



RoboWhirl

RM40DJ

50 Hz

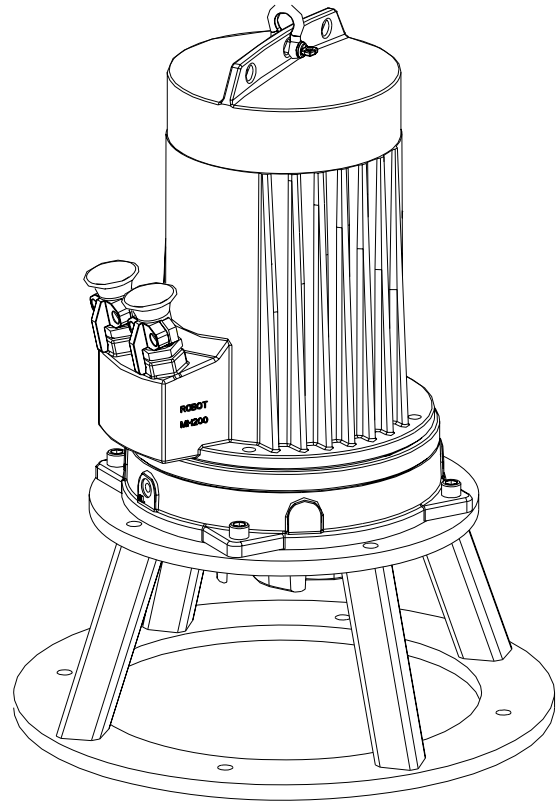
The RoboWhirl agitators are used to prevent the accumulation of solids and sludge at the bottom of pump sumps and in storm water collecting pits. The turbulence created by the RoboWhirl prevents the formation of a floating crust at the water surface.

Mixer

effective working area : up to Ø12 m
 absorbed electrical power in clean water : 5.5 kW
 impeller diameter : 135 mm
 (diameter Nihard 4 impeller : 180 mm)
 effective working distance depends on weight- and volume concentration of the solids in the fluid.

Motor

rated shaft power : 5.0 kW
 rated electrical power : 6.3 kW
 mains : 50 Hz - 3 phase
 nominal speed : 1420 rpm
 motor efficiency : 79 %
 rated power factor (cos phi) : 0.82
 degree of protection : IP 68
 isolation class : F (155 °C)
 max. water temperature : 40 °C
 (higher temp. on request)
 standard cable length : 10 m



Materials

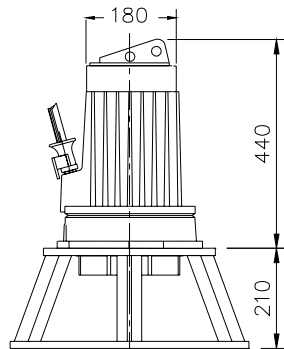
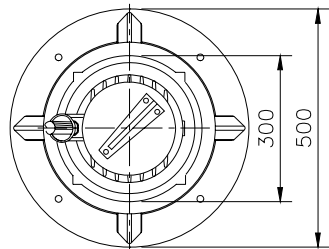
motor housing : 1
 seal housing : 1
 impeller : 2 5,12
 shaft : 3 5
 support : 11, 5
 bolts : 4 5
 elastomers : 8+9 10
 electrical cable : 9
 mechanical seals : oil lubricated
 pump seal : silicon carbide-silicon carbide
 motor seal : carbon-ceramic
 primer : Alkyd primer
 top coating : Two component high-build polyurethane coating

1	cast iron	EN-GJL-250
2	sg cast iron	EN-GJS-400-15
3	stainless steel 431	X20 CrNi 17 2
4	stainless steel 304	X5 CrNi 18 10
5	stainless steel 316	X5 CrNiMo 17 12 2
6	stainless steel 329	X4 CrNiMoN 27 5 2
7	wear resistant sg iron	HB 500
8	nitrile	(NBR)
9	neoprene	(CR)
10	viton	(FPM)
11	galvanized steel	
12	Nihard 4	G-X300CrNiSi 9 5 2

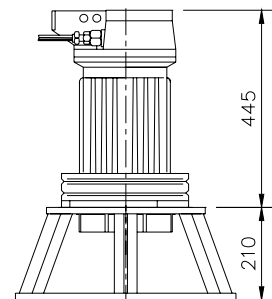
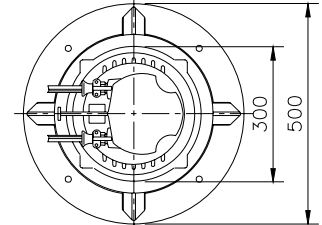


Dimensions

RM40DJ



Basic version



Version E

The motor is cooled by the surrounding water.

Versions

Version	Weight:
B Basic	85 kg
E Explosion proof version Certified according to: II 2 G Ex de IIB c T4	100 kg
N Wear resistant version Impeller and wear plate in Nihard 4	90 kg
EN Explosion proof and wear resistant version Certified according to: II 2 G Ex de IIB c T4	105 kg

Optional:

Thermoswitches in motorwindings
Standard for explosion proof version (2 sets) and cooling system

Flexible protective sheathing for cable
(AISI 316)

Water detector in motor and oil housing
(for explosion proof version only in oil housing with external cable)

Motor Connection details

voltage [V]*	rated current[A]	number of cables x number of cores x cross section [mm²]					
				with waterdetector and/or thermoswitches		explosion proof version	
		DOL-start	YD-start	DOL-start	YD-start	DOL-start	YD-start
220	20.3	1x4x2.5	1x7x1.5	1x7x2.5	1x10x1.5	1x7x2.5	1x7x2.5+1x4x2.5
380	11.7	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	1x7x2.5+1x4x2.5
400	11.1	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	1x7x2.5+1x4x2.5
415	10.7	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	1x7x2.5+1x4x2.5
500	8.9	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	1x7x2.5+1x4x2.5

starting current DOL-start : 5.0 x rated current

starting current YD-start : 1.7 x rated current

* other voltages on request

We reserve the right to alter specifications without prior notice.