

Submersible Mixer Type ABS XRW 900

The compact submersible mixers have been designed for a wide range of applications. The units are suitable to achieve a flow pattern in large tanks and open waters for mixing and stirring applications.

Construction

The submersible mixer is designed as a compact, water-pressure-tight unit including propeller and integrally casted installation bracket for the attachment on the square guide tube. Different versions with an open, closed bracket or a flow ring can be chosen. The mixers are available in two standard material versions; cast iron (EC), and stainless steel (CR). 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 F (155 °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.

Solids deflection ring

The 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.

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

Leakage sensor $\overline{(\mathrm{DI})}$ in the junction box, oil chamber*, and motor.

* not in Ex version.

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, flow ring, seals in viton, PTC in the stator, vibration damper, lifting bracket, additional seal (C-Cr) at motor side, EMC cable.



Weight

XRW 900	Weight (kg)	Weight (kg) with flow ring
PA 110/4	250 kg	320 kg
150/4	285 kg	355 kg
220/4	310 kg	380 kg

Motor Data

Motor	PA 110/4	PA 150/4	PA 220/4
Rated power (kW)	11.0	15.0	22.0
Rated current at 400 V (A)	21.7	29.9	44.8
Speed (r/min)	246¹	246¹ / 295²	295 ²
Motor efficiency (%)	92.1	92.3	92.1
Power factor	0.79	0.78	0.77

 $^{^{1}}$ = gear ratio i = 6; 2 = gear ratio i = 5

Mixer performance

Hydraulic No.	Mixer power P _p in kW	Motor kW
9032	7.2	11.0
9033	8.1	11.0
9034	8.9	11.0
9035	10.6	15.0
9033	13.1	15.0
9034	14.6	22.0
9035	18.5	22.0

Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250 painted	1.4404 (AISI 316 L)
Sliding bracket	EN-GJL-250 painted / polyamide (CF-8M)	1.4470 / polyamide (CF-8M)
Motor shaft	1.4021 / EN-GJS-700-3	1.4021 / EN-GJS-700-3
Propeller	1.4571 (AISI 316 Ti)	1.4571 (AISI 316 Ti)
Fasteners	1.4401 (AISI 316)	1.4401 (AISI 316)

sulzer.com

Submersible Mixer Type ABS XRW 900 50Hz en 07.2025, Copyright © Sulzer Ltd 2025

This document does not provide a warranty or guarantee of any kind. Please contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.

TECHNICAL DATASHEET 2