

Submersible Mixer Type ABS XRW 210

SULZER

60 Hz

Compact submersible mixer, designed to achieve an optimum flow pattern in a wide range of mixing and stirring applications, in large tanks and open waters.

Construction

The submersible mixer is designed as a compact, water-pressure-tight unit, with propeller and mounting bracket which allows for vertical and horizontal adjustment. A mounting kit for attachment to a square guide rail is also available. A flow ring is fitted on selected models. The mixer is available in cast iron (EC) and stainless steel (CR) versions.

Maximum allowable temperature of the medium for continuous operation is 40 °C (104 °F).

Motor:

Premium Efficiency IE3, three-phase, squirrel-cage motor; 480 V*; 60 Hz; 4-pole. Protection type IP 68, with stator insulation Class H. Start-up: direct on line (DOL)
Max. submergence 20 m (66 ft).

* other voltages available

Propeller:

Technically optimized, axially operating 2- or 3-blade propeller, designed to achieve high thrust and therefore a high flow capacity in an axial direction. The propeller is self-cleaning and so ensures vibration-free operation.

Solids deflection ring:

The patented solids deflection ring protects the mechanical seal from damage by ingress of solid or fibrous matter.

Bearings:

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

Shaft sealing:

Sic-Sic mechanical seal at medium side.
NBR O-rings and lip seals.

Seal monitoring:

DI-system with sensors in the oil, motor and cable connection chambers.

Temperature monitoring:

Thermal sensors in the stator which open at 140 °C (284 °F).

Cable:

10 m (33 ft) sewage-resistant material.

Optional lengths:

15 m (49 ft), 20 m (66 ft), 30 m (98 ft), 40 m (131 ft), 50 m (164 ft).

Options:

Explosion-proof version, additional seal (Sic-C) at motor side, flow ring, seals in viton, EMC cable, PTC thermistor in stator, vertical angle adjustment, vortex shield, lifting hoop, guide rail bracket, vibration damper.

Weight:

41 kg (90 lbs).

With flow ring add 5.2 kg (11.5 lbs).



Motor data

Motor	PA 18/4
Rated power (kW/hp)	1.8 / 2.4
Rated current (A) at 480 V	3.5
Speed (min ⁻¹)	1735
Motor efficiency (%)	85.2
Power factor	0.73

Mixer performance

Hydraulic No.	Mixer power P _p in kW/hp	Motor kW/hp
2121	1.10 / 1.50	1.8 / 2.4
2131	1.54 / 2.06	1.8 / 2.4

Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250 painted	1.4404
Motor shaft	1.4021	1.4401
Propeller	1.4460	1.4460
Fasteners	1.4401	1.4401
Lifting band	1.4404	1.4404

Material comparison	
Europe	USA
EN 1561; EN-GJL-250	ASTM A48; Class 35 B
1.4021	ASTM / AISI 420
1.4401	AISI 316
1.4404	AISI 316 L
1.4460	AISI 329