



RoboWhirl

RM21DG

50 Hz

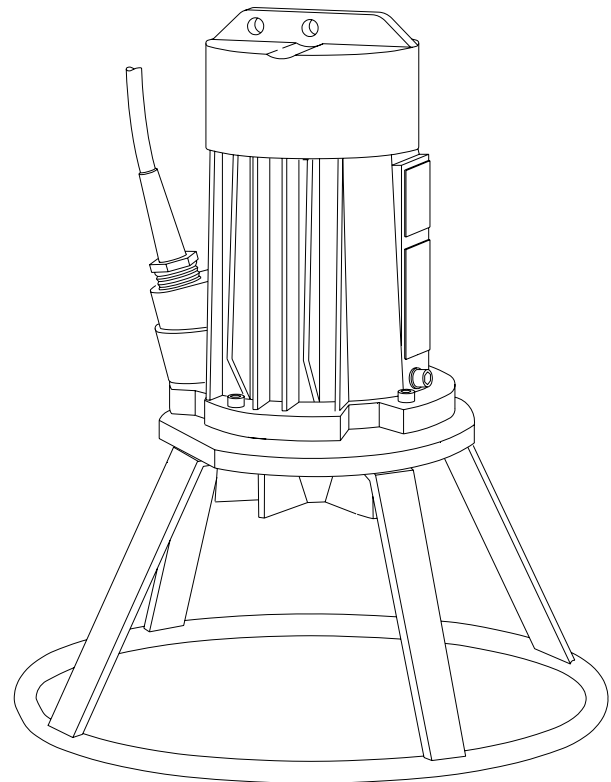
The RoboWhirl agitators are used to prevent the accumulation of solids and sludge at the bottom of pump sumps and in storm water collecting pits. The turbulence created by the RoboWhirl prevents the formation of a floating crust at the water surface.

Mixer

effective working distance : up to Ø10 m
 absorbed electrical power in clean water : 3.8 kW
 impeller diameter : 136 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 : 3.5 kW
 rated electrical power : 4.5 kW
 mains : 50 Hz - 3 phase
 nominal speed : 1450 rpm
 motor efficiency : 78 %
 rated power factor (cos phi) : 0.84
 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

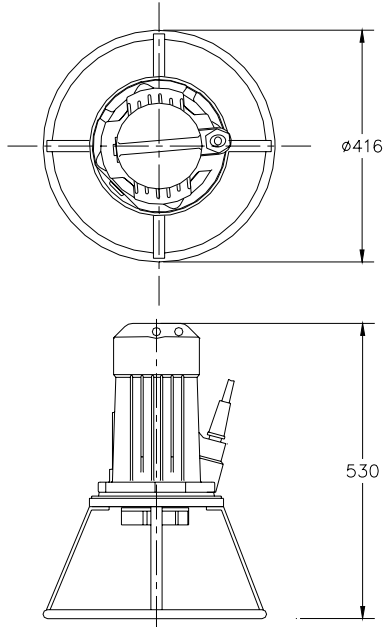
motor housing : 1
 seal housing : 1
 impeller : 2 5, 12
 shaft : 3 5
 support : 11,5
 bolts : 4 5
 elastomers : 8+9 10
 electrical cable : 9
 mechanical seals : oil lubricated
 pump seal : silicon carbide-silicon carbide
 motor seal : carbon-ceramic
 primer : Alkyd primer
 top coating : Two component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

RM21DG



The motor is cooled by the surrounding water.

Versions

B Basic

N Wear resistant version

Impeller and wear plate in Nihard 4

Weight:

42 kg

45 kg

Optional:

Thermoswitches in motorwindings

Flexible protective sheating for cable
(AISI 316)

Water detector in motor and oil housing

Anti-rotation support

Motor Connection details

voltage [V]*	rated current[A]	number of cables x number of cores x cross section [mm ²]					
		DOL-start	YD-start	with waterdetector and/or thermoswitches			
				DOL-start	YD-start		
220	14.0	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5		
380	8.1	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5		
400	7.7	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5		
415	7.4	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5		
500	6.2	1x4x2.5	1x7x1.5	1x7x1.5	1x10x1.5		

starting current DOL-start : 4.3 x rated current

* other voltages on request

starting current YD-start : 1.4 x rated current

We reserve the right to alter specifications without prior notice.