

Submersible Mixer Type ABS XRW 300

SULZER

50 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, including propeller and integrally casted installation bracket for attachment to a square guide tube. 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.

Motor:

Premium Efficiency IE3, three-phase, squirrel-cage motor; 400 V *, 50 Hz, 6-pole. Protection type IP68, with stator insulation Class H.

* other voltages available

Start-up:

direct on line (DOL). Max. submergence 20 m.

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 chamber (not in Ex version), motor chamber, and cable connection chamber.

Temperature monitoring:

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:

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

Weight:

XRW-PA 15/6 = 62 kg;

XRW-PA 29/6 = 82 kg.

With flow ring add 11 kg.



Motor data

Motor	PA 15/6	PA 29/6
Rated power (kW)	1.5	2.9
Rated current at 400 V (A)	3.5	7.3
Speed (min⁻¹)	958	971
Motor efficiency (%)	81.4	83.7
Power factor	0.77	0.72

Mixer performance

Hydraulic No.	Mixer power P_p in kW	Motor kW
3021	0.9	1.5
3022	1.2	1.5
3023	1.3	1.5
3031	1.6	2.9
3032	2.1	2.9
3033	2.8	2.9
3041*	0.6	1.5
3042*	0.7	1.5
3043*	0.9	1.5
3051*	1.2	2.9
3052*	1.5	2.9
3053*	2.0	2.9

*with flow ring

Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250 painted	1.4404 (AISI 316L)
Sliding bracket	EN-GJL-250 painted / polyamide (CF-8M)	1.4408 / polyamide (CF-8M)
Motor shaft	1.4021 (AISI 420)	1.4401 (AISI 316)
Propeller	1.4460 (AISI 329)	1.4460 (AISI 329)
Fasteners	1.4401 (AISI 316)	1.4401 (AISI 316)
Lifting band	1.4404 (AISI 316L)	1.4404 (AISI 316L)