

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 Ø 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 ($\pm 30^\circ$) 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.
- Single- and three-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.
- Maximum allowable temperature of the medium is 40 °C.



60 Hz

Materials

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)

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

Hydraulics:

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

Motor:

13 Motor power P₂ kW x 10
 4 Number of poles
 Ex Motor version (EX only on request)

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	2821
Motor	S16/4	S18/4	S28/4
Propeller diameter (mm)	185	185	250
Propeller angle	16°	16°	16°
Speed (rpm)	1 750	1 750	1 750
Motor power (kW)*	P _s = 1.57	P _s = 1.79	P _s = 2.83
Rated voltage (V)	3 ~ 208, 230, 380, 460, 575	1 ~ 115 (not Ex) 208, 230	3~ 208, 230, 380, 460, 575
Rated current (A): 230 V / 460 V / 575 V	7.2 / 3.6 / 2.9	12.1 / - / -	10.9 / 5.5 / 4.4
Cable type	SOW-A 14/7	SOW-A 14/7	SOW-A 14/7
Cable length (m)	10, 20, 30, 40, 50	10, 20, 30, 40, 50	10, 20, 30, 40, 50
Weight (kg)	25.85	31.75	31.75

* P₂ = Power at motor shaft.

Maximum Tank Sizes



RW 200: Ø 3.5 m
RW 280: Ø 5.0 m



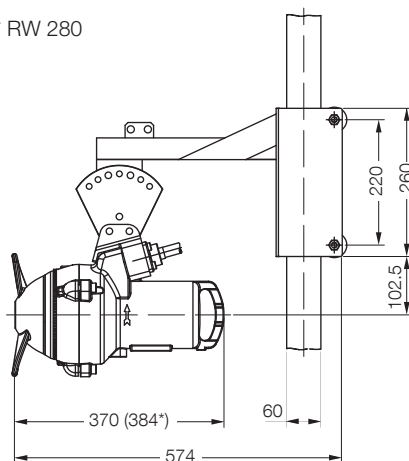
RW 200: 3.0 x 5.0 m
RW 280: 4.0 x 6.0 m

Dimensions (mm)

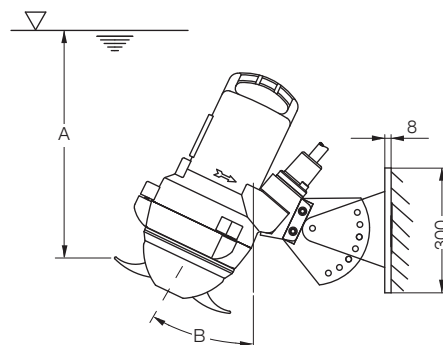
Guide rail (square tube)

for easy installation and removal

* RW 280



Wall mounted

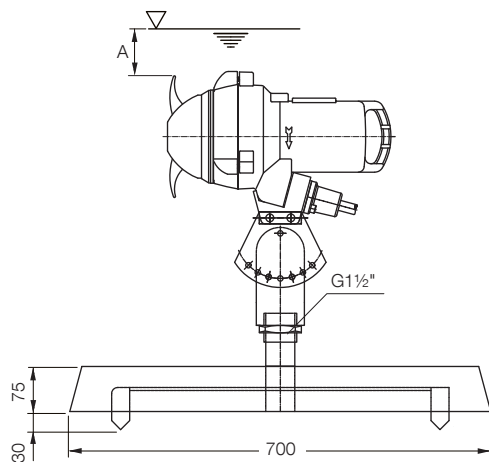


A = min. 500 mm

B = max. 30°

Floor mounted

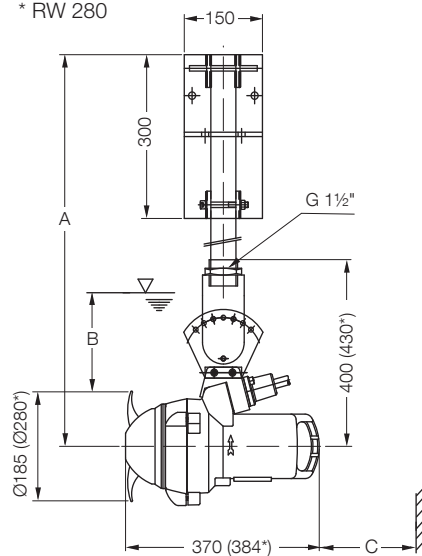
on moveable concrete base



A = min. 400 mm

Hanging installation

* RW 280



A = max. 2 m

B = min. 400 mm

C = min. 450 mm

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