

# Submersible Mixer Type ABS XRW 330

# SULZER

## 50 Hz

The compact submersible stainless steel mixer type ABS XRW 330 is specifically designed for the major mixing functions during the homogenization of sludge and slurry.

## Construction

The submersible mixer is designed as a compact, water-pressure-tight unit, including propeller and integrally cast installation bracket for attachment to a square guide tube. Maximum allowable temperature of the medium for continuous operation is 40 °C.

### Motor

Premium Efficiency, IE3 equivalent, sensorless permanent-magnet motor with high overload capacity; 50 Hz; 10-pole; 400 V\* using variable frequency drive (VFD) control. Protection type IP68, with stator insulation Class F.

### Start-up

Variable frequency drive (VFD). Max. submergence 20 m.

### Propeller

The mixer is equipped with a special 2-blade mixed-flow propeller. With this propeller a very strong rotating turbulent flow is produced in a semi-axial flow direction. Therefore this propeller combines all properties for the homogenization of sewage sludge that belong to the intrinsic viscous substances.

### Solids deflection ring

Enhanced solids deflection ring design. 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, covered mechanical seal at medium side. NBR o-rings and lip seals.

### Seal monitoring

System with leakage sensors (DI) in the oil\*\*, motor and cable connection chambers.

### Temperature monitoring

Overtemperature protection using a PTC thermistor in the stator at 140 °C.

### Cable

10 m sewage-resistant shielded cable.

Optional lengths (m): 15, 20, 30, 40, 50.

### Options

Explosion-proof version, additional seal (C-Cr) at motor side, seals in viton, vibration damper, lifting hoop.

### Weight

80 kg.

\* other voltages available

\*\* not in Ex version.



## System data

Motor	PM 30/10	PM 50/10
Rated power (kW)	3.0	5.0
Motor efficiency (%)	90.7	88.9
Variable Frequency Drive (VFD)	A	B
Rated power (kW)	4.0	5.5
Rated current (A) at 400 V	9.9	12.9

**Total system efficiency (%)**      **88.0**      **86.5**

## Mixer performance

Hydraulic No.	Mixer power $P_p$ in kW	Motor kW
3311 A	1.2	3.0
3312 A	1.5	3.0
3313 A	2.0	3.0
3311 B	2.5	5.0
3312 B	3.0	5.0
3313 B	3.5	5.0
3314 B	4.0	5.0
3315 B	4.5	5.0

## Materials

Part	
Motor housing	1.4404 (AISI 316 L)
Sliding bracket	1.4470 (AISI 329) / polyamide (CF-8M)
Motor shaft	1.4401 (AISI 316)
Propeller	1.4571 (AISI 316 Ti)
Fasteners	1.4401 (AISI 316)
Lifting band	1.4571 (AISI 316 Ti)