



### RoboWhirl

### RM21DD

50 Hz

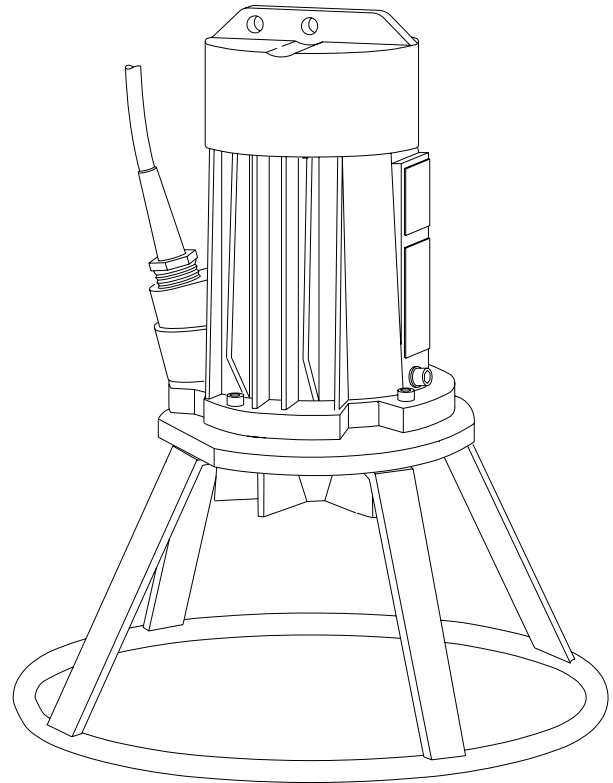
The RoboWhirl agitators are used to prevent the accumulation of solids and sludge at the bottom of pump sumps and in storm water collecting pits. The turbulence created by the RoboWhirl prevents the formation of a floating crust at the water surface.

#### Mixer

effective working distance : up to Ø8 m  
 absorbed electrical power in clean water : 2.5 kW  
 impeller diameter : 125 mm  
 (diameter Nihard 4 impeller : 150 mm)  
 effective working distance depends on weight- and volume concentration of the solids in the fluid.

#### Motor

rated shaft power : 2.2 kW  
 rated electrical power : 3.0 kW  
 mains : 50 Hz - 3 phase  
 nominal speed : 1450 rpm  
 motor efficiency : 71 %  
 rated power factor (cos phi) : 0.89  
 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

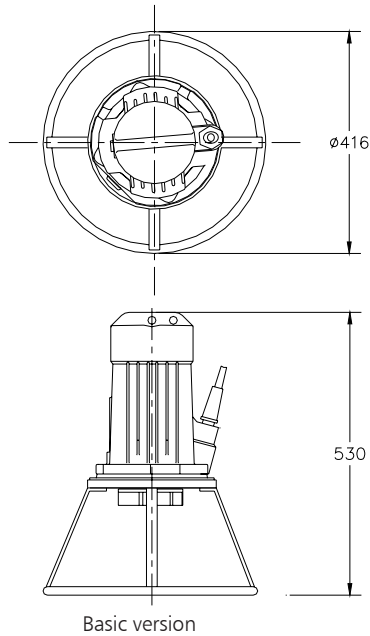
motor housing : 1  
 seal housing : 1  
 impeller : 2 5, 12  
 shaft : 3 5  
 support : 11, 5  
 bolts : 4 5  
 elastomers : 8+9 10  
 electrical cable : 9  
 mechanical seals : oil lubricated  
 pump seal : silicon carbide-silicon carbide  
 motor seal : carbon-ceramic  
 primer : Alkyd primer  
 top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



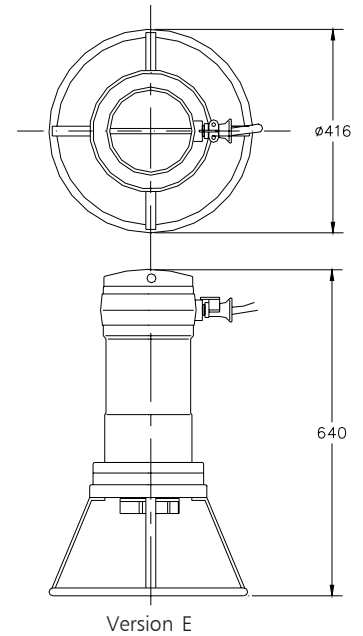
### Dimensions

### RM21DD



Basic version

The motor is cooled by the surrounding water.



Version E

### Versions

- B Basic**
- E Explosion proof version**  
Certified according to: II 2 G Ex de IIB c T4
- N Wear resistant version**  
Impeller and wear plate in Nihard 4
- EN Explosion proof and wear resistant version**  
Certified according to: II 2 G Ex de IIB c T4

### Weight:

- 42 kg
- 54 kg
- 45 kg
- 57 kg

### Optional:

- Thermoswitches** in motorwindings  
Standard for explosion proof version (2 sets)
- 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)
- Anti-rotation support**

### Motor Connection details

		number of cables x number of cores x cross section [mm <sup>2</sup> ]					
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	9.1	1x4x1.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	not possible
380	5.3	1x4x1.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	not possible
400	5.0	1x4x1.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	not possible
415	4.8	1x4x1.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	notpossible
500	4.0	1x4x1.5	1x7x1.5	1x7x1.5	1x10x1.5	1x7x2.5	not possible

starting current DOL-start : 3.4 x rated current

starting current YD-start : 1.1 x rated current

\* other voltages on request

We reserve the right to alter specifications without prior notice.