

# Submersible Mixer Type ABS RW 300

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 the attachment on the square guide tube. Different versions with a bracket for vertical angle adjustment 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, 6-pole 50 Hz, insulation class F (155 °C), max. submergence 20 m.

## Propeller

Technically optimized, axially operating 2- or 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 life time of 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 oil chamber.

## Temperature monitoring

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

## Cable

10 m sewage resistant CSM material. Type: HO7RN.

**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, vortex shield.

**Weight:** Without flow ring: 48/51 kg. With flow ring: 54/57 kg.

## Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250, painted	1.4571 (AISI 316)
Sliding bracket	EN-GJL-250/EN-GJS-400-18 painted, polyamide	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)

50 Hz



## Motor data

Motor	A 15/6	A 28/6
Rated power (kW)	1.5	2.8
Rated current at 400 V (A)	4.6	8.4
Speed (min <sup>-1</sup> )	904	894
Motor efficiency (%)	68	69
Power factor	0.70	0.70

## Mixer performance table

Hydraulic No.	Mixer power P <sub>P</sub> in kW	Motor kW
3021	0.7	1.5
3022	0.9	1.5
3031	1.0	1.5
3032	1.5	2.8
3033	2.0	2.8
3034	2.5	2.8
3041*	0.5	1.5
3042*	0.7	1.5
3051*	0.8	1.5
3052*	1.2	2.8
3053*	1.6	2.8
3054*	2.0	2.8

\*with flow ring

**SULZER**