

Submersible Mixer Type ABS RW 200 and 280

SULZER

60 Hz

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 16-ft diameter or 260-ft square. 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 33 ft 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, 1 750 minimum rpm, 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.
- 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.
- Maximum allowable temperature of the medium is 40 °C [104 °F].

Materials

Cast iron	
Motor housing	ASTM A48 Class 40B
Oil chamber	ASTM A48 Class 40B
Propeller	ASTM A48 Class 40B
Stainless steel	
Motor shaft	AISI 420 or 316 (1.4021 or 1.4401)
Fasteners	AISI 316 (1.4401)



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 no.

Motor:

13 Motor power P_2 (hp) x 10
 4 Motor polarity
 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 2.4" x 2.4" open	61265048
	guide rail 2.4" x 2.4" closed	61265049
	guide rail 2.0" x 2.0" open	61265050
	guide rail 2.0" x 2.0" closed	61265051

Technical Data

RW	2022	2022	2821
Motor	S16/4	S18/4	S28/4
Propeller diameter [ins]	7.3	7.3	9.8
Propeller angle	16°	16°	16°
Speed [rpm]	1 750	1 750	1 750
Motor power [hp]*	$P_2 = 2.1$	$P_2 = 2.4$	$P_2 = 3.8$
Rated voltage [V]	Three phase 208, 230, 380 460, 575	Single phase 115 (not FM) 208, 230	Three phase 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 [ft]	33, 66, 98, 131, 164	33, 66, 98, 131, 164	33, 66, 98, 131, 164
Weight [lbs]	57	70	70

* P_2 = Power at motor shaft.

Maximum Keep-Tank Sizes

RW 200: Ø 11 ft
RW 280: Ø 16 ft

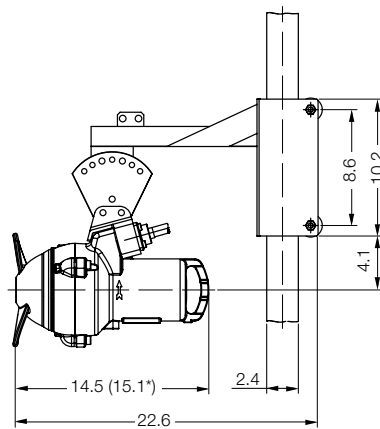


RW 200: 10 x 16 ft
RW 280: 13 x 20 ft



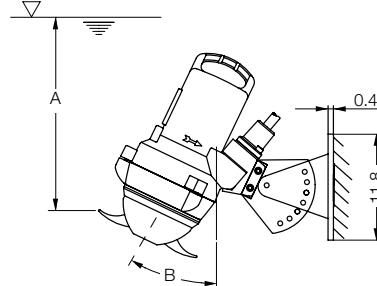
Dimensions (ins)

Guide rail (square tube)
for easy installation and removal



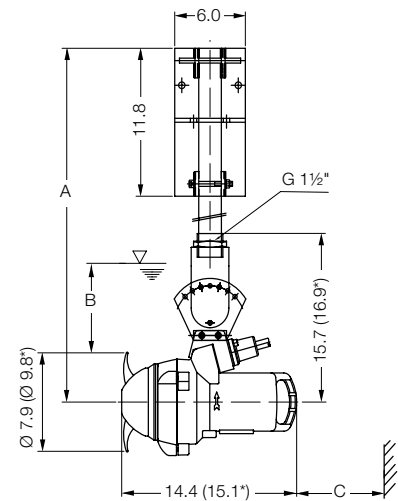
* RW 280

Wall mounted



A = min. 19.7 ins B = max. 30°

Hanging installation



A = max. 78.7 ins B = min. 15.7 ins
C = min. 17.8 ins

* RW 280