

Submersible Mixer Type ABS XRW 210

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.

Motor: Premium Efficiency IE3, three-phase, squirrel-cage motor; 400 V*; 50 Hz; 4-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 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.

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, lifting hoop, guide rail bracket, vibration damper.

Weight (kg): XRW-PA 08/4 = 33 kg; XRW-PA 15/4 = 41 kg. With flow ring add 5.2 kg.

** not in Ex version.

Materials

Part	EC	CR
Motor housing	EN-GJL-250 painted	1.4404 [AISI 316L]
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]

50 Hz



Motor data

Motor	PA 08/4	PA 15/4
Rated power (kW)	0.8	1.5
Rated current (A) at 400 V	1.8	3.7
Speed (min ⁻¹)	1424	1437
Motor efficiency (%)	82.5	85.3
Power factor	0.75	0.70

Mixer performance

Hydraulic No.	Mixer power P _p in kW	Motor kW
2121	0.7	0.8
2131	0.9	1.5
2132	1.2	1.5
2133	1.4	1.5
2141*	0.3	0.8
2151*	0.5	1.5
2152*	0.8	1.5
2153*	0.9	1.5

*with flow ring

SULZER