

Submersible Mixer Type ABS RW 200 and 280

Compact submersible mixer for flushing and cleaning of pump sumps.

Applications

The compact submersible mixers of the RW 200 / RW 280 series are designed for mixing applications in pump sumps, i.e. the prevention of sedimentation deposits and floating scum. They have a maximum continuous running time of one hour, and up to a total of eight hours in every twenty four.

The RW 200 / 280 series can be installed regardless of the tank shape and is suitable for the cleaning of pump sumps up to \emptyset 5 m or 24 m². Depending on the intensity of mixing required, one or more mixers may be installed.

The optimum flow direction for a particular application can be achieved quite simply by adjusting the mixer position horizontally or vertically (± 30°) on the mounting bracket.

Horizontal adjustment is not possible in a guide rail installation. In a hanging installation, swivelling in the horizontal plane is facilitated by the conical threaded pipe connection.

The coupling bracket, adjusting plate, and 10 m cable with free cable ends, are supplied as standard.

For optimum selection in general mixing applications the following information is required:

- Application
- Tank / sump dimensions
- Medium to be mixed
- Viscosity and specific weight of medium
- Temperature, dry matter content etc.

Construction

- Water-pressure-tight encapsulated modular motor with cast iron housing, oil chamber and propeller, form a compact, robust, unit construction.
- 3-phase, 4-pole motor, 1 450 minimum r/min, insulation class F, protection class IP68.
- Rotor shaft supported in lubricated-for-life ball bearings.
- Tandem shaft sealing with lip seal and silicon carbide mechanical seal as standard. Option of viton mechanical seal.
- Solids deflection ring protects the mechanical seal from damage by ingress of solid or fibrous matter.
- Blockage-free, cast iron, 2-blade propeller.
- Thermal sensors in the stator give a warning and switch off the unit if excessive temperatures are reached in the motor.
- \bullet $\,$ $\,$ Maximum allowable temperature of the medium is 40 °C.

Material

Description	Material	
Motor housing	Cast iron EN-GJL-250	
Motor shaft	Stainless steel 1.4021 (AISI 420)	
Oil chamber	Cast iron EN-GJL-250	
Propeller	Cast iron EN-GJL-250	
Fasteners	Stainless steel 1.4401 (AISI 316)	



50 Hz

Features

- · Easy installation
- Small space requirements
- Adjustable bracket allows direction to be altered
- · Guide rail mounting option
- · Cast iron housing
- Wear-resisting propeller
- · High power reserves
- · Patented solids deflection ring
- Modular motor
- Available as standard or explosion-proof

Identification code: e.g. RW 2022 13/4 Ex Hvdraulics:

RW...... Mixer series
20 Propeller diameter (cm) nominal
2 Propeller type
2 Hydraulic number

Motor:
13 Motor power P_a kW x 10

Ex Motor version (EX only on request)

4 Number of poles

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Accessories

Description		Part no.
	wall or floor	62995000
	wall (extended)	62990006
	pipe G 1½"	62990007
Mounting brackets	guide rail 60 x 60 mm open	61265048
	guide rail 60 x 60 mm closed	61265049
	guide rail 50 x 50 mm open	61265050
	guide rail 50 x 50 mm closed	61265051
Concrete base		62990008

Technical data

RW	2022	2822
Motor	S13/4	S25/4
Propeller diameter (mm)	185	280
Propeller angle	16°	16°
Speed (r/min)	1 450	1 450
Motor power (kW)*	$P_1 = 1.9 / P_2 = 1.3$	$P_1 = 3.3 / P_2 = 2.5$
Rated voltage (V)	230 3~, 400 3~	230 3~, 400 3~
Rated current (A): 230 V / 400 V	6.3 / 3.6	10.1 / 5.8
Cable type (TL90 07RN-F)	4G1.5 + 3x0.5	4G1.5 + 3x0.5
Cable length (m)	10, 20, 30, 40, 50	10, 20, 30, 40, 50
Weight (kg)	26.0	32.0

^{*} P_1 = Power taken from mains. P_2 = Power at motor shaft.

Maximum Tank Sizes



RW 200: Ø 3.5 m RW 280: Ø 5.0 m



RW 200: 3.0 x 5.0 m RW 280: 4.0 x 6.0 m

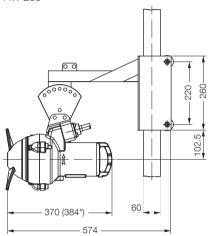
TECHNICAL DATA SHEET 2

Dimensions (mm)

Guide rail (square tube)

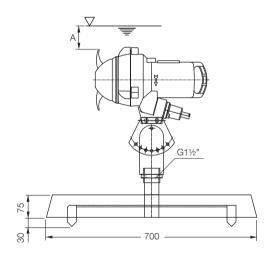
for easy installation and removal

* RW 280



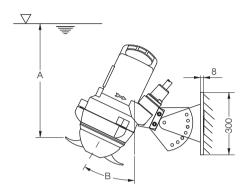
Floor mounted

on moveable concrete base



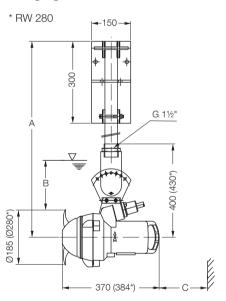
A = min. 400 mm

Wall mounted



 $\mathbf{A} = \min. 500 \text{ mm}$ $\mathbf{B} = \max. 30^{\circ}$

Hanging installation



A = max. 2 m **B** = min. 400 mm **C** = min. 450 mm

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