# Submersible Mixer Type ABS XRW 300

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

Motor: Premium Efficiency IE3, three-phase, squirrel-cage motor; 400 V\*; 50 Hz; 6-pole.

Protection type IP 68, with stator insulation Class H.

Start-up: direct on line (DOL) Max. submergence 20 m.

\* 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 0-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.

Cable: 10 m sewage-resistant CSM material, type S1BN8-F. Optional lengths (m): 15, 20, 30, 40, 50.

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, vibration damper, lifting hoop.

Weight (kg): 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 (A) at 400 V	3.5	7.3
Speed (min <sup>-1</sup> )	958	971
Motor efficiency (%)	82.5	85.6
Power factor	0.77	0.72

### Mixer performance

Mixer power	Motor
P <sub>P</sub> in kW	kW
0.9	1.5
1.2	1.5
1.3	1.5
1.6	2.9
2.1	2.9
2.8	2.9
0.6	1.5
0.7	1.5
0.9	1.5
1.2	2.9
1.5	2.9
2.0	2.9
	P <sub>P</sub> in kW  0.9  1.2  1.3  1.6  2.1  2.8  0.6  0.7  0.9  1.2  1.5

<sup>\*</sup>with flow ring

## **Materials**

Part	EC	CR
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)



<sup>\*\*</sup> not in Ex version.