

The compact ABS 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, 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**

## Motor

Squirrel cage, 3-phase, 8-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 and junction box.

## 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, shock absorber, vortex shield, flush system for the mechanical seal.

**Weight:** Without flow ring: 96 kg. With flow ring: 102 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]	1.4404 [AISI 316]
Propeller	1.4571 [AISI 316]	1.4571 [AISI 316]
Fasteners	1.4401 [AISI 316]	1.4401 [AISI 316]

# 50 Hz



## Motor data

Motor	A 30/8	A 40/8
Rated power (kW)	3.0	4.0
Rated current at 400 V [A]	9.3	10.9
Speed (min <sup>-1</sup> )	702	680
Motor efficiency (%)	72	71
Power factor	0.65	0.74

## Mixer performance table

Hydraulic No.	Mixer power P <sub>p</sub> in kW	Motor kW
4021	1.1	3.0
4022	1.3	3.0
4023	1.6	3.0
4024	2.0	3.0
4031	2.6	4.0
4032	3.0	4.0
4033	3.5	4.0
4041*	0.8	3.0
4042*	1.0	3.0
4043*	1.3	3.0
4044*	1.6	3.0
4051*	2.1	4.0
4052*	2.4	4.0
4053*	2.8	4.0

\*with flow ring

