

# ABS submersible mixer RW 200 and 280

Compact submersible mixer for flushing and cleaning of pump sumps, plus a wide range of applications in sewage treatment plants and industrial mixing applications.

## Applications

The compact ABS submersible mixers of the RW 200 and 280 series have been designed for a wide range of applications. As well as for the prevention of deposits and floating crusts in pump sumps, the units are also ideal for a variety of mixing and stirring applications in sewage treatment plants and in industrial areas.

Depending on the intensity of mixing required, and the flow formation needed, one or more mixers may be installed. RW 200 and 280 series is suitable for the cleaning of sumps up to 5-m diameter or 24 square meters.

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; 1450 minimum r/min; insulation class F; protection class IP 68.
- 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 double mechanical seal.
- Patented 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.

**Identification code:** RW 2022 13/4 Ex

## Hydraulics:

- RW** ..... Mixer series  
**20** ..... Propeller diameter (cm) nominal  
**2** ..... Propeller type  
**2** ..... Hydraulic no.

## Motor:

- 13** ..... Motor power  $P_2$  kW x 10  
**4** ..... Number of poles  
**Ex** ..... Motor version (EX only on request)

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

## 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)

## Accessories

Description	Part no.
<b>Mounting Brackets:</b>	
wall or floor	62995000
wall (extended)	62990006
pipe G 1½"	62990007
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
<b>Concrete Base</b>	62990008

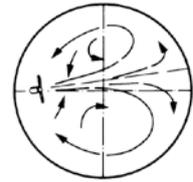
## Technical Data

RW	2022	2822
Motor	S13/4	S25/4
Propeller: diameter (mm)	200	280
angle	16°	16°
Speed (r/min)	1450	1450
Motor power* (kW)	P <sub>1</sub> = 1.9 P <sub>2</sub> = 1.3	P <sub>1</sub> = 3.3 P <sub>2</sub> = 2.5
Rated voltage [V]	230; 400 3~	230; 400 3~
Rated current [A] 230 V	6.3	10.1
400 V	3.6	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

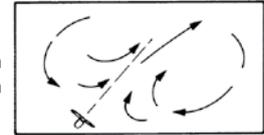
P<sub>1</sub> = Power at mains; P<sub>2</sub> = Power at rotor shaft

## Maximum Tank Sizes

RW 200: Ø 3.5 m  
RW 280: Ø 5.0 m



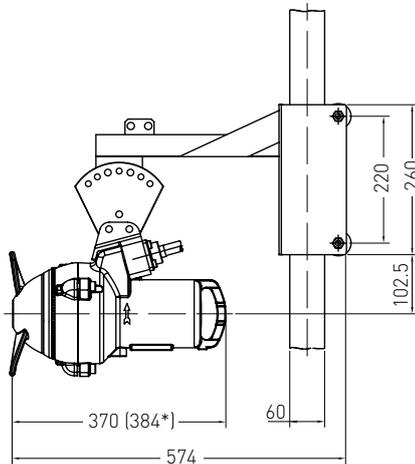
RW 200: 3.0 x 5.0 m  
RW 280: 4.0 x 6.0 m



## Dimensions (mm)

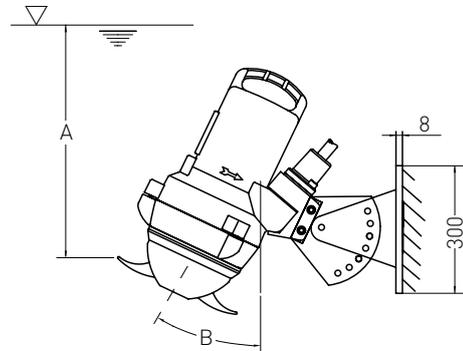
### Guide Rail

for easy installation and removal



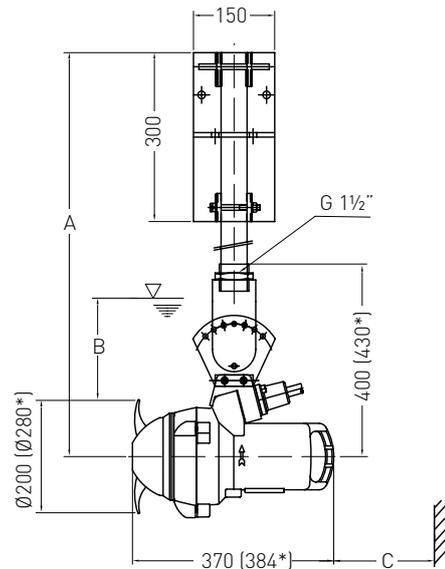
\* RW 280

### Wall Mounted



**A** = min. 500 mm; **B** = max. 30°

### Hanging Installation

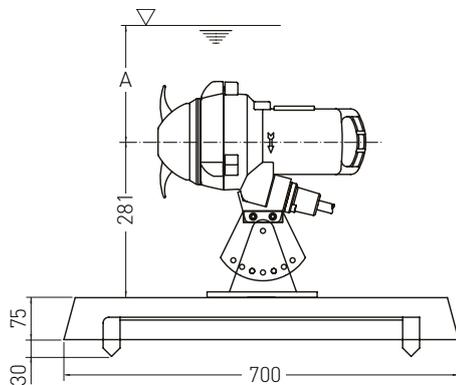


**A** = max. 2 m; **B** = min. 400 mm; **C** = min. 450 mm

\*RW 280

### Floor Mounted

on moveable concrete base



**A** = min. 400 mm