

48 V Centrifugal Pump System

4 kW · 1+1 Redundant · In-Rack 4U CDU

80 gpm

FLOW @ DUTY POINT

58 psi

DIFFERENTIAL PRESSURE

4 kW

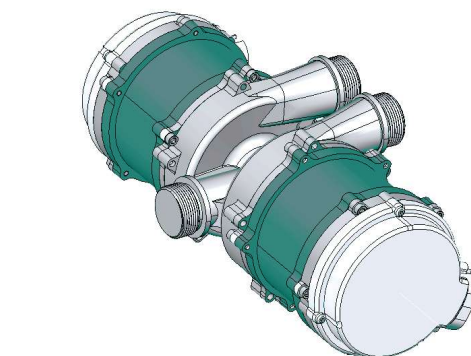
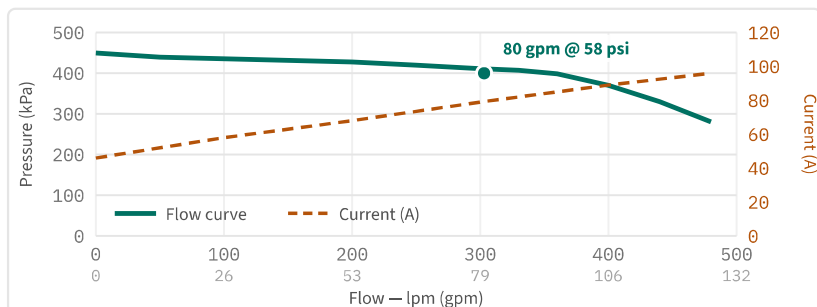
RATED POWER

48 V DC

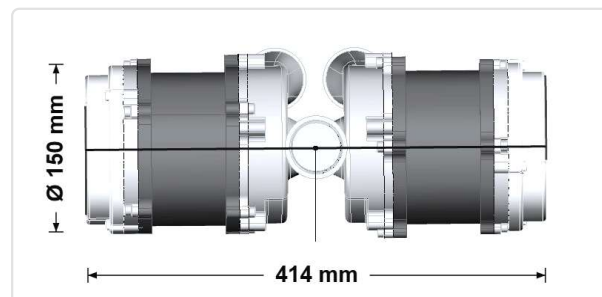
SUPPLY VOLTAGE

Compact 1+1 redundant centrifugal pump system for in-rack 4U coolant distribution units. Two 48 V pumps share an integrated pump-head manifold — a single hydraulic assembly that eliminates external redundancy plumbing and keeps the full system within a 4U envelope at just 414 mm overall length.

- **1+1 redundancy** — seamless takeover on pump fault, no external valving
- **Integrated pump-head manifold** — one wetted assembly, minimal joints
- **Extremely compact** — 414 mm (16.3 in) length, fits 4U rack space
- **Sealless design** — no dynamic seals, no wear-based leak path
- **Stainless steel wetted components** — PG25 compatible
- **Modbus interface** — speed control and diagnostics
- **Scalable configuration** — also available as single pump; different ports and orientations possible

PERFORMANCE · SINGLE PUMP, 48 V, PG25

1+1 pump system with integrated pump-head manifold

DIMENSIONS

Overall length 414 mm / 16.3 in

Motor diameter Ø 150 mm / 5.9 in

Rack envelope Fits 4U (7.0 in)

TECHNICAL DATA

Nominal flow	80 gpm (303 l/min)
Pressure @ duty point	58 psi (400 kPa)
Rated power	5.4 hp (4 kW)
Supply voltage	48 V DC
Rated current @ duty point	79 A
Configuration	1+1 redundant / single

Coolant	PG25
Wetted materials	Stainless steel, PPS
Sealing	No dynamic seals
Communication	Modbus
Design life	> 20,000 h
Overall length	414 mm (16.3 in)
Motor diameter	Ø 150 mm (5.9 in)
Form factor	In-rack 4U CDU

Protection functions: over-temperature, over-current, over-voltage, under-voltage, stall detection, dry-run detection, internal error monitoring. Preliminary data — subject to change. Performance measured with PG25 at 25 °C.