



RoboWhirl

RM40DZ

50 Hz

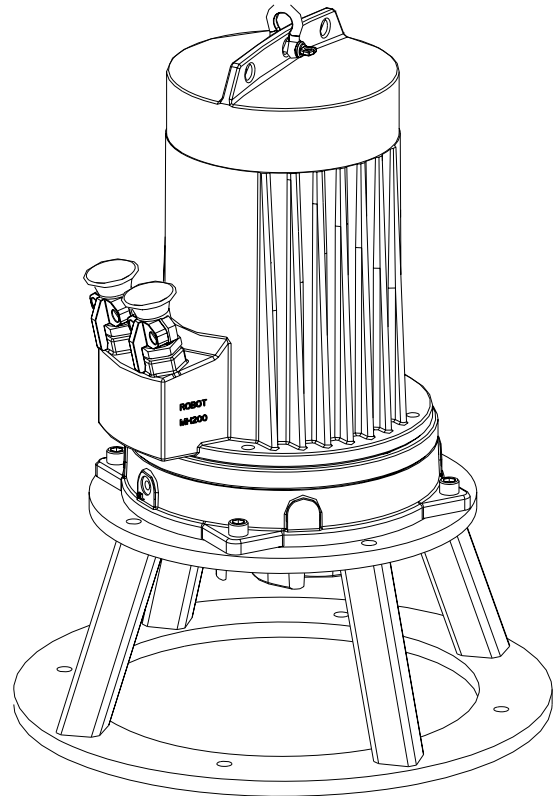
The RoboWhirl agitators are used to prevent the accumulation of solids and sludge at the bottom of pump sumps and in storm water collecting pits. The turbulence created by the RoboWhirl prevents the formation of a floating crust at the water surface.

Mixer

effective working distance : up to Ø18 m
 absorbed electrical power in clean water : 13.5 kW
 impeller diameter : 173 mm
 (diameter Nihard 4 impeller : 230 mm)
 effective working distance depends on weight- and volume concentration of the solids in the fluid.

Motor

rated shaft power : 13.0 kW
 rated electrical power : 15.1 kW
 mains : 50 Hz - 3 phase
 nominal speed : 1450 rpm
 motor efficiency : 86 %
 rated power factor (cos phi) : 0.845
 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

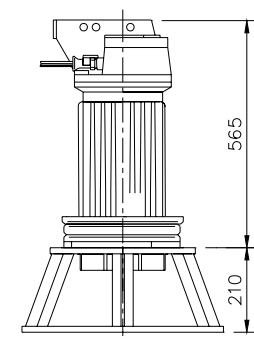
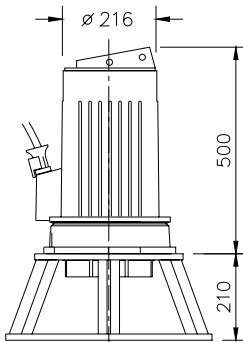
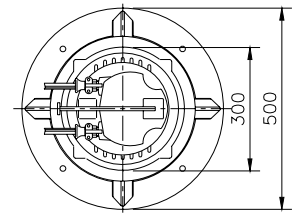
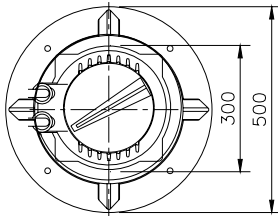
motor housing : 1
 seal housing : 1
 impeller : 2 5, 12
 shaft : 3 5
 support : 11, 5
 bolts : 4 5
 elastomers : 8+9 10
 electrical cable : 9
 mechanical seals : oil lubricated
 pump seal : silicon carbide-silicon carbide
 motor seal : carbon-ceramic
 primer : Alkyd primer
 top coating : Two component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

RM40DZ



The motor is cooled by the surrounding water.

Basic version

Version E

Versions

Version	Weight:
B Basic	111 kg
E Explosion proof version Certified according to: II 2 G Ex de IIB c T4	126 kg
N Wear resistant version Impeller and wear plate in Nihard 4	116 kg
EN Explosion proof and wear resistant version Certified according to: II 2 G Ex de IIB c T4	131 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

		number of cables x number of cores x cross section [mm ²]					
voltage [V]*	rated current[A]			with waterdetector and/or thermoswitches		explosion proof version	
		DOL-start	YD-start	DOL-start	YD-start	DOL-start	YD-start
220	47.2	1x4x10	2x4x6	1x4x10+1x4x2.5	not possible	not possible	not possible
380	27.3	1x4x6	1x7x2.5	1x4x6+1x4x2.5	1x7x2.5+1x4x2.5	1x4x6+1x4x2.5	1x7x2.5+1x4x2.5
400	26.0	1x4x4	1x7x1.5	1x4x4+1x4x2.5	1x10x1.5	1x4x6+1x4x2.5	1x7x2.5+1x4x2.5
415	25.0	1x4x4	1x7x1.5	1x4x4+1x4x2.5	1x10x1.5	1x4x6+1x4x2.5	1x7x2.5+1x4x2.5
500	20.8	1x4x4	1x7x1.5	1x4x4+1x4x2.5	1x10x1.5	1x4x6+1x4x2.5	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.