

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, 12-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: H07RN.

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: 150/180/200 kg. With flow ring: 168/198/218 kg.

Materials

Part	EC (cast iron)	CR (stainless steel)
Motor housing	EN-GJL-250, painted	1.4571 (AISI 316)
Sliding bracket	EN-GJS-400-18 painted, polyamide	1.4408 / polyamide (CF-8M)
Motor shaft	1.4021 (AISI 420)	1.4401 (AISI 316)
Propeller	1.4571 (AISI 316)	1.4571 (AISI 316)
Fasteners	1.4401 (AISI 316)	1.4401 (AISI 316)



Motor data

Motor	A 50/12	A 75/12	A100/12
Rated power (kW)	5.0	7.5	10.0
Rated current at 400 V (A)	18.2	24.5	31.9
Speed (min ⁻¹)	470	462	470
Motor efficiency (%)	70.4	72.6	75.1
Power factor	0.56	0.61	0.60

Mixer performance table

Hydraulic No.	Mixer power P _p in kW	Motor kW
6521	2.1	5.0
6522	2.5	5.0
6523	3.2	5.0
6524	3.9	5.0
6525	4.2	5.0
6531	5.0	7.5
6532	6.4	7.5
6533	8.0	10.0
6541*	2.0	5.0
6542*	2.2	5.0
6543*	2.6	5.0
6544*	2.8	5.0
6545*	3.0	5.0
6551*	3.4	7.5
6552*	5.6	7.5
6553*	6.2	10.0

*with flow ring