

EBARA

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SPECIFICATION

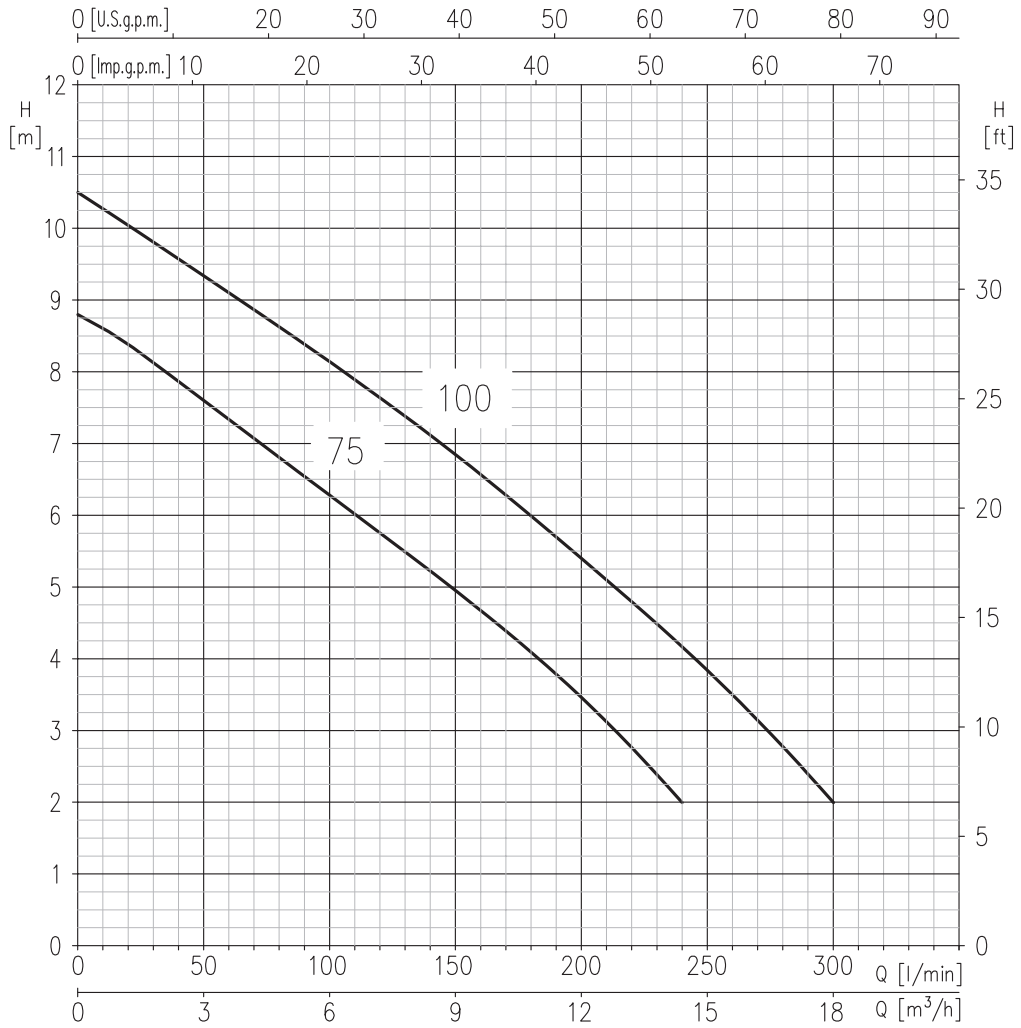
50Hz

Rev. I

PUMP		
Liquid Handled	Type of liquid	Clean and dirty water
	Max [°C]	50°
	Max solids size [mm]	35 spherical
Maximum immersion [m]		2 (with power cable length 5 m) 7 (with power cable length 10 m)
Construction	Impeller	Open vortex type
	Shaft seal type	Double mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction-Flange [mm]	35 open
	Discharge- [inch]	G1½ UNI ISO 228
Material	Casing	AISI 304
	Impeller	AISI 304
	Casing cover	AISI 304
	Shaft seal	Pump side: SiC/SiC/NBR Motor side: Carbon/Ceramic/NBR
	Seal cover	AISI 304
	Shaft	AISI 303 (Wet extension)
	Lubricating liquid	White mineral oil: Esso Marcol 152 (180 cc)
Applicable standard of test		ISO 9906:2012 – Grade 3B

MOTOR			
Type	Submersible dry type		
	Single Phase	Three Phase	
No. of Poles	2		
Rotation speed [min ⁻¹]	≈ 2875		
Insulation Class	F		
Protection degree	IP X8		
kW/HP Rating	[kW]	0.55 ÷ 0.75	
	[HP]	0.75 ÷ 1	
Frequency [Hz]	50		
Voltage [V]	230 ± 10%	400 ± 10%	
Capacitor	Built in	-	
Over load protection	Built in	User to provide	
Float Switch	Optional	N/A	
Float Switch Cable	Material	H07RN-F	
	Size	3G1	
Power cable	length [m]	5 (only for internal usage); 10	
	material	H07RN-F	H07RN-F
	size	3G1	4G1
Dimensions of cable entry	Cable Gland		

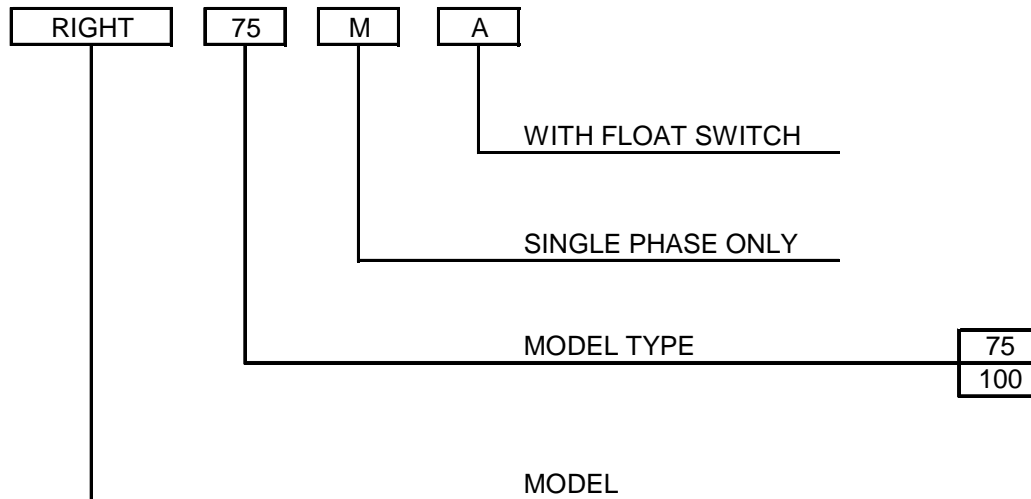
PERFORMANCE RANGE



SELECTION CHART

Pump Type		Power		Q=Capacity									
				l/min	40	80	120	160	200	240	300		
Single Phase	Three Phase	[kW]	[HP]	m³/h	0	2,4	4,8	7,2	9,6	12	14,4	18	
H=Total manometric head in meters													
RIGHT 75 M	RIGHT 75	0,55	0,75	8,8	7,8	6,8	5,7	4,7	3,4	2	-		
RIGHT 100M	RIGHT 100	0,75	1	10,5	9,5	8,6	7,6	6,6	5,4	4,2	2		

TYPE KEY



PERFORMANCE CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906:2012 – Grade 3B

The curves refer to effective speed of asynchronous motors at 50 Hz, 2 poles.

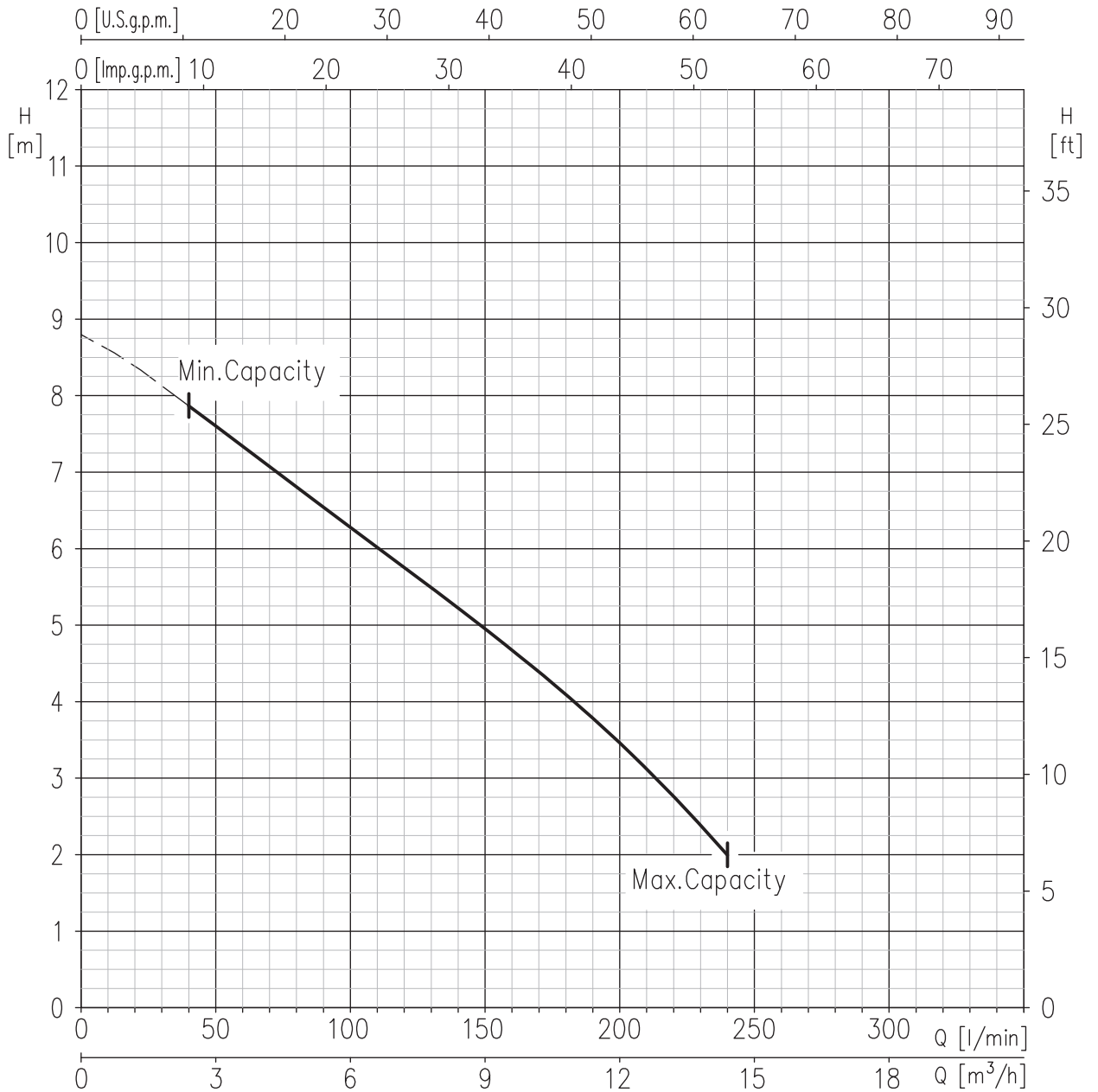
Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt)

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

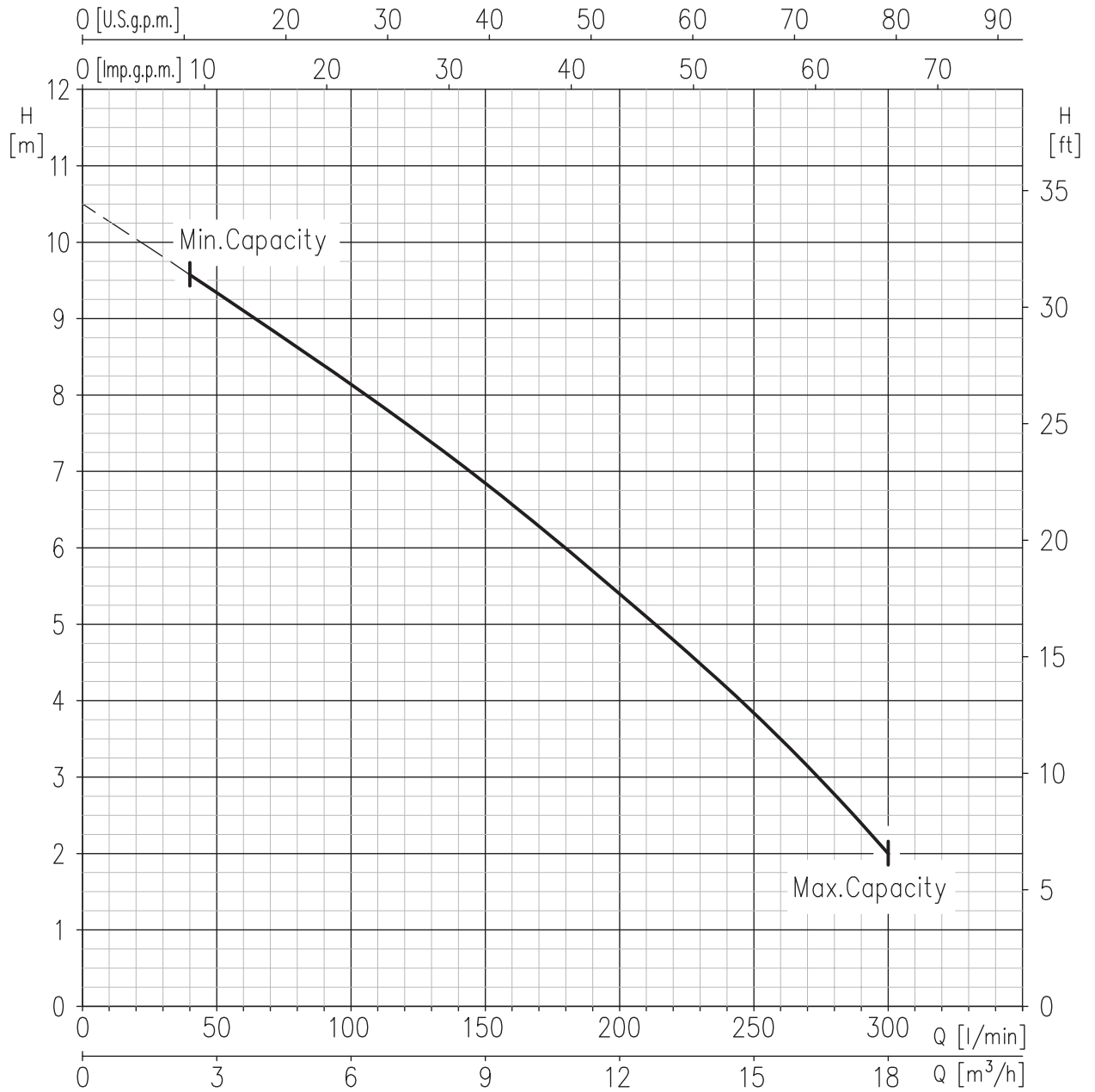
- Q = volume flow rate
- H = total head

RIGHT 75 (0.55 kW) – impeller diameter = 100 mm



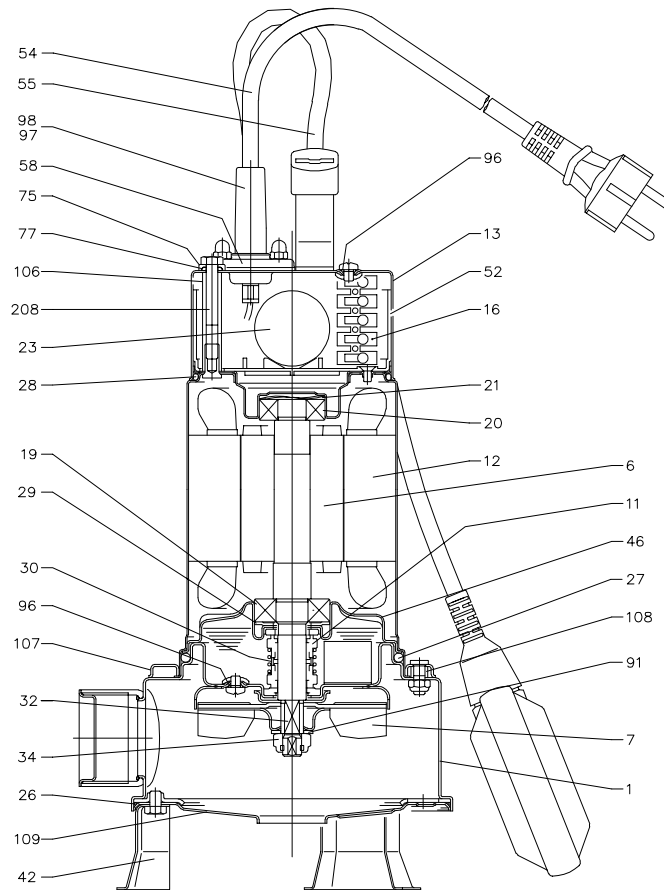
Rotation speed $\approx 2875 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

RIGHT 100 (0.75 kW) – impeller diameter = 100 mm



Rotation speed $\approx 2875 \text{ min}^{-1}$
 Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW



N°	PART NAME	MATERIAL	Q.TY
1	Casing	AISI 304	1
6	Shaft with rotor	AISI 303	1
7	Impeller	AISI 304	1
11	Mechanical seal [3]	Ceramic/Carbon/NBR	1
12	Motor frame with stator	-	1
13	Cover	AISI 304	1
16	Terminal	-	4
19	Lower ball bearing	-	1
20	Upper ball bearing	-	1
21	Adjusting washer	AISI 304	1
23	Capacitor [2]	-	1
26	"O" Ring	NBR	1
27	"O" Ring	NBR	1
28	"O" Ring	NBR	1
29	Washer	AISI 304	1
30	Mechanical seal spacer	Brass	1
32	Key	AISI 304	1
34	Nut	AISI 303	1

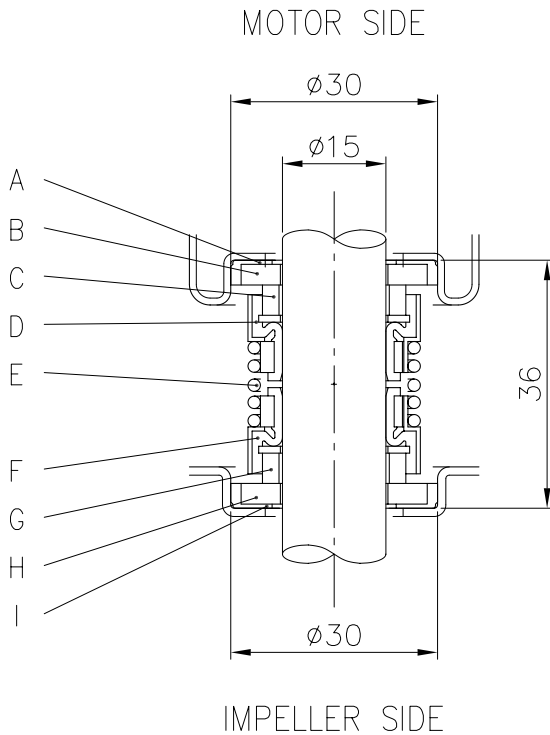
N°	PART NAME	MATERIAL	Q.TY
42	Foot	AISI 304	3
46	Lower bearing bracket	AISI 304	1
52	Capacitor box	PA66 glass fibre reinforced class V-0	1
54	Submersible power cable	-	1
55	Float switch [1]	-	1
58	Cable gland	AISI 304	1
75	Washer	AISI 304	3
77	"O" Ring	NBR	3
91	Washer	AISI 304	1
96	"O" Ring	NBR	2
97	Cable connector	NBR	1
98	Cable connector [1]	NBR	1
106	Spacer	AISI 304	3
107	Stopper ring	AISI 304	1
108	Gasket	NBR	1
109	Suction cover	AISI 304	1
208	Screw	AISI 304	3
-	-	-	-

[1] Only for single phase version with float switch
 [2] Only for single phase version
 [3] See Mechanical seal at page 301

BEARINGS

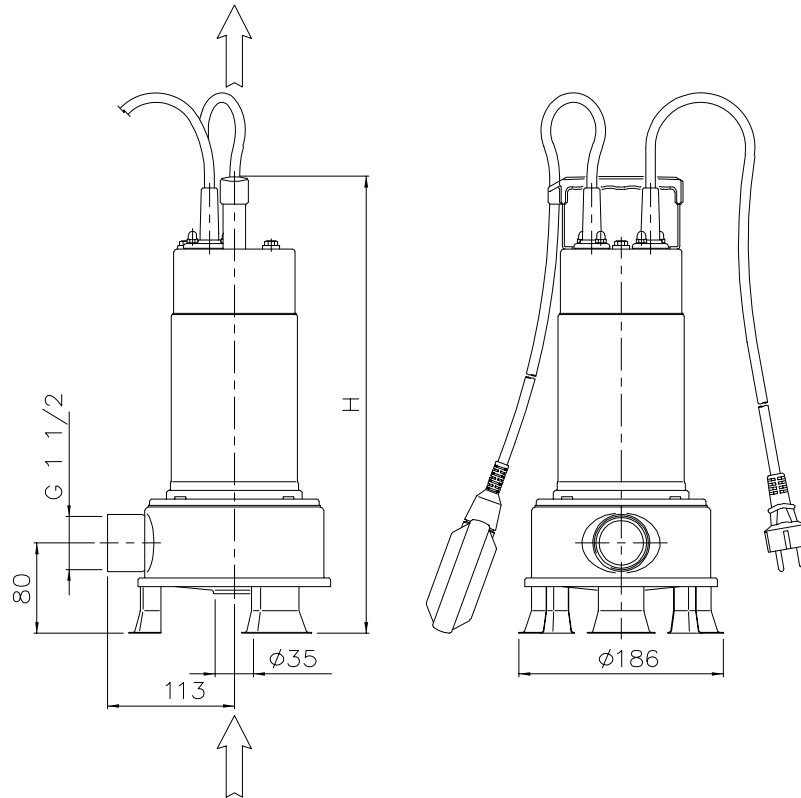
Type pumps		Ball Bearing	
Single Phase	Three Phase	Pump side	Fan side
RIGHT 75 M	RIGHT 75	6203 ZZ	6202 ZZ
RIGHT 100 M	RIGHT 100	6203 ZZ	6202 ZZ

MECHANICAL SEAL



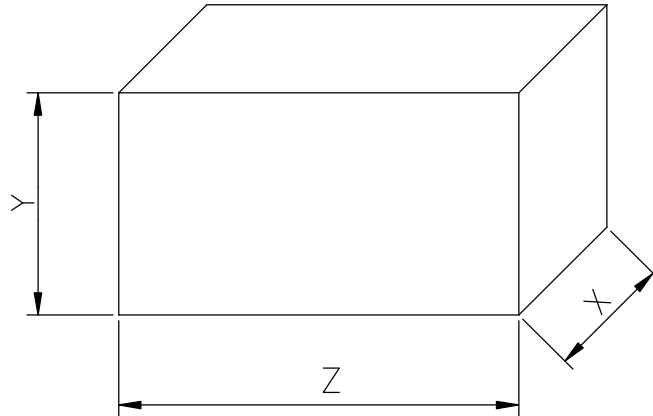
REF	PART NAME	MATERIAL
A	Rubber cup	NBR
B	Seat	Ceramic
C	Seal face	Carbon
D	Bellow	NBR
E	Spring	AISI 304
F	Bellow	NBR
G	Seal face	Silicon carbide
H	Seat	Silicon carbide
I	Rubber cup	NBR

PUMP



Type pumps		Dimension H [mm]	Weight [kg]	
Single Phase	Three Phase		Single Phase	Three Phase
RIGHT 75 M	RIGHT 75	405	10	10
RIGHT 100 M	RIGHT 100	430	11.5	11.5

PACKING

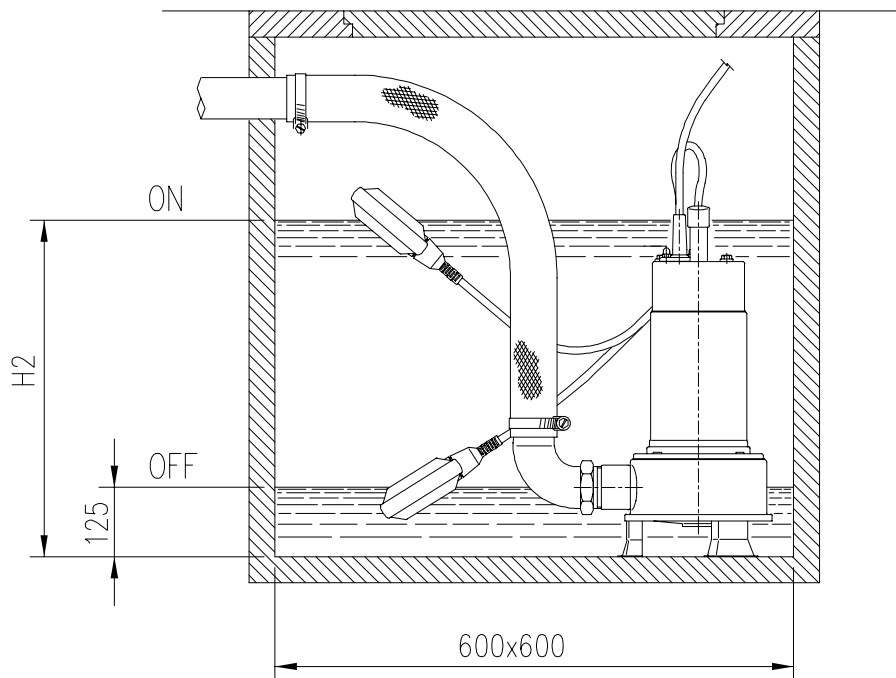


Type pumps		Packing [mm]			Weight [kg]	
Single Phase	Three Phase	Z	X	Y	Single Phase	Three Phase
RIGHT 75 M	RIGHT 75	450	195	245	10.7	10.7
RIGHT 100 M	RIGHT 100	450	195	245	12.2	12.2

MOTOR DATA

Pump Type		Power		Capacitor Single Phase		Input [kW]		Full load current [A]		Locked rotor current [A]	
Single Phase	Three Phase	[kW]	[HP]	[μF]	[Vc]	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase
RIGHT 75 M	RIGHT 75	0,55	0,75	20	450	1,0	0,95	4,8	2,1	19,5	12
RIGHT 100 M	RIGHT 100	0,75	1	31,5	450	1,20	1,2	5,7	2,6	24,5	16

INSTALLATION



Pump type	Dimensions [mm]
	H2
RIGHT 75	410
RIGHT 100	430