



RoboWhirl

RM21DC

50 Hz

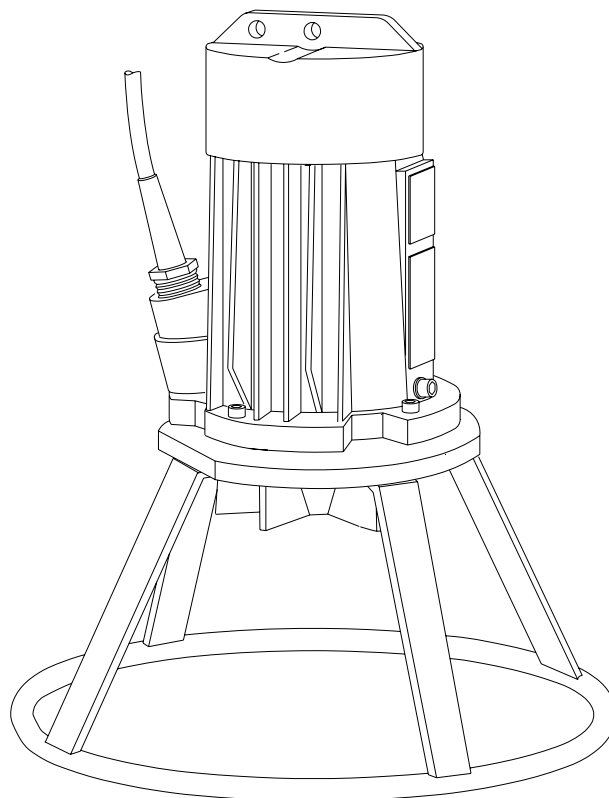
The RoboWhirl agitators are used to prevent the accumulation of solids and sludge at the bottom of pump sumps and in storm water collecting pits. The turbulence created by the RoboWhirl prevents the formation of a floating crust at the water surface.

Mixer

effective working distance : up to Ø 6 m
 absorbed electrical power in clean water : 1.8 kW
 impeller diameter : 115 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 : 1.5 kW
 rated electrical power : 2.1 kW
 mains : 50 Hz - 3 phase
 nominal speed : 1450 rpm
 motor efficiency : 71 %
 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

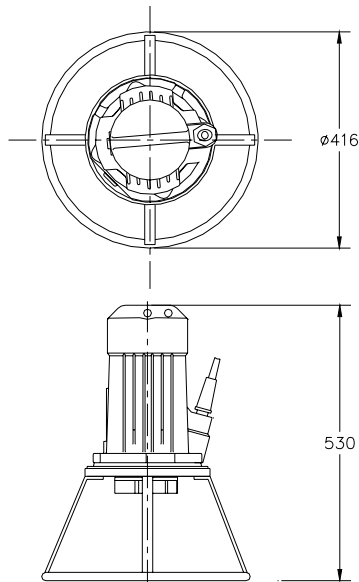


ITT

ROBOT PUMPS

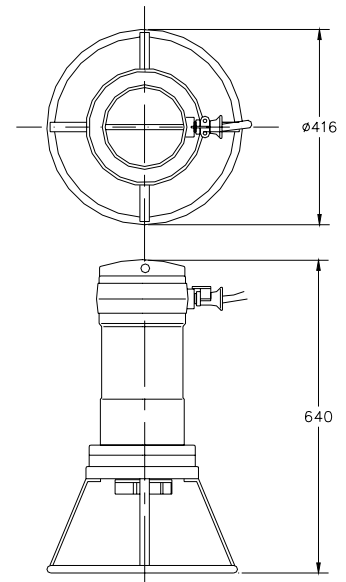
Dimensions

RM21DC



Basic version

The motor is cooled by the surrounding water.



Version E

Versions

B Basic

Weight:

42 kg

E Explosion proof version

Certified according to: II 2 G Ex de IIB c T4

54 kg

N Wear resistant version

Impeller and wear plate in Nihard 4

45 kg

EN Explosion proof and wear resistant version

Certified according to: II 2 G Ex de IIB c T4

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 ²]					
voltage [V]*	rated current[A]			with waterdetector and/or thermoswitches		explosion proof version	
		DOL-start		DOL-start		DOL-start	
220	6.6	1x4x1.5		1x7x1.5		1x7x2.5	
380	3.8	1x4x1.5		1x7x1.5		1x7x2.5	
400	3.6	1x4x1.5		1x7x1.5		1x7x2.5	
415	3.5	1x4x1.5		1x7x1.5		1x7x2.5	
500	2.9	1x4x1.5		1x7x1.5		1x7x2.5	

starting current DOL-start

: 4.8 x rated current

* other voltages on request

We reserve the right to alter specifications without prior notice.