

# Submersible Mixer Type ABS RW 900

# SULZER

## 50 Hz

The compact submersible mixers have been designed for a wide range of applications. The units are suitable to achieve 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 attachment on the square guide tube. Different versions with a bracket for vertical angle adjustment, a flushing system (option) for the mechanical seal and / or a flow ring can be chosen. The mixers are available in two standard material versions:

**EC = cast iron version, CR = stainless steel version**

Maximum allowable temperature of the medium for continuous operation is 40 °C.

### Motor

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 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.

### Gearbox

High efficiency planetary gearbox, fatigue strength with a calculated lifetime more than 100 000 h.

### Shaft sealing

Mechanical seal: Silicon carbide / Silicon carbide.

O-Rings / lip seals: NBR.

### Seal monitoring

DI-system with a sensor in the junction box.

### Temperature monitoring

TCS-Thermo-Control-System with thermal sensors in the stator which open at 140 °C.

### Cable

10 m sewage-resistant material.

Optional lengths (m): 15, 20, 25, 30.

### Options

Explosion-proof version, flow ring, seals in viton, cable protection sleeve, PTC or PT 100 in the stator.

### Accessories

Lifting bracket, vertical angle adjustment, flush system for the mechanical seal.

### Weight

Without flow ring: 180/185/210 kg.

With flow ring: 258/263/288 kg.



## Motor data

Motor	A 110/4	A 150/4	A 220/4
Rated power (kW)	11.0	15.0	22.0
Rated current at 400 V (A)	22.8	31.3	43.9
Speed (min <sup>-1</sup> )	238 <sup>1</sup>	238 <sup>1</sup> / 285 <sup>2</sup>	285 <sup>2</sup>
Motor efficiency (%)	84.9	84.0	85.4
Power factor	0.86	0.82	0.85

<sup>1</sup> gear ratio i = 6; <sup>2</sup> gear ratio i = 5

## Mixer performance table

Hydraulic No.	Mixer power P <sub>p</sub> in kW	Motor kW
9032	7.0	11.0
9033	7.8	11.0
9034	8.4	11.0
9035	10.2	15.0
9033	11.5	15.0
9034	14.4	22.0
9035	18.5	22.0
9052*	5.6	11.0
9053*	6.3	11.0
9054*	6.8	11.0
9055*	8.2	15.0
9053*	9.0	15.0
9054*	11.3	22.0
9055*	13.9	22.0

\*with flow ring

## Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250 painted	1.4571 (AISI 316 Ti)
Sliding bracket	EN-GJS-400-18 painted / polyamide	1.4408 / polyamide (CF-8M)
Motor shaft / Propeller 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)

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