

Submersible Recirculation Pump Type ABS XRCP 800 PE

SULZER

50 Hz

Compact, submersible, recirculation pump type XRCP is designed for pumping activated sludge in treatment plants during the nitrification and denitrification process, as well as for pumping of storm, surface and river water.

Construction

The submersible recirculation pump type XRCP is designed as a compact, water-pressure-tight unit, including propeller and bracket with well proven automatic coupling system using a single guide rail. The single guide rail coupling system guarantees quick and economical installation to DIN-flange. The XRCP is available in standard material versions cast iron (EC).

Maximum allowable temperature of the medium for continuous operation is 40 °C.

Motor:

Premium Efficiency IE3, squirrel cage, 3-phase, 4-pole, 50 Hz, insulation class H (motor winding protected by temperature sensor 140 °C), max. submergence 20 m.

Propeller:

Technically optimized, axially operating 3-blade propellers with very good self-cleaning effect for vibration-free operation. The propellers are designed to achieve high thrusts and therefore a high flow capacity in axial direction.

Bearings:

All bearings are lubricated-for-life and maintenance-free, with a calculated lifetime of more than 100,000 h.

Gearbox:

High-efficiency planetary gearbox, fatigue strength with a calculated life time more than 100,000 h.

Shaft sealing:

Mechanical seal: Silicon carbide / Silicon carbide. O-Rings / lip seals: NBR.

Seal monitoring:

DI-system with sensors in the oil*, motor and cable connection chambers. Only one single control wire.

Temperature monitoring:

TCS-Thermo-Control-System with thermal sensors in the stator which open at 140 °C.

Cable:

10 m, sewage-resistant material.

Optional lengths (m):

15, 20, 30, 40, 50.

Options:

Seals in viton, PTC or PT 100 in the stator, EMC cable, insulation class H*.

Weight:

XRCP 800-PE 300/4 = 675 kg.

* not in Ex version.



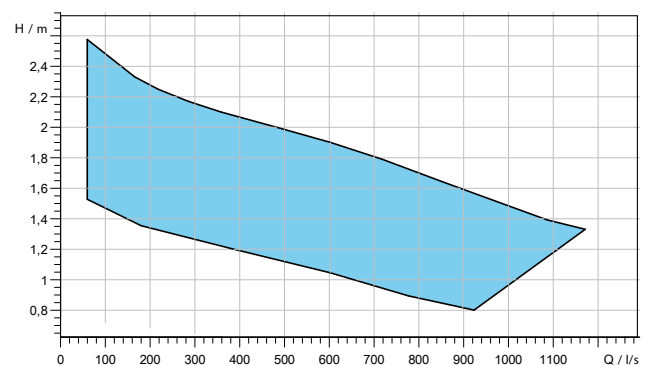
Motor data

Motor	PE 300/4
Rated power (kW)	30.0
Rated current (A) at 400 V)	56.5
Speed (min ⁻¹)	1475
Motor efficiency (%)	93.6
Power factor	0.85

Materials

Part	Material
Motor housing	EN-GJL-250 painted
Connection chamber	EN-GJL-250 painted
Motor shaft / Propeller shaft	1.4021 (AISI 420) / 42CrMo4V
Propeller	2.0975.01
Fasteners / Motor	1.4401 (AISI 316)
Bracket	1.4470 (AISI 329) / 1.4571 (AISI 316 Ti)

Performance curve



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