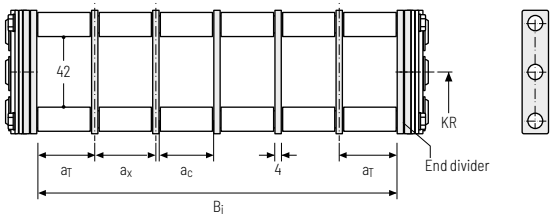
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

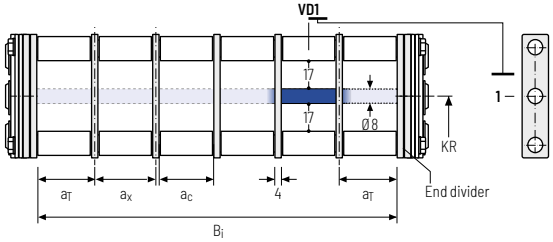
Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	20	20	16	–



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	20	20	16	2



Order example

TS1	.	B	.	3	.	K1	.	34	-	VD0
						⋮		⋮		⋮
					.	K4	.	38	-	VD0
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

S/SX0950 LG | Dimensions · Technical data

Aluminum stay LG –
hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

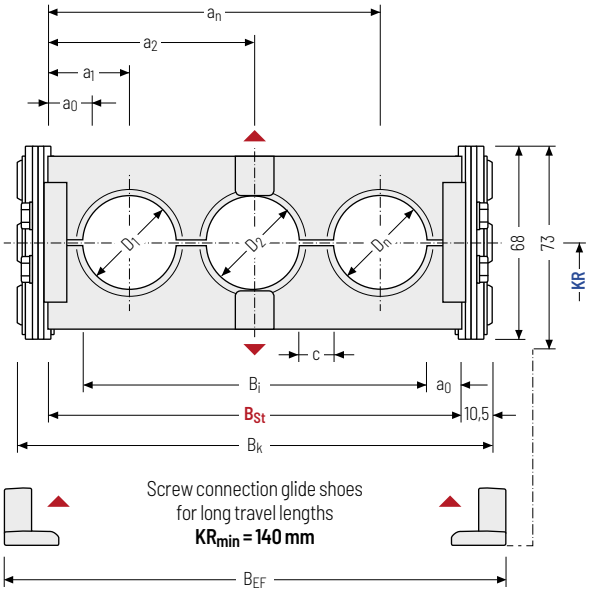
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 125 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$B_{St} = \sum D + \sum c + 2\,a_0$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
50	12	68	73	82 – 557	104 – 579	B_{St} + 21	B_{St} + 30	4	11	125 260 410	140 290 600	170 320	200 350	7.97 – 11.82

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

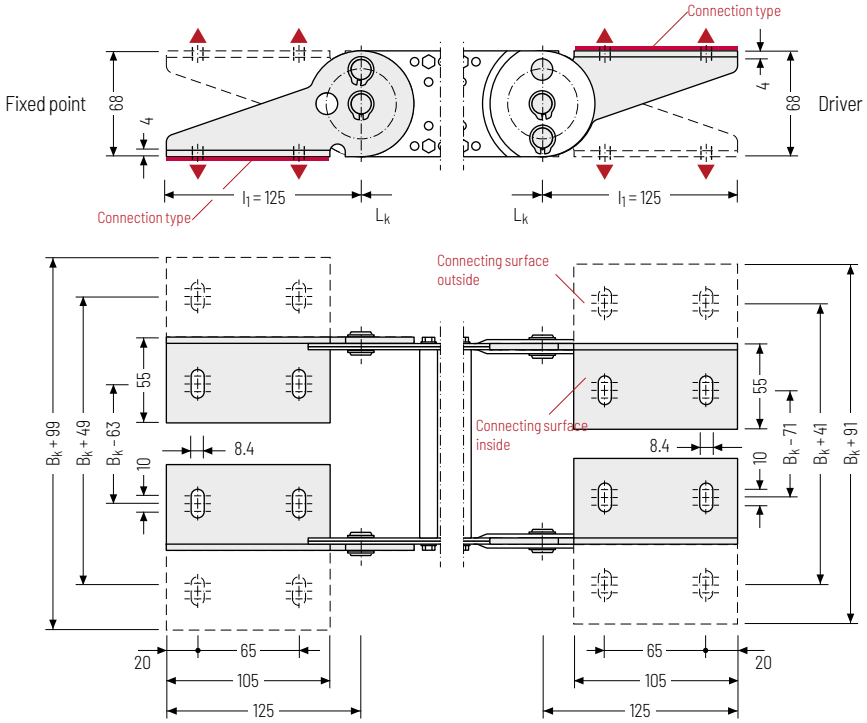
Order example

S0950	.	150	.	LG	.	200	.	St	-	2375	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

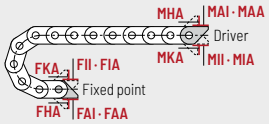
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint to outside (standard)
- **I** – threaded joint to inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Connection surface
- **I** – connection surface inside (standard)
- **A** – connection surface outside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 122 mm.

Order example

Steel	F	A	I
Steel	M	A	I
End connector	Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

S/SX1250

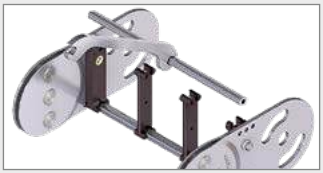
Pitch
125 mm

Inner heights
66 – 76 mm

Chain widths
130 – 800 mm

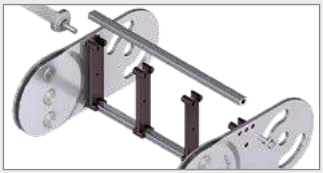
Bending radii
145 – 1000 mm

Stay variants



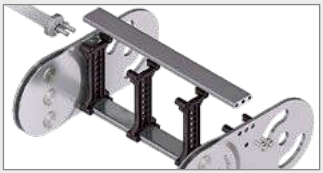
Aluminum stay RS 1 ..... page **774**

Frame stay narrow "The standard"
» Aluminum profile bars for light to medium loads.
» **Outside:** release by turning by 90°.
» **Inside:** Threaded joints easy to release.



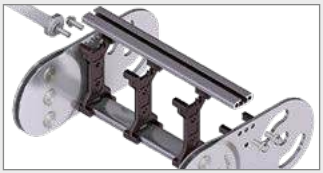
Aluminum stay RS 2 ..... page **778**

Frame stay narrow, bolted
» Aluminum profile bars for light to medium loads. Simple threaded joint.
» **Outside/inside:** Threaded joints easy to release.



Aluminum stay RV ..... page **782**

Frame stay, reinforced
» Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
» **Inside/outside:** Threaded joints easy to release.



Aluminum stay RM ..... page **786**

Frame stay, solid
» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joints easy to release.



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**.

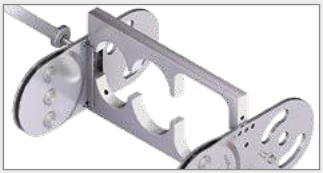
Subject to change without notice.



Aluminum stay RR page 788

Frame stay, tube version

» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
» **Inside/outside:** Screw connection detachable.



Aluminum stay LG page 790

Frame stay, split

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Inside/outside:** Threaded joint easy to release.



S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 824.

Additional stay variants on request



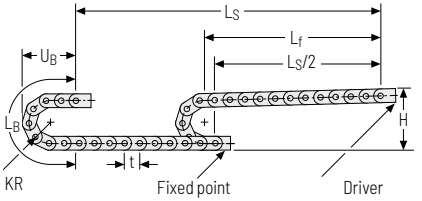
Aluminum stay RMA
For guiding very large cable diameters



Aluminum stay RMR
Gentle cable guiding with rollers.

Subject to change without notice.

Unsupported arrangement



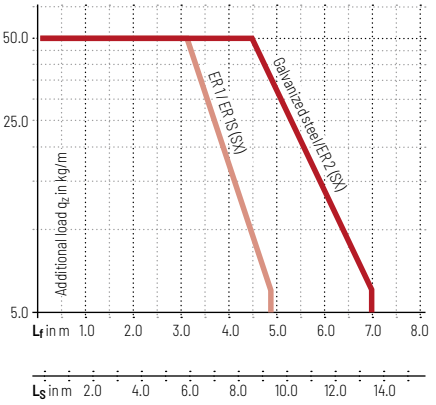
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
145	431	955	442
200	541	1128	497
220	581	1191	517
260	661	1317	557
300	741	1442	597
340	821	1568	637
380	901	1694	677
420	981	1820	717
460	1061	1945	757
500	1141	2071	797
540	1221	2196	837
600	1341	2385	897
1000	2141	3640	1297

Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_K = 13$ kg/m. For other inner widths, the maximum additional load changes.



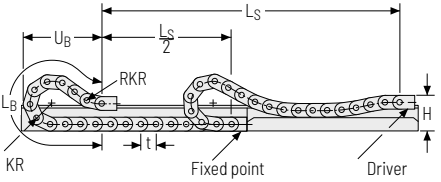
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 13.5 m

Additional load
up to 50 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 50 kg/m

Subject to change without notice.

Subject to change without notice

S/SX1250 RS 1 | Dimensions · Technical data

Aluminum stay RS 1 – frame stay narrow

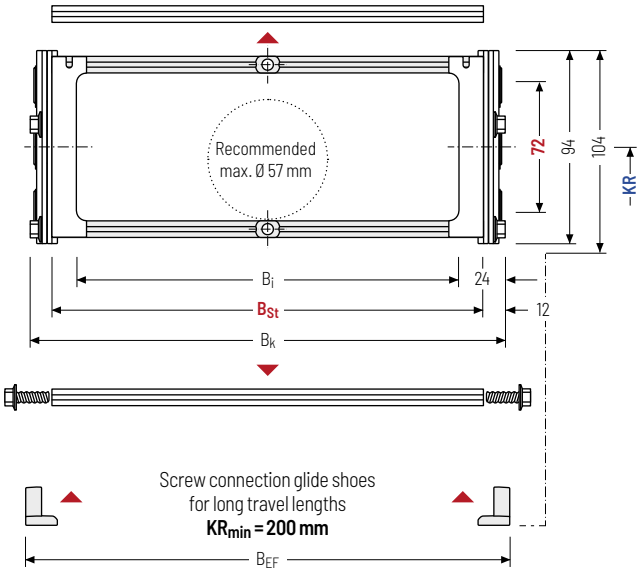
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Outside:** release by rotating 90°.
- **Inside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 200 – 400 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
72	94	104	152 – 352	176 – 376	B_{St} + 24	B_{St} + 30	145	200	220	260	300	340	380	12.88 – 13.43
							420	460	500	540	600	1000		

* in 1 mm width sections

Order example

S1250	.	400	.	RS 1	.	200	.	St	-	4750		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

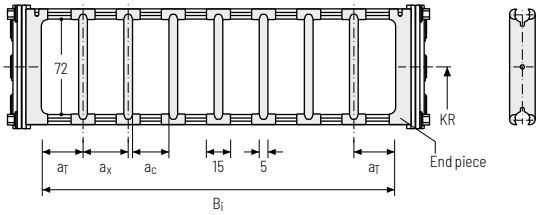
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	12.5	15	10	–

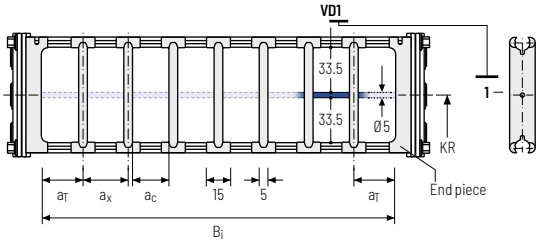
The dividers can be moved in the cross section.



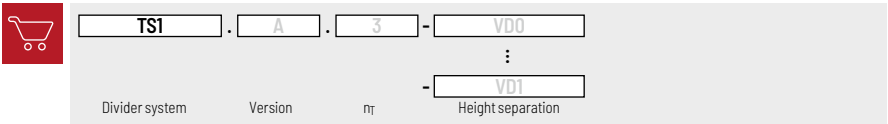
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	12.5	15	10	2

The dividers can be moved in the cross section.



Order example



Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

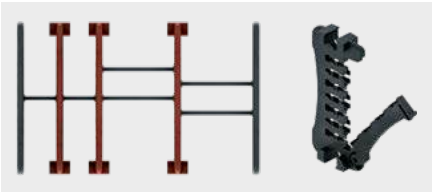
The end pieces are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

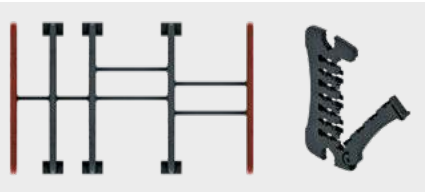
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider version A is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



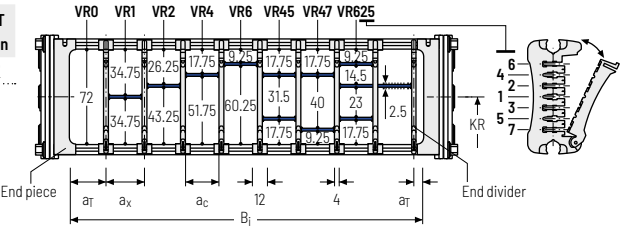
End divider

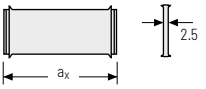


Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	n_T min
A	7*/11	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

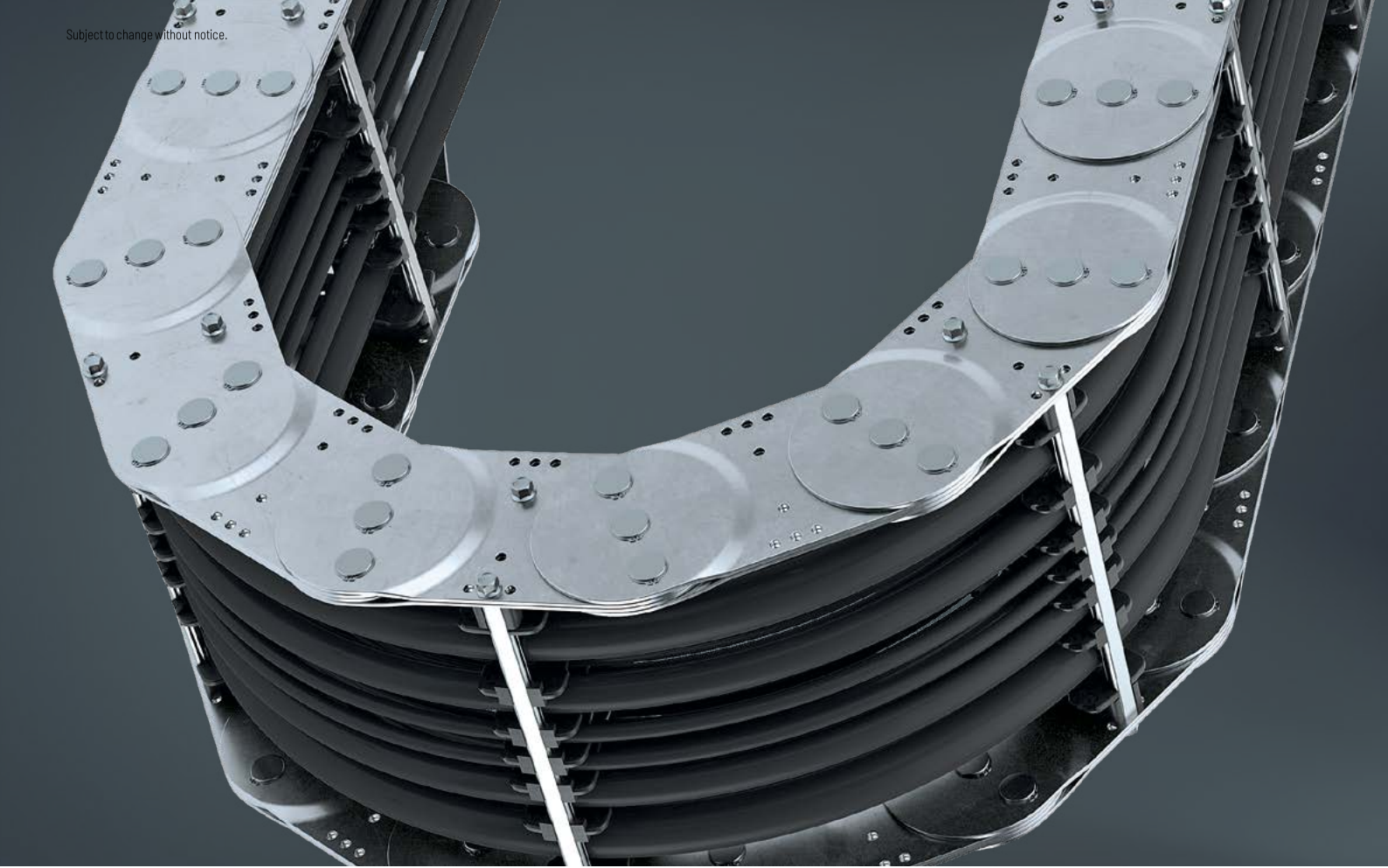
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system (TS0, TS1,...), version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation (TS1, TS3) please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice.



S/SX1250 RS 2 | Dimensions · Technical data

Aluminum stay RS 2 –
frame stay narrow, threaded joint

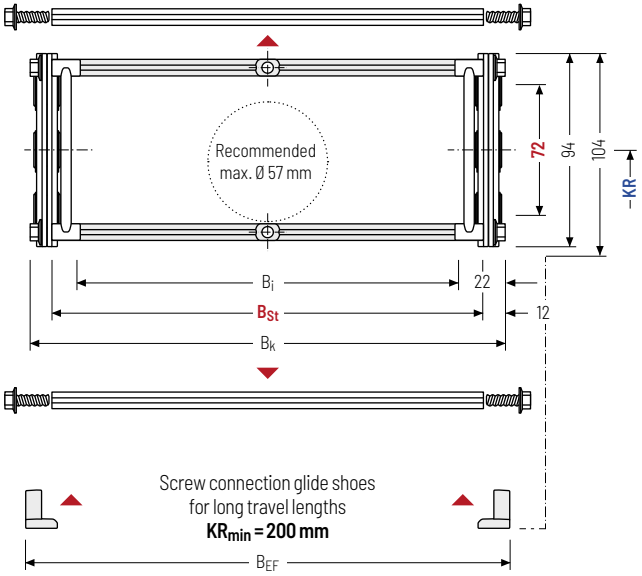
- Quick to open and close
- Aluminum profile bars for light to medium loads. Simple threaded joint
- Available customized in **1 mm width sections**.
- **Outside/inside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 200 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
72	94	104	156 – 456	176 – 476	B_{St} + 24	B_{St} + 30	145	200	220	260	300	340	380	12.88 – 13.71
							420	460	500	540	600	1000		

* in 1 mm width sections

Order example

S1250	.	400	.	RS 2	.	200	.	St	-	4750	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

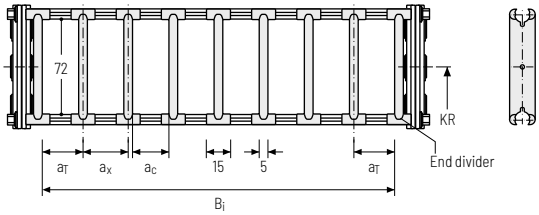
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm **(version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	12.5	15	10	–

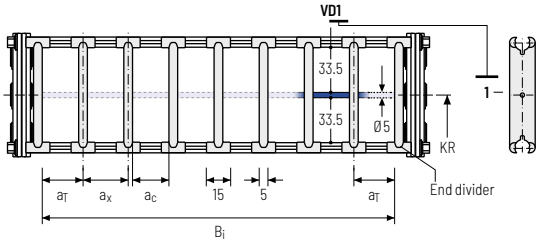
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	12.5	15	10	2

The dividers can be moved in the cross section.



Order example



TS1 . A . 3 - VD0

⋮

- VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

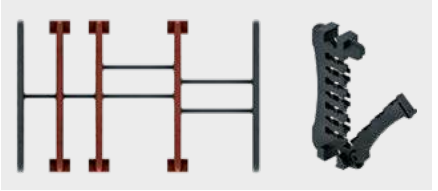
The end dividers are part of the divider system and don't have to be ordered separately.

Subject to change without notice.

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider version A is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

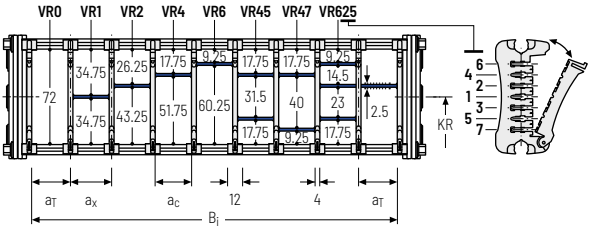
Divider version A

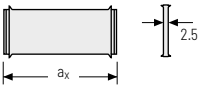


Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	10*/12	14	10	2

* For VR0

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example



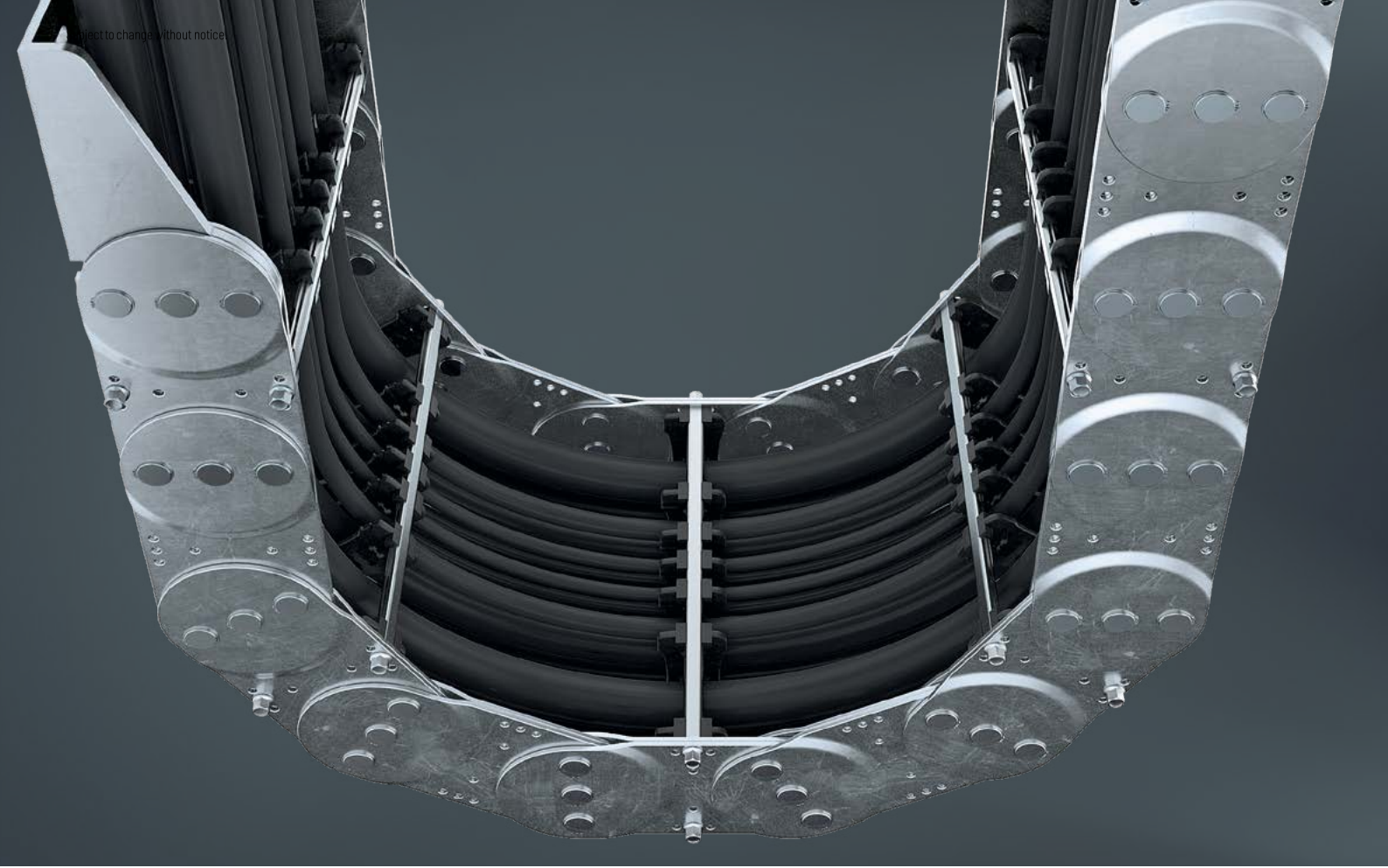
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system (TS0, TS1,...), version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation (TS1, TS3) please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

Subject to change without notice.

Subject to change without notice



S/SX1250 RV | Dimensions · Technical data

Aluminum stay RV – reinforced frame stay

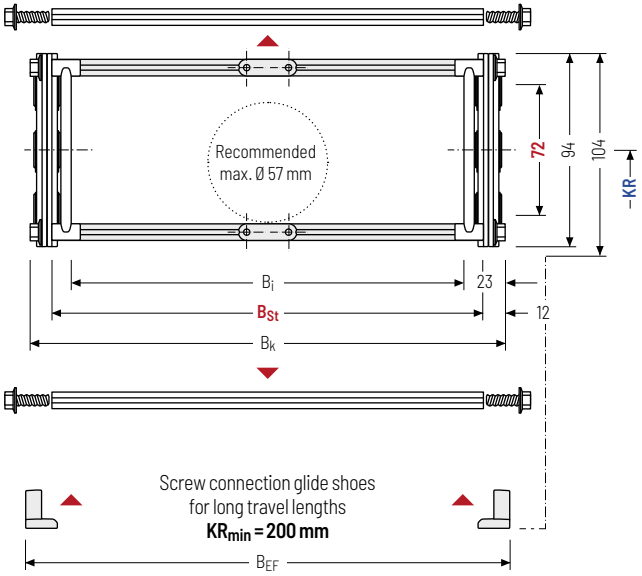
» Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joints easy to release.



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 200 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
72	94	104	154 – 554	176 – 576	B_{St} + 24	B_{St} + 30	145	200	220	260	300	340	380	13.83 – 17.11
							420	460	500	540	600	1000		

* in 1 mm width sections

Order example

S1250	.	400	.	RV	.	200	.	St	-	4750		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

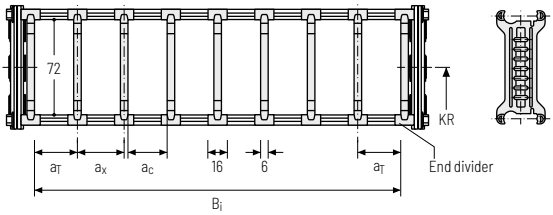
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	13	16	10	–

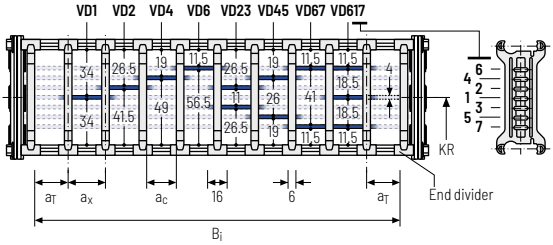
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	13	16	10	2

The dividers can be moved in the cross section.

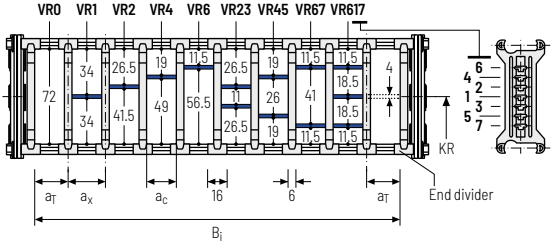


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	13	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 6 mm).



More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

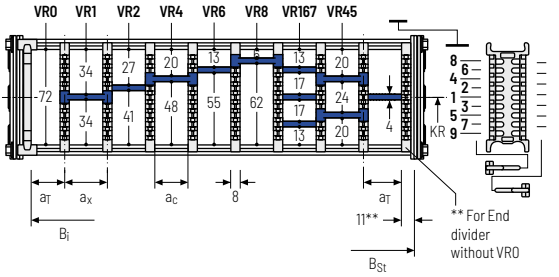
Subject to change without notice.

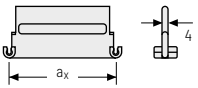
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminum partitions in 1 mm width increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system (**TS0, TS1,...**), the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

More product information online

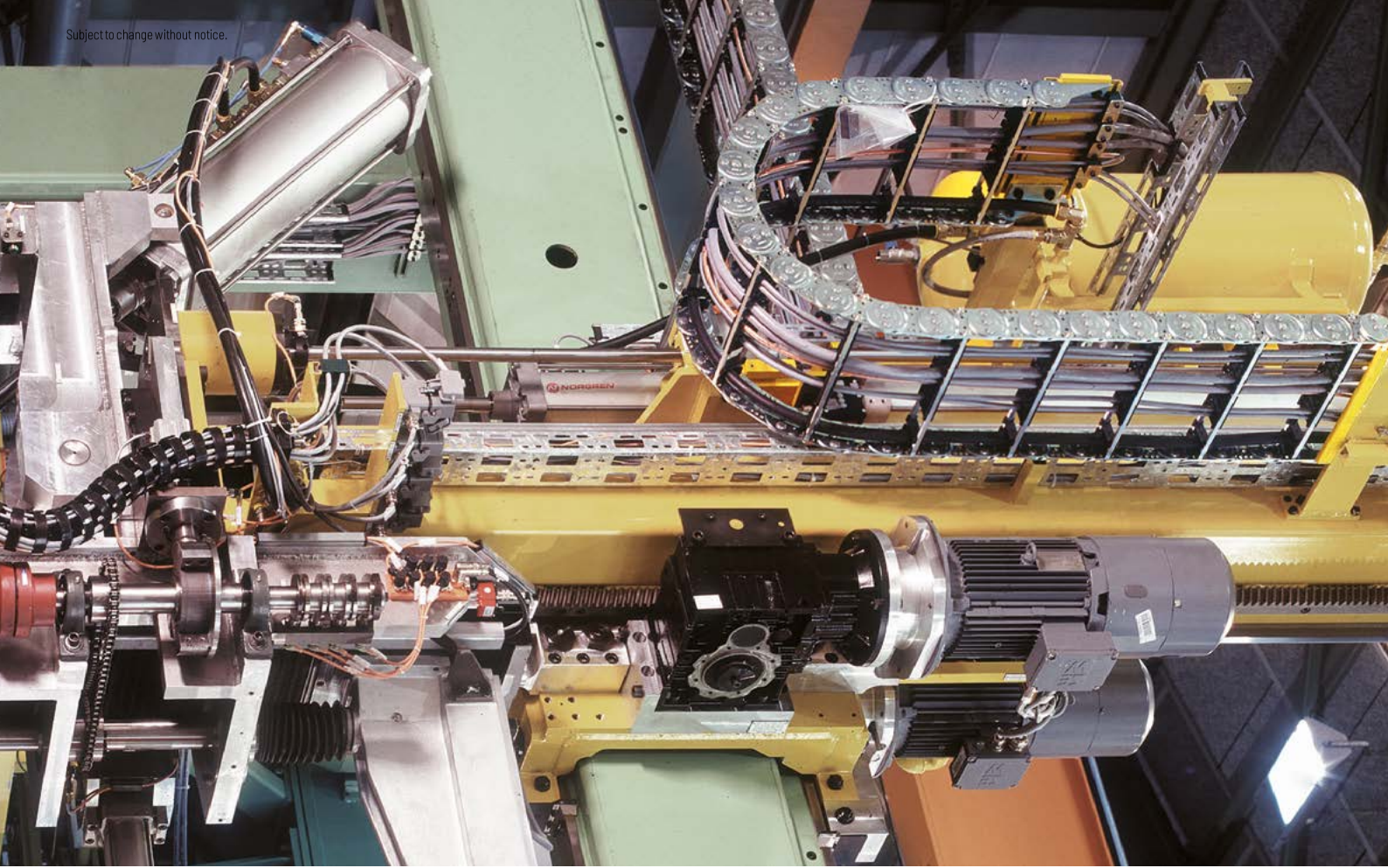
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.



S/SX1250 RM | Dimensions · Technical data

Aluminum stay RM –
frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joints easy to release.

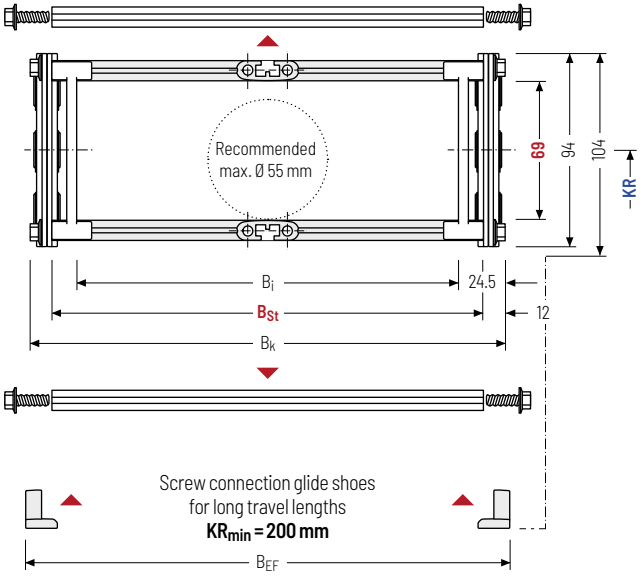
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k from 200 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
69	94	104	151 – 751	176 – 776	B_{St} + 24	B_{St} + 30	145	200	220	260	300	340	380	13.42 – 17.01
							420	460	500	540	600	1000		

* in 1 mm width sections

Order example

S1250	.	400	.	RM	.	200	.	St	-	4750		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

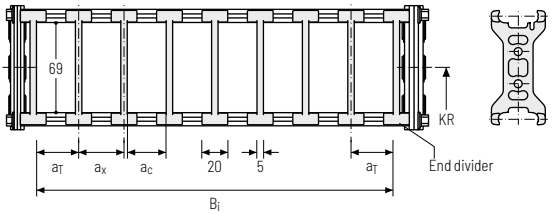
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	17.5	20	15	–

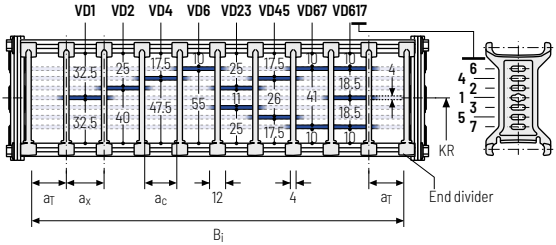
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	10	12	8	2

The dividers can be moved in the cross section.

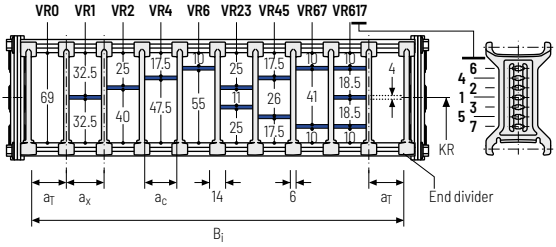


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	17	21	15	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



Order example

TS2	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Subject to change without notice.

S/SX1250 RR | Dimensions · Technical data

Tube stay RR –
frame stay, tube version

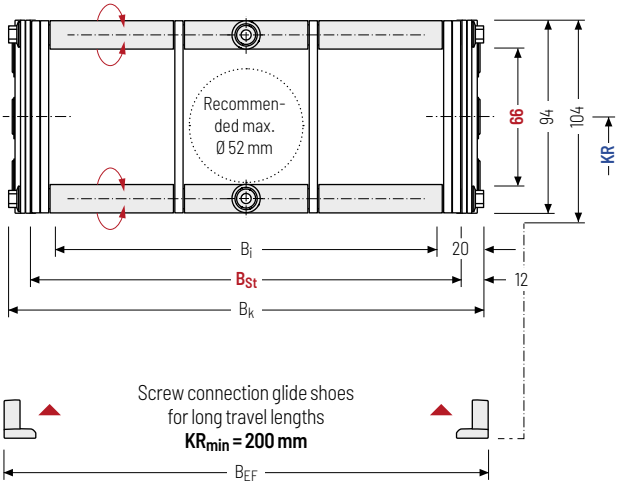


» Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
» Available customized in **1 mm width sections**.
» **Inside/outside:** Screw connection detachable
» **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 200 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$L_k \approx \frac{L_S}{2} + L_B$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]							q_k [kg/m]
66	94	104	160 – 560	176 – 576	B_{St} + 24	B_{St} + 30	145 – 420	200 – 460	220 – 500	260 – 540	300 – 600	340 – 1000	380	13.82 – 17.30

* in 1 mm width sections

Order example

S1250	.	400	.	RR	.	200	.	St	-	4750		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

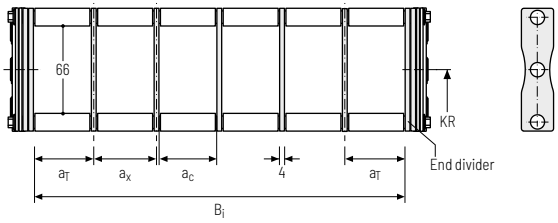
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

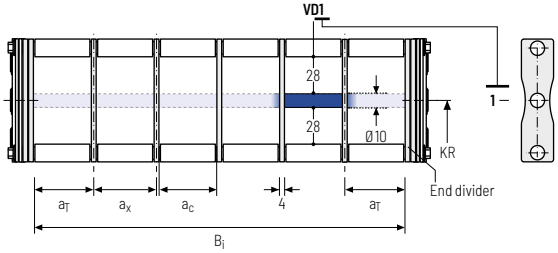
Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	30	30	26	–



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	30	30	26	2



Order example

TS1	.	B	.	3	.	K1	.	34	-	VD0
						⋮		⋮		⋮
					.	K4	.	38	-	VD0
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).



TRAXLINE® cables for cable carriers

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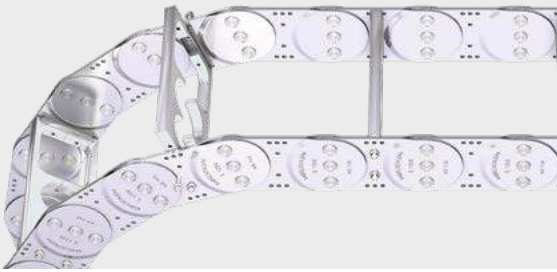
Subject to change without notice.

S/SX1250 LG | Dimensions · Technical data

Aluminum stay LG –
hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

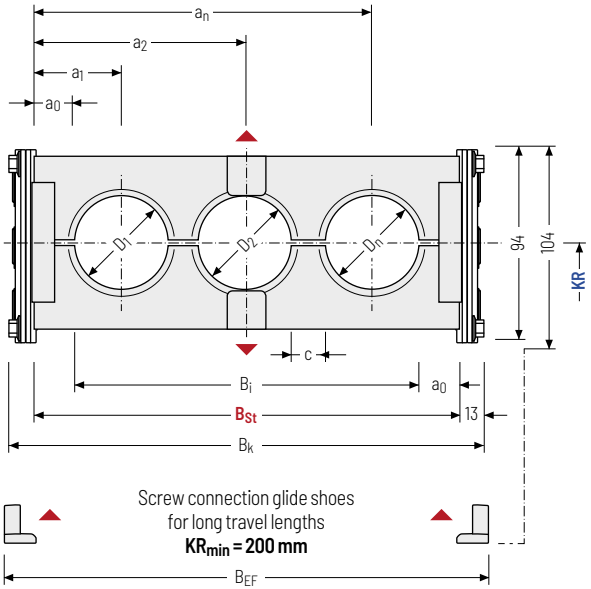
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 130 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]					q_k 50 %** [kg/m]
76	12	94	104	82	104	B_{St}	B_{St}	4	11	145	200	220	260	300	13.10
				–	–	+	+			340	380	420	460	500	–
				752	774	26	32			540	600	1000			18.22

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

S1250	.	400	.	LG	.	200	.	St	-	4750	HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

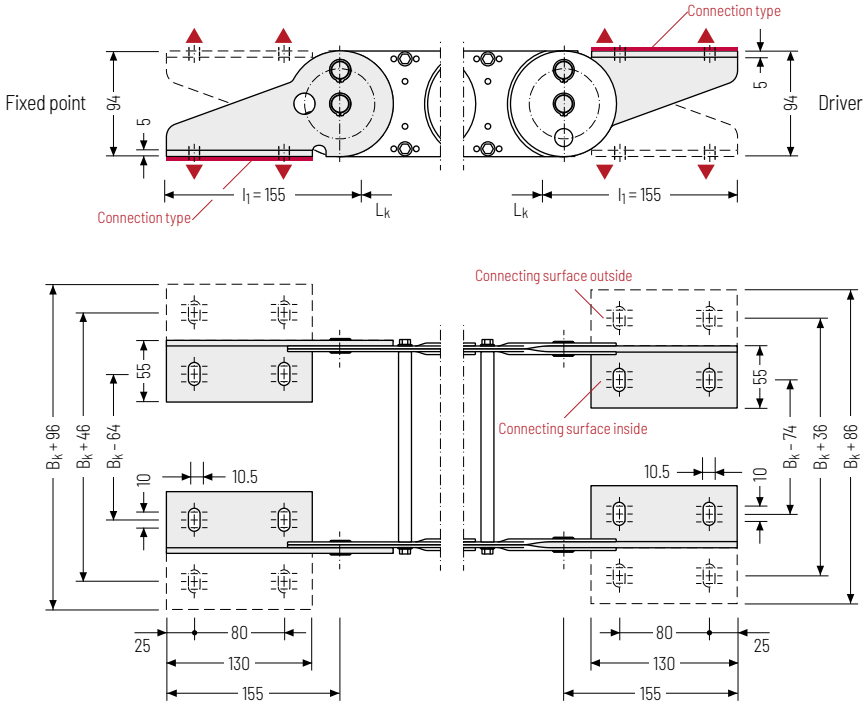
Subject to change without notice.

Subject to change without notice.

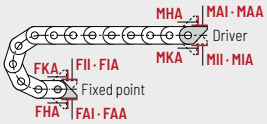


End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint to outside (standard)
I – threaded joint to inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Connection surface
I – connection surface inside (standard)
A – connection surface outside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 125 mm.

Order example

Steel	F	A	I
Steel	M	A	I
End connector	Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

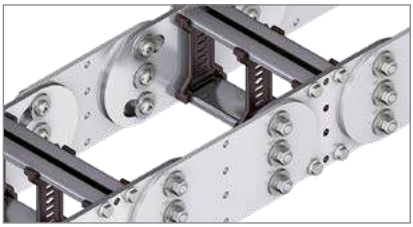
Special designs

S/SX1252 – with closed stroke system and straight link plates



- Closed stroke system protected between link plates mounted on both sides.
- Symmetrical side band design.
- Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.

S/SX1252 B – with internal stroke system and straight link plates



- Open stroke system.
- Link plates of the side bands are mounted offset.
- Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.
- The optimized, "self-cleaning" geometry prevents blocking of the stops through dirt.
- Version with bolted side bands.



TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**



TRAXLINE® cables for cable carriers

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Subject to change without notice.

S/SX1800

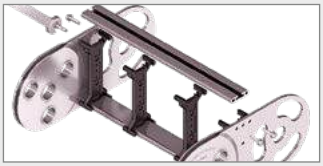
Pitch
180 mm

Inner height
104 – 110 mm

Chain widths
180 – 1000 mm

Bending radii
265 – 1300 mm

Stay variants



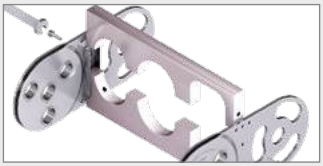
Aluminum stay RM
page **796**

Frame stay, solid
» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joints easy to release.



Aluminum stay RR
page **798**

Frame stay, tube version
» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
» **Inside/outside:** Screw connection detachable.



Aluminum stay LG
page **800**

Frame stay, split
» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» **Inside/outside:** Threaded joint easy to release.

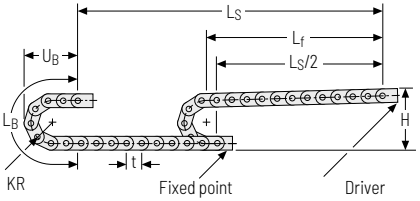


S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 824.

Subject to change without notice.

Unsupported arrangement



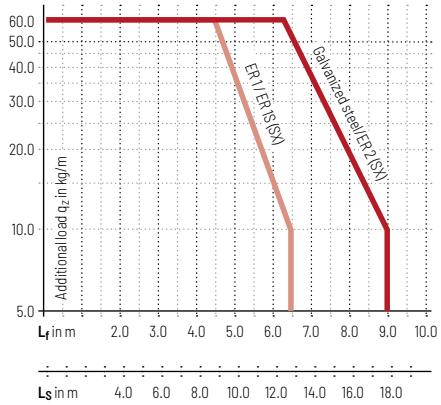
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
265	740	1552	695
320	850	1725	750
375	960	1898	805
435	1080	2087	865
490	1190	2259	920
605	1420	2620	1035
720	1650	2982	1150
890	1990	3516	1320
1175	2560	4411	1605
1300	2810	4804	1730

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 26$ kg/m. For other inner widths, the maximum additional load changes.



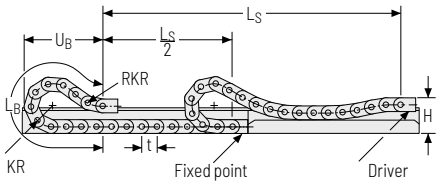
Speed
up to 2 m/s

Acceleration
up to 3 m/s²

Travel length
up to 17.8 m

Additional load
up to 60 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 0.8 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 60 kg/m

Subject to change without notice.

Aluminum stay RM –
frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joints easy to release.

HEAVY DUTY
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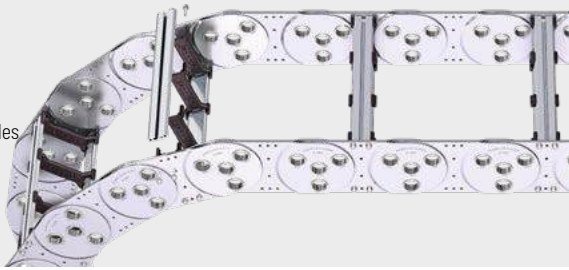
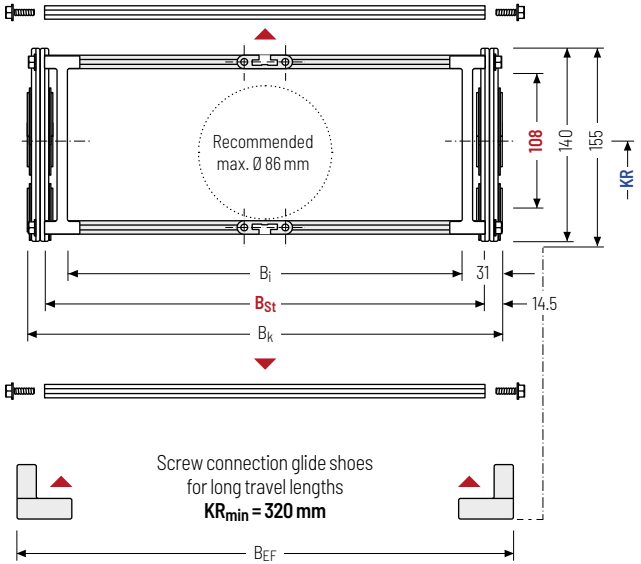


Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 250 – 1000 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
108	140	155	188 – 938	221 – 971	B_{St} + 29	B_{St} + 40	265	320	375	435	490	24.08 – 28.46
							605	720	890	1175	1300	

* in 1 mm width sections

Order example

SX1800	.	417	.	RM	.	375	.	St	-	5940		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

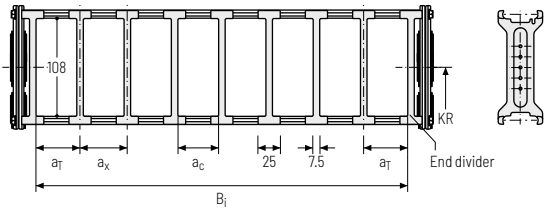
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	21.5	25	17.5	–

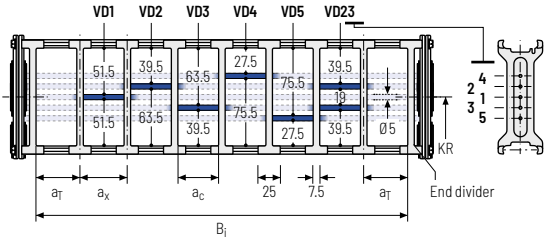
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	21.5	25	17.5	2

The dividers can be moved in the cross section.

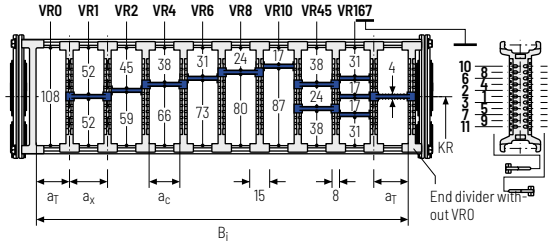


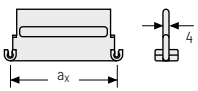
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	11.5	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminum partitions in 1 mm width increments with **a_x > 42 mm** are also available.

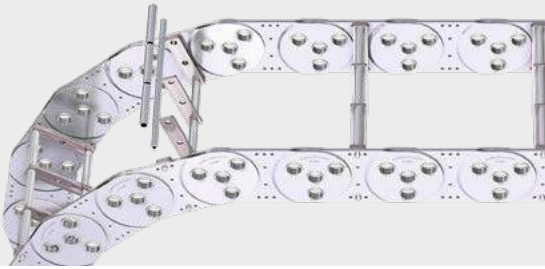
a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

Subject to change without notice.

S/SX1800 RR | Dimensions · Technical data

Tube stay RR –
frame stay, tube version

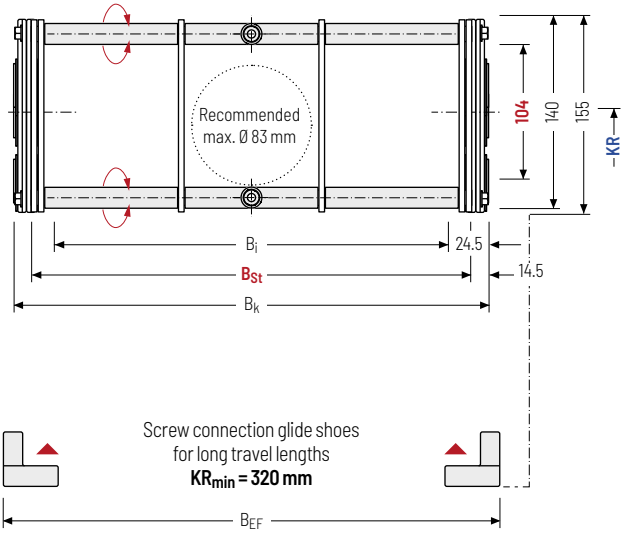


» Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
» Available customized in **1 mm width sections**.
» **Inside/outside:** Screw connection detachable
» **Option:** Divider systems made from stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k from 250 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
104	140	155	201 – 751	221 – 771	B_{St} + 29	B_{St} + 40	265	320	375	435	490	26.57 – 36.05
							605	720	890	1175	1300	

* in 1 mm width sections

Order example

S1800	.	417	.	RR	.	375	.	St	-	5940		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

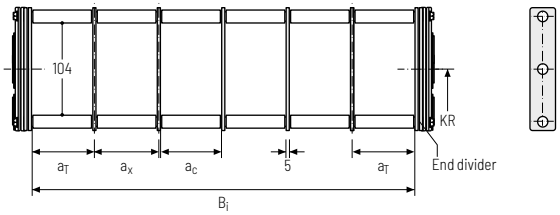
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

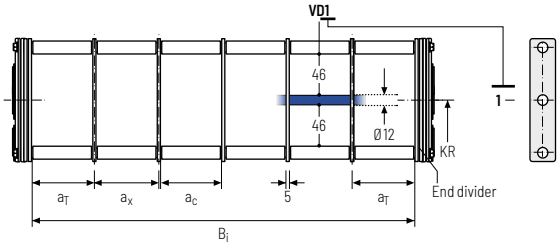
Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	45	45	40	–



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
B	45	45	40	2



Order example

TS1	.	B	.	3	.	K1	.	34	-	VD0
						⋮		⋮		⋮
					.	K4	.	38	-	VD0
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).



TRAXLINE® cables for cable carriers

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Subject to change without notice.

S/SX1800 LG | Dimensions · Technical data

Aluminum stay LG –
hole stay, split version



» Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

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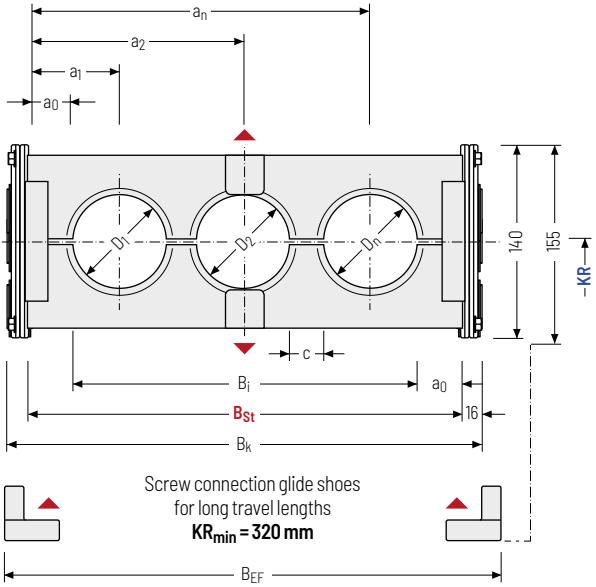
Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 180 – 1000 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
110	12	140	155	121 – 941	148 – 968	B_{St} + 32	B_{St} + 43	4	13.5	265	320	375	435	24.38 – 35.08
										490	605	720	890	
										1175	1300			

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

Order example

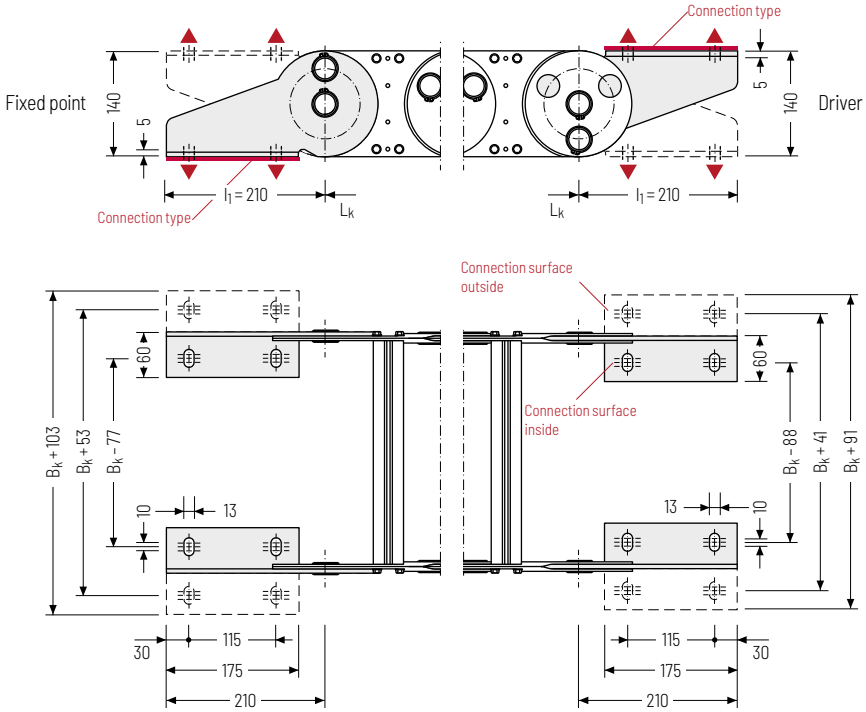
S1800	417	LG	375	St	5940	HS
Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement

Subject to change without notice.

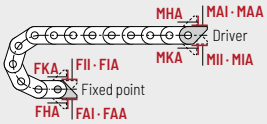


End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint to outside (standard)
I – threaded joint to inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Connection surface
I – connection surface inside (standard)
A – connection surface outside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 139 mm.

Order example

Steel	F	A	I
Steel	M	A	I
End connector	Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

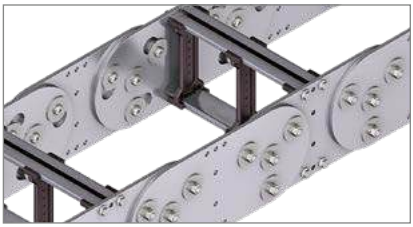
Special designs

S/SX1802 – with closed stroke system and straight link plates



- Closed stroke system protected between link plates mounted on both sides.
- Symmetrical side band design.
- Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.

S/SX1802 B – with internal stroke system and straight link plates



- Open stroke system.
- Link plates of the side bands are mounted offset.
- Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.
- The optimized, "self-cleaning" geometry prevents blocking of the stops through dirt.
- Version with bolted side bands.



TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at tsubaki-kabelschlepp.com/totaltrax



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

S/SX2500

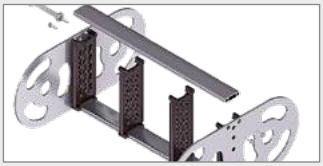
Pitch
250 mm

Inner height
180 – 183 mm

Chain widths
250 – 1200 mm

Bending radii
365 – 1395 mm

Stay variants



Aluminum stay RM ..... page **806**

Frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» **Inside/outside:** Threaded joint easy to release.



Aluminum stay LG ..... page **808**

Frame stay, split

» Optimum cable routing in the neutral bending line. Split version for easy cable routing.
» **Inside/outside:** Threaded joint easy to release.



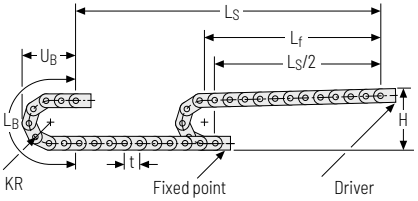
Steel band cover

Also available as covered variants with steel band cover. More information can be found in chapter "steel band cover" from p. 936.

Subject to change without notice.

S/SX2500 | Installation dim. | Unsupported

Unsupported arrangement



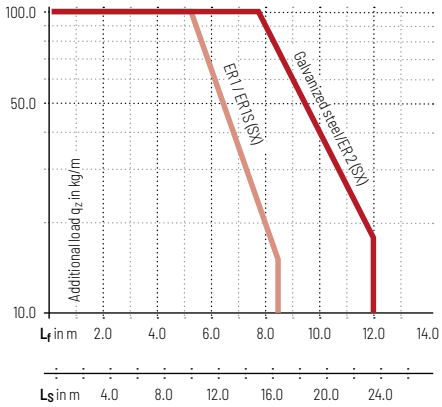
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
365	1060	2147	975
445	1220	2398	1055
600	1530	2885	1210
760	1850	3388	1370
920	2170	3890	1530
1075	2480	4377	1685
1235	2800	4880	1845
1395	3120	5383	2005

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 41$ kg/m. For other inner widths, the maximum additional load changes.



Speed
up to 1 m/s

Acceleration
up to 3 m/s²

Travel length
up to 23.7 m

Additional load
up to 100 kg/m

Subject to change without notice.

S/SX2500 RM | Dimensions · Technical data

Aluminum stay RM –
frame stay, solid

» Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides **"Heavy Duty"**.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

HEAVY DUTY
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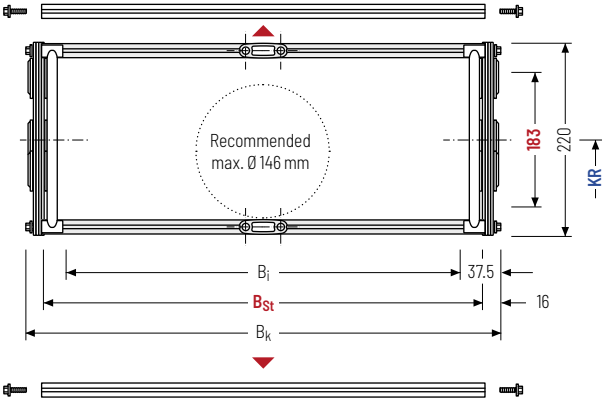
Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 250 – 1200 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	KR [mm]				q_k [kg/m]
183	220	175 – 1125	218 – 1168	B_{St} + 32	365 – 920	445 – 1075	600 – 1235	760 – 1395	38.68 – 44.58

* in 1 mm width sections

Order example

S2500	.	806	.	RM	.	760	.	St	-	9250		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

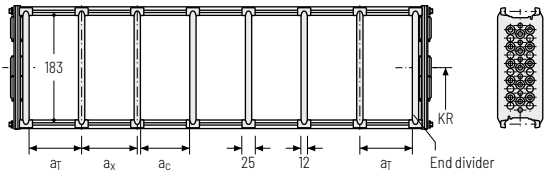
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	19	25	13	–

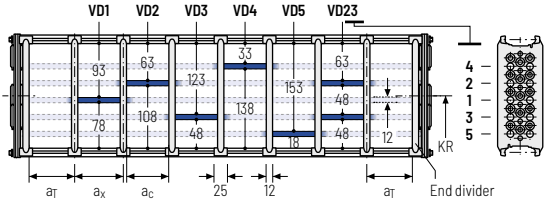
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,min}$ [mm]	$n_{T\,min}$
A	19	13	25	2

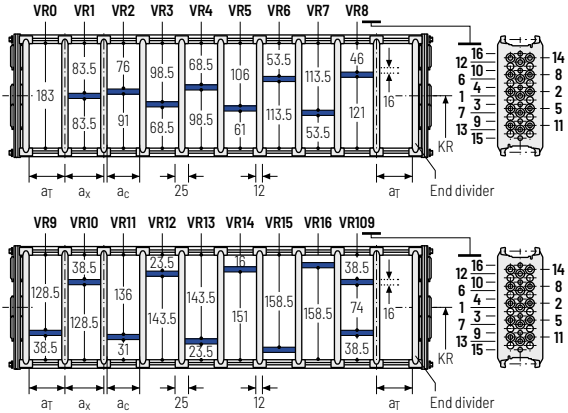
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	40	46	34	2

Standard height separation with tube Ø 16 mm.
The dividers can be moved in the cross section.



Order example

TS2	.	A	.	2	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K3	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Subject to change without notice.

S/SX2500 LG | Dimensions · Technical data

Aluminum stay LG – hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

HEAVY DUTY
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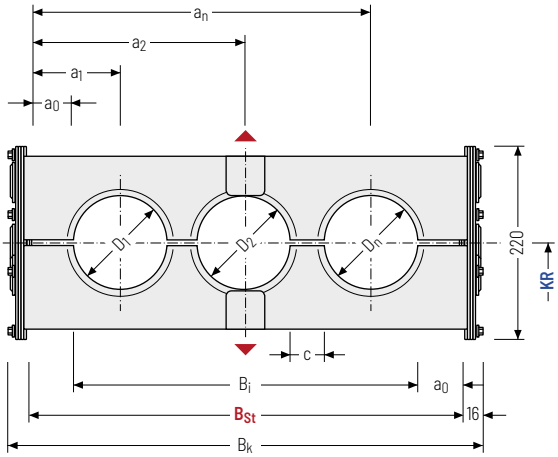
Stay arrangement on every 2nd chain link standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 250 – 1200 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
180	12	220	174 – 1124	218 – 1168	B_{St} + 32	4	22	365 – 920	445 – 1075	600 – 1235	760 – 1395	36.66 – 48.36

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

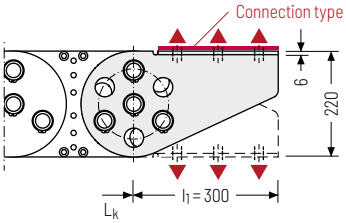
Order example

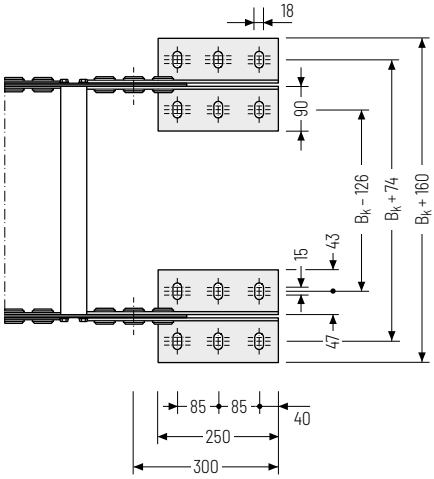
SX2500	806	LG	760	St	9250	HS
Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement

Subject to change without notice.

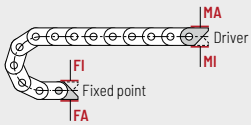
End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

Steel	F	A
Steel	M	A
End connector	Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

S/SX3200

Pitch
320 mm

Inner height
220 mm

Chain widths
250 – 1500 mm

Bending radii
470 – 1785 mm

Stay variants



Aluminum stay LG ..... page **812**

Frame stay, split

» Optimum cable routing in the neutral bending line. Split version for easy cable routing.
» **Inside/outside:** Threaded joint easy to release.

Stay variant RR available as a customized design.
Please contact us.



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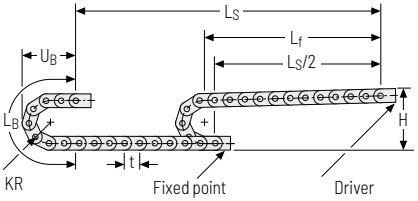
Subject to change without notice.

Unsupported arrangement



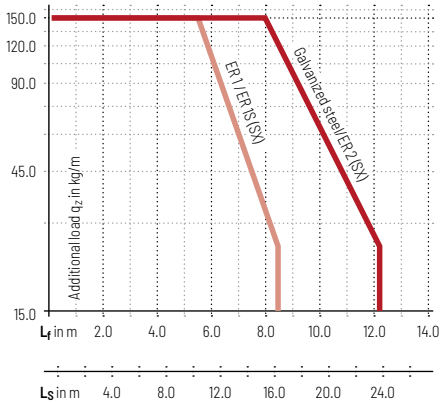
KR [mm]	H [mm]	L_B [mm]	U_B [mm]
470	1390	2757	1260
670	1790	3385	1460
870	2190	4013	1660
1075	2600	4657	1865
1275	3000	5286	2065
1480	3410	5930	2270
1785	4020	6888	2575

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 41$ kg/m. For other inner widths, the maximum additional load changes.



Speed
up to 1 m/s

Acceleration
up to 2.5 m/s²

Travel length
up to 24 m

Additional load
up to 150 kg/m

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

S/SX3200 LG | Dimensions · Technical data

Aluminum stay LG – hole stay, split version

» Optimum cable routing in the neutral bending line. Split version for easy cable routing.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.

HEAVY DUTY
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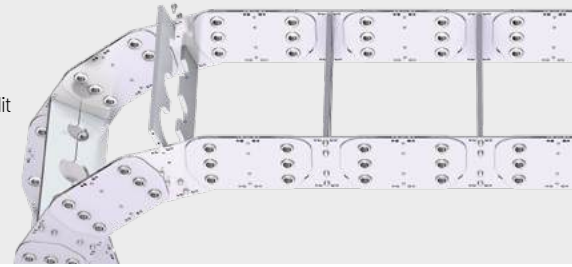
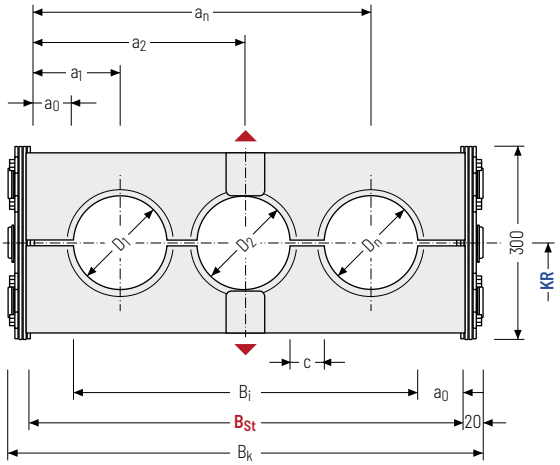


Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**

Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 250 – 1500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

Calculating the stay width

Stay width B_{St}

$$B_{St} = \sum D + \sum c + 2\,a_0$$

D_{max} [mm]	D_{min} [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	c_{min} [mm]	$a_{0\,min}$ [mm]	KR [mm]				q_k 50 %** [kg/m]
220	12	300	181 – 1416	210 – 1460	B_{St} + 40	4	22	470 – 1275	670 – 1480	870 – 1785	1075	57.48 – 72.66

* in 1 mm width sections ** Hole ratio of the hole stay approx. 50 %

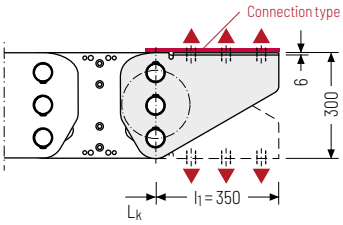
Order example

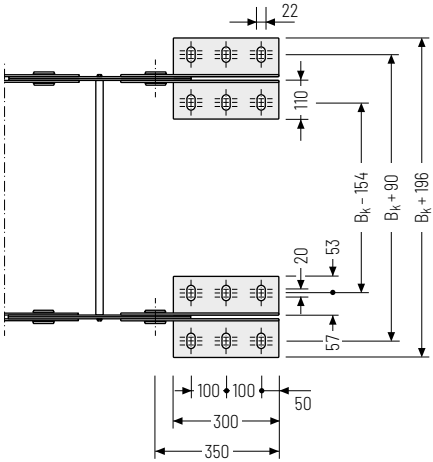
SX3200	776	LG	1075	ER 1	9280	HS
Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement

Subject to change without notice.

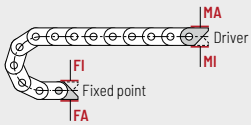
End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

Steel	F	A
Steel	M	A
End connector	Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

S/SX 5000 – 8000

Pitch
200 – 550 mm

Inner heights
150 – 578 mm

Chain widths
250 – 1800 mm

Bending radii
min. 500 mm

Stay variants



Steel stay special design
..... from page **816**

Steel frame stay, bolted

» Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
» **Inside/outside:** Threaded joint can be released.

Cable carriers of types 5000 – 8000 are **customized products** for special applications, e.g. offshore use.



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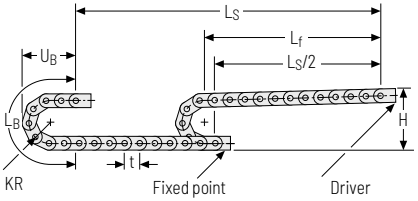
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, o ptimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Unsupported arrangement



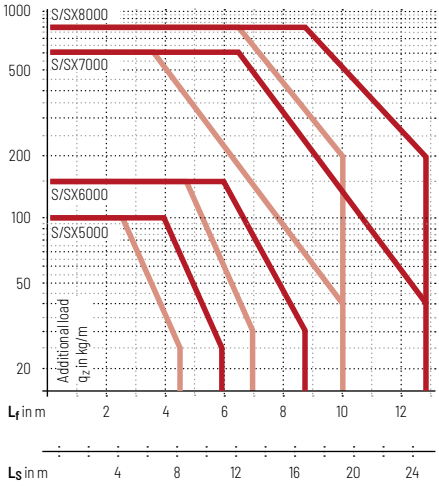
Type	KR [mm]	H [mm]	L_B [mm]	U_B [mm]
S/SX5000	min. 500	1200	1970	800
	max. 1200	2600	4170	1500
S/SX6000	min. 700	1700	2840	1170
	max. 1500	3300	5350	1970
S/SX7000	min. 900	2250	3725	1575
	max. 2400	5250	8435	3075
S/SX8000	min. 900	2400	3925	1750
	max. 2400	5400	8635	3250

Installation height H_z

$H_z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_k
50 kg/m for S/SX5000
75 kg/m for S/SX6000
150 kg/m for S/SX7000
230 kg/m for S/SX8000
For other inner widths, the maximum additional load changes.



S5000/6.../7.../8... galvanized steel
SX5000/6.../7.../8... ER 2
SX5000/6.../7.../8... ER 1 / ER 1S

Speed

S/SX5000 up to 2.0 m/s
S/SX6000 up to 1.5 m/s
S/SX7000 up to 0.5 m/s
S/SX8000 up to 0.5 m/s

Acceleration

S/SX5000 up to 3.0 m/s²
S/SX6000 up to 2.0 m/s²
S/SX7000 up to 0.3 m/s²
S/SX8000 up to 0.3 m/s²

Travel length

S/SX5000 up to 11.0 m
S/SX6000 up to 16.7 m
S/SX7000 up to 24.9 m
S/SX8000 up to 24.9 m

Additional load

S/SX5000 up to 100 kg/m
S/SX6000 up to 150 kg/m
S/SX7000 up to 600 kg/m
S/SX8000 up to 800 kg/m

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**

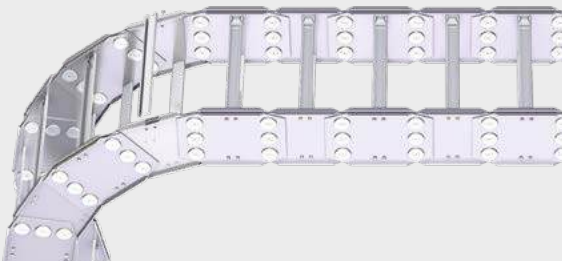


Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

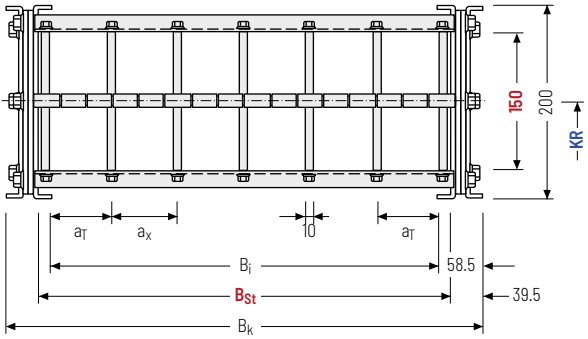
Steel stay –
steel frame stay, bolted

» Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k 250 – 1200 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

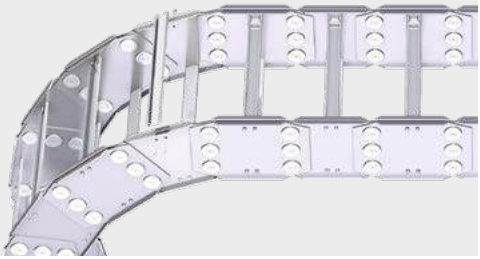
h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	$a_{T\,max}$ [mm]	$a_{x\,max}$ [mm]	$n_{T\,min}$	KR [mm]**	q_k [kg/m]
150	200	133 – 1083	171 – 1121	B_{St} + 79	150	150	2	500 – 1200	42.5 – 52.0

* in 1 mm width sections
** individual intermediate sizes available

Subject to change without notice.

Steel stay –
steel frame stay, bolted

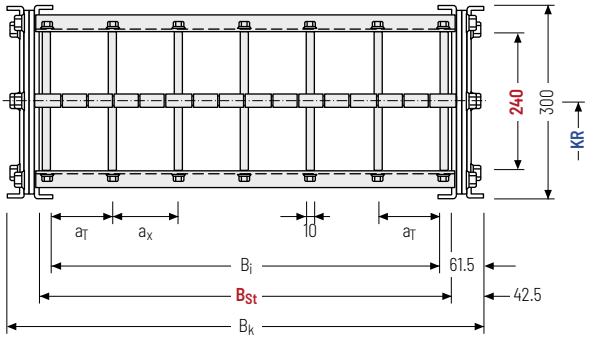
» Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm

B_k 300 – 1500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

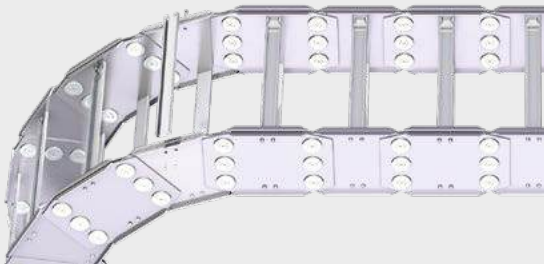
h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	$a_{T\,max}$ [mm]	$a_{x\,max}$ [mm]	$n_{T\,min}$	KR [mm]**	q_k [kg/m]
240	300	177 – 1377	215 – 1415	B_{St} + 85	200	200	2	700 – 1500	55 – 79

* in 1 mm width sections
** individual intermediate sizes available

Subject to change without notice.

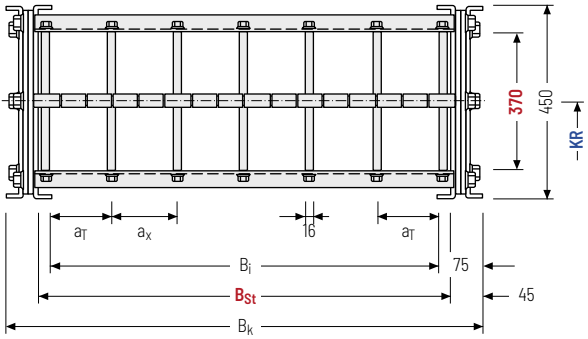
Steel stay –
steel frame stay, bolted

» Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm
B_k from 350 – 1800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

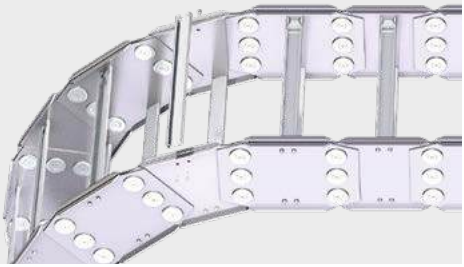
h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	$a_{T\,max}$ [mm]	$a_{x\,max}$ [mm]	$n_{T\,min}$	KR [mm]**	q_k [kg/m]
370	450	200 – 1650	**260** – **1710**	B_{St} + 90	250	250	2	**900** – **2400**	135 – 164

* in 1 mm width sections
** individual intermediate sizes available

Subject to change without notice.

Steel stay –
steel frame stay, bolted

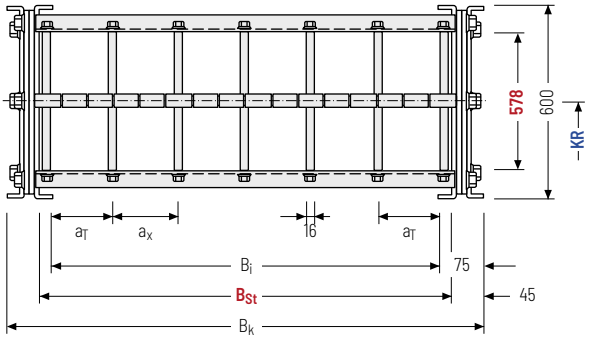
- Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm

B_k 350 – 1800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t for odd number of chain links

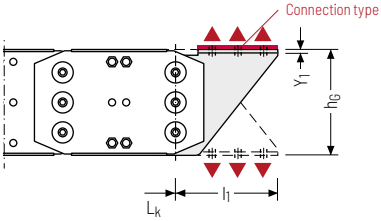
h_i [mm]	h_G [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	$a_{T\,max}$ [mm]	$a_{x\,max}$ [mm]	$n_{T\,min}$	KR [mm]**	q_k [kg/m]
578	600	200 – 1650	**260 – 1710**	B_{St} + 90	300	300	2	**900 – 2400**	198 – 255

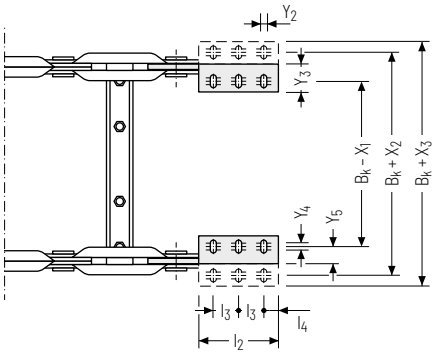
* in 1 mm width sections
** individual intermediate sizes available

Subject to change without notice.

End connectors – steel

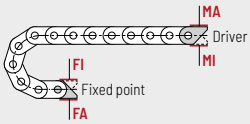
End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options

Type	l_1 [mm]	l_2 [mm]	l_3 [mm]	l_4 [mm]	X_1 [mm]	X_2 [mm]	X_3 [mm]	Y_1 [mm]	Y_2 [mm]	Y_3 [mm]	Y_4 [mm]	Y_5 [mm]
S/SX5000	300	200	75	25	130	210	290	12	18	90	15	50
S/SX6000	400	300	100	50	130	210	290	12	18	90	15	50
S/SX7000	400	300	100	50	140	220	300	12	22	90	15	50
S/SX8000	400	300	100	50	140	220	300	12	22	90	15	50



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

More product information online

Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/downloads**



Configure your custom cable carrier here: **online-engineer.de**

Subject to change without notice.

Subject to change without notice.



S/SX9000

Custom sizes

Cable carrier width
from 350 mm

For over 65 years, TSUBAKI KABELSCHLEPP has been developing and manufacturing steel cable carriers which are used in a great variety of applications, from steel works and shipbuilding to offshore oil rigs. We comply with the required quality and industry standards and are happy to develop customized solutions for your individual projects. We can manufacture special sizes in different materials as per your requirements.

- Individual problem solutions from an experienced engineering team
- Maintenance-free systems with a high level of reliability and availability
- Different materials adapted to the area of application
- Resistant to temperature, corrosion, chemicals and UV
- Suitable for use with salt water
- Explosion protection with classification EX II 2 GD as per ATEX RL
- Linear and rotating travel paths possible
- Easy and flexible assembly with modular design
- Cable weights of over 1000 kg/m possible
- Long service life



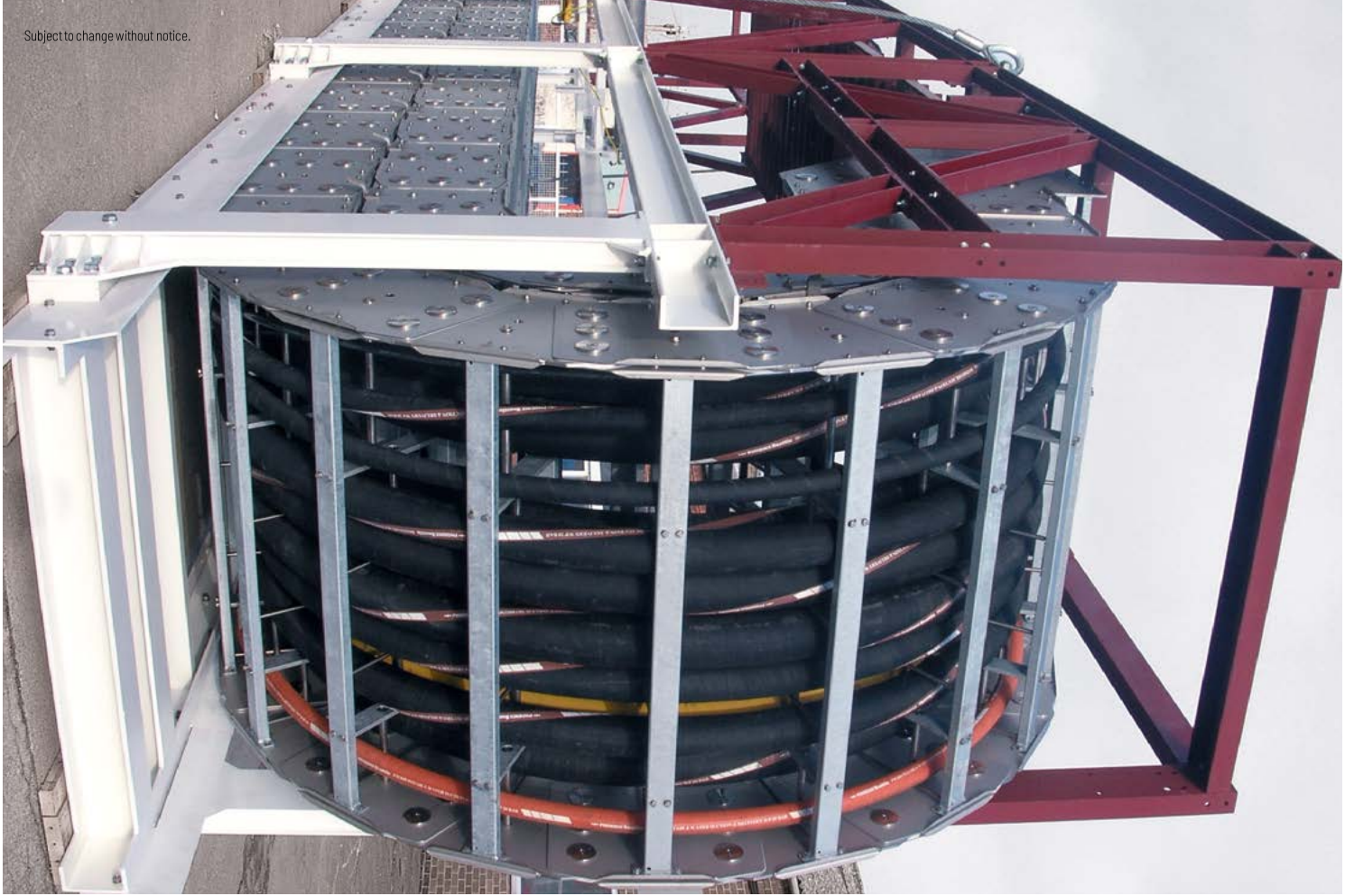
TSUBAKI KABELSCHLEPP technical support

If you have any questions about the configuration of cable carriers or other technical details please contact our technical support at technik@kabelschlepp.de. We will be happy to help you.



Subject to change without notice.

Subject to change without notice.



TUBES-STEEL

Covered steel cable carriers for extreme applications

Special applications require the use of special cable carriers. Our steel and stainless steel cable carriers are the first choice for extreme heat or other very rough ambient conditions, such as in mining, smelting or oil production. Customized separating options offer best possible protection for cables and hoses even under high mechanical loads.

- Robust design for high mechanical loads
- High additional loads and extensive unsupported lengths possible
- Ideal for extreme and rough ambient conditions
- Heat-resistant



Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Subject to change without notice.





S/SX-TUBES series page **826**

Extremely robust and sturdy covered steel cable carriers

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
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S/SX Tubes series

Extremely robust and sturdy covered steel cable carriers



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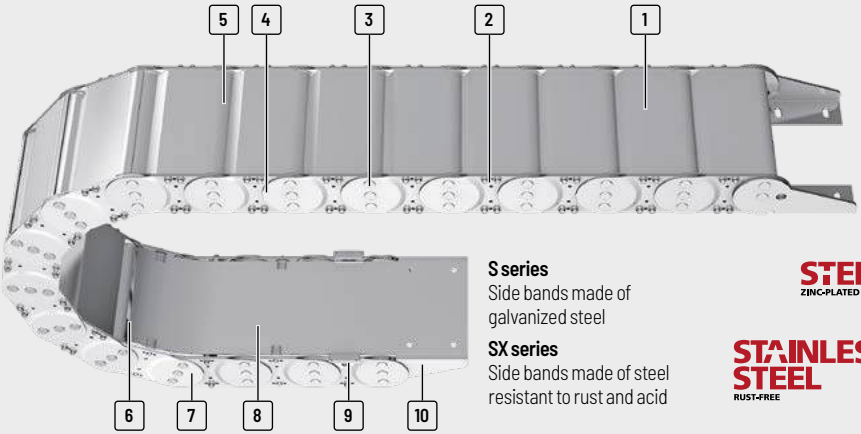


S series
Side bands made of galvanized steel

SX series
Side bands made of steel resistant to rust and acid

STEEL ZINC-PLATED

STAINLESS STEEL RUST-FREE

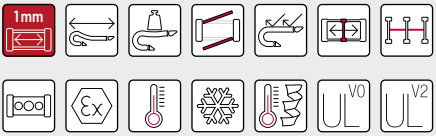
1 Aluminum covers available in **1 mm width sections**
2 4 bolted aluminum covers for extreme loads
3 Joint design with hardened bolts for long service life
4 Cranked link plate design
5 Can be opened on the inside and the outside for cable laying
6 Different separation options for the cables
7 Extremely robust side bands, galvanized or stainless steel
8 Steel band cover available in **1 mm width sections**
9 Replaceable glide shoes
10 End connectors for different connection variants

Features

- » Extremely robust, sturdy steel cable carriers for heavy mechanical loads and rough environmental conditions
- » Side bands made of galvanized steel (S series) or corrosion-resistant and acid-resistant steel (SX series) in three qualities: ER 1 / ER 1S and ER 2
- » Very sturdy link plates, each consisting of two individual plates
- » Very extensive unsupported lengths even with large additional loads
- » Joint design with multi stroke system and hardened bolt
- » Bolted stay systems, solid end connectors
- » Explosion protection with classification EX II 2 GD as per ATEX RL

The design

Proven steel cable carriers with extremely sturdy link plates and dedicated joint design with multi stroke system and hardened bolt. The extremely sturdy design allows extensive unsupported lengths and high possible additional loads.





Sandwich design: Link plates consist of two plates



Glide shoes available for gliding applications



Stroke system with hardened bolt and circlips



Also available as open variants with different stay variants, p. 740

Subject to change without notice.

S/SX Tubes series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
S/SX0650 Tubes											
		RMD	30	50	65 – 465	100 – 500	1	65	115 – 400	30	24
S/SX0950 Tubes											
		RMD	44	68	88 – 563	125 – 600	1	95	170 – 600	45	35
S/SX1250 Tubes											
		RMD	69	94	101 – 751	150 – 800	1	125	200 – 1000	50	55
S/SX1800 Tubes											
		RMD	104	140	188 – 938	250 – 1000	1	180	320 – 1300	60	83

* Depending on the specific application, additional gliding elements or rollers are required.
** Application-specific, values on request.

Subject to change without notice.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
5.8	2.5	5	**	1	2	•	•	–	–	•	•	–	832
8.8	2.5	5	**	1	2	•	•	–	–	•	•	–	838
13.5	2.5	5	**	1	2	•	•	•	–	•	•	–	844
17.8	2	3	**	0.8	2	•	•	–	•	•	•	–	848

Subject to change without notice.

S/SX0650

Pitch
65 mm

Inner height
30 mm

Chain widths
100 – 500 mm

Bending radii
115 – 300 mm

Stay variants



Aluminum stay RMD ..... page **832**

Aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» **Inside/outside:** Threaded joint easy to release.



TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

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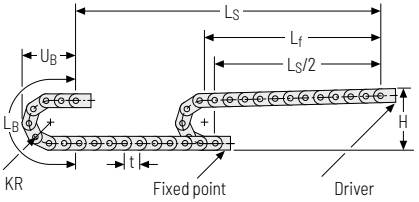
Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	L_B [mm]	U_B [mm]
115	305	621	270
125	325	653	280
135	345	684	290
145	365	716	300
155	385	747	310
175	425	810	330
200	475	888	355
250	575	1045	405
300	675	1202	455
400	875	1516	555

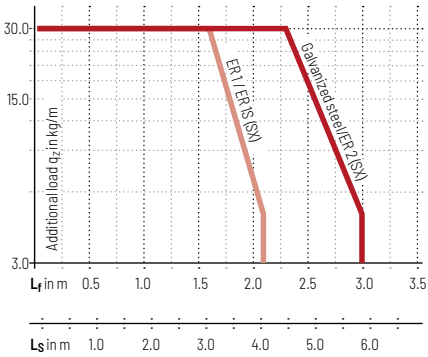
Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 4.5$ kg/m. For other inner widths, the maximum additional load changes.

For cable carriers with a aluminum cover system, a higher intrinsic cable carrier weight is to note.



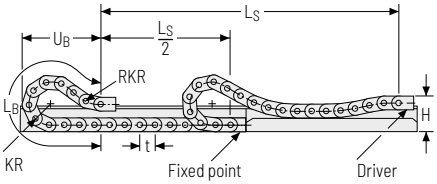
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 5.8 m

Additional load
up to 30 kg/m

Gliding arrangement



Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 30 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

S/SX0650 RMD | Dimensions · Technical data

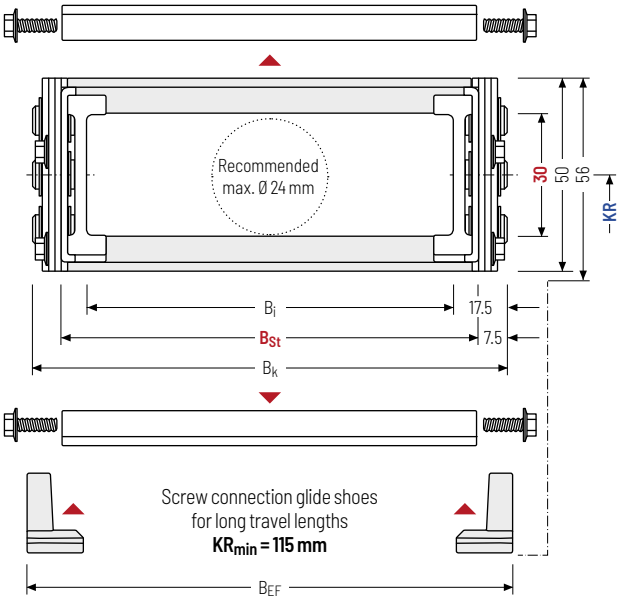
Aluminum stay RMD – aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» Available customized in **1 mm grid**.
» **Inside/outside:** Threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 100 – 500 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
30	50	56	65 – 465	**85 – 485**	B_{St} + 15	B_{St} + 20	**115 – 175**	**125 – 200**	**135 – 250**	**145 – 300**	**155 – 400**	4.84 – 10.50

* in 1 mm width sections

Order example

SX0650	.	180	.	RMD	.	135	.	St	-	1430		VS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

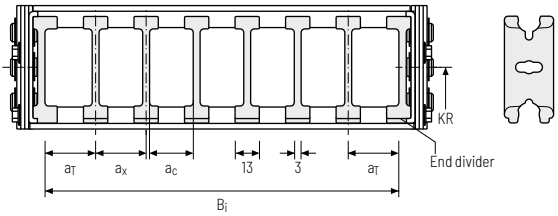
As a standard, the divider system is mounted on every 2nd cover/chain link (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	–

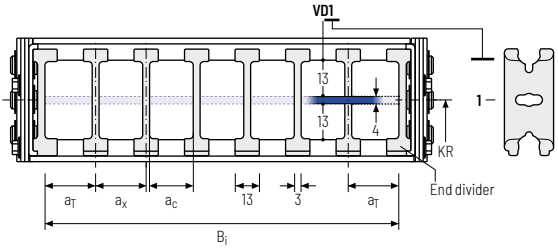
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	11.5	13	10	2

The dividers can be moved in the cross section.



Order example

TS1 . A . 3 - VD0 ⋮ - VD1

Divider system | Version | n_T | Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

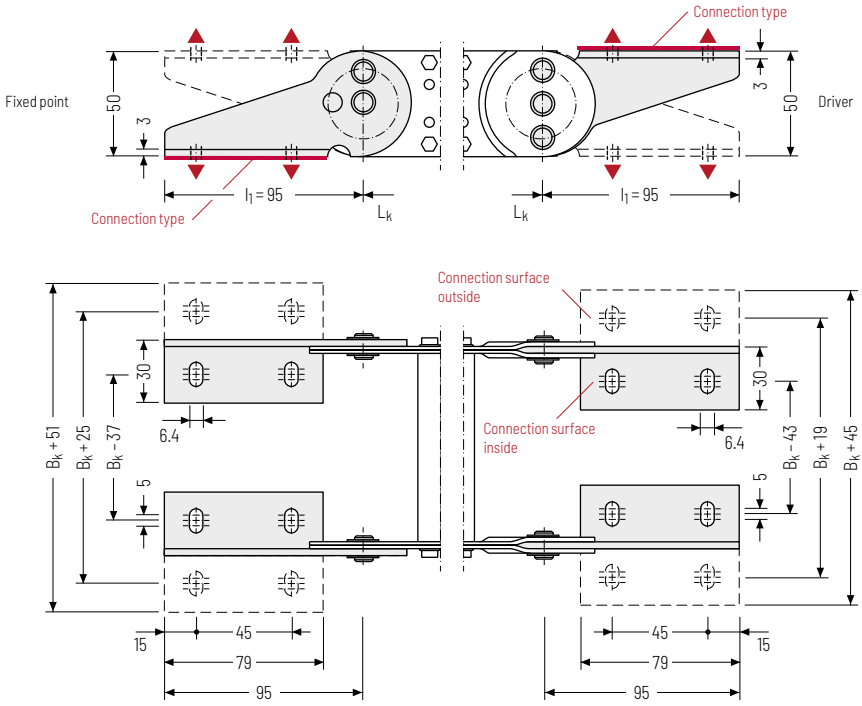
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

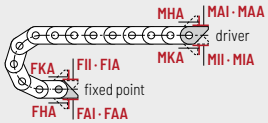
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint to outside (standard)
- **I** – threaded joint to inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 70 mm.

Connection surface
- **A** – connection surface inside (standard)
- **I** – connection surface outside

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.



S/SX0950

Pitch
95 mm

Inner height
44 mm

Chain widths
125 – 600 mm

Bending radii
170 – 600 mm

Stay variants



Aluminum stay RMD ..... page **838**

Aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» **Inside/outside:** Threaded joint easy to release.



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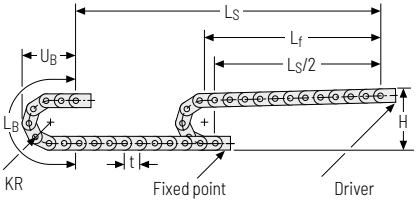
Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	L_B [mm]	U_B [mm]
170	442	914	395
200	502	1008	425
260	622	1197	485
290	682	1291	515
320	742	1385	545
350	802	1480	575
410	922	1668	635
600	1302	2264	825

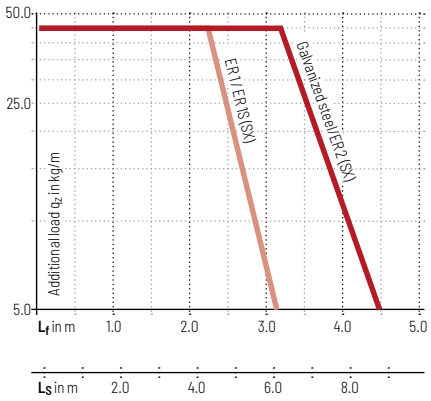
Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 7.6$ kg/m. For other inner widths, the maximum additional load changes.

For cable carriers with a aluminum cover system, a higher intrinsic cable carrier weight is to note.



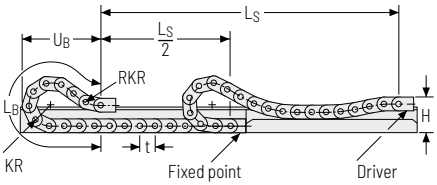
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 8.8 m

Additional load
up to 45 kg/m

Gliding arrangement



Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 45 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Subject to change without notice.

S/SX0950 RMD | Dimensions · Technical data

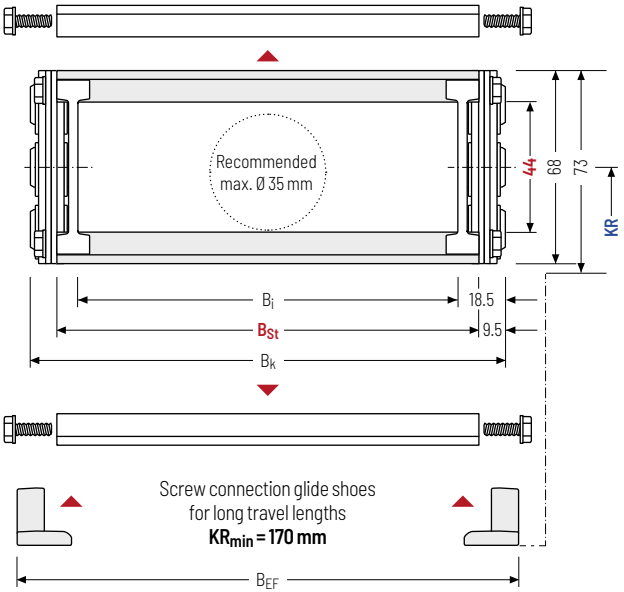
Aluminum stay RMD –
aluminum cover system

- Bolted aluminum covers for maximum stability.
- For applications generating chips or coarse contamination.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 125 – 600 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]				q_k [kg/m]
44	68	73	88 – 563	106 – 581	B_{St} + 19	B_{St} + 28	170	200	260	290	9.97 – 21.95
							320	350	410	600	

* in 1 mm width sections

Order example

SX0950	.	107	.	RMD	.	200	.	St	-	2375	VS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]	Stay arrangement

Subject to change without notice.

Divider systems

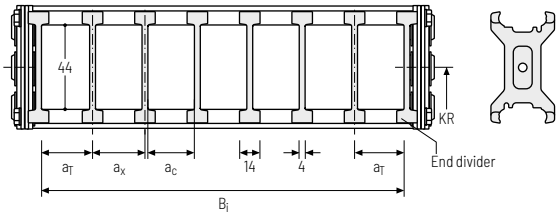
As a standard, the divider system is mounted on every 2nd cover/chain link (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	–

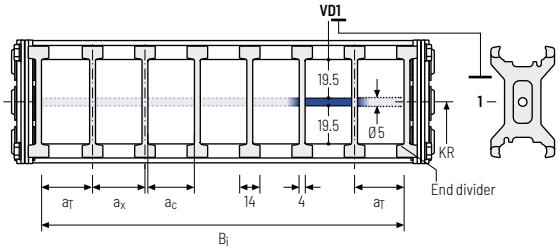
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

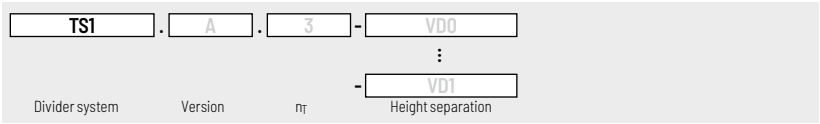
Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	12	14	10	2

The dividers can be moved in the cross section.



Order example





Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T].

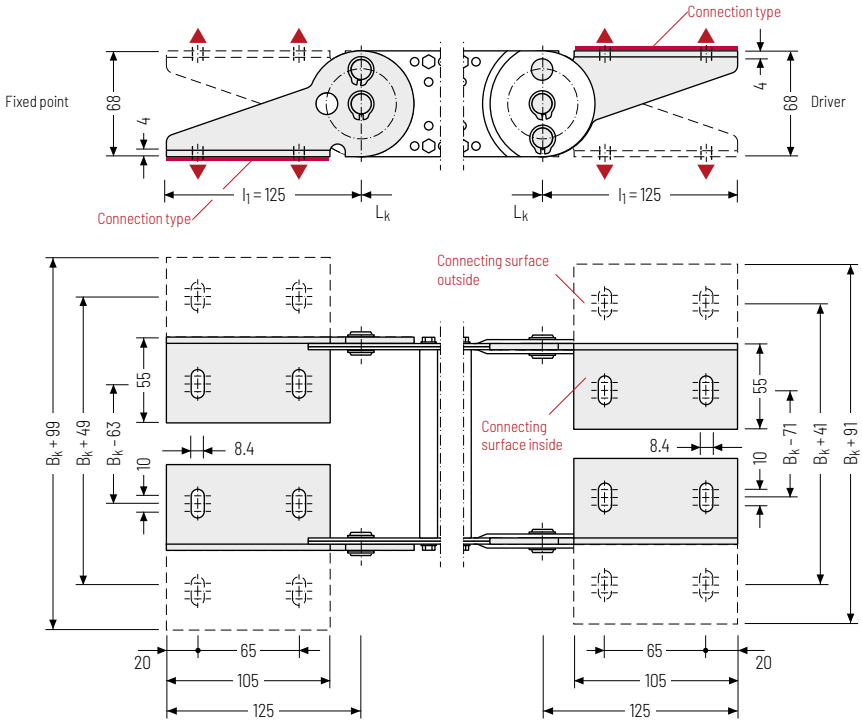
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

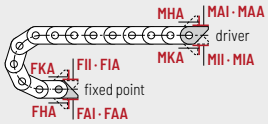
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint to outside (standard)
- **I** – threaded joint to inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 122 mm.

Connection surface
- **A** – connection surface inside (standard)
- **I** – connection surface outside

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.


KABELSCHLEPP
S 0950
KR 170

S/SX1250

Pitch
125 mm

Inner height
69 mm

Chain widths
150 – 800 mm

Bending radii
200 – 1000 mm

Stay variants



Aluminum stay RMD ..... page **844**

Aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» **Inside/outside:** Threaded joint easy to release.



TOTALTRAX® complete systems

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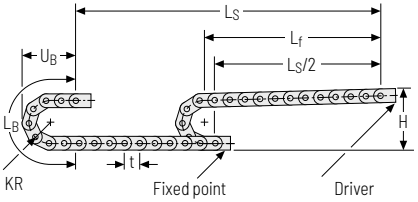
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	L_B [mm]	U_B [mm]
200	541	1128	497
220	581	1191	517
260	661	1317	557
300	741	1442	597
340	821	1568	637
380	901	1694	677
420	981	1820	717
460	1061	1945	757
500	1141	2071	797
540	1221	2196	837
600	1341	2385	897
1000	2141	3640	1297

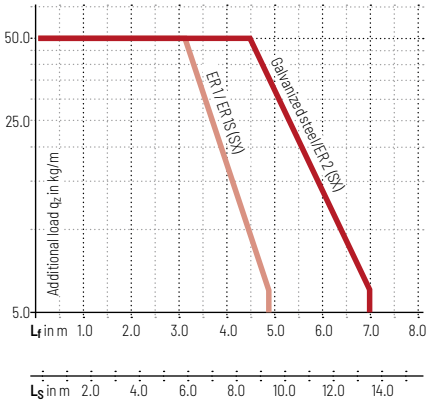
Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_k = 13 kg/m. For other inner widths, the maximum additional load changes.

For cable carriers with a aluminum cover system, a higher intrinsic cable carrier weight is to note.



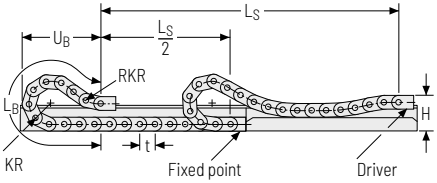
Speed
up to 2.5 m/s

Acceleration
up to 5 m/s²

Travel length
up to 13.5 m

Additional load
up to 50 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 1 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 50 kg/m

Subject to change without notice.

S/SX1250 RMD | Dimensions · Technical data

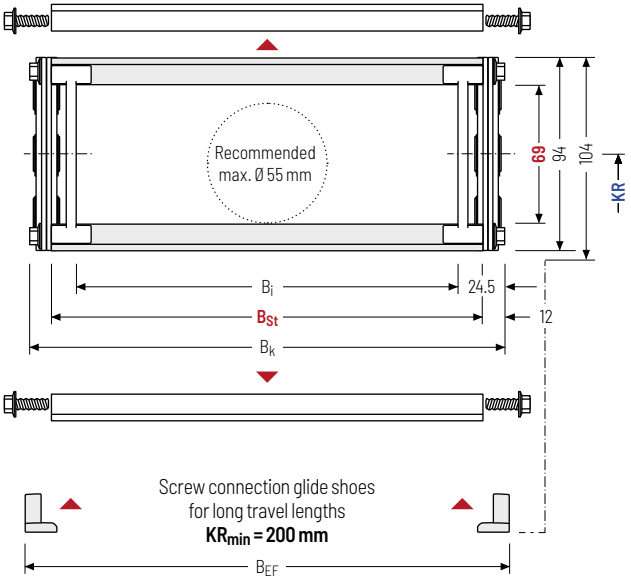
Aluminum stay RMD –
aluminum cover system

- Bolted aluminum covers for maximum stability.
- For applications generating chips or coarse contamination.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_k 150 – 800 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
69	94	104	101 – 751	126 – 776	B_{St} + 24	B_{St} + 30	200**	220**	260	300	340	380	15.48 – 32.38
							420	460	500	540	600	1000	

* in 1 mm width sections ** geometrically reduced inner height

Order example

S1250	.	352	.	RMD	.	260	.	St	-	4750		VS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Subject to change without notice.

Divider systems

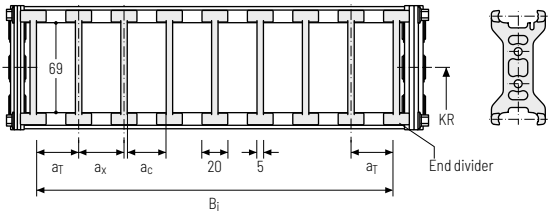
As a standard, the divider system is mounted on every 2nd cover/chain link (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	17.5	20	15	–

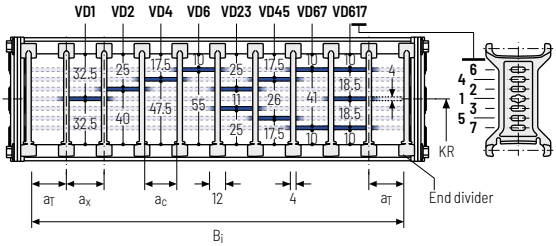
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	10	12	8	2

The dividers can be moved in the cross section.



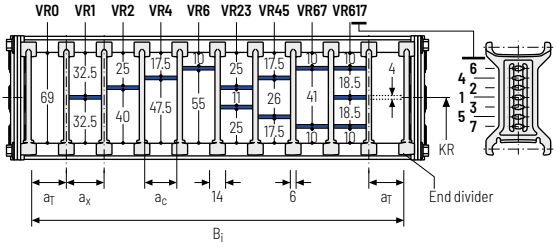
Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11*/17**	14*/21	8*/15	2

* For VR0 ** For version with height separation to the end divider

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



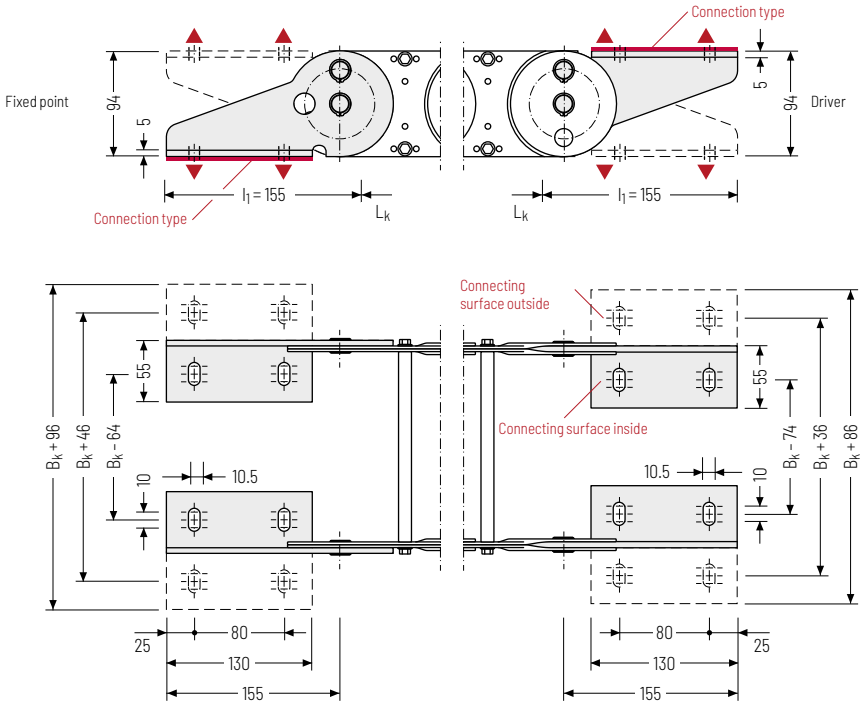
Order example

TS2	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

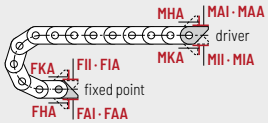
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint to outside (standard)
I – threaded joint to inside
H – threaded joint, rotated 90° to the outside
K – threaded joint, rotated 90° to the inside

Connection surface
A – connection surface inside (standard)
I – connection surface outside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 125 mm.

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Subject to change without notice.



S/SX1800

Pitch
180 mm

Inner height
104 mm

Chain widths
250 – 1000 mm

Bending radii
320 – 1300 mm

Stay variants



Aluminum stay RMD ..... page **850**

Aluminum cover system

» Bolted aluminum covers for maximum stability.
» For applications generating chips or coarse contamination.
» **Inside/outside:** Threaded joint easy to release.



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TRAXLINE® cables for cable carriers

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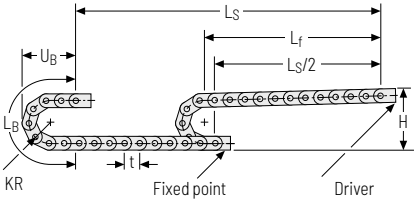
Subject to change without notice.

Unsupported arrangement



KR [mm]	H [mm]	L_B [mm]	U_B [mm]
320	850	1725	750
375	960	1898	805
435	1080	2087	865
490	1190	2259	920
605	1420	2620	1035
720	1650	2982	1150
890	1990	3516	1320
1175	2560	4411	1605
1300	2810	4804	1730

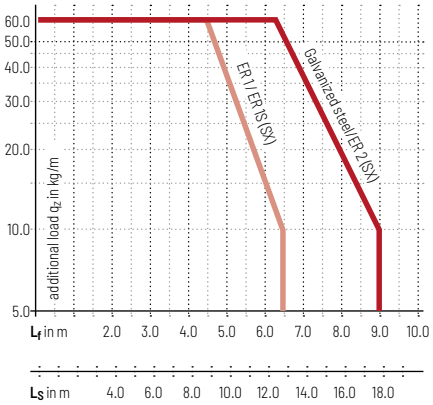
Installation height H_Z

$H_Z = H + 10$ mm/m

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight $q_k = 26$ kg/m. For other inner widths, the maximum additional load changes.

For cable carriers with a aluminum cover system, a higher intrinsic cable carrier weight is to note.



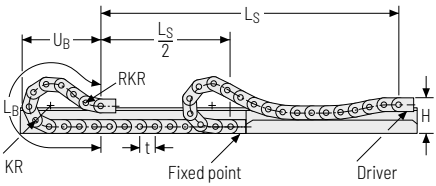
Speed
up to 2 m/s

Acceleration
up to 3 m/s²

Travel length
up to 17.8 m

Additional load
up to 60 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Speed
up to 0.8 m/s

Acceleration
up to 2 m/s²

Travel length
on request

Additional load
up to 60 kg/m

Subject to change without notice.

S/SX1800 RMD | Dimensions · Technical data

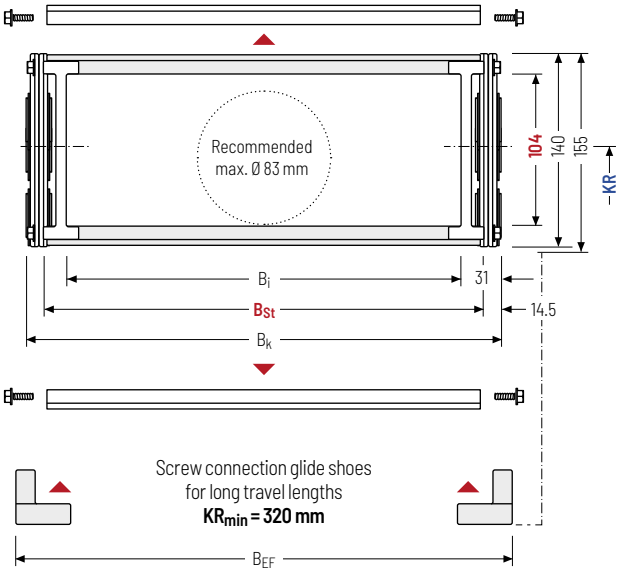
Aluminum stay RMD –
aluminum cover system

- Bolted aluminum covers for maximum stability.
- For applications generating chips or coarse contamination.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm — B_k 250 – 1000 mm in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]	B_{St} [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]					q_k [kg/m]
104	140	155	188 – 938	221 – 971	B_{St} + 29	B_{St} + 40	320	375	435	490	605	28.46 – 47.67
							720	890	1175	1300		

* in 1 mm width sections

Order example

S1800 (Type) . 417 (B_{St} [mm]) . RMD (Stay variant) . 375 (KR [mm]) . St (Material) - 5940 (L_k [mm]) | VS (Stay arrangement)

Subject to change without notice.

Divider systems

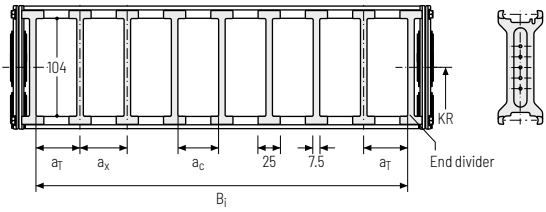
As a standard, the divider system is mounted on every 2nd cover/chain link (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	21.5	25	17.5	–

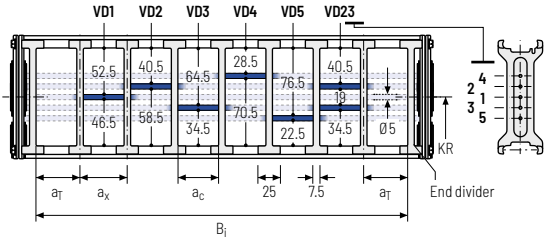
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	21.5	25	17.5	2

The dividers can be moved in the cross section.

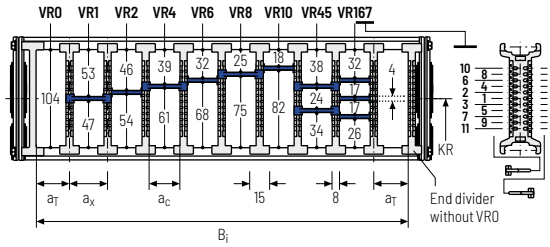


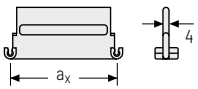
Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	38*/16.5**/12***	16/42*	8	2

* For aluminum partitions
** For VR0
*** For version with height separation to the end divider

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]

a_c (nominal width of inner chamber) [mm]

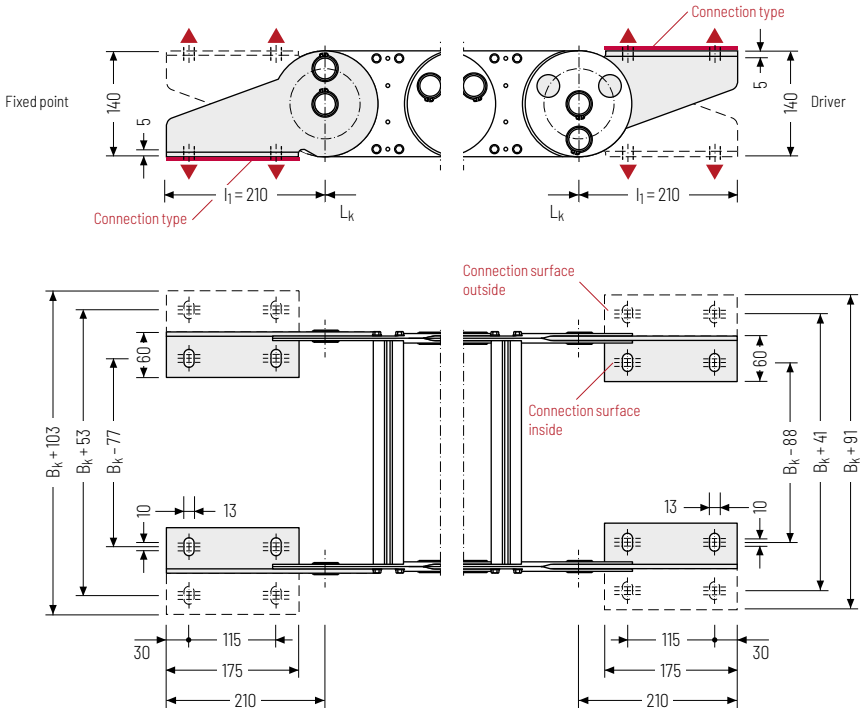
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

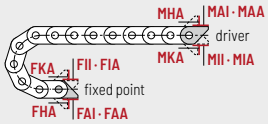
Subject to change without notice.

End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint to outside (standard)
- **I** – threaded joint to inside
- **H** – threaded joint, rotated 90° to the outside
- **K** – threaded joint, rotated 90° to the inside

Caution: The standard connection variant FAI/MAI is only possible from B_k of 139 mm.

Connection surface
- **A** – connection surface inside (standard)
- **I** – connection surface outside

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

Subject to change without notice.

Subject to change without notice.



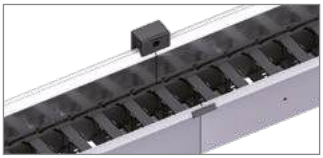
Accessories

for cable carriers

The extensive range of accessories allow cable carriers to be ideally adapted to your specific application. With the accessories for the cable carriers, the cable routing can be assembled from standard components to form a complete cable carrier system. We can also supply a pre-assembled TOTALTRAX® complete system.

- Support tray and guide channels made from steel and aluminum
- Driver connection for optimum transfer of the cables and hoses to the consuming units
- Support rollers for longer unsupported lengths
- Support and guide elements for optimum gliding and rolling
- Strain reliefs for optimum placement with dynamic use of cables
- Steel band covers as continuous, cost-effective protection against chips and other external influences
- Opening tools reduce assembly times and save costs





Support trays and guide channels ..... Page **856**

Reliable unrolling and optimum gliding for long travel lengths



Condition Monitoring ..... Page **916**

Knowing what's (not) up



Floating Moving Device (TKFMD) ..... Page **918**

Optimum transfer of cables

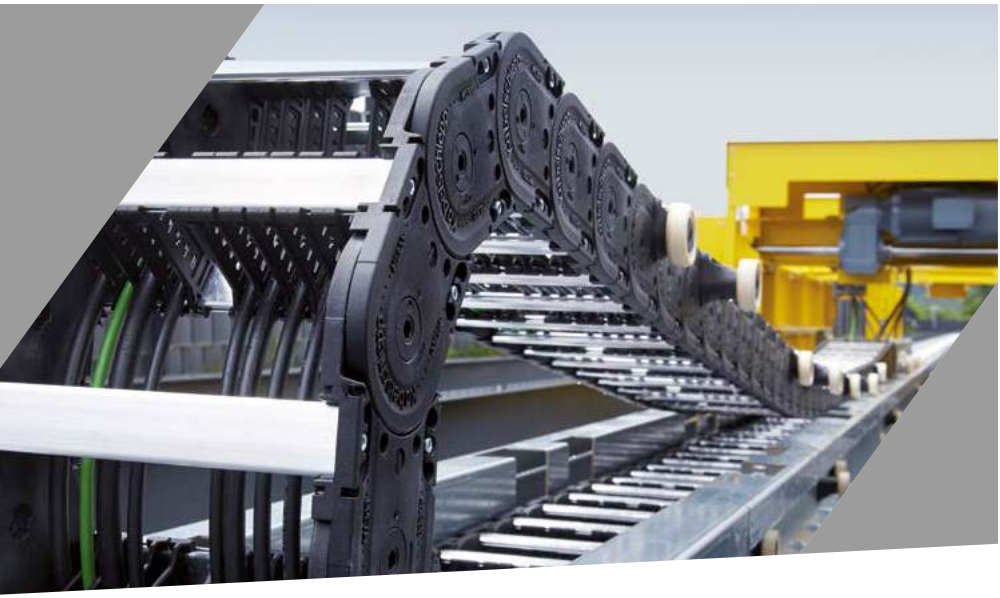


Support rollers ..... Page **920**

For longer unsupported lengths

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration. Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Subject to change without notice.





Strain relief devices ..... Page **924**

For optimum placement with dynamic use of cables



Steel strip covers ..... Page **936**

Continuous, cost-effective protection against chips and other external influences



Opening tools ..... Page **938**

Reduce assembly times and save costs

Subject to change without notice.

Not all technical data and parameters are reached in each individual case, but are depending on the respective type of application and product configuration.
Legally binding insofar is only the individual information provided for the specifically requested particular case. Please contact us - we will be happy to advise you!

Support trays and guide channels

Reliable unrolling and optimum gliding for long travel lengths



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Support trays and guide channels | Overview

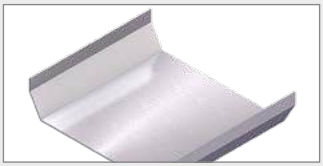
Type	One-piece	Multi-piece	Standard length [mm]	Custom length	Material: StVz	Material: V2A	Material: V4A	Material: Al alloy	Easy alignment	Variable width	Flexible distances of the channel mounting	Channel mounting: inside	Channel mounting: outside	Channel bottom: open	Channel bottom: closed	Robust design	Page
Support trays																	
	•	•	2000/ 3000	•	•	•	•	–	•	•	–	•	–	•	•	–	858
Standard channel																	
	•	–	2000/ 3000	•	•	•	•	–	•	–	•	–	•	•	•	•	870
Steel Guide System (TKSG)																	
	–	•	1000/ 2000	–	•	•	•	–	•	•	–	–	•	•	–	•	880
Channel enclosure																	
	–	•	1000/ 2000	–	•	•	•	–	•	•	–	–	•	–	•	•	885
Alu Guide System (TKAL)																	
	–	•	2000	•	–	–	–	•	•	•	•	•	•	•	–	•	886
Easy Guide System (TKEG)																	
	•	•	2000	•	•	•	•	–	•	–	•	–	•	–	•	–	894
Vertical Guide System (TKVG)																	
	–	•	3000	•	–	–	–	•	•	–	•	–	•	–	•	•	914

Subject to change without notice.

Support trays

An even surface is required for reliable unrolling of the unsupported cable carrier. If this is not already provided on site, a support tray has to be used. If required, we supply our cable carriers with a suitable support tray for your application. This ensures quiet movement of the lower run with reduced wear, reducing costs and design work.

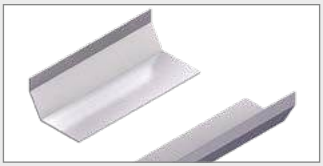
All support trays are available in zinc plated sheet steel or stainless steel. The selection depends on the conditions of use. The simple design allows easy fixing and omits complex individual constructions. The standard lengths are 2000 mm / 3000 mm. Special lengths on request.



One part (standard) ..... Page **860**

Support tray, one part, closed

- Steel profile, folded on both sides.
- Available in zinc plated sheet steel or stainless steel.
- Available for all cable carrier types
- Standard lengths 2000 / 3000 mm, special lengths in 1 mm sections.



Two parts ..... Page **861**

Support tray, two parts, open

- Steel profiles, folded on one side.
- Available in zinc plated sheet steel or stainless steel.
- Available for all cable carrier types.
- Standard lengths 2000 / 3000 mm, special lengths in 1 mm sections.

Subject to change without notice.

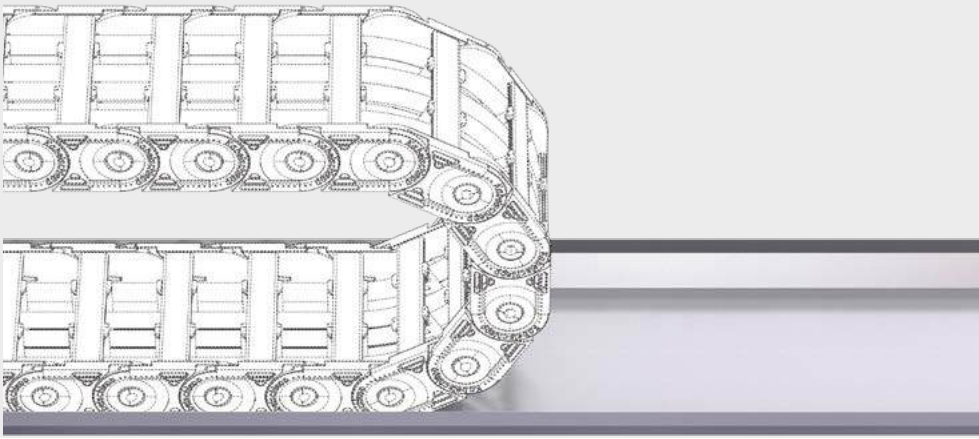
to change without notice.



Support Trays | Overview

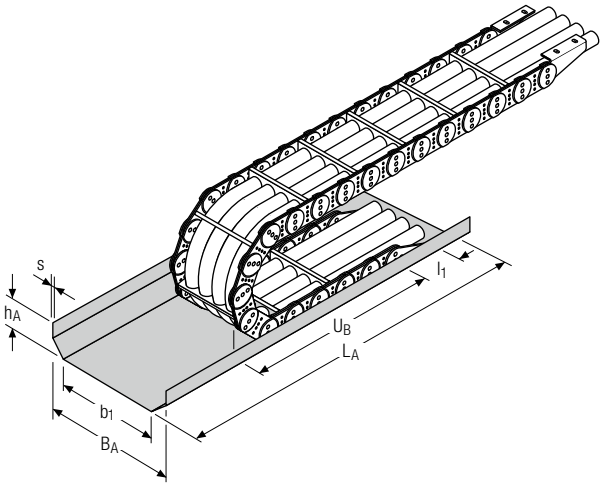
One part – closed (standard)

- Steel profile, folded on both sides.
- Zinc plated sheet steel or stainless steel.
- Available for all cable carrier types.
- Standard lengths 2000 / 3000 mm, special lengths in 1 mm sections.



Zinc plated sheet steel / stainless steel

Standard lengths 2000 / 3000 mm
Special lengths on request



Calculating the support tray length

Support tray length L_A

$$L_A = \frac{L_S}{2} + U_B + l_1$$

(for standard connection)

With upstream strain relief on the fixed point, the support trays have to be made accordingly longer.

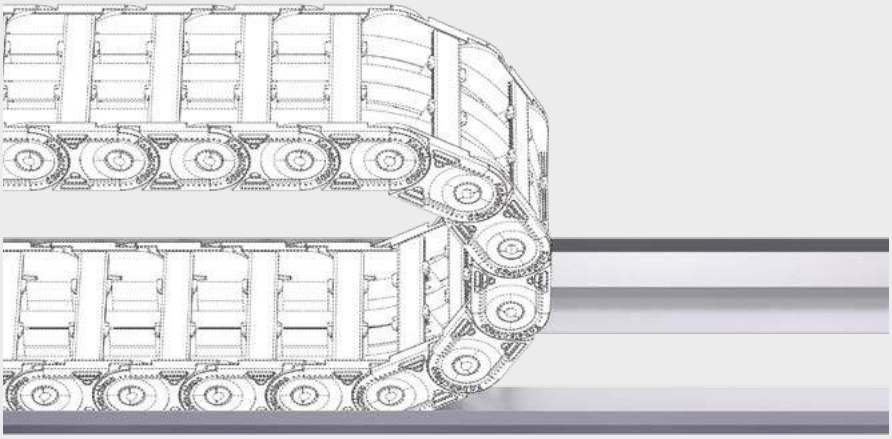
The use of a one part support tray depends on the the cable carrier. Please contact us.

Subject to change without notice.

Support Trays | Overview

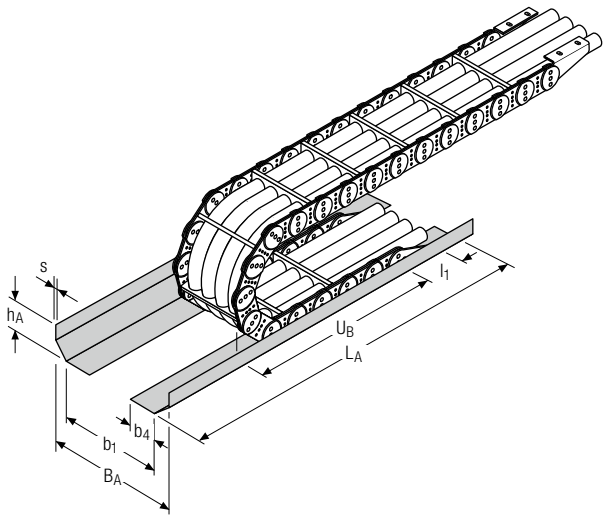
Two parts – open

- Steel profiles, folded on one side.
- Zinc plated sheet steel or stainless steel.
- Available for all cable carrier types.
- Standard lengths 2000 / 3000 mm, special lengths in 1 mm sections.
- Variable widths.



Zinc plated sheet steel / stainless steel

Standard lengths 2000 / 3000 mm
Special lengths on request



Calculating the support tray length

Support tray length L_A

$$L_A = \frac{L_S}{2} + U_B + l_1$$

(for standard connection)

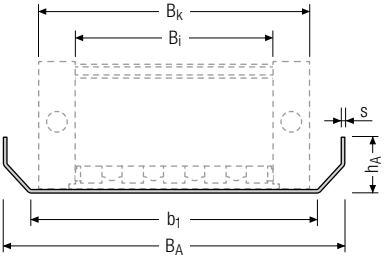
With upstream strain relief on the fixed point, the support trays have to be made accordingly longer

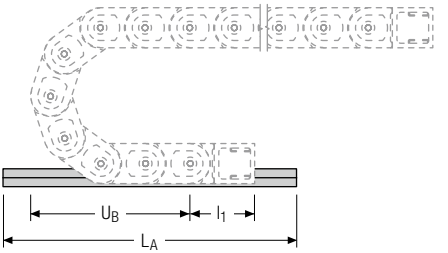
The use of a two part support tray depends on the the cable carrier. Please contact us.

Subject to change without notice.

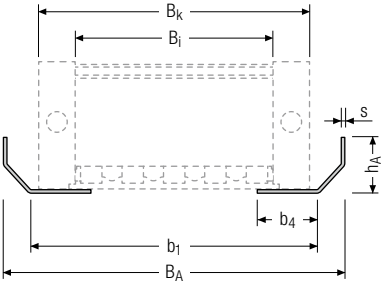
Dimensions

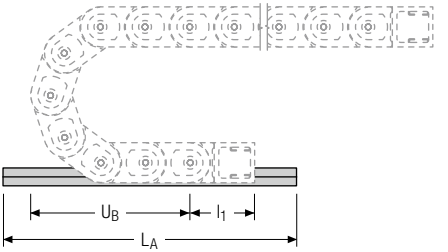
One part – closed (standard)





Two parts – open





UNIFLEX *Advanced* series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
UA1455 | page 162					
B_i + 16	B_k + 6	25	B_k + 21	20	1.5
UA1555 | page 172					
B_i + 18	B_k + 6	30	B_k + 21	20	1.5
UA1665 | page 182					
B_i + 22	B_k + 15	40	B_k + 40	30	2
UA1775 | page 196					
B_i + 26	B_k + 15	55	B_k + 40	30	2
UA1995 | page 204/348					
B_i + 30	B_k + 20	60	B_k + 60	50	2

The use of a two part support tray strongly depends on the inner width used in the cable carrier. For small inner widths, we recommend using one part support trays.
Please contact us.

Subject to change without notice.

Dimensions

TKP35 series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
TKP35 | page 218					
$B_i + 12$	$B_k + 6$	25	$B_k + 21$	20	1.5

EasyTrax® series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
ET1455 | page 258					
$B_i + 16$	$B_k + 6$	25	$B_k + 21$	20	1.5

K series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
K0650 | page 306					
$B_i + 28$	$B_k + 15$	40	$B_k + 40$	30	2
K0900 | page 322					
$B_i + 31$	$B_k + 15$	55	$B_k + 40$	30	2

M series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
M0475 | page 372					
$B_i + 17$	$B_k + 6$	30	$B_k + 21$	20	1.5
M0650 | page 380					
$B_i + 34$	$B_k + 15$	40	$B_k + 40$	30	2
M0950 | page 400					
$B_i + 39$	$B_k + 15$	55	$B_k + 40$	30	2
M1250 | page 428					
$B_i + 45$	$B_k + 20$	60	$B_k + 60$	50	3
M1300 | page 416					
$B_i + 50$	$B_k + 20$	55	$B_k + 60$	50	3

Subject to change without notice.

Dimensions

TKHP® series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
TKHP85 | page 468					
$B_i + 54$	$B_k + 15$	60	$B_k + 40$	30	3
TKHP90 | page 474					
$B_i + 70$	$B_k + 20$	70	$B_k + 60$	70	3

XL series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
XL1650 | page 496					
$B_i + 68$	$B_k + 20$	70	$B_k + 60$	70	3

QUANTUM® series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
Q040 | page 506					
$B_i + 40$	$B_k + 6$	30	$B_k + 21$	20	1.5
Q060 | page 512					
$B_i + 52$	$B_k + 15$	40	$B_k + 40$	30	2
Q080 | page 522					
$B_i + 72$	$B_k + 15$	55	$B_k + 40$	30	2
Q100 | page 536					
$B_i + 82$	$B_k + 20$	60	$B_k + 60$	50	3

TKR series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
TKR0200 | page 560					
$B_i + 16$	$B_k + 6$	25	$B_k + 21$	20	1.5
TKR0260 | page 566					
$B_i + 26$	$B_k + 15$	40	$B_k + 40$	30	2
TKR0280 | page 572					
$B_i + 30$	$B_k + 15$	40	$B_k + 40$	30	2

The use of a two part support tray strongly depends on the inner width used in the cable carrier. For small inner widths, we recommend using one part support trays.
Please contact us.

Subject to change without notice.

Support Trays | Dimensions · Technical Data

Dimensions

TKA series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
TKA38 | page 596					
B_l + 16	B_k + 6	25	B_k + 21	20	1.5
TKA45 | page 602					
B_l + 16	B_k + 6	25	B_k + 21	20	1.5
TKA55 | page 610					
B_l + 21	B_k + 15	40	B_k + 40	30	2

LS/LSX series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
LS/LSX1050 | page 734					
B_{St} + 16/18	B_k + 15	55	B_k + 40	30	2

S/SX series

B_k [mm]	b_1 [mm]	b_4 [mm]	B_A [mm]	h_A [mm]	s [mm]
S/SX0650 | page 748					
B_{St} + 15/17	B_k + 15	40	B_k + 40	30	2
S/SX0950 | page 758					
B_{St} + 19/21	B_k + 15	55	B_k + 40	30	2
S/SX1250 | page 770					
B_{St} + 24/26	B_k + 20	60	B_k + 60	50	3
S/SX1800 | page 794					
B_{St} + 29/32	B_k + 20	70	B_k + 60	50	3
S/SX2500 | page 804					
B_{St} + 32	B_k + 25	100	B_k + 75	80	3
S/SX3200 | page 810					
B_{St} + 40	B_k + 25	100	B_k + 75	80	3

We will also be happy to manufacture support trays for types 5000 to 9000. Please contact us.

Order

Support trays

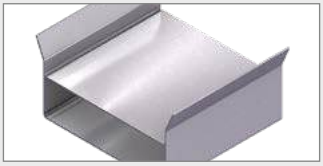
To order the support tray, we need the following information:

- Number of support trays
- Material
- Version of support tray (one part/two parts)
- Part length
- Total length of support tray
- Cable carrier type
- Height of support tray h_A
- Inner width of support tray b_1

Subject to change without notice.

Guide channels

Guide channels are important elements for the reliable functioning with long travel lengths. The upper run of the cable carrier slides on the lower run and on the sliding area of the guide channel behind the fixed point. Guide channels prevent the upper run from slipping off the lower run, ensuring quiet running with low wear. For vertical applications such as elevators or storage and retrieval systems, a vertical channel provides optimum guiding.



Standard channel ..... Page **870**

Sheet steel guide channels

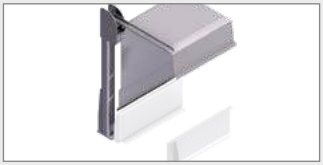
- Simple version with customized fixing options.
- Zinc plated sheet steel or stainless steel.
- Standard lengths.



Steel Guide System (TKSG) ..... Page **880**

Guide channels in the modular system

- Modular system with optimized design for long travel lengths.
- Zinc plated sheet steel or stainless steel.
- Easy installation.



Channel enclosure ..... Page **885**

Cover for guide channels

- Optimum protection against external influences.
- Easy access for inspection.
- Modular design.



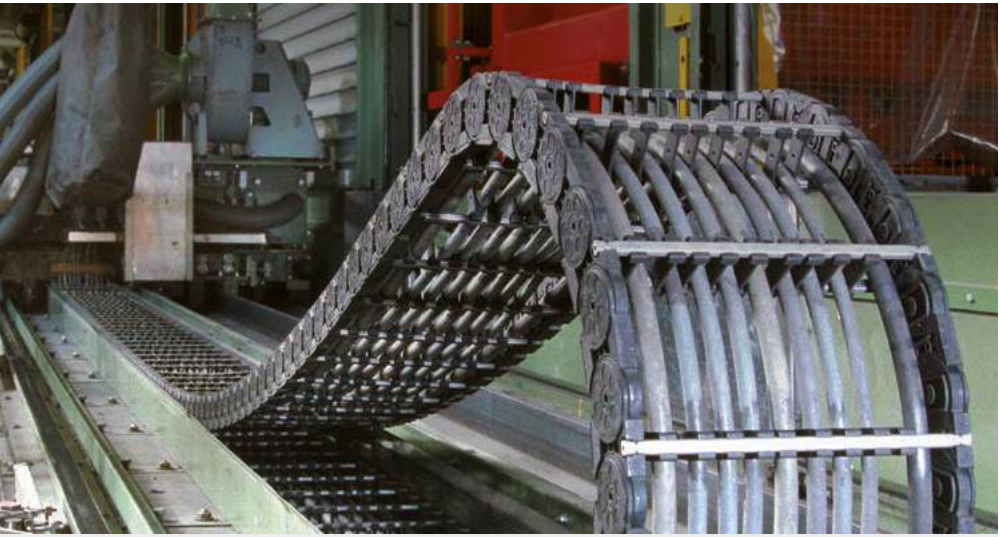
Alu Guide System (TKAL) ..... Seite **886**

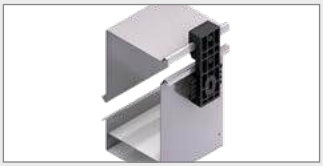
Aluminium guide channels in the modular system

- Modular system with many mounting options.
- Standard lengths and sets.
- Lightweight design for high speeds.

Technical data on p. 868

Subject to change without notice.





Easy Guide System (TKEG) ..... Page **894**

Guide channels for multifunctional use

- Flexible use in many areas of application.
- Made of zinc plated sheet steel or stainless steel.



Vertical Guide System (TKVG) ..... Page **914**

Guide channels for vertical hanging applications

- Ready-to-install channel system made of aluminum.
- Standardized module.
- Easy installation.
- For elevators, storage and retrieval systems and many other applications.



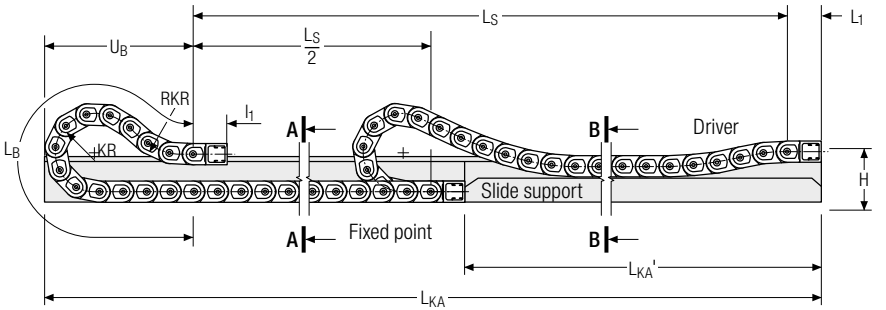
Assembly profiles ..... Page **915**

Assembly profiles for guide channels

- Assembly profiles with sloping sides can be used for all guide channels for fastening
- Lengths in 50 mm grid possible

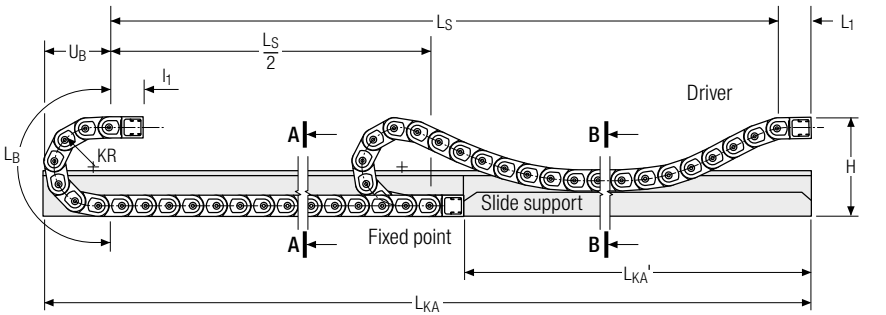
Subject to change without notice.

One-sided arrangement – with lower driver connection and reverse bending radius (standard)



Calculating the channel length	Calculating the connection height	Calculating the slide support length
Channel length L_{KA}	**Connection height H**	**slide support length L_{KA}'**
$L_{KA} = L_S + U_B + L_1$	$H = 3\ h_G$	$L_{KA}' = L_S / 2$

One-sided arrangement – high connection



Calculating the channel length	Connection height high connection	Calculating the slide support length
Channel length L_{KA}	**Connection height H**	**slide support length L_{KA}'**
$L_{KA} = L_S + U_B + L_1$	$H = 2 \times KR + h_G$	$L_{KA}' = L_S / 2$

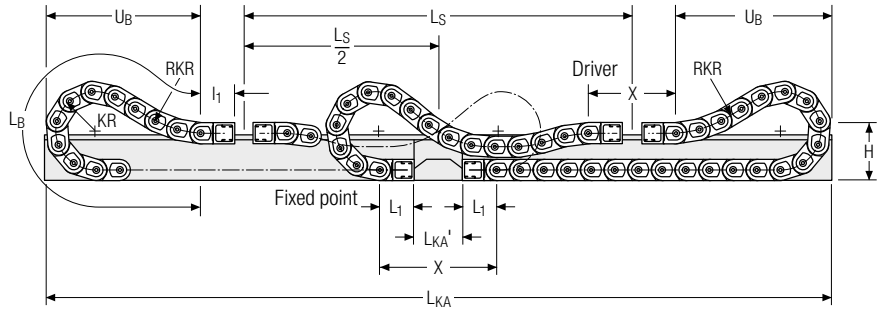


TSUBAKI KABELSCHLEPP Technical Support

Increased wear on the cable carrier can occur in applications with a **high driver connection**. Please use our technical support at technik@kabelschlepp.de for the configuration of your application.
We will be happy to help you.

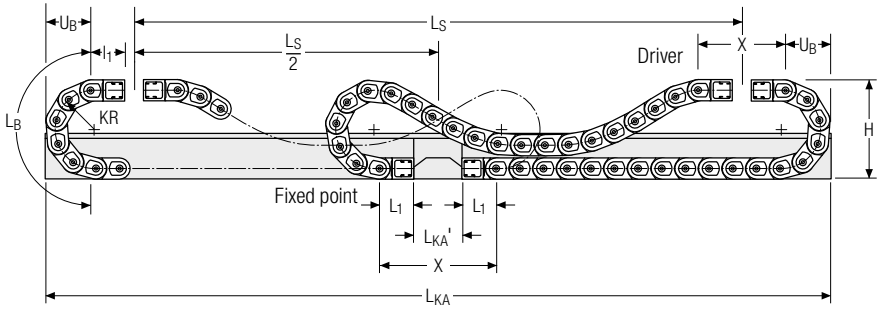
Subject to change without notice.

Opposite arrangement – with lower driver connection and reverse bending radius (standard)



Calculating the channel length	Calculating the connection height	Calculating the slide support length
Channel length L_{KA}	**Connection height H**	**slide support length L_{KA}'**
$L_{KA} = L_S + 2\ U_B + X$	$H = 3\ h_G$	$L_{KA}' = X - 2\ L_1$

Opposite arrangement – high connection



Calculating the channel length	Connection height high connection	Calculating the slide support length
Channel length L_{KA}	**Connection height H**	**slide support length L_{KA}'**
$L_{KA} = L_S + 2\ U_B + X$	$H = 2 \times KR + h_G$	$L_{KA}' = X - 2\ L_1$

Depending on the chain size, the inner channel width is 4-6 mm larger than the width of the guided cable carrier. Depending on the travel length, the connection height of the cable carrier must be reduced. Please contact us! We will be happy to calculate the suitable guide channel for your application.

The calculated channel and support lengths are rounded to a reasonable production or installation dimension of the section lengths. A possible travel reserve must be taken into account. Standard section lengths are specified for each channel design.

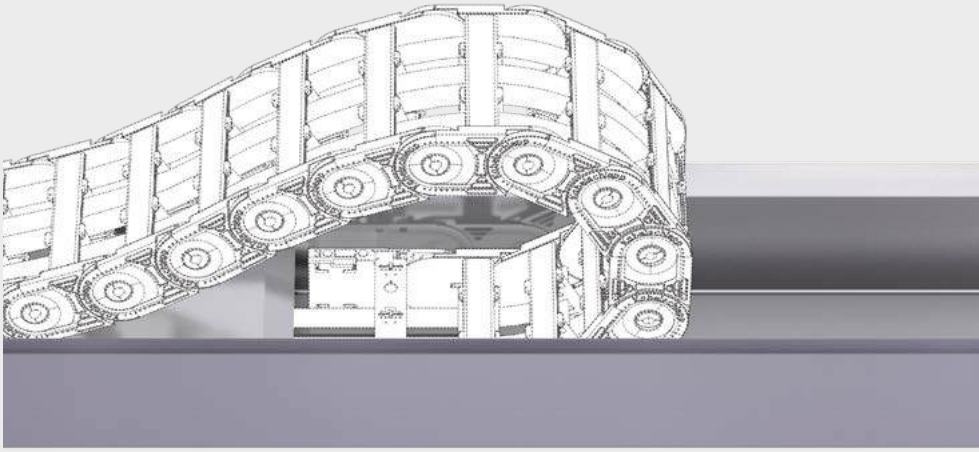
For different distances between the fixed points and drivers in your application please contact us.

Subject to change without notice.

Standard Channel | Overview

Sheet steel guide channels

- Simple version with customized fixing options.
- Zinc plated sheet steel or stainless steel.
- Standard lengths.



Zinc plated sheet steel / stainless steel

Standard lengths 2000 / 3000 mm
Special lengths on request

Features

- Universal installation – the channel side walls do not require aligning as there are no single side walls
- Large support widths through sturdy U-design
- Optionally available as a corrosion resistant, sea water resistant version
- Easy fixing options:
  - standard angle brackets for screwing
  - welded on directly on site
  - different fixing variants

Individual solutions

We can also manufacture customized sheet steel guide channels for your application, taking into account virtually any request regarding customized shapes and fixing options.

Information on dimensions can be found from p. 872

Subject to change without notice.

Standard Channel | Versions

One-sided arrangement

For one-sided arrangement of the cable carrier, the cable carrier slides behind the fixed point on a continuous slide support with run-on bevels.

Closed design

One part channel closed at the bottom and one part slide support with run-on bevels.



Open design

One part channel closed at the bottom and divided slide support with run-on bevels.

Dirt and liquids can drop through without restrictions.

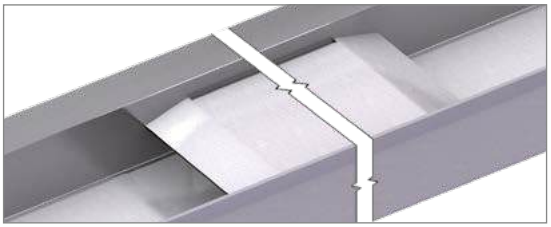


Opposite arrangement

For opposite arrangement, a slide support is also attached for bridging between the fixed point connections.

Closed design

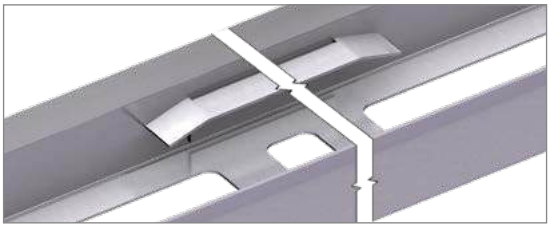
One part channel closed at the bottom and one part slide support with run-on bevels.



Open design

One part channel closed at the bottom and divided slide support with run-on bevels.

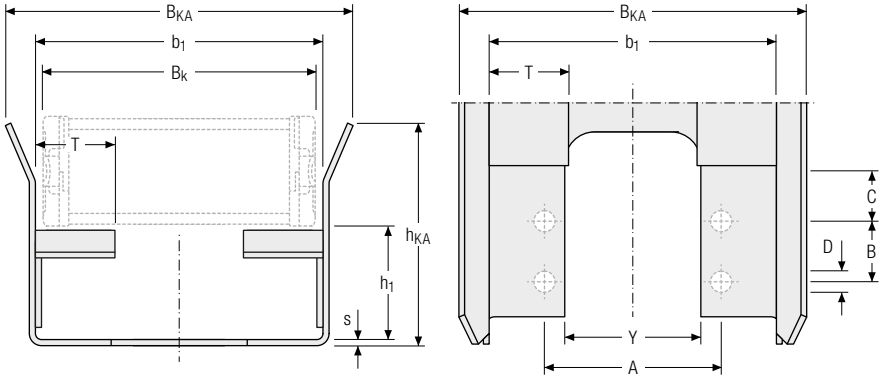
Dirt and liquids can drop through without restrictions.



A special slide support can be adhered to reduce sliding resistance and abrasion between cable carrier and support. We recommend the use of special slide supports for velocities > 0.5 m/s and for frequent move cycles.

Subject to change without notice.

Dimensions



From $h_{KA} \geq 200$ mm, the guide channel flanks are additionally stabilized with alignment flanges or with connecting flanges.

The dimension y refers only to open guide channel versions.

UNIFLEX *Advanced* series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T* [mm]	Y** [mm]
UA1455 | page 162											
–	36	70 (KR < 100) 125 (KR ≥ 100)	$B_k + 4$ $B_k + 7$	$B_k + 24$	2	$b_1 - 34.0$ (FA-A) $b_1 - 34.5$ (FA-L) $b_1 - 13.5$ (FU)	–	40 50	6.2 5.3	30	$b_1 - 65$ $b_1 - 40$
Glide shoes	38.5	70 (KR < 100) 125 (KR ≥ 100)	$B_k + 7$	$B_k + 27$	2	$b_1 - 37.0$ (FA-A) $b_1 - 37.5$ (FA-A) $b_1 - 16.5$ (FU)	–	40 50	6.2 5.3	30	$b_1 - 65$ $b_1 - 40$
UA1555 | page 172											
–	50	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 43$ (FA) $b_1 - 16$ (FU)	– 22.5	50	6.5 5.3	30	$b_1 - 85$ $b_1 - 40$
Glide shoes	53	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 9$	$B_k + 29$	2	$b_1 - 47$ (FA) $b_1 - 21$ (FU)	– 22.5	50	6.5 5.3	30	$b_1 - 85$ $b_1 - 40$
UA1665 | page 182											
–	60	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 47$ (FA) $b_1 - 14$ (FU)	– 22.5	60	8.5 5.3	30	$b_1 - 85$ $b_1 - 40$
Glide shoes	63	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 10$	$B_k + 30$	2	$b_1 - 52$ (FA) $b_1 - 19$ (FU)	– 22.5	60	8.5 5.3	30	$b_1 - 85$ $b_1 - 40$

The designations for dimension A refer to the version of the cable carrier connection.

* Dimension T for leg length support brackets (guiding channel open type for $B_k \geq 90$ mm).

** Dimension Y for guiding channel open for $B_k \geq 90$ mm).

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Subject to change without notice.

UNIFLEX *Advanced* series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T* [mm]	Y** [mm]
UA1775 | page 196											
–	77	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 19.6$ (FU)	20	60	8.5	30	$b_1 - 60$
Glide shoes	81.5	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 10$	$B_k + 30$	2	$b_1 - 24.6$ (FU)	20	60	8.5	30	$b_1 - 65$
UA1995 | page 204/348											
–	110	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 6$	$B_k + 26$	2	$b_1 - 28$ (FU)	35	60	8.5	30	$b_1 - 60$
Glide shoes	116.5	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 11$	$B_k + 31$	2	$b_1 - 28$ (FU)	35	60	8.5	30	$b_1 - 60$

The designations for dimension A refer to the version of the cable carrier connection.

Dimensions

TKK39 series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
TKK39 | page 224											
–	50	117	$B_k + 5$	$B_k + 25$	2	$b_1 - 43$	24	40	5.2	30	$b_1 - 40$

The designations for dimension A refer to the version of the cable carrier connection.

K series

When using aluminum hole stays, slide discs have to be placed on the side tabs between cable carrier and channel wall for spacing.

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
K0650 | page 306											
–	57.5	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 19$ (FU)	40	30	6.5	30	$b_1 - 65$
Slide discs	57.5	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 13$	$B_k + 33$	2	$b_1 - 27$ (FA) $b_1 - 27$ (FU)	40	30	6.5	30	$b_1 - 65$
K0900 | page 322											
–	78.5	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 20.5$ (FU)	50	30	6.5	30	$b_1 - 65$
Slide discs	78.5	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 19$	$B_k + 39$	2	$b_1 - 34.0$ (FA) $b_1 - 34.5$ (FU)	50	30	6.5	30	$b_1 - 75$

The designations for dimension A refer to the version of the cable carrier connection.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Subject to change without notice.

Dimensions

M series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
M0475 | page 372											
Glide shoes	41.5	70 (KR < 100) 125 (KR ≥ 100)	$B_k + 4$	$B_k + 24$	2	$b_1 - 39.0$ (FI)	24	30	6.5	30	$b_1 - 55$
M0650 | page 380											
Glide shoes	60.6	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 55$ (FAI) $b_1 - 24$ (FU)	30 22.5	30	6.5	30	$b_1 - 70$
Offroad glide shoes	62.2	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 55$ (FAI) $b_1 - 24$ (FU)	30 22.5	30	6.5	30	$b_1 - 65$
M0950 | page 400											
Glide shoes	83.5	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 70.0$ (FAI) $b_1 - 19.5$ (FU)	40 35	30	8.5	30	$b_1 - 100$ $b_1 - 60$
Offroad glide shoes	86	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 70.0$ (FAI) $b_1 - 19.5$ (FU)	40 35	30	8.5	30	$b_1 - 100$ $b_1 - 60$
M1250 | page 428											
Glide shoes	99.5	200 (KR < 300) 400 (KR ≥ 300)	$B_k + 6$	$B_k + 26$	3	$b_1 - 83$ (FAI) $b_1 - 23$ (FU)	50 35	30	10.5 11	30	$b_1 - 125$ $b_1 - 65$
Offroad glide shoes	103	200 (KR < 300) 400 (KR ≥ 300)	$B_k + 6$	$B_k + 26$	3	$b_1 - 83$ (FAI) $b_1 - 23$ (FU)	50 35	30	10.5 11	30	$b_1 - 125$ $b_1 - 65$
M1300 | page 416											
–	120	250 (KR < 320) 400 (KR ≥ 320)	$B_k + 6$	$B_k + 26$	3	$b_1 - 27$ (FU)	35	30	11	40	$b_1 - 75$
Glide shoes	127	250 (KR < 320) 400 (KR ≥ 320)	$B_k + 6$	$B_k + 26$	3	$b_1 - 27$ (FU)	35	30	11	40	$b_1 - 75$

The designations for dimension A refer to the version of the cable carrier connection.

Our engineers will be happy to help with your project planning – please contact us.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Subject to change without notice.

Dimensions

TKHP® series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
TKHP85 | page 468											
Glide shoes	90.5	200 (KR < 350) 400 (KR ≥ 350)	$B_k + 6$	$B_k + 26$	2	$b_1 - 100$ (FAI)	80	45	12	40	$b_1 - 80$
TKHP85-R + TKHP85-RSD | page 480											
–	–	200 (KR < 350) 400 (KR ≥ 350)	$B_k + 6$	$B_k + 26$	2	$b_1 - 100$ (FAI)	80	45	12	40	$b_1 - 80$
TKHP90-R + TKHP90-RSD | page 486											
–	–	200 (KR < 310) 400 (KR ≥ 310)	$B_k + 6$	$B_k + 26$	2	$b_1 - 96$ (FAI)	40	40	12	65	$b_1 - 65$

The designations for dimension A refer to the version of the cable carrier connection.

XL | XLT series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
XL1650 | page 496											
–	140	300 (KR < 350) 400 (KR ≥ 350)	$B_k + 6$	$B_k + 26$	3	$b_1 - 99$ (FAI)	50	40	13.5	40	$b_1 - 130$
Glide shoes	147	300 (KR < 350) 400 (KR ≥ 350)	$B_k + 6$	$B_k + 26$	3	$b_1 - 99$ (FAI)	50	40	13.5	40	$b_1 - 130$

The designations for dimension A refer to the version of the cable carrier connection.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Information on the fixing options for the standard channel can be found on page 878

Subject to change without notice.

Dimensions

QUANTUM® series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
Q040 | page 506											
–	40	70 (KR < 110) 125 (KR ≥ 110)	$B_k + 4$	$B_k + 24$	2	$b_1 - 18$ (FU)	14	30	6.6	40	$b_1 - 35$
Q60 | page 512											
Glide shoes	66	117 (KR < 190) 200 (KR ≥ 190)	$B_k + 9$	$B_k + 29$	2	$b_1 - 29$ (FU)	29	30	6.6	40	$b_1 - 45$
Q080 | page 522											
Glide shoes	88	150 (KR < 200) 300 (KR ≥ 200)	$B_k + 13$	$B_k + 33$	2	$b_1 - 38$ (FU)	35	40	9	40	$b_1 - 70$
Q100 | page 536											
Glide shoes	108	250 (KR < 300) 400 (KR ≥ 300)	$B_k + 13$	$B_k + 33$	2	$b_1 - 43$ (FU)	35	40	11	40	$b_1 - 105$

The designations for dimension A refer to the version of the cable carrier connection.

TKA series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
TKA30 | page 590											
–	29.15	70 (KR < 95) 125 (KR ≥ 95)	$B_k + 4$	$B_k + 24$	2	$b_1 - 31$ (FU)	–	50	6.5	–	–
TKA38 | page 596											
–	36.75	70 (KR < 95) 125 (KR ≥ 95)	$B_k + 4$	$B_k + 24$	2	$b_1 - 10.5$ (FU)	–	50	4.5	25	$b_1 - 55$
TKA45 | page 602											
–	51	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 12$ (FU)	–	50	5.5	25	$b_1 - 60$
TKA55 | page 610											
–	65	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 16$ (FU)	–	60	5.5	25	$b_1 - 75$

The designations for dimension A refer to the version of the cable carrier connection.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Subject to change without notice.

Dimensions

UAT series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
UAT1555 | page 622											
–	69	117 (KR < 200) 200 (KR ≥ 200)	$B_k + 5$	$B_k + 25$	2	$b_1 - 15$ (FU)	25 40	40	5.5	30	$b_1 - 80$

The designations for dimension A refer to the version of the cable carrier connection.

S/SX series | S/SX tubes

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
S/SX 0650 | page 748											
Glide shoes	56	125 (KR ≤ 155) 200 (KR > 155	$B_k + 10$	$B_k + 30$	2	$b_1 - 47$	45	15	6.4	30	$b_1 - 70$
S/SX 0950 | page 758											
Glide shoes	73	150 (KR ≤ 200) 300 (KR > 200)	$B_k + 14$	$B_k + 34$	2	$b_1 - 77$	65	20	8.4	30	$b_1 - 100$
S/SX 1250 | page 770											
Glide shoes	99	200 (KR ≤ 300) 400 (KR > 300)	$B_k + 12$	$B_k + 32$	3	$b_1 - 76$	80	25	10.5	30	$b_1 - 100$
Offroad glide shoes	104	200 (KR ≤ 300) 400 (KR > 300)	$B_k + 12$	$B_k + 32$	3	$b_1 - 76$	80	25	10.5	50	$b_1 - 100$
S/SX 1800 | page 794											
Glide shoes	155	300 (KR ≤ 435) 500 (KR > 435)	$B_k + 17$	$B_k + 37$	3	$b_1 - 94$	115	30	13	50	$b_1 - 120$

The designations for dimension A refer to the version of the cable carrier connection.

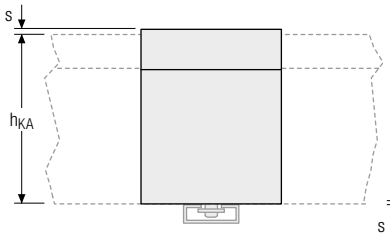
The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

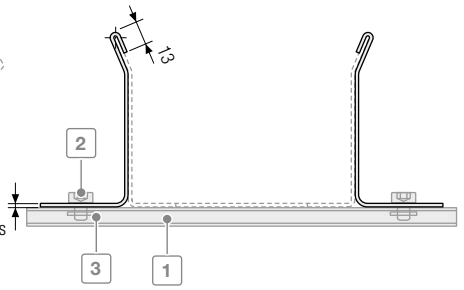
Subject to change without notice.

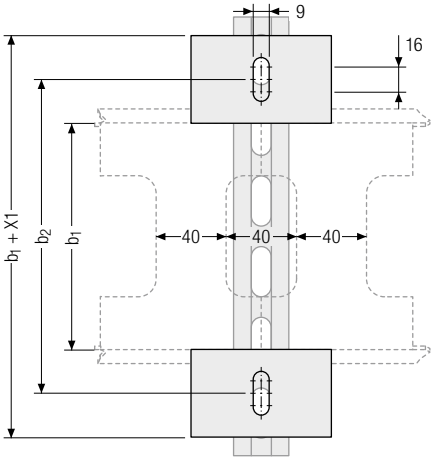
Standard fixing with angle brackets (standard)

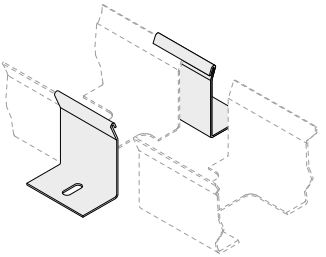
The angle brackets are mounted at the joins, ensuring precise connection of the joint areas in addition to fixing the channel to the substructure.

- Optimum alignment of the joins
- Reduced installation times
- Minimum number of screw connections
- Reliable fixing, even under rough conditions









The figure shows an open channel version

s [mm]	X1 [mm]	b_2 [mm]
2	104	$b_1 + 54$
3	106	$b_1 + 56$

The sheet metal thickness “s” corresponds to the respective wall thickness “s” of the channel.

As a standard, the angle brackets included with the delivery are installed on all joins as well as at both ends of a channel. If you require more angle brackets beyond this, please state this when ordering.

Calculating C-profile length

C-profile length L_P

$L_P = b_1 + 106$

C-profile length L_P rounded to 50 mm

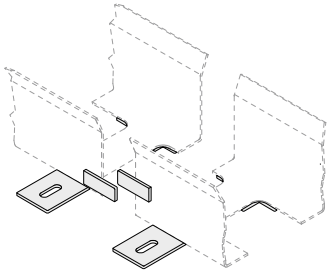
Suitable perforated C-profiles can be found from page 915

Subject to change without notice.

Fixing with alignment flanges and floor fixing plate

The fixing tabs are mounted at the joins, ensuring precise connection of the joint areas in addition to fixing the channel to the substructure.

- Optimum alignment of the joins
- Reduced installation times
- Minimum number of screw connections
- Push-to-connect system



C-profile length L_P

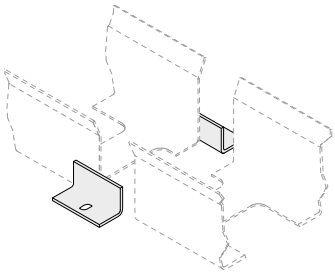
C-profile length L_P rounded to 50 mm

$L_P = b_1 + 105$

Fixing with floor fixing bracket

The floor fixing brackets are mounted at the joins, ensuring precise connection of the joint areas in addition to fixing the channel to the substructure.

- Easy alignment of the joins
- Reduced installation times
- Minimized number of screw connections



C-profile length L_P

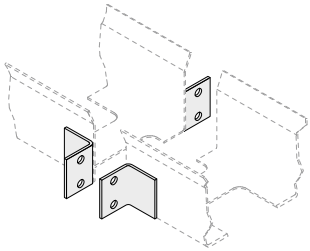
C-profile length L_P rounded to 50 mm

$L_P = b_1 + 66$

Fixing with lateral connecting flange

The unsupported connecting flanges are mounted at the joins, ensuring precise connection of the joint areas in addition to fixing the channel to the substructure.

- Unsupported joins without support (self supporting) through flange connections
- Reliable, secure connection even with extreme vibrations or in unsupported channel arrangements



Order

Standard channel

To order the standard channel, please provide the following information:

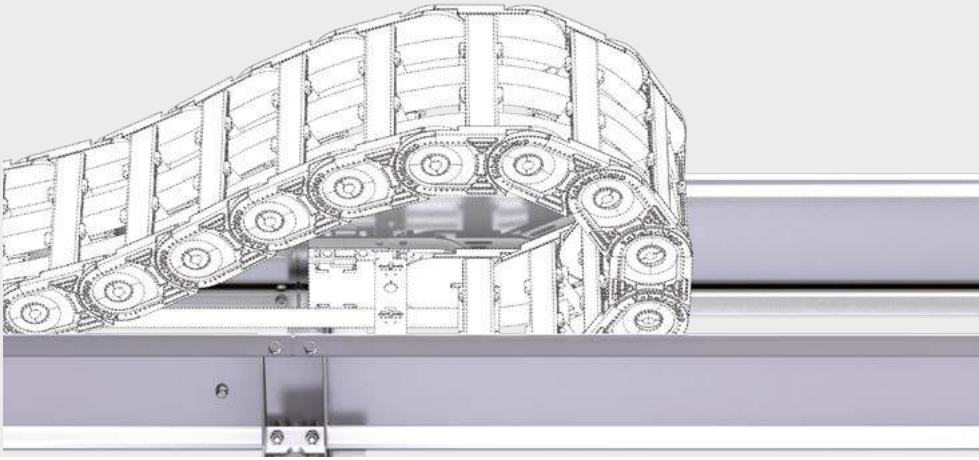
- Number of guide channels
- Material
- Version of guide channel
- Part length
- Total length of channel
- Slide support length L_{KA}'
- Floor fixing
- Join connection
- Slide support height h_1
- Outer height of guide channel h_{KA}
- inner width of guide channel b_1

Subject to change without notice.

Steel Guide System (TKSG) | Overview

Guide channels in the modular system

- Modular system with optimized design for long travel lengths.
- Available in zinc plated sheet steel or stainless steel.
- Easy installation.



Zinc plated sheet steel / stainless steel

Standard lengths 1000 / 2000 mm
Special lengths on request

Features

- Especially suitable for cranes and applications with long travel lengths
- Simple design for short installation times
- No accumulation of dirt through open construction
- Fast and easy installation thanks to pre-assembled sidebands and channel brackets
- Complete system for screw-fitting
- All components without welds

Subject to change without notice.

Steel Guide System (TKSG) | Versions

One-sided arrangement

For one-sided arrangement of the cable carrier, the cable carrier slides behind the fixed point on a continuous slide support with run-off bevels.

Open design

Channel profile with and without slide supports incl. run-on bevels.

Dirt and liquids can drop through without restrictions.



Opposite arrangement

For opposite arrangement, a slide support is also attached for bridging between the fixed point connections.

Open design

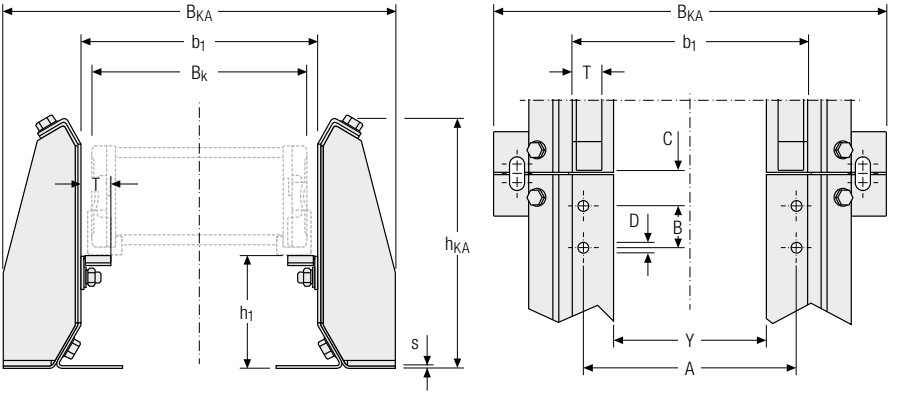
Channel profile with and without slide supports incl. run-on bevels.

Dirt and liquids can drop through without restrictions.



Subject to change without notice.

Dimensions



Dimensions

UNIFLEX *Advanced*

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
UA1555 | page 172											
Glide shoes	53	124	$B_k + 9$	$B_k + 139$	2	$b_1 - 47$ (FA) $b_1 - 21$ (FU)	– 22.5	25 22.5	6.4 5.5	24	$b_1 - 69$
UA1665 | page 182											
Glide shoes	63.5	124 (KR < 200) 176 (KR ≥ 200)	$B_k + 10$	$B_k + 140$	2	$b_1 - 52$ (FA) $b_1 - 19$ (FU)	– 22.5	30.5 25	8.4 5.5	24 25	$b_1 - 69$ $b_1 - 66$
UA1775 | page 196											
Glide shoes	83.5	176 (KR < 200) 209 (KR ≥ 200)	$B_k + 10$	$B_k + 140$	2	$b_1 - 52$ (FA) $b_1 - 19$ (FU)	20	30	8.5	25	$b_1 - 66$ $b_1 - 70$
UA1995 | page 204/348											
Glide shoes	116.5	258	$B_k + 11$	$B_k + 141$	2	$b_1 - 28$ (FU)	35	30	8.5	50	$b_1 - 100$

M series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
M0650 | page 380											
Glide shoes	60.5	124 (KR < 200) 176 (KR ≥ 200)	$B_k + 5$	$B_k + 135$	2	$b_1 - 55$ (FAI)	30	25	6.4	24 25	$b_1 - 69$ $b_1 - 66$
Offroad glide shoes	63.5					$b_1 - 24$ (FU)	22.5	30.5	6.5		

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

The dimension A refers only to the connection holes.

Subject to change without notice.

Dimensions

M series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
M0950 | page 400											
Glide shoes	83.5	176 (KR < 200) 209 (KR ≥ 200)	$B_k + 5$	$B_k + 135$	2	$b_1 - 70$ (FAI)	40	30	8.4	25	$b_1 - 66$ $b_1 - 70$
Offroad glide shoes	86.5					$b_1 - 19.5$ (FU)	35	34.5	8.5		
M1250 | page 428											
Glide shoes	99.5	209 (KR < 300) 258 (KR ≥ 300)	$B_k + 6$	$B_k + 136$	2	$b_1 - 83$ (FAI)	50	35	10.5	50	$b_1 - 70$ $b_1 - 90$
Offroad glide shoes	103					$b_1 - 23$ (FU)	35	40.5	11		
M1300 | page 416											
Glide shoes	127.5	258	$B_k + 6$	$B_k + 136$	2	$b_1 - 27$ (FU)	35	30	11	50	$b_1 - 90$

TKHP® series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
TKHP85 | page 468											
Glide shoes	90.5	209	$B_k + 6$	$B_k + 136$	2	$b_1 - 100$ (FAI)	80	25	12	35	$b_1 - 70$
TKHP85-R + TKHP85-RSD | page 480											
–	84	209	$B_k + 6$	$B_k + 136$	2	$b_1 - 100$ (FAI)	80	25	12	35	$b_1 - 70$
TKHP90-R + TKHP90-RSD | page 486											
–	117	258	$B_k + 6$	$B_k + 136$	2	$b_1 - 96$ (FAI)	40	25	12	50	$b_1 - 90$

S/SX series

Type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	B_{KA} [mm]	s [mm]	A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Y [mm]
S/SX0650 | page 748											
Glide shoes	56	124	$B_k + 10$	$B_k + 140$	2	$b_1 - 47$ (FAI)	45	25	6,4	24	$b_1 - 69$
S/SX0950 | page 758											
Glide shoes	73	176	$B_k + 10$	$B_k + 140$	2	$b_1 - 77$ (FAI)	65	30	8,4	27	$b_1 - 66$
S/SX1250 | page 770											
Offroad glide shoes	103	209 (KR < 350) 258 (KR ≥ 350)	$B_k + 12$	$B_k + 142$	2	$b_1 - 76$ (FAI)	80	35	10,5	50	$b_1 - 100$
S/SX1252 | page 770											
Offroad glide shoes	103	209 (KR < 350) 258 (KR ≥ 350)	$B_k + 12$	$B_k + 142$	2	$b_1 - 76$ (FAI)	80	35	10,5	50	$b_1 - 100$

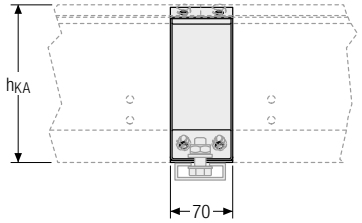
The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

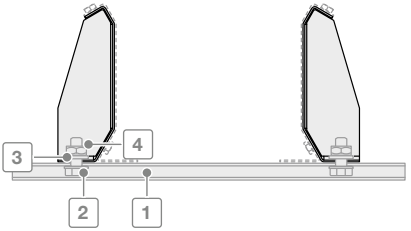
Subject to change without notice.

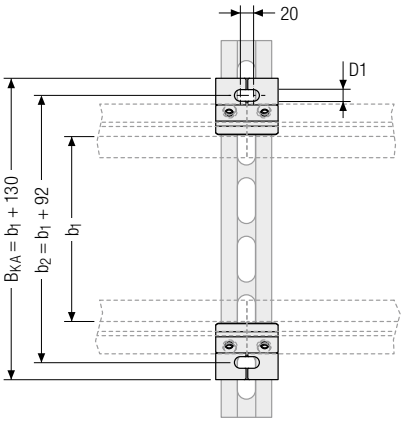
Fixing with channel brackets

The channel brackets are mounted at the joins, ensuring precise connection of the joins in addition to fixing the channel to the substructure.

- Optimum alignment of the joins
- Reduced installation times
- No welds
- Minimum number of screw connections
- Reliable fixing under rough conditions
- High stability







h_{KA} [mm]	D1 [mm]	s [mm]
123	11	2
175	11	2
208	11	2
257	11	2

The sheet metal thickness “s” corresponds to the respective wall thickness “s” of the channel.

As a standard, the channel brackets included with the delivery are installed on all joins as well as at both ends of a channel. If you require more channel brackets beyond this, please state this when ordering.

Calculating C-profile length

C-profile length L_P

$L_P = B_{KA} + 50$ mm

C-profile length L_P rounded to 50 mm

Suitable perforated C-profiles can be found from page 915

Order

To order the Steel Guide System (TKSG), please provide the following information:

- Number of guide channels
- Total length of channel
- Support length L_{KA}'
- Ouer height of guide channel h_{KA}
- Inner width of guide channel b_1
- Material
- Support height h_1
- Delivery (unmounted/mounted)
- Fixing with or without C-profile

Subject to change without notice.

Channel Enclosure | Overview

Cover for guide channels



Protection against external influences: Maintenance-friendly enclosure

- Easy inspection of the cable carrier.
- Openable at any position.
- Protection of the cable carrier system against external influences (coarse dirt, falling parts, snow, ice).
- Disassembly without screws.
- To open without tools.
- Secured against accidental closing in opening position.
- Can be used with any TSUBAKI KABELSCHLEPP channel system.
- Modular design.



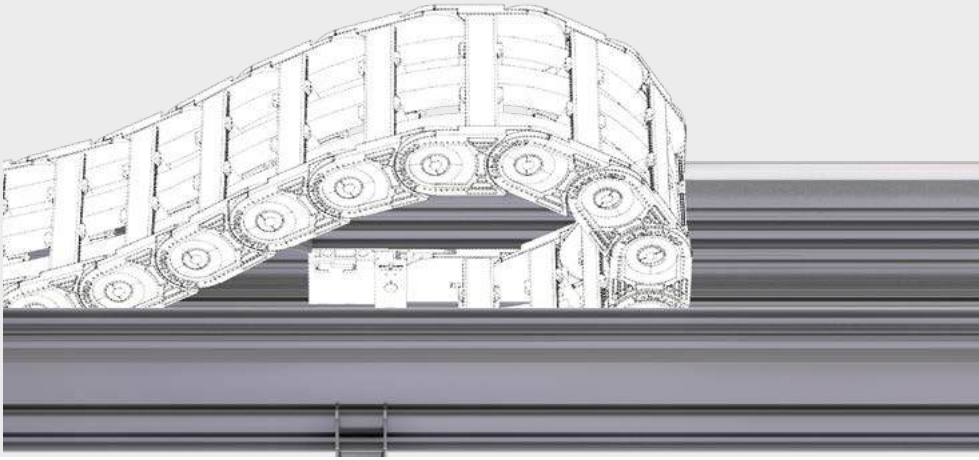
Our engineers will be happy to help with your project planning – please contact us.

Subject to change without notice.

Alu Guide System (TKAL) | Overview

Aluminium guide channels in the modular system

- Modular system with many mounting options.
- Standard lengths and sets.
- Lightweight design for high speeds.
- Slide and roller support made of high-quality plastic.



Channel side wall
Al alloy

Standard lengths 1000 / 2000 mm
Special lengths on request

Features

- Safe operation on long travel length
- Seawater resistant
- Twin channel connectors for parallel arrangement of several channels
- Standard- and Heavy-Duty-Version
- Variable fixation in standard stainless steel
- UMB mounting kit for assembly of the cable carrier

The Alu Guide System (TKAL) for long travel applications and high loads ensures secure guidance and smooth running of the energy chain in a gliding and rolling application.

The standardized channel profiles of 1000 / 2000 mm in length can be individually adjusted to the width of the chain. They can be quickly and easily be installed with the help of a mounting kit. Such UMB mounting kits are also available for attaching the fixed-point of the energy chain.

The optional damping band additionally reduces noise emission and guarantees an even quieter running of the chain.

TSUBAKI KABELSCHLEPP also offer the Alu Guide System (TKAL) together with the appropriate energy chain as well as with the ready-to-install TOTALTRAX® System including cables.

Assembly instruction

Subject to change without notice.

Alu Guide System (TKAL) | Versions

One-sided arrangement

For One-sided arrangement of the cable carrier, the cable carrier slides behind the fixed point on a slide support with run-on bevels.

Open design

Channel with and without supports incl. run-on bevels.

Dirt and water can drop through without restrictions.



Opposite arrangement

For opposite arrangement, a slide support with a minimum length of 500 mm is also attached for bridging between the fixed point connections.

Open design

Channel with and without supports incl. run-on bevels.

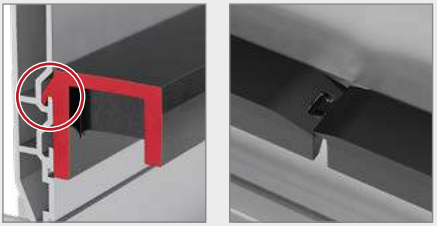
Dirt and water can drop through without restrictions.



Glide and roll support made of plastic

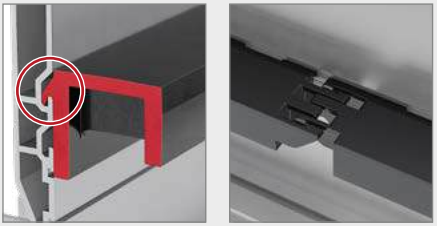
Glide support

- Simple and quick mounting by hooking in
- Slip-free hold in channel fastening groove
- 500 mm long, loadable up to 100 kg
- Compensation of linear expansion by toothing at the joints – continuous glide surface
- Optimized, rounded approach slope without bend



Roll support (TKAL 254/274)

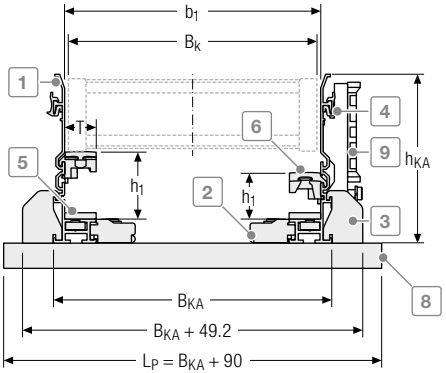
- Simple and quick mounting by hooking in
- Slip-free hold in channel fastening groove
- 500 mm long, loadable up to 100 kg
- Compensation of linear expansion by toothing at the joints – continuous roll surface
- Minimal noise emission



Subject to change without notice.

Dimensions

TKAL 134



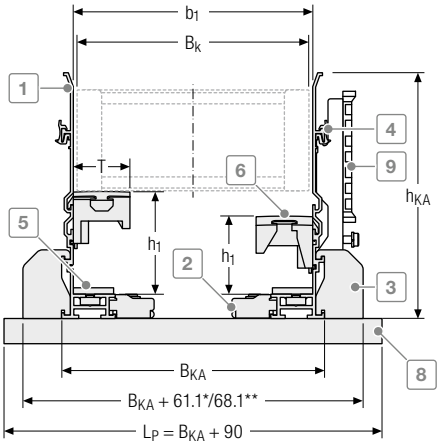
1 Channel profile
2 Internal mounting kit
3 External mounting kit
4 Joint connectors
5 Damping band (optional)
6 Stable gliding support made of plastic
7 Stable roller support made of plastic
8 C-Rail
9 Strain relief holder kit

Using holder inside double-sided
b_1 min.: 118 mm.

Using holder outside double-sided
b_1 min.: 50 mm.

C-profile length L_P rounded to 50 mm

TKAL 195



1 Channel profile
2 Internal mounting kit
3 External mounting kit
4 Joint connectors
5 Damping band (optional)
6 Stable gliding support made of plastic
7 Stable roller support made of plastic
8 C-Rail
9 Strain relief holder kit

Using holder inside double-sided
b_1 min.: 134 mm.

Using holder outside double-sided
b_1 min.: 90 mm.

C-profile length L_P rounded to 50 mm

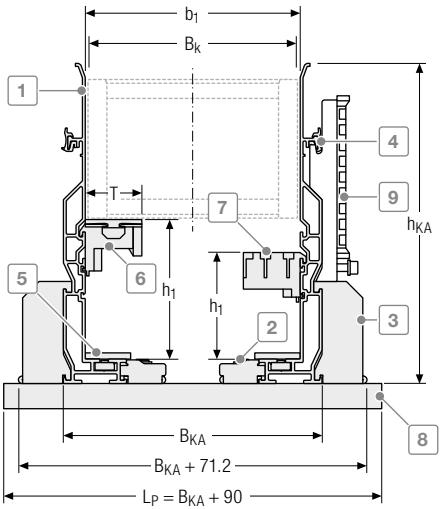
* for C-profiles 3938/3939 ** for C-profiles 3940/3941

As a standard, the mounting kits included with the delivery are installed on all joins as well as at both ends of a channel. If you require more angle brackets beyond this, please state this when ordering.

Subject to change without notice.

Dimensions

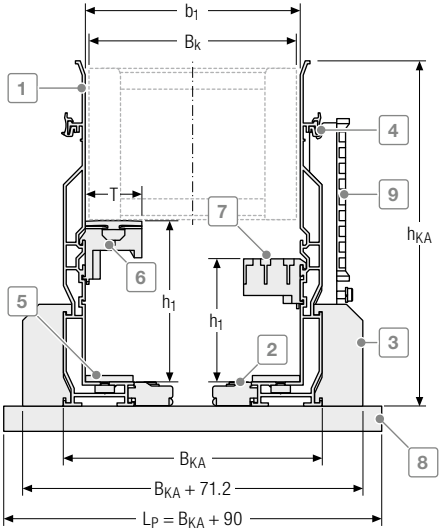
TKAL 254



1 Channel profile
2 Internal mounting kit
3 External mounting kit
4 Joint connectors
5 Damping band (optional)
6 Stable gliding support made of plastic
7 Stable roller support made of plastic
8 C-Rail
9 Strain relief holder kit

Using holder inside double-sided
b_1 min.: 134 mm.
Using holder outside double-sided
b_1 min.: 90 mm.
C-profile length L_P rounded to 50 mm

TKAL 274



1 Channel profile
2 Internal mounting kit
3 External mounting kit
4 Joint connectors
5 Damping band (optional)
6 Stable gliding support made of plastic
7 Stable roller support made of plastic
8 C-Rail
9 Strain relief holder kit

Using holder inside double-sided
b_1 min.: 146 mm.
Using holder outside double-sided
b_1 min.: 90 mm.
C-profile length L_P rounded to 50 mm

As a standard, the mounting kits included with the delivery are installed on all joins as well as at both ends of a channel. If you require more angle brackets beyond this, please state this when ordering.

Subject to change without notice.

Alu Guide System (TKAL) | Dimensions

UNIFLEX *Advanced* series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
UA1455 | page 162								
Glide shoes	134	40	**134**	**$B_k + 7$**	$B_k + 50$	$B_k - 69$	$B_k + 25$	25
UA1555 | page 172								
Glide shoes	134	53	**134**	**$B_k + 9$**	$B_k + 52$	$B_k - 67$	$B_k + 27$	25
UA1665 | page 182								
Glide shoes	195	61,5	**195**	**$B_k + 10$**	$B_k + 60,15$	$B_k - 82.4$	$B_k + 28,6$	45
UA1775 | page 196								
Glide shoes	195	81	**195**	**$B_k + 9$**	$B_k + 59,15$	$B_k - 83.4$	$B_k + 27,6$	45
UA1995 | page 204								
Glide shoes	254	116	**254**	**$B_k + 10,4$**	$B_k + 71,9$	$B_k - 81$	$B_k + 45$	45

K series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
K0650 | page 306								
–	134	56,5	**134**	**$B_k + 5$**	$B_k + 48$	$B_k - 71$	$B_k + 23$	25
Slide discs	134	56,5	**134**	**$B_k + 13$**	$B_k + 56$	$B_k - 63$	$B_k + 31$	25
K0900 | page 322								
–	195	81	**195**	**$B_k + 5$**	$B_k + 55,15$	$B_k - 87.4$	$B_k + 23.6$	25
Slide discs	195	81	**195**	**$B_k + 19$**	$B_k + 69,15$	$B_k - 73.4$	$B_k + 37.6$	45

M series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
M0650 | page 380								
Glide shoes	195	61.5	**195**	**$B_k + 5$**	$B_k + 55.15$	$B_k - 87.4$	$B_k + 23.6$	45
Offroad glide shoes	195	61.5	**195**	**$B_k + 5$**	$B_k + 55.15$	$B_k - 87.4$	$B_k + 23.6$	45
M0950 | page 400								
Offroad glide shoes	195	86	**195**	**$B_k + 5$**	$B_k + 55.15$	$B_k - 87.4$	$B_k + 23.6$	45
M1250 | page 428								
Offroad glide shoes	274	103	**274**	**$B_k + 6$**	$B_k + 67.5$	$B_k - 97.4$	$B_k + 40.6$	45
M1300 | page 416								
Glide shoes	274	127.5	**274**	**$B_k + 6$**	$B_k + 67.5$	$B_k - 97.4$	$B_k + 40.6$	45

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Our engineers will be happy to help with your project planning – please contact us.

Subject to change without notice.

TKHP® series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
TKHP85 | page 468								
Glide shoes	254	90	**254**	**$B_k + 6$**	$B_k + 67.5$	$B_k - 85.4$	$B_k + 40.6$	45
TKHP85-R + TKHP85-RSD | page 480								
–	254	84.5	**254**	**$B_k + 6$**	$B_k + 67.5$	$B_k - 85.4$	$B_k + 40.6$	45
TKHP90-R + TKHP90-RSD | page 486								
–	274	117	**274**	**$B_k + 6$**	$B_k + 67.5$	$B_k - 97.4$	$B_k + 40.6$	45

QUANTUM® series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
Q040 | page 506								
–	134	40	**134**	**$B_k + 4$**	$B_k + 47$	$B_k - 72$	$B_k + 22$	25
Q060 | page 512								
Glide shoes	195	66.5	**195**	**$B_k + 9$**	$B_k + 59.15$	$B_k - 83.4$	$B_k + 27.6$	45
Q080 | page 522								
Glide shoes	195	86	**195**	**$B_k + 13$**	$B_k + 63.15$	$B_k - 79.4$	$B_k + 31.6$	45
Q100 | page 536								
Glide shoes	274	108	**274**	**$B_k + 13$**	$B_k + 74.5$	$B_k - 90.4$	$B_k + 47.6$	45

TKA series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
TKA38 | page 596								
–	134	36.5	**134**	**$B_k + 4$**	$B_k + 47$	$B_k - 72$	$B_k + 22$	25
TKA45 | page 602								
–	134	53	**134**	**$B_k + 5$**	$B_k + 48$	$B_k - 71$	$B_k + 23$	25
TKA55 | page 610								
–	195	66.5	**195**	**$B_k + 5$**	$B_k + 55.15$	$B_k - 87.4$	$B_k + 23.6$	45

UAT series

Type	Channel type	h_1 [mm]	h_{KA} [mm]	b_1 [mm]	b_2 [mm]	b_3 [mm]	B_{KA} [mm]	T [mm]
UAT1555 | page 622								
–	195	66.5	**195**	**$B_k + 5$**	$B_k + 55.15$	$B_k - 87.4$	$B_k + 23.6$	45

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Our engineers will be happy to help with your project planning – please contact us.

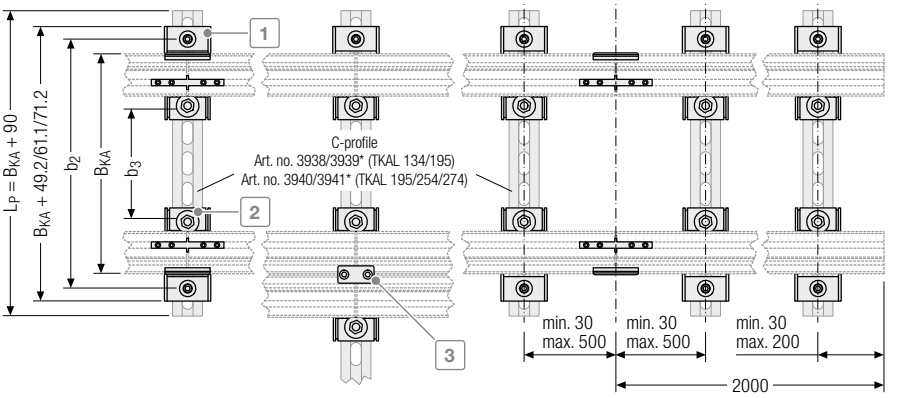
Subject to change without notice.

Standard and heavy duty

The internal or external mounting kits made of stainless steel are mounted at the joints, ensuring precise connection of the joints in addition to fastening the channel to the substructure.

Flying joint

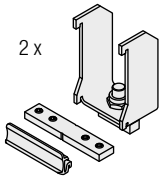
The internal and external mounting kits made of stainless steel are mounted with a spacing of 30-500 mm from the joints, ensuring fastening of the channel to the substructure. The mounting kit does not necessarily have to be mounted at the joints.



External mounting kit 1

The mounting brackets are mounted at the outside of the channel.

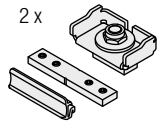
The additional joint connectors ensure precise connection of the joints.



Internal mounting kit 2

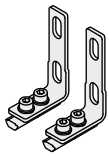
The mounting brackets are mounted at the inside of the channel.

The additional joint connectors ensure precise connection of the joints.



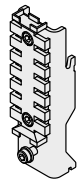
UMB mounting kit

The UMB mounting kit for fixed point ensures optimum fastening of the cable carrier in the channel and depends on the cable carrier type.



Holder set strain relief (optional)

The holders are mounted on the outside of the channel for fixed installation of cables.



Twin channel connector 3 (optional)

The twin channel connectors enable the parallel arrangement of several channels.



All pictures of the mounting kit are exemplary.

Order

To order the Alu Guide System, please provide the following information or the used cable carrier:

- Number of guide channels
- Total length of channel
- Support length L_{KA}'
- Type of fastening (internal/external)
- Delivery (unmounted/mounted)
- Support height h_1
- Fixing with C-profile
- Inner width of guide channel b_1

* More information can be found on page 915

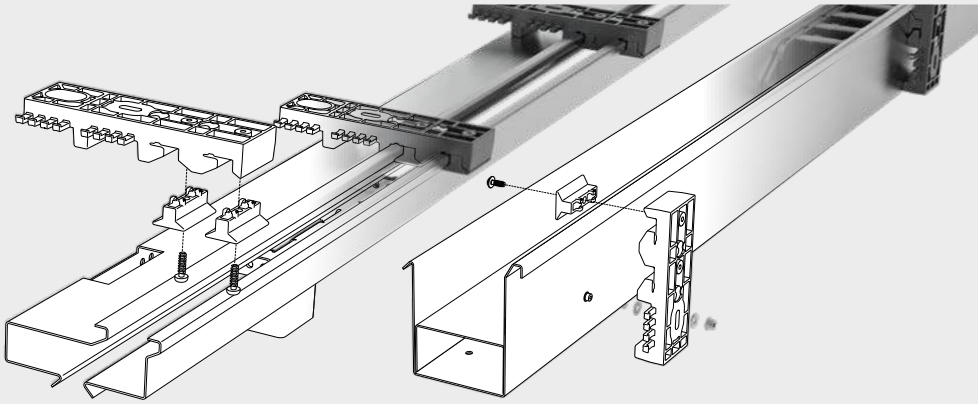
Subject to change without notice.



Easy Guide System (TKEG) | Overview

Guide channels for multifunctional use

- Flexible use in many areas of application.
- Made of zinc plated sheet steel or stainless steel.
- Easy and fast horizontal or vertical arrangement.
- On its side laying installation possible.



Zinc plated sheet steel or stainless steel

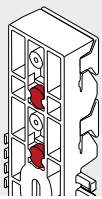
Standard lengths 2000 mm
Special lengths on request

Features

- Space-saving design
- Installation possible horizontal or laying on its side
- Easy and fast assembly by only one fitter
- Saves additional cable channels through installation of permanent cables directly on the holder (securely behind the channel)
- System remains horizontally adjustable after installation
- Mounting holes for the cable carriers and cable ducts every 850 mm
- Brackets are installed with screws or weld studs
- No complex steel structure necessary
- Suitable for all I-beams and box beams
- The same mounting brackets for different trough sizes/chain types
- Can be installed “flying”

- Closed design
  - Guiding for suspended chains
  - Allows operation of the cable carrier laying on its side
  - Mechanical protection
  - Protection against lateral acceleration
  - Protection against the cable carrier "banging" during acceleration and deceleration

With magnets as mounting aids for easy positioning of the holder and placing of the fastenings such as drilled holes or welded studs.



Our engineers will be happy to help with your project planning – please contact us.

Subject to change without notice.

Easy Guide System (TKEG) | Versions

One-sided arrangement with central feed

For single-sided arrangement of the cable carrier with central feed, the cable carrier slides behind the fixed point on a continuous slide plate.

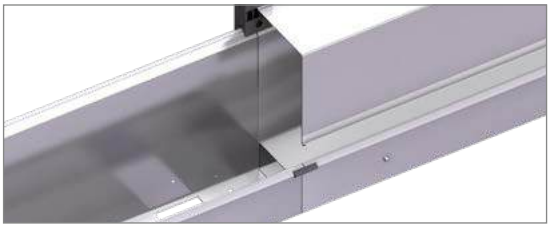
Closed design – standing without enclosure
(Variant A)

One-part channel in version with open top and one-part slide plate.



Closed design – standing with enclosure
(Variant B)

One-part channel in version with closed top (enclosure) and one-part slide plate.



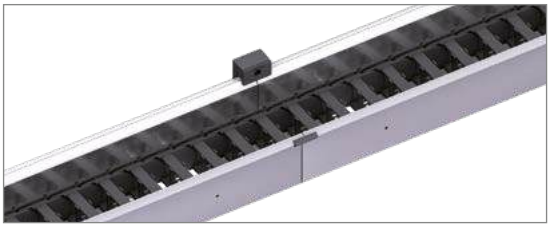
For central feed, permanent cables can be placed directly on the holder (securely behind the channel)

One-sided arrangement with end feed

For single-sided arrangement of the cable carrier with end feed, the cable carrier slides behind the fixed point on itself.

Closed design – standing without enclosure
(Variant A)

One-part channel in version with open top and one-part slide plate.



Closed design – standing with enclosure
(Variant B)

One-part channel in version with closed top (enclosure) and one-part slide plate.



Subject to change without notice.

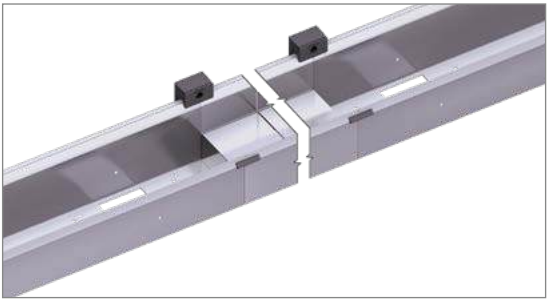
Easy Guide System (TKEG) | Versions

Opposite arrangement

For opposite arrangement, a slide support is also attached for bridging between the fixed point connections.

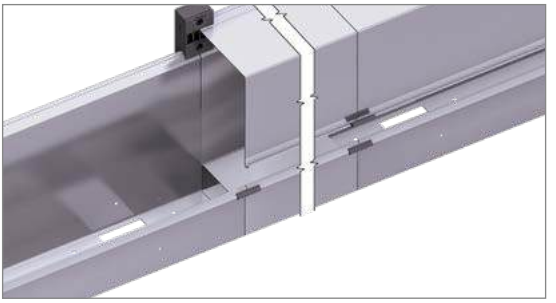
Closed design – standing without enclosure
(Variant A)

One-part channel in version with open top and one-part slide plate.



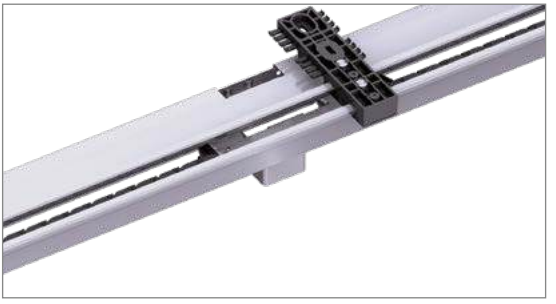
Closed design – standing with enclosure
(Variant B)

One-part channel in version with closed top (enclosure) and one-part slide plate.



Closed design – laying on its side with enclosure
(Variant C)

One-part channel laying on its side in enclosed version (enclosure) incl. driver sledge.

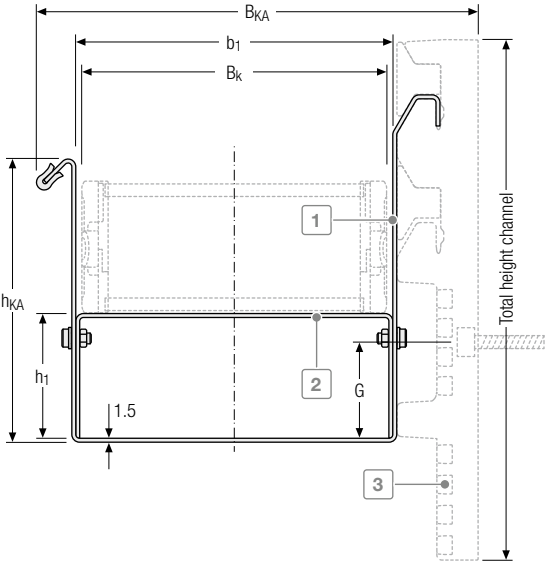


Subject to change without notice.



Easy Guide System (TKEG) | Dimensions

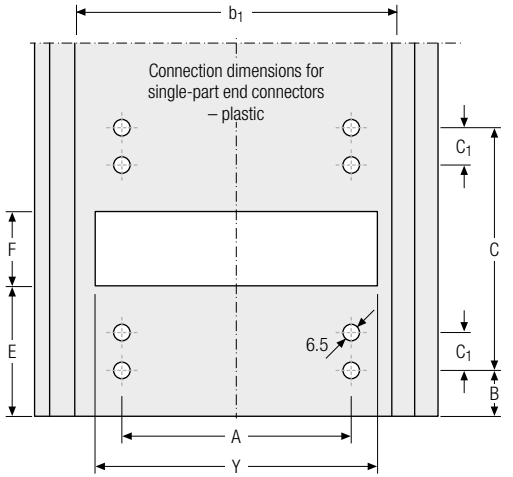
Dimensions I standing without enclosure (Variant A)



1 Guide channel
2 Stable gliding support made of zinc plated sheet steel or stainless steel
3 Holder

Slide support height

$h_1 = h_G$



Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

QuickTrax® series

B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	C_1 [mm]	E [mm]	F [mm]	G [mm]	Y [mm]
QT0320 with channel holder 202 | page 138														
25	75	25.5	54	202	42	90.7	10	79	140	14	129	40	39	27
50	100				67	115.7	35							52
QT0320 with channel holder 155 | page 138														
25	75	25.5	54	156.5	42	90.7	10	79	140	14	129	40	39	27
50	100				67	115.7	35							52

EasyTrax® series

B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	C_1 [mm]	E [mm]	F [mm]	G [mm]	Y [mm]
ET0320 with channel holder 202 | page 252														
25	75	25.5	54	202	42	90.7	10	79	140	14	129	40	39	27
50	100				67	115.7	35							52
ET0320 with channel holder 155 | page 252														
25	75	25.5	54	156.5	42	90.7	10	79	140	14	129	40	39	27
50	100				67	115.7	35							52

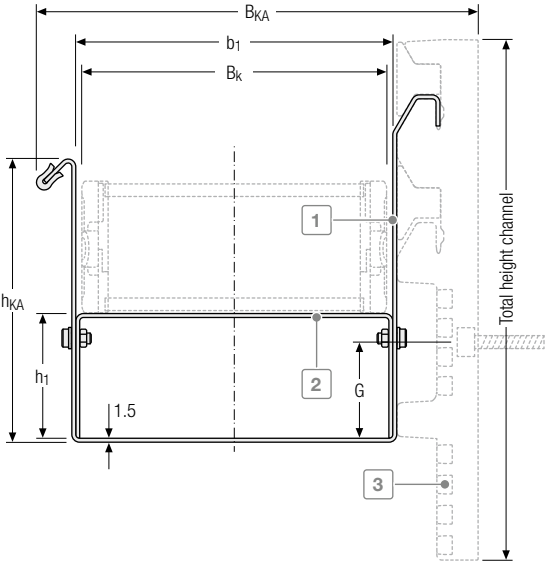
The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Information on the fixing options for the Easy Guide Systems can be found on page 913

Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

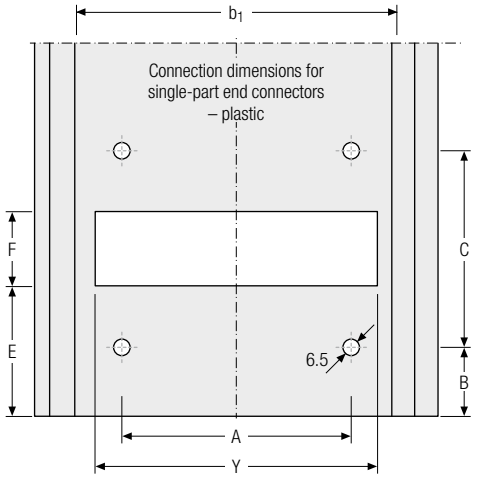
Dimensions I standing without enclosure (Variant A)



1 Guide channel
2 Stable gliding support made of zinc plated sheet steel or stainless steel
3 Holder

Slide support height

$h_1 = h_G$



Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

UNIFLEX *Advanced* series

B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	E [mm]	F [mm]	G [mm]	Y [mm]
UA1455 with channel holder 202 | page 162													
58	125	36	100	202	79	127.7	43.5	73	152	123	52	39	64
78					99	147.7	63.5						84
103					124	172.7	88.5						109
UA1455 with channel holder 155 | page 162													
58	125	36	100	156.5	79	127.7	43.5	73	152	123	52	39	64
78					99	147.7	63.5						84
103					124	172.7	88.5						109
UA1555 with channel holder 202 | S page eite 172													
50	125	50	115	202	73	121.7	30	61	176	111	76	39	58
75					98	146.7	55						83
100					123	171.7	80						108
UA1555 with channel holder 155 | page 172													
50	125	50	115	156.5	73	121.7	30	61	176	111	76	39	58
75					98	146.7	55						83
100					123	171.7	80						108

Standard version of the cable carrier in the Easy Guide System without glide shoes.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Our engineers will be happy to help with your project planning – please contact us.

Information on the fixing options for the Easy Guide Systems can be found on page 913

Subject to change without notice.

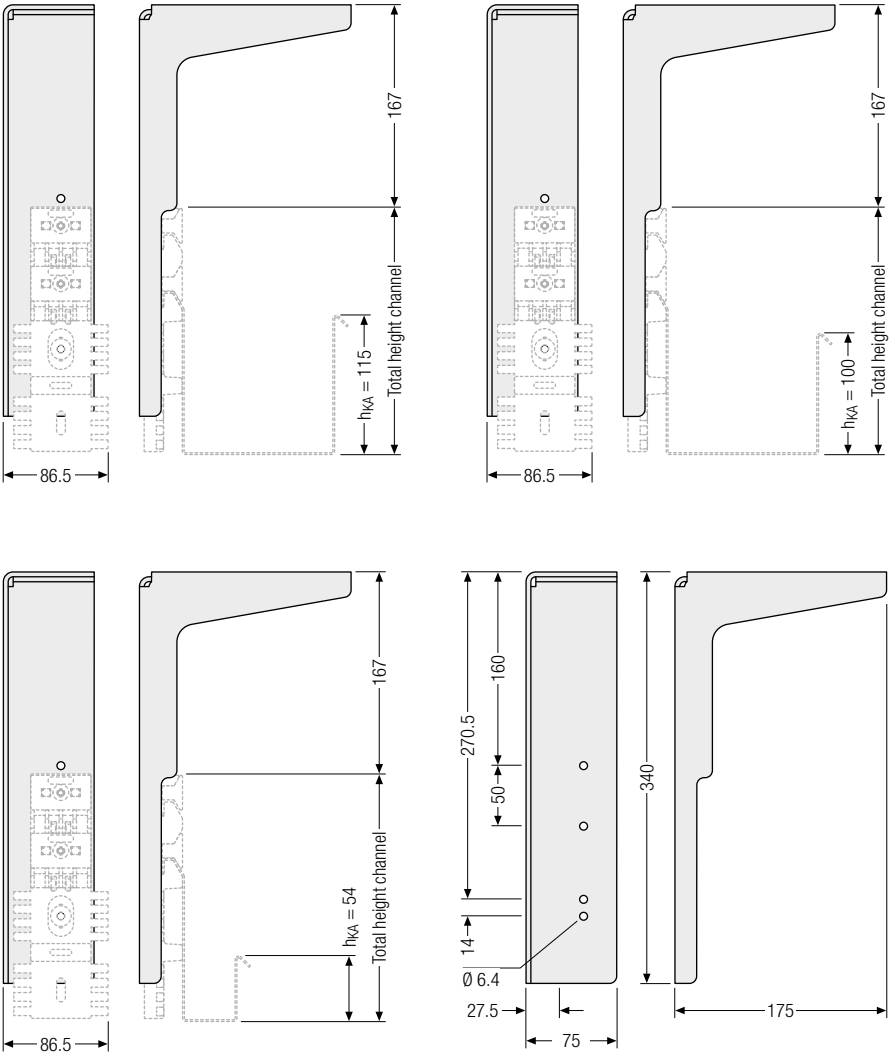
Easy Guide System (TKEG) | Dimensions

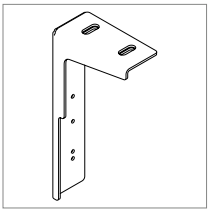
Dimensions | Ground holder (Variant A)

Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

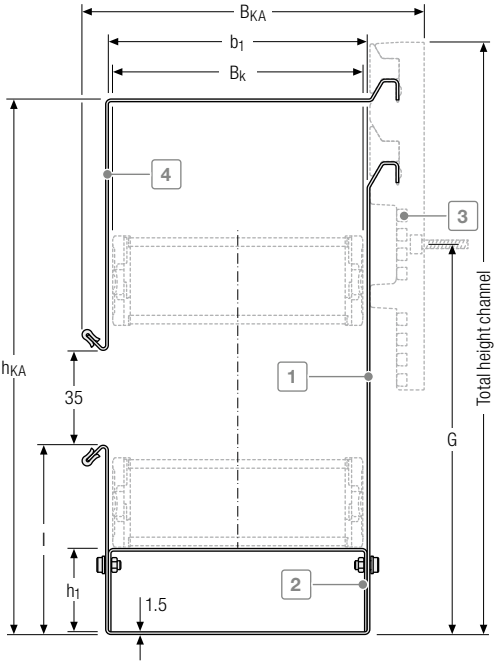
Dimensions | Ceiling holder (Variant A)

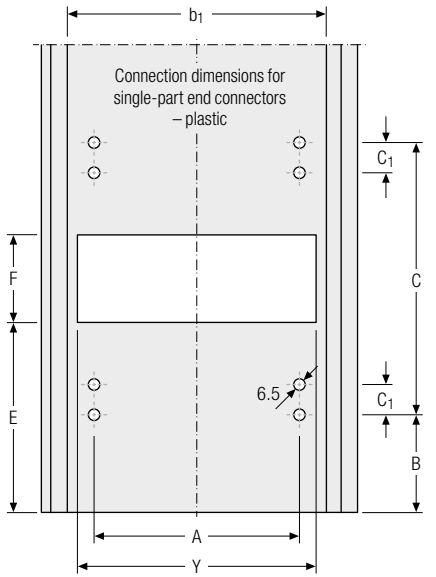




Subject to change without notice.

Dimensions | standing with enclosure (Variant B)





1 Guide channel
2 Stable gliding support made of zinc plated sheet steel or stainless steel
3 Holder
4 Enclosure

Slide support height

$h_1 = h_G$

Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

QuickTrax® series

B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	C_1 [mm]	E [mm]	F [mm]	G [mm]	I [mm]	Y [mm]
QT0320 with channel holder 202 | page 138															
25	100	25.5	236.5	269.5	42	90.7	10	79	140	14	129	40	152	54	27
50					67	115.7	35								52
QT0320 with channel holder 155 | page 138															
25	100	25.5	236.5	269.5	42	90.7	10	79	140	14	129	40	152	54	27
50					67	115.7	35								52

EasyTrax® series

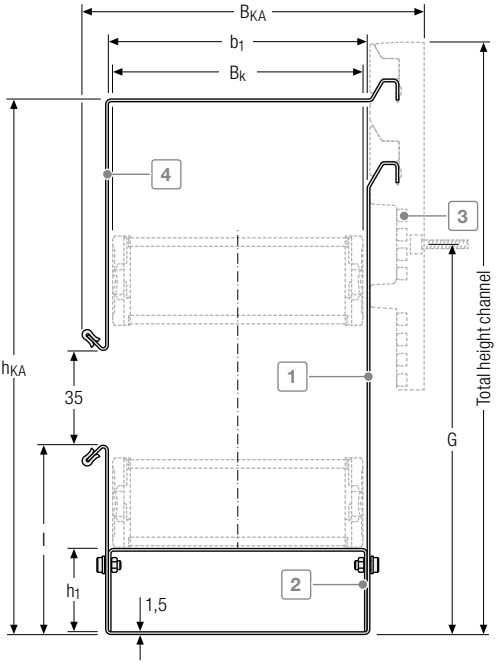
B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	C_1 [mm]	E [mm]	F [mm]	G [mm]	I [mm]	Y [mm]
ET0320 with channel holder 202 | page 252															
25	100	25.5	236.5	269.5	42	90.7	10	79	140	14	129	40	152	54	27
50					67	115.7	35								52
ET0320 with channel holder 155 | page 252															
25	100	25.5	236.5	269.5	42	90.7	10	79	140	14	129	40	152	54	27
50					67	115.7	35								52

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Information on the fixing options for the Easy Guide Systems can be found on page 913

Subject to change without notice.

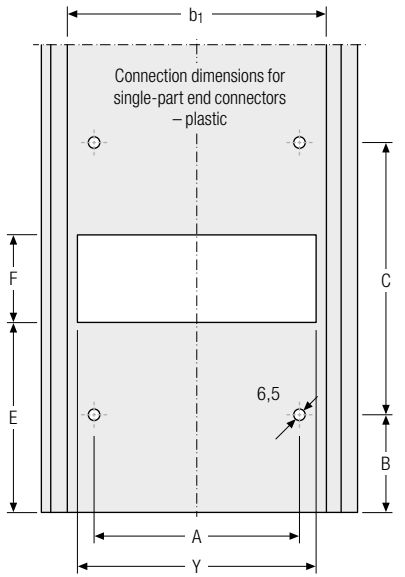
Dimensions | standing with enclosure (Variant B)



1 Guide channel
2 Stable gliding support made of zinc plated sheet steel or stainless steel
3 Holder
4 Enclosure

Slide support height

$h_1 = h_G$



Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

UNIFLEX *Advanced* series

B_i [mm]	KR [mm]	h_1 [mm]	h_{KA} [mm]	Total height channel [mm]	b_1 [mm]	B_{KA} [mm]	A [mm]	B [mm]	C [mm]	E [mm]	F [mm]	G [mm]	I [mm]	Y [mm]
UA1455 with channel holder 202 | page 162														
58	125	36	297	330	79	127.7	43.5	73	152	123	52	212.5	100	64
78					99	147.7	63.5							84
103					124	172.7	88.5							109
UA1455 with channel holder 155 | page 162														
58	125	36	297	330	79	127.7	43.5	73	152	123	52	212.5	100	64
78					99	147.7	63.5							84
103					124	172.7	88.5							109
UA1555 with channel holder 202 | page 172														
50	125	50	311	344	73	121.7	30	61	176	121	76	226.5	111	58
75					98	146.7	55							83
100					123	171.7	80							108
UA1555 with channel holder 155 | page 172														
50	125	50	311	344	73	121.7	30	61	176	121	76	226.5	111	58
75					98	146.7	55							83
100					123	171.7	80							108

Standard version of the cable carrier in the Easy Guide System without glide shoes.

The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b_1 and the overall width B_{KA}.

Our engineers will be happy to help with your project planning – please contact us.

Information on the fixing options for the Easy Guide Systems can be found on page 913

Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

Dimensions | Ground holder (Variant B)

Subject to change without notice.

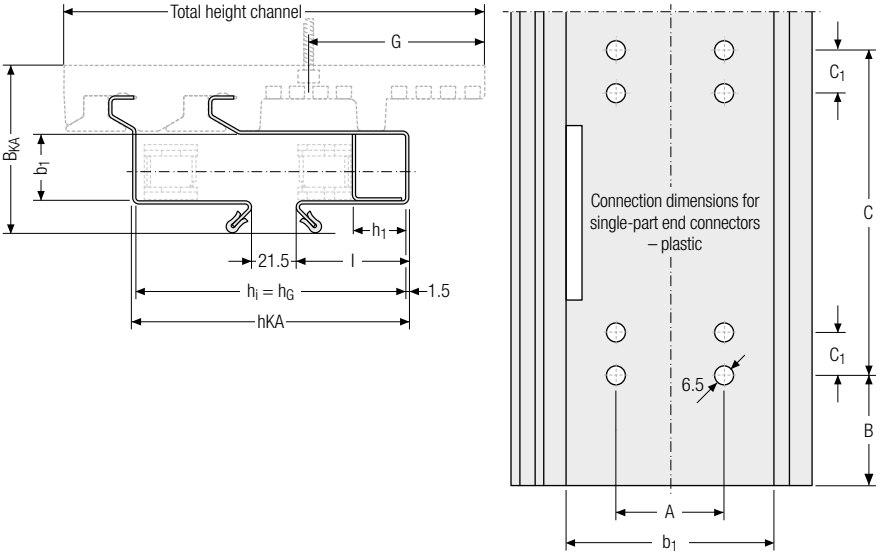
Easy Guide System (TKEG) | Dimensions

Dimensions | Ceiling holder (Variant B)

Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

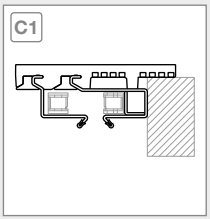
Dimensions | laying on its side (Variant C)

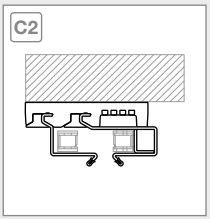


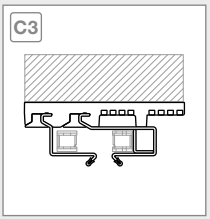
QuickTrax® series | UNIFLEX *Advanced* series

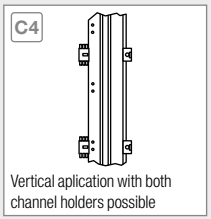
Bi [mm]	KR [mm]	hKA [mm]	Total height channel [mm]	b1 [mm]	BKA [mm]	A [mm]	B [mm]	C [mm]	C1 [mm]	G [mm]	l [mm]
QT0320 | UA1320 with channel holder 202 | page 138 + 156											
15	48	132.5	202	32	80.7	–	85	128	14	37,5	54
25				42	90.7	10					
50				67	115.7	35.5					
QT0320 | UA1320 with channel holder 155 | page 138 + 156											
15	48	132.5	165.5	32	80.7	–	85	128	14	84,5	54
25				42	90.7	10					
50				67	115.7	35.5					

Mounting options









Vertical aplication with both channel holders possible

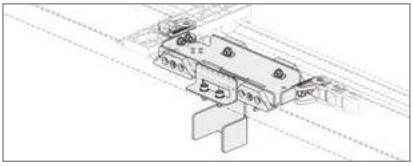
Information on the fixing options for the Easy Guide Systems can be found on page 913

Subject to change without notice.

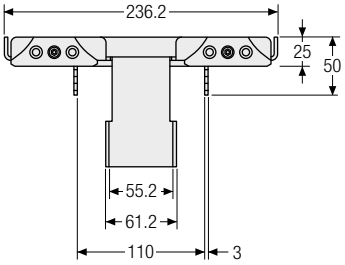
Easy Guide System (TKEG) | Dimensions

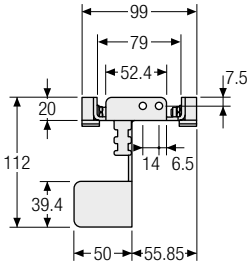
Dimensions | laying on its side (Variant C) | Driver sledge

For the version of the Easy Guide System laying on its side, the correct carrier sledge has to be used for each cable carrier width.

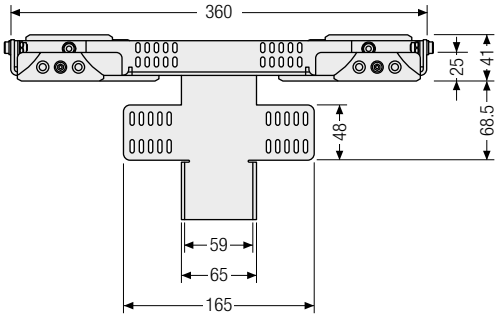


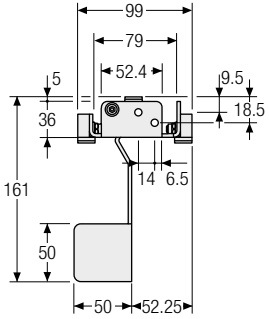
Driver sledge 79-112 for B_i 15



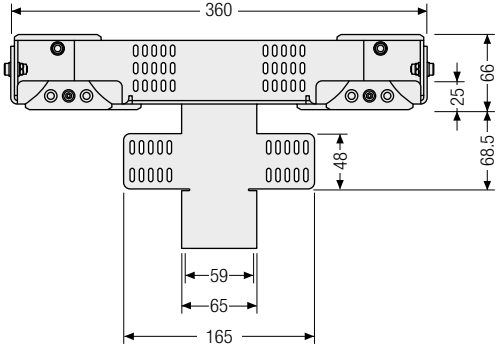


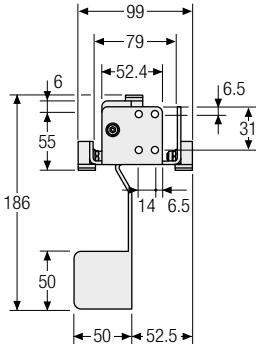
Driver sledge 156-360 for B_i 25





Driver sledge 175-360 for B_i 50

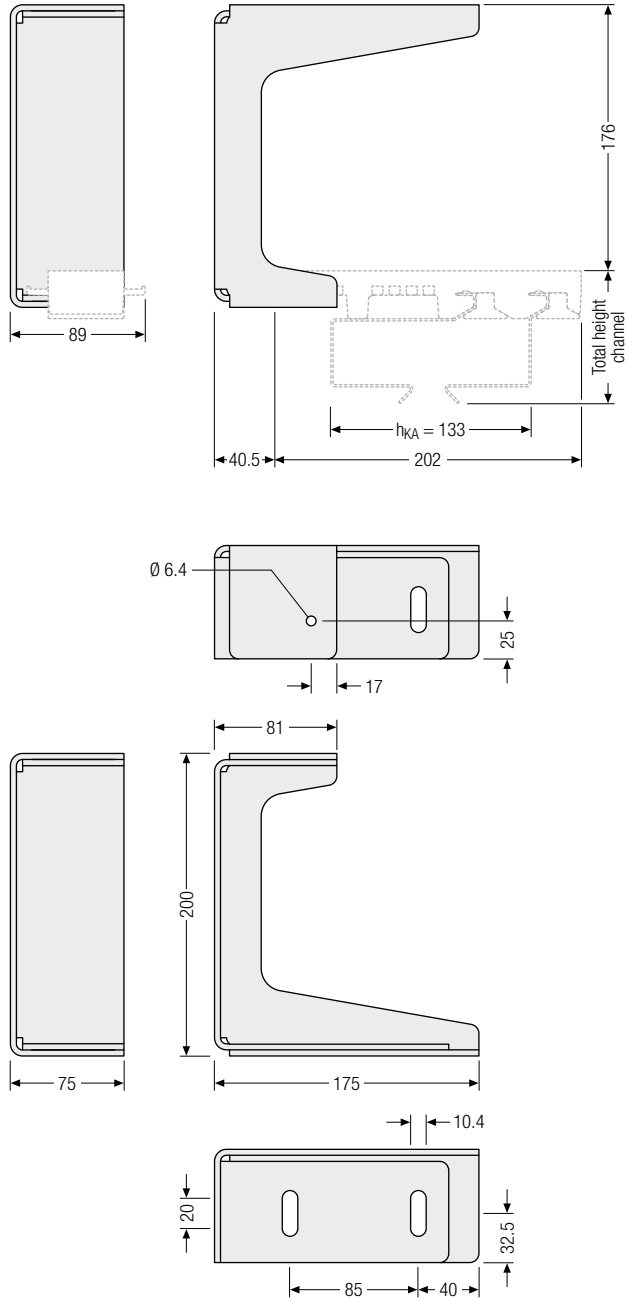


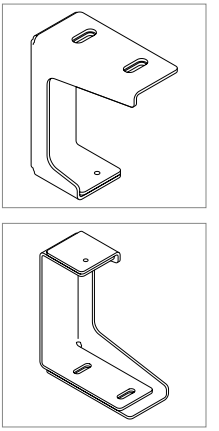


Subject to change without notice.

Easy Guide System (TKEG) | Dimensions

Dimensions | Ground holder (Variant C)



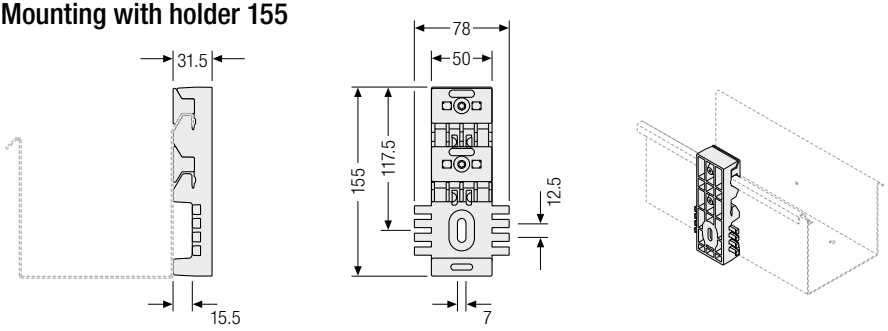


Subject to change without notice.

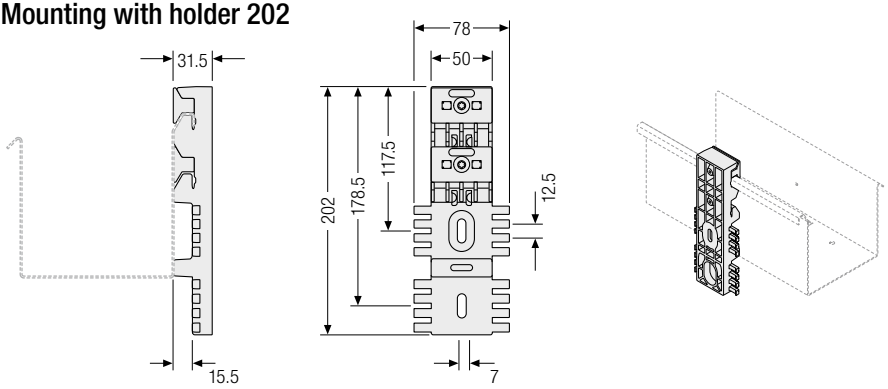
Easy Guide System (TKEG) | Fixing Elements

For variant C (laying on its side), the holders have to be mounted on the joins. For variant A and B, the holders can be installed in any position.

Mounting with holder 155



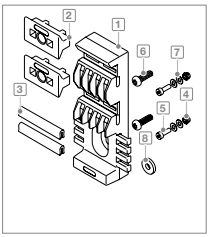
Mounting with holder 202

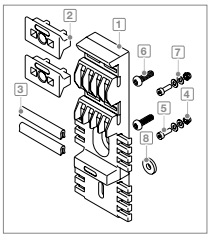


Mounting kit

Set for fixing the holders on the channel.

Installation kit			
1	Holder	5	Screw M4 x 12
2	Holder clamp	6	Screw
3	Join connector	7	Washer
4	Nut	8	Washer





Order example

To order the Easy Guide System, please provide the following information and the used cable carrier:

- Variant of channel (A, B or C)
- Number of guide channels
- Total length of channel
- Support length L_{KA}'
- Variant of holder (H155/H202)
- Type of fastening (Wall/ceiling/floor)

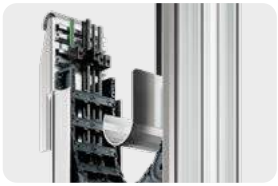
Subject to change without notice.

Guide channels for vertical hanging applications

- Ready-to-install channel system made of aluminum.
- Standardized module.
- Easy installation.
- For elevators, storage and retrieval systems and many other applications.

Aluminum channel system for UNIFLEX *Advanced*

The ready-to-install channel system for vertical hanging applications from TSUBAKI KABELSCHLEPP is ideal for use in fast moving storage and retrieval systems with high lateral accelerations. Other typical fields of application are lifters, elevators, construction elevators, crane elevators or lifts. As a ready-to-connect complete system including driver, cables and strain reliefs, it is very easy to install. Standard parts result in short delivery times and a cost efficient solution. This allows energy and data to be transferred within one system reliably and without interruptions.





Features

- Standardized for UNIFLEX *Advanced* 1555
- Available from 75 mm inner width and 125 mm bending radius
- Other series and types on request
- Suitable for extremely long travel lengths
- Fixed point offset possible
- Fixed point connection alternatively left or right
- Cable outlet on the driver alternatively towards the front or rear
- Standard lengths of the aluminum profile. Custom lengths also possible on request
- Mounting distance of the channel brackets flexibly adaptable
- Optional C-rails for assembly
- Attachment parts in galvanized steel or stainless steel
- Restraint system:
  - Smart retrofitting for stacker cranes
  - Wear reduction and longer service life
  - Less noise emission and audibly quieter operation
  - Stabilization of the energy chain at high accelerations
  - Modular design with many connection options

Our engineers will be happy to help with project planning – please contact us



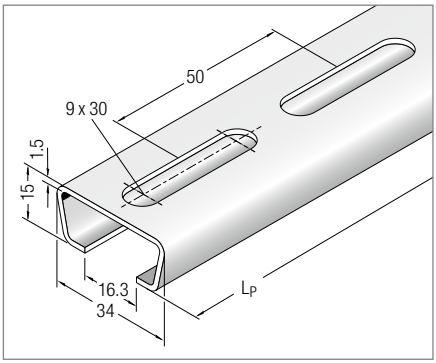
Subject to change without notice.

Assembly profiles for guide channels | Overview

- Assembly profiles with sloping sides can be used for all guide channels for fastening
- Lengths in 50 mm grid possible



C-profile, perforated, 34 x 15 mm

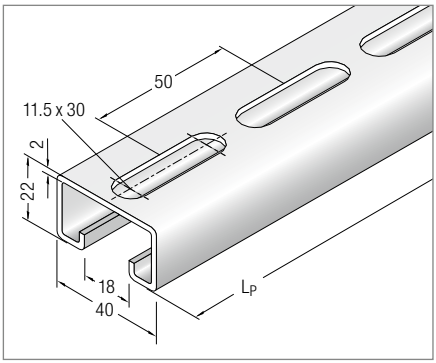


(slot width 16 – 17 mm)

Material	Article no.
Steel	3938
Stainless steel (ER 1S)	3939

Attach profile with cheese-head screws M8 – DIN 6912

C-profile, perforated, 40 x 22 mm



(slot width 18 mm)

Material	Article no.
Steel	3940
Stainless steel (ER 1S)	3941

Attach profile with cheese-head screws M8 – DIN 6912

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Condition Monitoring

Knowing what's (not) up



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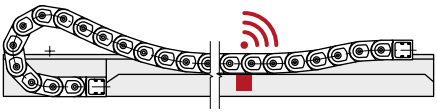
Safety devices for cranes and wear measurement for glide shoes

- signal is usable for a fully-automatic emergency stop-system
- direct measurement of the push-/pull-forces at the moving point
- force limits freely programmable (lower limit, upper limit)
- error indication if the limits are exceeded
- outcoming signal PLC usable (full stop, slow down)
- no speed limit
- scheduled gliding shoe replacement
- wear monitoring in real-time
- wear forecast
- sensor-free wear elements
- without additional cables and power supplies inside the cable carrier
- usable for all glide shoe chains

The installation conditions are difficult? In that case our service team will take care of the mounting or assists and advises you.

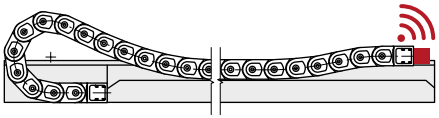
Measuring glide shoe wear in the channel



- Determine and evaluate real-time values
- Easy to retrofit with exchangeable glide shoes
- Easy installation by clipping on the glide shoes and installation in the channel
- No additional cables in the cable carrier
- Direct connection to your control system without radio transmission
- Uses standard components



Measuring shear/tensile forces on the standardized driver



- Guiding without transverse forces:
  - protects the cable carrier
  - minimizes costs through reduced downtimes
  - reduces defects/malfunctions/damage
- Integrated shear/tensile force monitoring
- The compensation of the parallel error between the system and the cable carrier is ensured
- Defined cable routing through two pre-assembled modules
- Easy maintenance/disassembly, if necessary
- Easy retrofitting on an opposite-arrangement system
- Easy connection options
- System reliability and availability



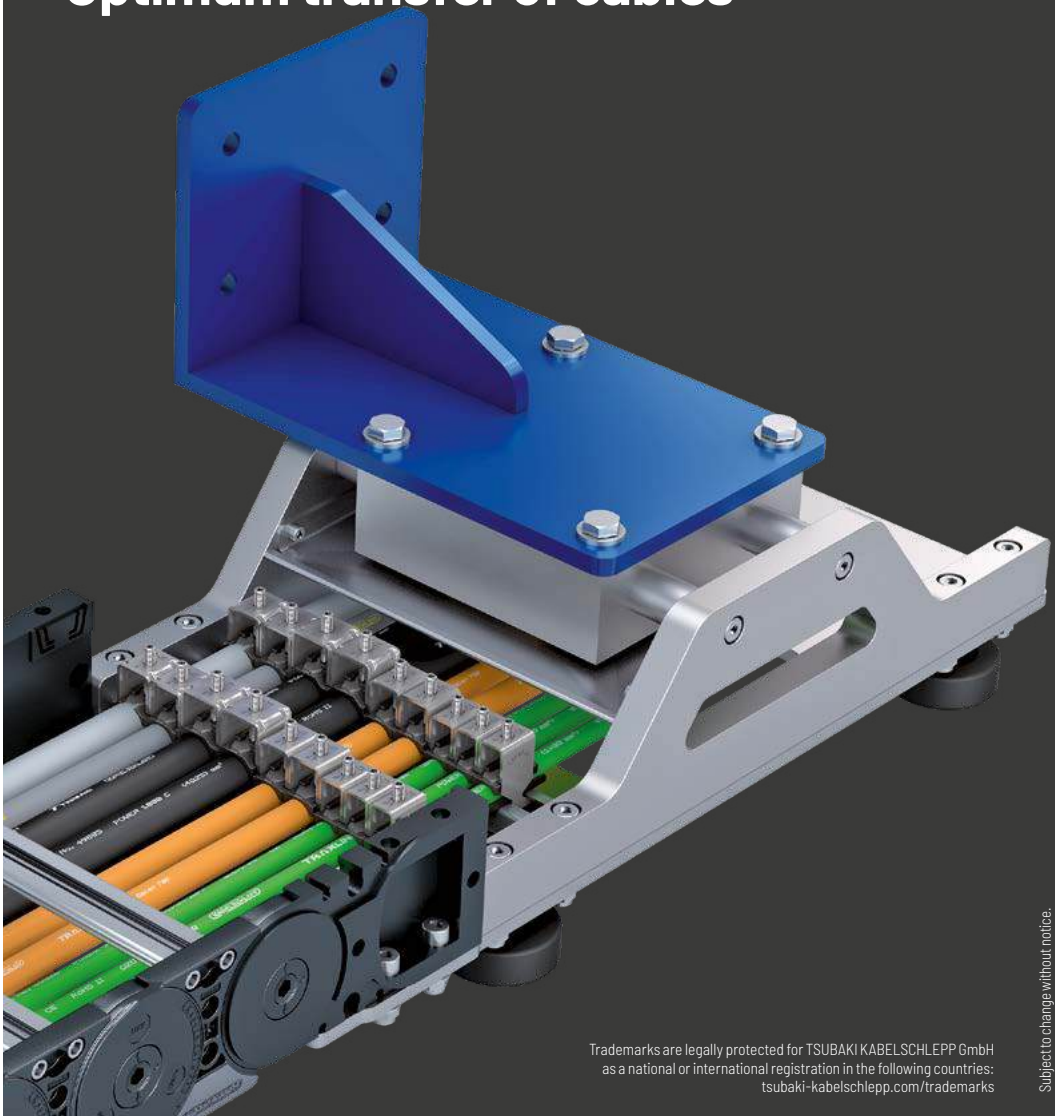
Automatic outdoor test facility

TSUBAKI KABELSCHLEPP stands for high quality and reliable solutions. Our outdoor test facility offers realistic test conditions to ensure compliance with the highest standards. Gliding and roller systems with travel lengths over 100 meters as well as high-speed applications are tested by our experts under the toughest conditions.

Subject to change without notice.

Floating Moving Device

Optimum transfer of cables



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Floating Moving Device (TKFMD) – To compensate for lateral offset in cable carriers

A flexible driver connection is required to ensure guiding of the cable carrier without transverse forces in applications with increased lateral offset.

The connection has to ensure a relative movement between the connection of the cable carrier system and the system driver.

Features

» **Tolerance compensation:**
- Horizontal: max. +/- 30 mm, vertical: max. +/- 20 mm
- Inaccuracies in channel alignment/ manufacturing/assembly are compensated

» **Continued cable routing**
No threading or passing through of the tail lengths required

» **Wear**
- Wear reduced to a minimum
- Roller-guided system in connection with all Tsubaki Kabelschlepp guide channels

» **Material**
Stainless steel/aluminum, or painted to customer specifications

» **Easy installation**
The cable carrier system has two defined mounting assemblies for easy installation of cables and hoses

» **Cable routing**
The protected continued cable routing in the Floating Moving Device corresponds to the inner height of the cable carrier

» **Strain relief**
Easy access and assembly with LineFix clamps for strain relief

» **Standard connection dimensions**
- For horizontal and vertical connection including GO module (friction-optimized for low wear)

Relevant factors

» Guiding without transverse forces:
– protects the cable carrier
– minimizes costs through reduced downtimes
– reduces defects/malfunctions/damage

» The compensation of the parallel error between the system and the cable carrier is ensured

» Easy maintenance/disassembly, if necessary

» Easy retrofitting on an opposite-arrangement system

» Easy connection options

» System reliability and availability



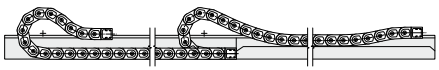
Suitable for:

Type	Inner width B_i [mm]
M0950	130 – 500
M1250	150 – 800
M1300	140 – 500*

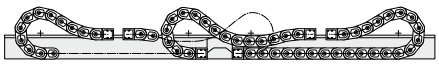
* Additional inner widths on request.

Arrangements

Single-sided arrangement:



Opposite arrangement:



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Support rollers

Ball-bearing rollers for long service life



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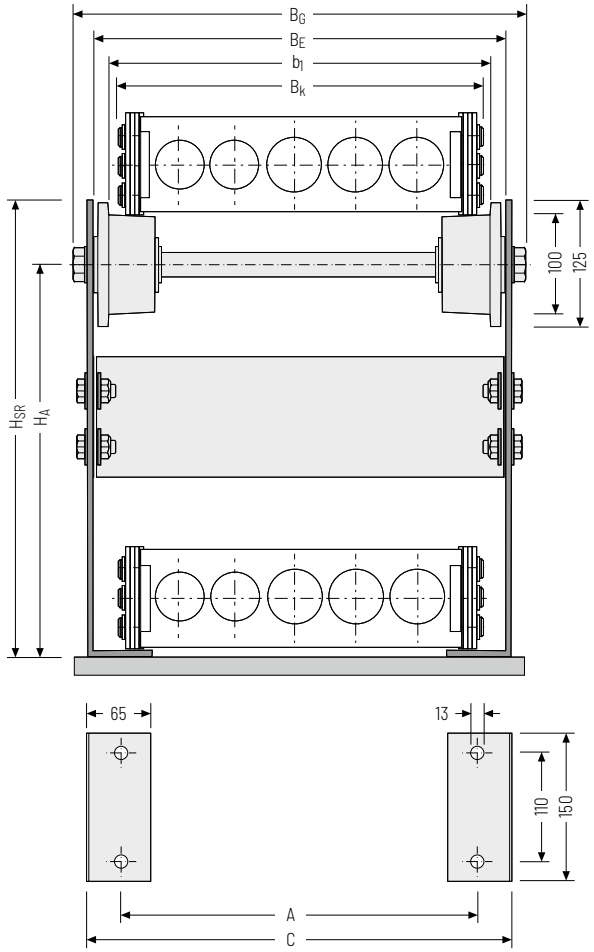
Support rollers "Basic"

Support rollers are designed to support the upper run of the cable carrier when the maximum unsupported length is exceeded.

KABELSCHLEPP® support rollers are available for the types LS/LSX 1050, S/SX 0650, S/SX 0950, S/SX 1250 and S/SX 1800.

- » Cost-effective support rollers in lightweight design
- » Long service life thanks to ball bearing rollers
- » Optimized installation width
- » Only to be used for two-band carriers



Dimension table for standard support rollers

B_E [mm]	B_G [mm]	b_1 [mm]	H_{SR} [mm]	H_A [mm]	A [mm]	C [mm]
$B_k + 52$	$B_k + 90$	$B_k + 20$	2 KR + 15	2 KR – 50	$B_k - 10$	$B_k + 60$

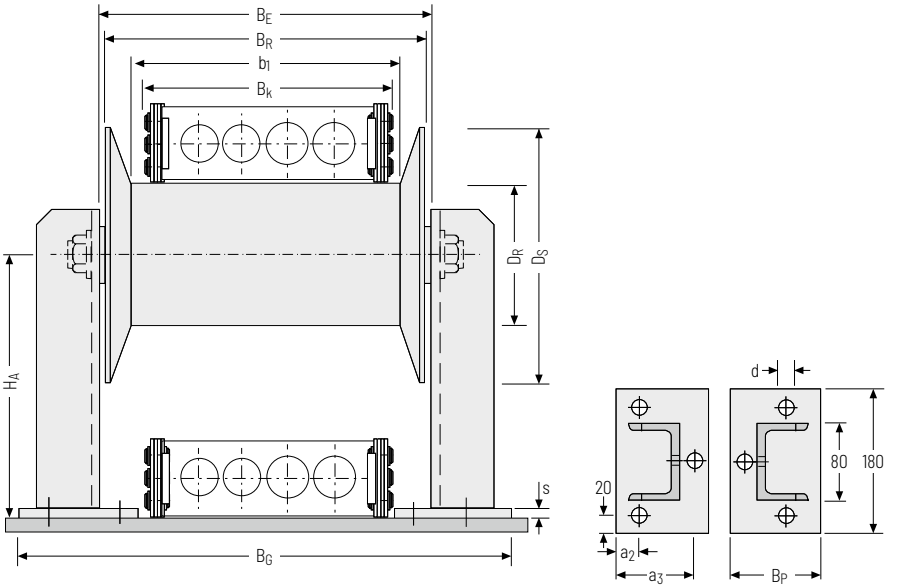
Subject to change without notice.

Reinforced support rollers

Support rollers are designed to support the upper run of the cable carrier when the maximum unsupported length is exceeded.

KABELSCHLEPP® reinforced support rollers are available for the types LS/LSX 1050, S/SX 0650, S/SX 0950, S/SX 1250 and S/SX 1800.

- » Solid design for extreme strain
- » Long service life thanks to ball bearing rollers
- » With hard manganese steel wear protection for type S and applications with high strain
- » Also available in stainless steel
- » Also suitable for multi-band cable carriers



Dimension table for reinforced support rollers

Type	D_R [mm]	b1 [mm]	B_R [mm]	B_E [mm]	B_G [mm]	D_S [mm]
LS/LSX 1050	120	B_k + 20	B_k + 50	B_k + 64	B_k + 174	Ø 200
S/SX 0650	90	B_k + 15	B_k + 45	B_k + 59	B_k + 169	Ø 170
S/SX 0950, S/SX 1250, S/SX 1800	120	B_k + 20	B_k + 50	B_k + 64	B_k + 174	Ø 200
S/SX 2500	220	B_k + 30	B_k + 60	B_k + 74	B_k + 184	Ø 300

Diameter of support roller D_R = 114 mm, for standard stainless steel version. The axis height H_A has to be adapted accordingly.

Dimension table for support stands

Type	H_A [mm]	B_P [mm]	a_2 [mm]	a_3 [mm]	d [mm]	s [mm]
LS/LSX 1050	2 KR – 60	100	20	80	Ø 18	8
S/SX 0650	2 KR – 45	80	40	–	Ø 14	8
S/SX 0950, S/SX 1250, S/SX 1800	2 KR – 60	100	20	80	Ø 18	8
S/SX 2500	2 KR – 110	100	20	80	Ø 18	8

Subject to change without notice.

Subject to change without notice.



Strain relief devices

For optimum placement with dynamic use of cables



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Strain relief devices

KABELSCHLEPP® strain reliefs were developed especially for use in cable carriers. We offer the best solution for each of many different areas of application. The type of strain relief to be selected depends on cable type, length of the cable carrier and installation position.



LineFix® clamps page 926

» Optimized foot geometry for secure seating in the C-profile.
» For one cable and two or three cables stacked.
» For C-profiles with 11 mm slot width.



Strain relief combs page 930

» Higher fixing force than single-sided strain relief comb.
» Uniform force transmission in push and pull direction.



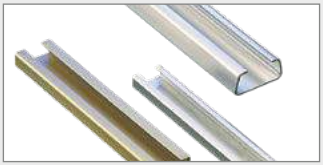
SZL strain reliefs page 932

» Gentle on the cables through large contact area with the cables.
» Simple mounting without tools.



Block clamps page 933

» For strain relief of hoses.



Assembly profiles page 934

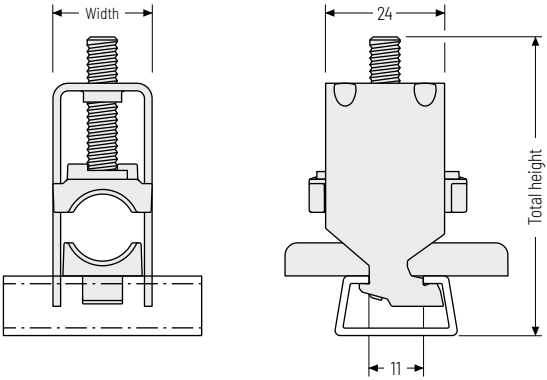
» Assembly profiles for strain relief elements

Subject to change without notice.

LineFix clamps | Overview

- For C-profiles with 11 mm slot width.
- For one, two or three cables stacked.
- Optimized foot geometry for secure seating in the C-profile.
- High grade corrosion protection of the coated housing body through cathodic dip coating (CDC).
- Pan design with support ribs for secure fixing of the cables.
- Rounded design of the pan elements, gentle on the cables.
- Also available in **stainless steel (ER 1S)**.



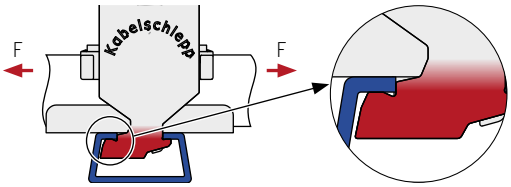


The data for the total height are guide values.
The actual height depends on the cable diameter and the cable structure, among other things.

Secure seating and easy assembly

In practical operation, tensile forces occur in both cable directions. Clamps therefore have to transmit high tensile forces in the respective direction.

In contrast to standard commercial clamps, the LineFix® foot geometry ensures transmission of extremely high tensile forces equally in both directions. The catch fixes the foot securely in the C-profile when it is bolted on, preventing the crossbar from tipping out during load application, regardless of the direction of forces or installation.



Pan design with optimized geometry.

The curved support ribs fix the cables very gently and reliably.

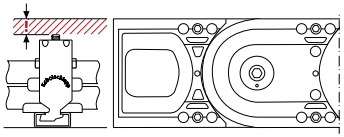


Easy installation even in tight packaging spaces through headless screw with hexagon socket.



Observe minimum height

For cable carriers with upper run gliding on the lower run, the system height of the strain relief must not be higher than the chain link height!



Subject to change without notice.

LineFix clamps | Technical data

Dimensions

Type	Designation	Material no. for one complete LineFix®	Material no. for one complete stainless steel LineFix® (ER 1S)	min. cable diam. [mm]	max. cable diam. [mm]	No. of cables	Width [mm]	Total height with max. cable diam. incl. C-profile* [mm]
Single clamp								
	LF 12-1	13630	13731	6	12	1	16	55
	LF 14-1	13631	13732	12	14	1	18	52
	LF 16-1	13632	13733	14	16	1	20	54
	LF 18-1	13633	13734	16	18	1	22	56
	LF 20-1	13634	13735	18	20	1	24	59
	LF 22-1	13635	13736	20	22	1	26	61
	LF 26-1	13636	13737	22	26	1	30	70
	LF 30-1	13637	13738	26	30	1	34	74
	LF 34-1	13638	13739	30	34	1	38	78
	LF 38-1	13639	13740	34	38	1	42	82
	LF 42-1	13640	13741	38	42	1	46	91
Double clamp								
	LF 12-2	13641	13742	6	12	2	16	73
	LF 14-2	13642	13743	12	14	2	18	74
	LF 16-2	13643	13744	14	16	2	20	82
	LF 18-2	13644	13745	16	18	2	22	86
	LF 20-2	13645	13746	18	20	2	24	91
	LF 22-2	13646	13747	20	22	2	26	95
	LF 26-2	13647	13748	22	26	2	30	108
	LF 30-2	13648	13749	26	30	2	34	121
	LF 34-2	13649	13750	30	34	2	38	129
Triple clamp								
	LF 12-3	13650	13751	6	12	3	16	98
	LF 14-3	13651	13752	12	14	3	18	98
	LF 16-3	13652	13753	14	16	3	20	105
	LF 18-3	13653	13754	16	18	3	22	111
	LF 20-3	13654	13755	18	20	3	24	118
	LF 22-3	13655	13756	20	22	3	26	130

* Item no. 3934

Additional sizes on request.

Recommended tightening torque:
max. 3 Nm for electric cables suitable for cable carriers



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **tsubaki-kabelschlepp.com/traxline**

Subject to change without notice.

LineFix clamps | Technical data

Maximum flexibility with combinable double jaws

The standard sets of LineFix® clamps in size LF/LFX 12 offer even more flexibility and mounting options due to the extension with the new double and counter jaws. Optimized for different cable diameters and individually combinable heights, almost all requirements can be implemented without any problems.

Double jaw
LD12 d6s12



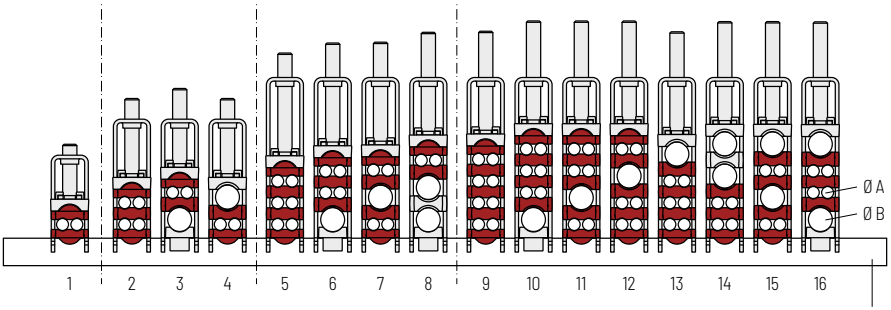
Double jaw
LD12 d6d6



Counter jaw
LG12 d6



Combination possibilities | Dimensions



	Material no. for one complete LineFix®	Material no. for one complete stainless steel LineFix® (ER 1S)	Cable diam. A [mm]	cable diam. B [mm]	No. of cables	Width [mm]	Total height with max. cable diam. incl. C-profile* [mm]
1	13757	13773	3-6 (2x)	–	2	16	51
2	13758	13774	3-6 (4x)	–	4	16	70
3	13759	13775	3-6 (2x)	6-12 (1x)	3	16	74
4	13760	13776	3-6 (2x)	6-12 (1x)	3	16	70
5	13761	13777	3-6 (6x)	–	6	16	89
6	13762	13778	3-6 (4x)	6-12 (1x)	5	16	94
7	13763	13779	3-6 (4x)	6-12 (1x)	5	16	94
8	13764	13780	3-6 (2x)	6-12 (2x)	4	16	98
9	13765	13781	3-6 (8x)	–	8	16	98
10	13766	13782	3-6 (6x)	6-12 (1x)	7	16	103
11	13767	13783	3-6 (6x)	6-12 (1x)	7	16	103
12	13768	13784	3-6 (6x)	6-12 (1x)	7	16	103
13	13769	13785	3-6 (6x)	6-12 (1x)	7	16	98
14	13770	13786	3-6 (4x)	6-12 (2x)	6	16	103
15	13771	13787	3-6 (4x)	6-12 (2x)	6	16	103
16	13772	13788	3-6 (4x)	6-12 (2x)	6	16	102

* Art. no. 3934

Subject to change without notice.

Subject to change without notice.



Strain relief combs | Technical data

For separate strain relief or fastening of cables outside of the cable carrier – suitable for all cable carriers.

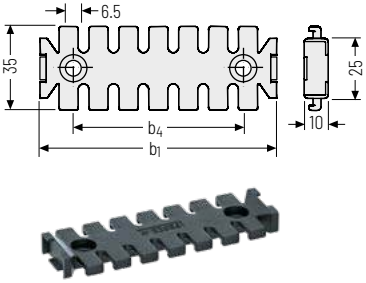
The strain relief combs are equipped with teeth on both sides. This allows secure fixing of each cable with two cable ties.

- Secure fixing with two or four cable ties
- Higher fixing force than single-sided strain relief combs
- Uniform force transmission in push and pull direction
- Minimized movement of cables and hoses



Strain relief comb with C-profile connections

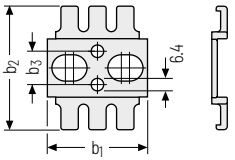
Mat. no.	b_1 [mm]	b_4 [mm]	No. of teeth
53654	49	21	2 x 3
53655	74	46	2 x 5
53656	99	71	2 x 7
53657	124	96	2 x 9
53658	149	121	2 x 11
53659	174	146	2 x 13
76550	54	21	2 x 3
76551	79	46	2 x 5
76552	104	71	2 x 7
76553	129	96	2 x 9
76554	154	121	2 x 11
76555	179	146	2 x 13

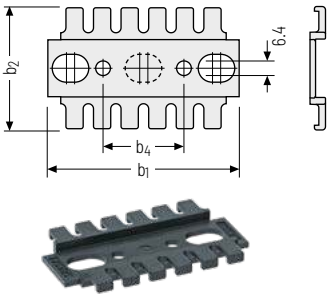


Strain relief comb

Mat. no.	b_1 [mm]	b_2 [mm]	b_4 [mm]	No. of teeth
53983	43,2	53	14	2 x 3
53684	60,0	53	14	2 x 4
57350	61,0	70	20	2 x 4

Mat. no.	b_1 [mm]	b_2 [mm]	b_4 [mm]	No. of teeth
53984	63,2	53	15,2	2 x 4
53985	83,2	53	35,2	2 x 6
53986	108,2	53	60,2	2 x 8
53685	85,0	53	25,0	2 x 6
53686	110,0	53	50,0	2 x 8
53687	135,0	53	75,0	2 x 10
53688	160,0	53	100,0	2 x 12
57351	86,0	70	20,0	2 x 6
57352	111,0	70	40,0	2 x 8
57354	136,0	70	65,0	2 x 10
57355	161,0	70	90,0	2 x 12
57356	186,0	70	115,0	2 x 14
57357	211,0	70	140,0	2 x 16
57358	236,0	70	165,0	2 x 18
57359	261,0	70	190,0	2 x 20



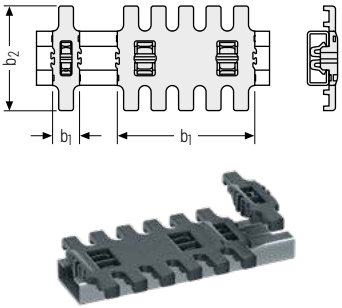


Subject to change without notice.

Variable strain relief comb for C-profiles

The variable strain relief combs can be combined with each other as desired in the 1-fold and 5-fold versions and clipped into the C-profiles #3931, #3934, #3935 and 3936 (see page 934).

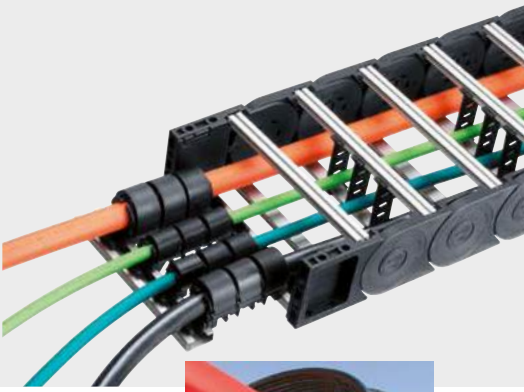
Mat. no.	b_1 [mm]	b_2 [mm]	No. of teeth
3950	12,5	48	2 x 1
3951	62,5	48	2 x 5





SZL strain reliefs | Overview

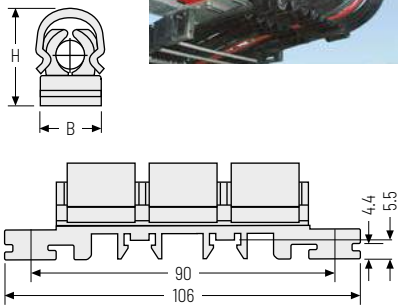
- Cost-effective
- Assembly – easy, fast and without tools
- Large-area surrounding of the cables
- Low height
- Without screws and cable ties
- Contact force defined by spring tension bracket
- Suitable for standard commercial profile rails
- Protected against vibrations
- Long service life for dynamic applications
- Also usable as strain relief in control cabinets





Available sizes

Type	Mat. no.	for cable Ø [mm]	Width B at Ø min [mm]	Width B at Ø max [mm]	Height H [mm]
SZL 8	24989	> 5.0 - 8.0	16	16	28
SZL 10	24990	> 8.0 - 10.5	20	20	30
SZL 14	24991	> 10.5 - 14.5	23	26	35
SZL 18	24992	> 14.5 - 18.0	25	32	40
SZL 22	24993	> 18.0 - 22.0	30	36	44
SZL 27	24994	> 22.0 - 27.0	34	39	50
SZL 32	24995	> 27.0 - 32.0	39	44	56



Fixing options



1. Clipped into a C-profile



2. Clipped onto a DIN rail



3. Inserted into two C-profiles



4. Directly bolted on

Installation of the SZL strain relief









Subject to change without notice.

Block clamps | Overview

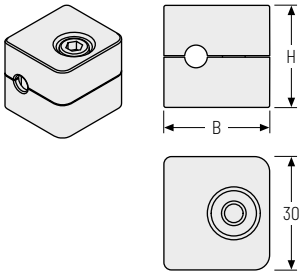
- For strain relief of hoses
- With clamping screw(s) and support rail nut
- Hoses and cables
- For C-rails with slot widths of 11 mm and 16 mm



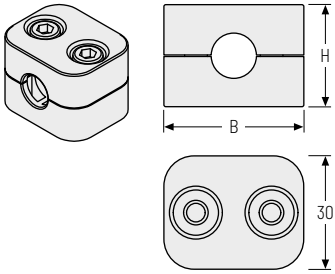
Available sizes

Type	Mat. no.	for diameter [mm]	Width B [mm]	Height H [mm]
BS 0.06	16701	6-7	28	27
BS 0.07	16702	7-8	28	27
BS 0.08	16703	8-9	28	27
BS 0.09	16704	9-10	28	27
BS 0.10	16705	10-12	28	27
BS 1.06	16706	6-7	37	27
BS 1.07	16707	7-8	37	27
BS 1.08	16708	8-9	37	27
BS 1.09	16709	9-10	37	27
BS 1.10	16710	10-11	37	27
BS 1.12	16711	12-14	37	27
BS 2.14	16712	14-16	42	33
BS 2.16	16713	16-18	42	33
BS 2.18	16714	18-20	42	33
BS 3.20	16715	20-22	50	36
BS 3.22	16716	22-23	50	36
BS 3.23	16717	23-25	50	36
BS 3.25	16718	25-27	50	36
BS 3.27	16719	27-30	59	42
BS 3.30	16721	30-34	59	42
BS 4.32	16722	32-34	59	42
BS 4.34	16723	34-36	71	56
BS 4.35	16724	35-37	71	56
BS 4.38	16725	38-40	71	56
BS 4.40	16726	40-42	71	56
BS 4.42	16727	42-44	71	56
BS 5.45	16728	45-48	86	66
BS 5.48	16729	48-51	86	66
BS 5.51	16731	51-54	86	66

Type BS 0



Type BS 1 – BS 5



Suitable for **C profiles** with **11 mm** slot (Article no. 3931, 3934, 3935, 3936) as well as for **C-profiles** with **16 mm** slot (Article no. 3932, 3938, 3939)

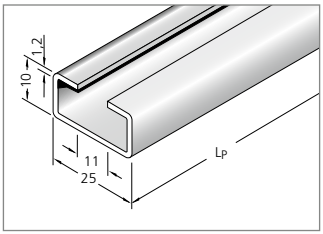
Subject to change without notice.

Assembly profiles for strain reliefs | Overview

» Assembly profiles for strain relief elements – for all commercially available clamps
» Length in 1 mm grid available



C-profile 25 x 10 mm

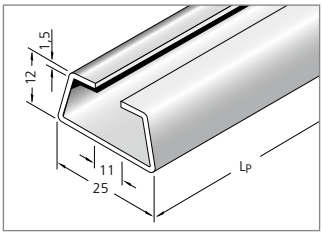


Suitable for all LineFix® clamps
(slot width 11 mm),
LineFix® types see page 926.

Material	**Article no.**
Galvanized steel	3931

Attach profile with cheese-head screws M6 – DIN 6912

C-profile 25 x 12 mm

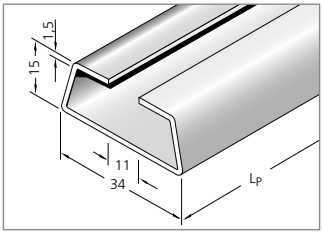


Suitable for all LineFix® clamps
(slot width 11 mm),
LineFix® types see page 926.

Material	**Article no.**
Galvanized steel	3934

Attach profile with cheese-head screws M6 – DIN 6912

C-profile 34 x 15 mm



Suitable for all LineFix® clamps
(slot width 11 mm),
LineFix® types see page 926.

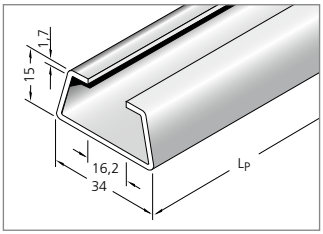
Material	**Article no.**
Galvanized steel	3935
Stainless steel (ER 1S)	3936

Attach profile with cheese-head screws M6 – DIN 6912

Subject to change without notice.

Assembly profiles for strain reliefs | Overview

C-profile 34 x 15 mm

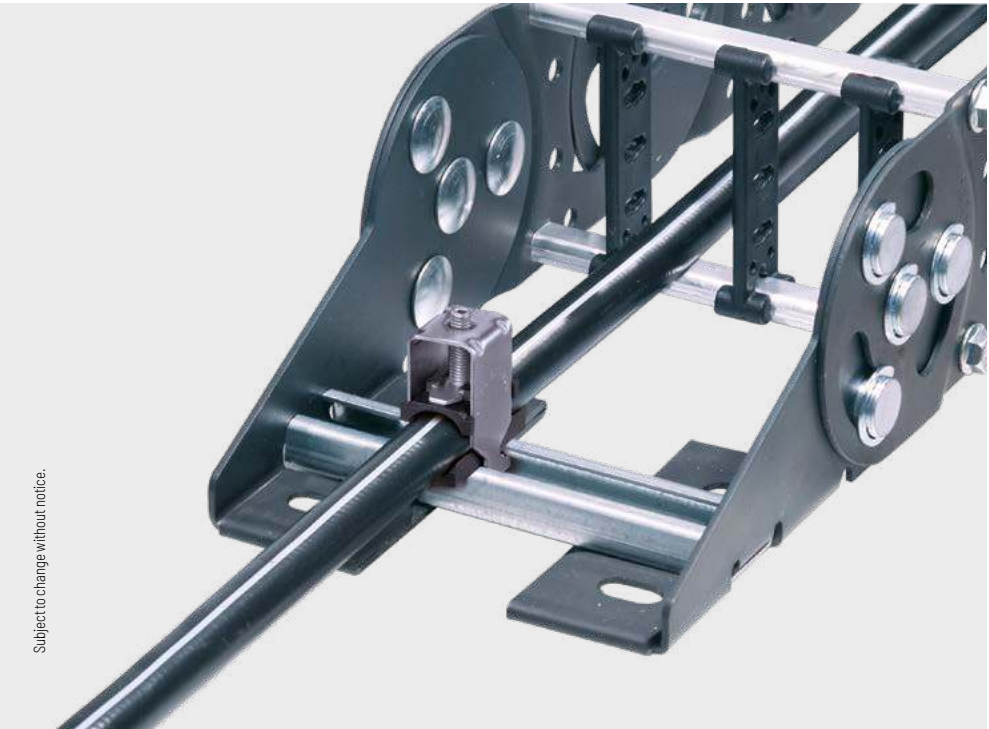


Suitable for all standard clamps
(slot width 16 – 17 mm),

Material	**Article no.**
Steel	3932

Attach profile with cheese-head screws M10 – DIN 6912

The selection of the suitable C-profile depends on the connecting element.



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Steel band covers

Continuous, cost-effective protection against chips and other external influences



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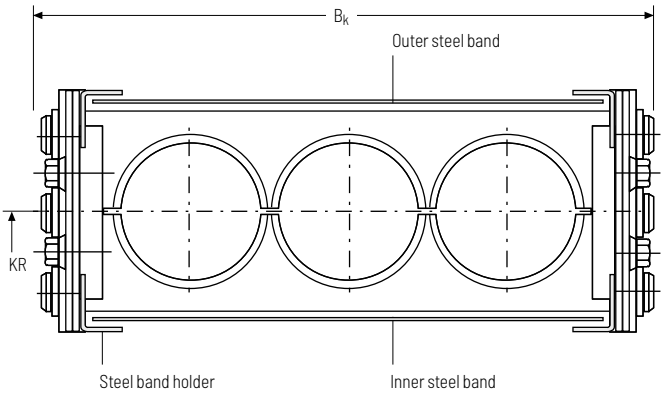
Steel band covers

To protect the cables against flying sparks, radiated heat and small chips, steel band covers made from corrosion-resistant and acid-resistant spring band steel are available.

» Cost-effective cover variant for **half-stayed** version
» Maximum steel band width: 1000 mm



Guiding of the steel band:

with steel band holders on the inside of the side band

Fastening of the steel band:

Inside: with steel band holders on the end connectors

Outside: with the fastening screws of the end connectors

Dimensions table

Type	Steel band length [mm]		Steel band width [mm]
	Outer steel band	Inner steel band	
S/SX 0650	L_k + 280	L_k + 130	B_k – 22
S/SX 0950	L_k + 360	L_k + 150	B_k – 27
S/SX 1250	L_k + 470	L_k + 170	B_k – 34
S/SX 1800	L_k + 640	L_k + 200	B_k – 40
S/SX 2500	L_k + 945	L_k + 255	B_k – 46

Steel band covers for the other types on request!



Steel band holder on the sidebands.



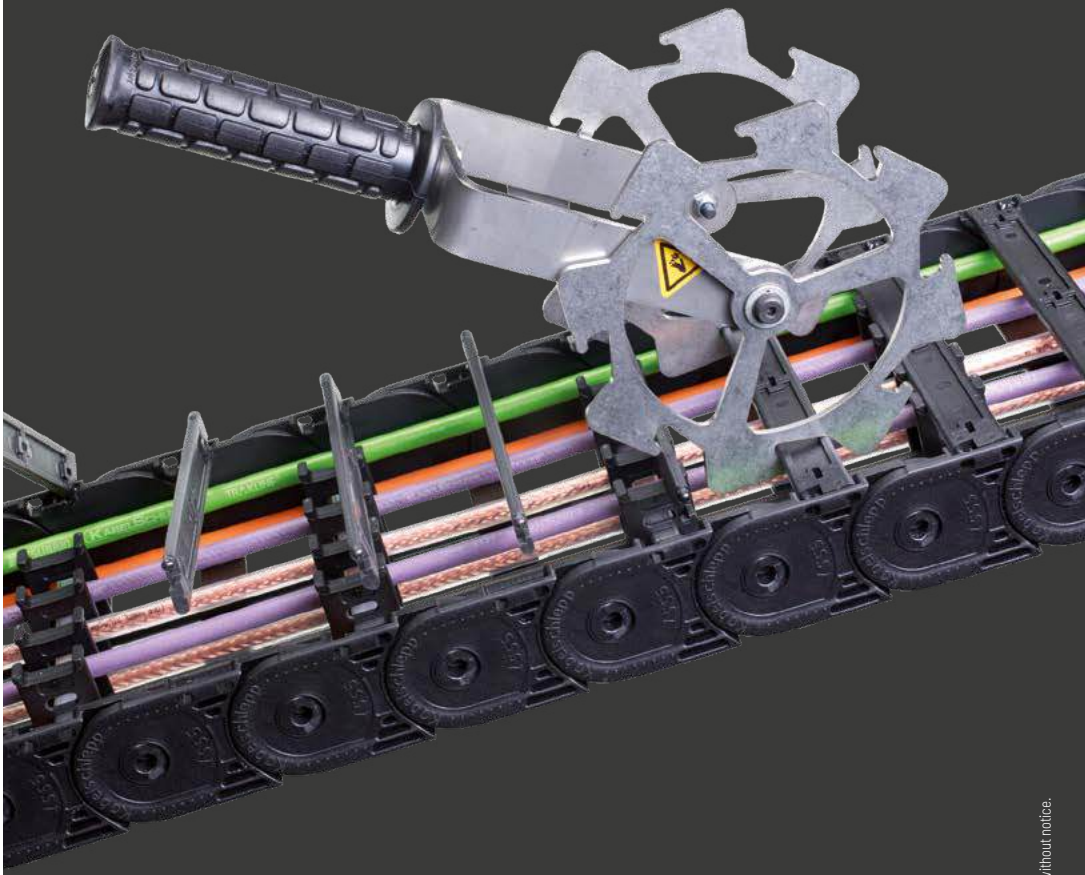
Fastening on the cable carrier connection with special end connector.



Subject to change without notice.

Opening tools

Reduce assembly times and save costs



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Opening tools | Overview

Assembly wrench RV stay

Suitable for all RV stays
Article no. 16094



Assembly wrench RMF stay

Suitable for all RMF stays
Article no. 16086



Assembly wrench RS stay

Suitable for all RS stays
Article no. 16090



Screwdriver 7 mm

For opening covers and stays
(7 mm slot width)
Article no. 16089



Screwdriver 5 mm

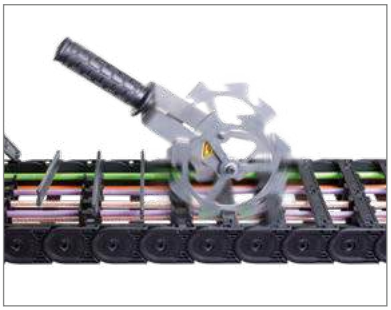
For opening covers and stays
(5 mm slot width)
Article no. 16085



Opening tool Uniflex Advanced

For types 1455, 1555 and 1665

- Extremely quick and gentle on the material.
- Open 1 m cable carrier in less then 2 seconds.
- Can also be used in the guide channel.
- Even cable carriers equipped with cables can be opened without problems.



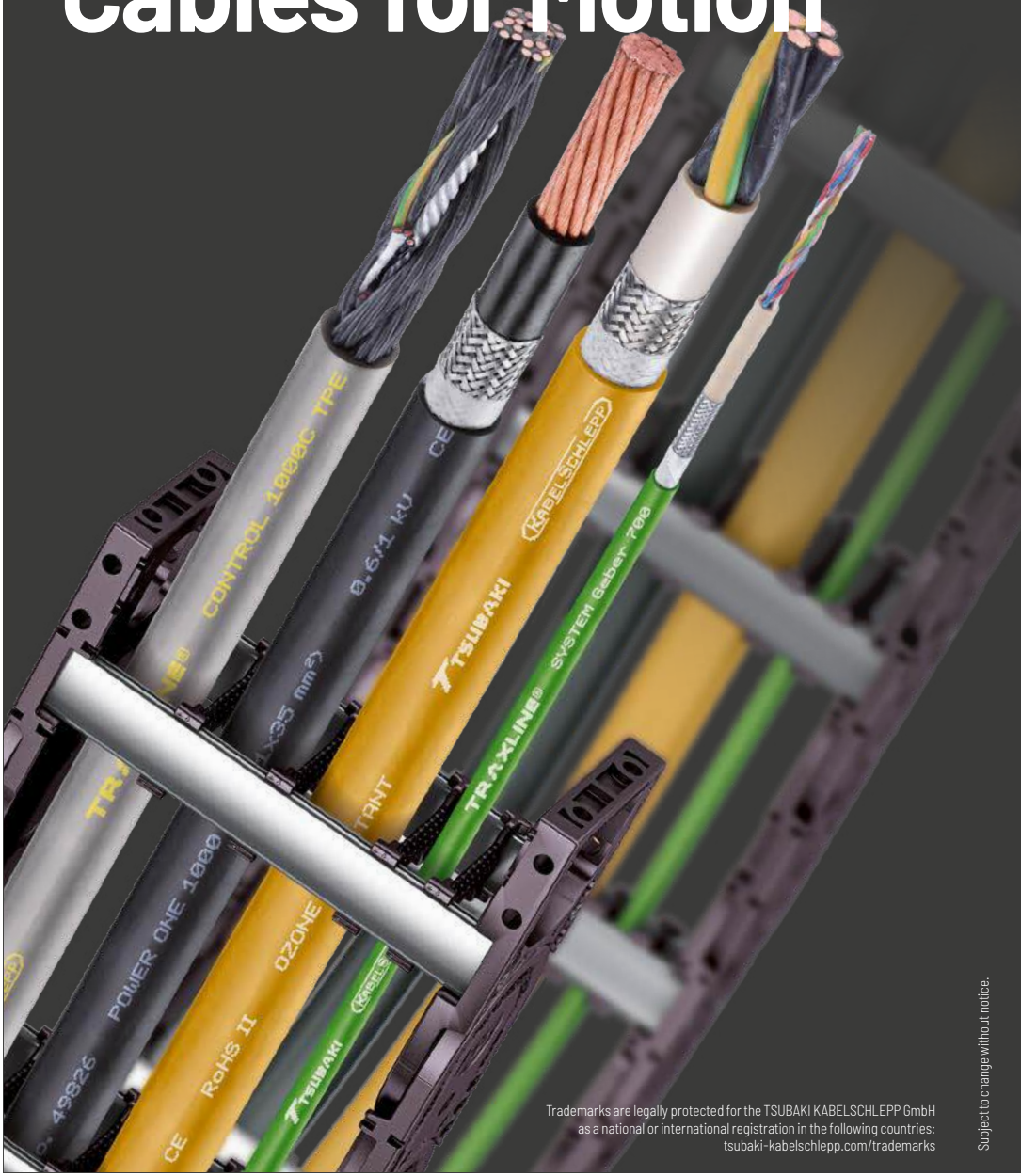




Type	Version	Article no.
UA 1455	single	16096
UA 1555	single	16098
	twin	16097
UA 1665	single	16100
	twin	16099

Subject to change without notice.

TRAXLINE®
Cables for Motion



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TRAXLINE® cables for cable carriers

TSUBAKI KABELSCHLEPP – inventor of the cable carrier. The product portfolio comprises over 100,000 steel, hybrid systems and plastic variants. Always a suitable, reliable cable carrier, whether standard or individual complete solution. We are active for you worldwide. We use our more than 60 years of experience to continuously develop the "driving force" – the TRAXLINE® cables – and adapt them to the requirements of the market.

Our cable series meet the highest quality standards to ensure the availability of your systems.

Our TRAXLINE® cables are continuous bending hi-flex and very durable. Tested functional reliability which meets applicable standards and guidelines is an essential criterion.

Competent, target-oriented system consultation and global on-site service are our constant commitment to the technical and economical optimization of your applications.

Product range

The TRAXLINE® range is continuously being optimized and expanded, especially for the ever increasing requirements of use in cable carriers. A clearly structured type selection provides a unique combination of performance characteristics and usage possibilities.

» Highest quality requirements
» Continuous bending hi-flex, very durable
» Complies with applicable standards and guidelines
» 2D applications (unsupported and gliding)
» For all environments from cleanroom applications to tough ambient conditions in a rough operating environment

Service & support

» Competent, target-oriented system consultation and global on-site service
» Fast availability through stockkeeping of more than 500 cable types
» No minimum purchase quantity
» Special designs for projects

TSUBAKI KABELSCHLEPP cable warehouse

Over 500 cable types, constantly available from the warehouse, ensure fast availability around the globe. We deliver from stock and without minimum purchase quantity.



TRAXLINE® Info center

With the aid of the TRAXLINE® info center, you can find the right cable for your cable carrier system with just a few mouse clicks. Simply enter the parameters for your application at **traxline.de** and find the ideal cable for your requirements.

TRAXLINE.de



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TRAXLINE® | Cable range



Data cable

» Data exchange between moving consumer and stationary end (control cabinet)
» Different quality classes available
» Jacket material: PUR, TPE shield respectively double shield optional
» Used in carriers with small bend radius



BUS-/FOC-/KOAX-cable

» Data exchange between moving consumer and stationary end (control cabinet)
» Different quality classes available
» Jacket material: PUR, TPE shield respectively double shield optional
» Used in carriers with small bend radius



Control cable CONTROL 200, 400, 700, 1000

» Connection for controling between moving consumer and control cabinet
» Four different quality classes available
» Jacket material: PVC, PUR, TPE; shield optional
» 2 to 49 wires



Motor cable POWER 400, 700, 1000, 4 to 7 wires

» Connection for power supply between moving consumer and control cabinet
» In three different quality classes available
» Jacket material: PVC, PUR, TPE; shield optional
» Cross section from 1,5 mm² to 150 mm²



Motor cable POWER ONE 700, 1000, 1 wire

» For applications in harsh conditions
» Secure transmission of large amounts of energy
» For long travel applications
» Cross section from 0,25 mm² to 700 mm²



Medium voltage cable Heavy Duty, 1 wire

» For applications in harsh conditions
» Secure transmission of large amounts of energy
» For long travel applications
» Cross section from 0,25 mm² to 700 mm²

Individual cable types and the associated data sheets can be found at **TRAXLINE.de.**

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Efficient design engineering
Precise and fast

Decrease your engineering times, accelerate your design processes, configure with original data directly from the manufacturer.

We are continuously investing in providing product-related data online to make your work easier. This allows you to access current product and CAD data already during the design engineering phase.

We are currently offering comprehensive technical information materials in three online tools which are partially interlinked.

online-engineer.de
Cable Carrier Configurator

Our web-based Online-Engineer platform with worldwide online access provides a variety of functions to support you with the selection and configuration of products for your application. All necessary technical and calculation information for the individual products from the areas of cable carriers, cables and other accessories are provided on a central, clearly structured platform. Selection of the suitable products is made substantially easier by entering different parameters.

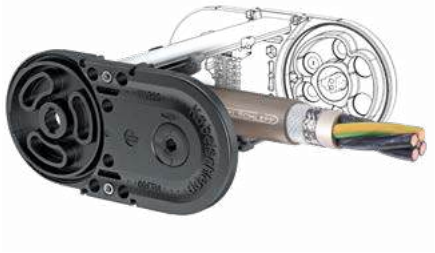
For even more efficient use, the data portals of Online-Engineer and CADENAS are linked. This allows you to quickly and easily download the suitable CAD model for your product configuration without having to exit Online-Engineer.

CADENAS 3D CAD catalog

CADENAS is an internationally used platform for providing 3D component models in a variety of CAD formats. It includes a large number of renowned companies from mechanical engineering, plant engineering and other industry sectors. We are currently offering CAD models in all standard CAD formats for the entire product portfolio. The database also contains the corresponding models for guide channels and support trays. The catalog is continuously expanded and supplemented.

Electrical engineering with ePLAN

The ePLAN Data Portal is an integrated, web-based data platform for providing current device data of market-leading component manufacturers for direct use in project planning with the ePLAN software solution. For the internationally used project planning software ePLAN ELECTRIC P8, we have stored the corresponding data for our TRAXLINE® cables in the ePLAN Data Portal for download.





More information:
traxline.de

More information:
online-engineer.de

More information:
tsubaki-kabelschlepp.com/cadenas

More information:
tsubaki-kabelschlepp.com/eplan

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TOTALTRAX® | Overview

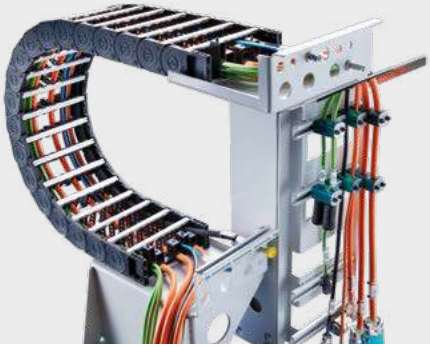
System competence

TOTALTRAX® complete systems

As a specialist for cable carriers and drag chain cables of all kinds, we have been a reliable partner for many decades also when it comes to turnkey complete systems.

Thousands of systems implemented by us are in use worldwide, each individually adapted to the customer application. Whether single harnessed cable carrier or highly complex system – we offer ready-to-install assemblies for almost any area of application.

As a member of the TSUBAKI group, we are part of a globally operating group of companies. This allows us to offer our customers and partners the international presence of a global player combined with the flexibility and creativity of a medium-size enterprise.



The following applies to all systems:

- Manufactured from high-quality components
- Perfectly adapted components
- Optimized turnaround times
- "Just-in-time" deliveries
- Complete systems from simple to complex

We take care of everything – and you can relax

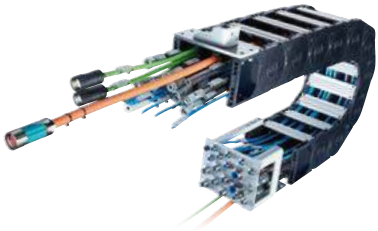
Our system experts work with you to develop the technical solution as a reliable assembly for your product.

This also includes the correct selection of the individual parts and the procurement of purchase parts: smooth interaction of all components is essential for a permanently functioning system.

The result: a customized complete system consisting of up to several hundred individual components.

We support you with:

- Extensive consulting during planning
- Support for project planning
- Preparation of an individual cable plan
- Engineering for precision-fit interfaces
- Customized system as per customer requirements
- Procurement of all components
- Professional support during the entire project
- Only one contact – continuously from the first project planning meetings until installation







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Our complete systems – delivered assembled and ready

Optimized manufacturing processes and coordinated provision of the correct components guarantee fast turnaround times and save you time and money, no matter how simple or complex your system is.

For large batches we can set up customer-specific production lines on request. We configure and manufacture economically viable individual solutions from a batch size of just one.

High-quality individual components make our complete systems reliable, resistant and durable. Regular checks additionally ensure consistently high quality. We even confirm this in writing:

» for individual components and

» for ready-mounted assemblies – on request with certificate and comprehensive project documentation

We deliver the cable carrier "just in time" and ready for installation, to your production facility or to the desired installation site. Safely transported in single-use or returnable packaging.

Difficult installation situation?
Our service team can take on the installation or support your with their expertise.



The optimized process:



Standardized manufacturing processes

Use of high-quality components

Customized production line on request

Permanent quality control during production and assembly

Complete installation by our service team

Your benefits at a glance

Obtain your complete system from one source: that makes procurement easier while also saving time and money.

» Complete delivery from one responsibility

» One contact for the complete system

» No storage costs

» Reduced procurement costs by concentrating on one partner

» Reduced effort for goods incoming inspections

» Timely delivery directly to your production facility

» Shorter downtimes through plug & play installation

Subject to change without notice.

Salesnetwork

Around the world.

With our worldwide technical sales and service network we are close to our customers at all times.
This ensures quick response, individual support and personal service – based everywhere on an understanding of local requirements..





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info@kabelschlepp.de

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Automotive Division

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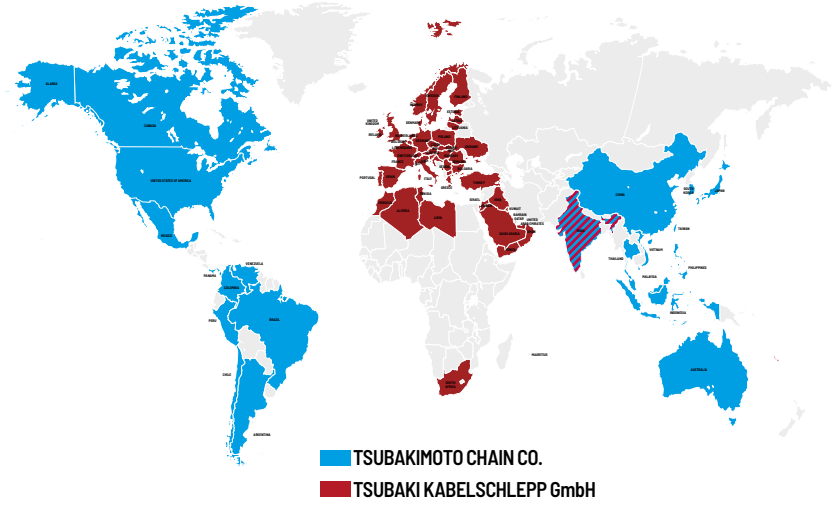
Fax: +49 2762 4003-40300
info@kabeltrax.de · kabeltrax.de

Our worldwide contact persons can be found at: tsubaki-kabelschlepp.com/salesnetwork



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For further information please visit: tsubaki-kabelschlepp.com/trademarks

Cable carrier
PROTUM® series
MT series

Cable carrier configuration
K series
XLT series

Configuration guidelines
UNIFLEX Advanced series
ROBOTRAX® System

Materials information
M series
FLATVEYOR®

MONO series
CLEANVEYOR®
TKHP® series

QuickTrax® series
XL series
LS/LSX series

UNIFLEX Advanced series
QUANTUM® series
S/SX series

TKP35 series
TKR series
S/SX-Tubes series

TKK series
TKA series
Accessories

EasyTrax® series
UAT series
TRAXLINE®

General abbreviations

a_1 = Hole distance – side edge
a_2 / a_3 = Hole distance – outer edge
a_c = Nominal width inner chamber
a_{max} = Max. travel acceleration
a_T = Distance lateral tabs inside to center of first divider
a_x = Divider center to center distance
b_1 = Inner width of support tray/ guide channel
b_2 = Hole distance – channel fixation outside
b_3 = Hole distance – channel fixation inside
b_4 = Support width of the support tray
b_A = Distance between connection boreholes
B_A = Outer width of support tray
B_E = Contanct width of roller
B_{EF} = Overall width of cable carrier incl. attachments
B_G = Total width of support
B_i = Inner width
B_k = Outer width of cable carrier without attachments
B_{KA} = Outer width of guide channel
B_P = Width of base plate
B_R = Width of roller
B_{St} = Stay width
c = Distance between hole stay bores
d = Cable diameter
D = Bore diameter
D_R = Diameter of support roller
d_R = Pipe diameter
D_S = Diameter of wheel flange
G = Bore hole position
H = Connection height
H_A = Axle height of support roller
h_A = Outer height of support tray
h_G = Chain link height
$h_{G'}$ = Chain link height incl. glide shoe/ roll
h_i = Inner height
H_i = Inner height of frame stay assembly
h_{KA} = Outer height of guide channel
h_1 = Channel profile height – support height
h_2 = Channel profile height – run-off height
HS = Half-stayed
H_{SR} = Height of the support roller
H_z = Installation height
I = Height channel opening
K = Chamber
KR = Bending radius
l_1 = Connection length
$l_{2\text{-}5}$ = Connection dimensions
l_A = Length of end connector
L_A = Length of support tray
L_B = Length of carrier in bend
L_D = Length of permissible sag
L_{EF} = Overall length of cable carrier incl. attachments
L_f = Unsupported length
L_k = Cable carrier length without connection
L_{KA} = Channel length
$L_{KA'}$ = Support length
L_L = Cable length
$L_{L'FE}$ = Cable overhang fixed end
$L_{L'ME}$ = Cable overhang movong end
L_P = Length of profile
L_S = Travel length
L_V = Fixed point offset
n_{RKR} = Number of RKR links
n_T = Number of dividers
n_Z = Number of comb teeth for strain relief
q_k = Intrinsic cable carrier weight
q_z = Additional load
RKR = Reverse bending radius
s / s_1 = Sheet metal thickness
S_H = Thickness of height separation
S_T = Thickness of divider
t = Pitch
T = Slide support width of guide channel
U_B = Loop overhang
VD = Position of continuous height separations in divider
VR = Position of partial height separations in divider
v_{max} = Max. travel speed
VS = Fully-stayed
W_f = Base width of divider
X = Connection distance for opposite arrangement
z = Pretension

Cable carrier | Key for abbreviations | Pictographs

Definitions

driver view = view into the driver connection

Pictographs


Inner height


Outer height


Inner width


Outer width



Inner width (B_i)
in x mm increments


Pitch


Bending radius


Long travel length


Travel length unsupported


Travel length gliding


High additional load


High travel acceleration


High travel velocity


Guide channel required


Strain relief


Stay arrangement on
every 2nd chain link


Stay arrangement on
every chain link


Cannot be opened


Opens outward


Opens inward


Opens inward/outward


Swiveling/pressing in
outward


Swiveling/pressing in inward


Covered cable carrier


Sliding dividers


Fixable dividers



Fixable dividers
in x mm grid


Height separation possible



Height separation
in 1 mm increments


Hole stay available



Clean room suitable


Quiet running/low noise


Sold by the meter


Low weight


Roller chain


ESD material


Ex-protection-material


Heat-resistant


Cold-resistant


Resistant to hot chips

Flame-resistant V0
(UL94)

Flame-resistant V2
(UL94)

suitable for railroad
applications

Order code

Important information



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