

EBARA

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SUBMERSIBLE SEWAGE PUMPS

RIGHT

SPECIFICATIONS

50Hz

PUMP		
Liquid Handled	Type of liquid	Clean and dirty water
	Temperature	Maximum 50°C
	Max solids size	Maximum 35mm spherical
Maximum immersion		10 m
Construction	Impeller	Open vortex type
	Shaft seal type	Double mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction-Flange	35 mm open
	Discharge-Flange	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 172 (180 cc)	
Applicable standard of test		ISO 9906 Annex A

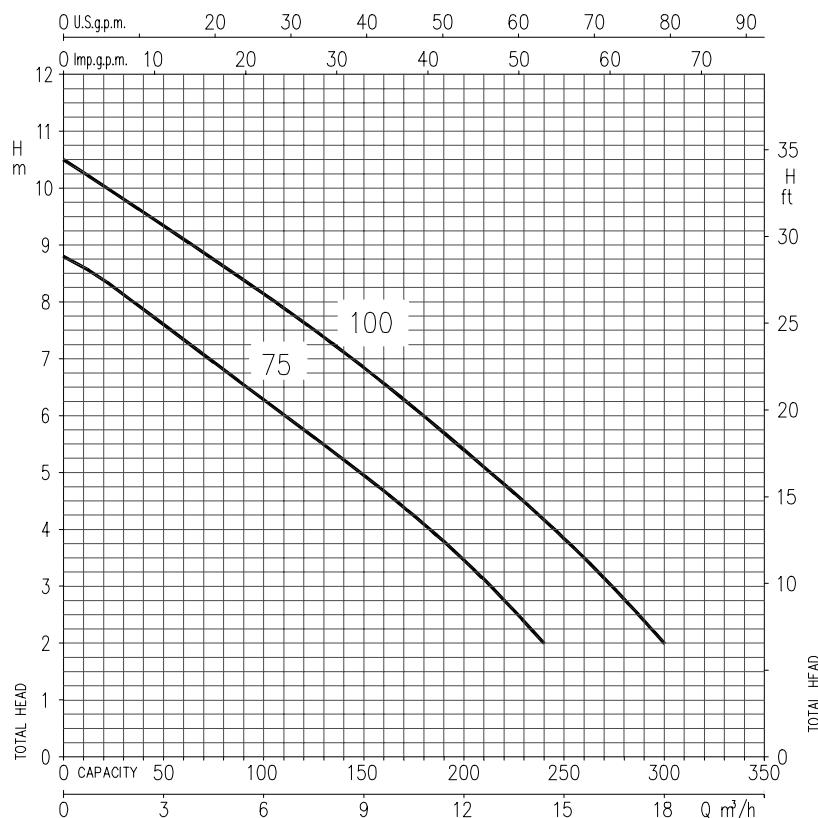
MOTOR		
Type	Submersible dry type	
	Single Phase	Three Phase
No. of Poles	2	
Speed [min ⁻¹]	3000	
Insulation Class	F	
Protection degree	IP X8	
kW/HP Rating	[kW]	0.55 ÷ 0.75
	[HP]	0.75 ÷ 1
Frequency [Hz]	50	
Voltage [V]	230 ± 10%	400 ± 10%
Capacitor (Single Phase)	Built in	-
Over load protection	Built in	User to provide
Float Switch	Optional	N/A
Float Switch Cable Material / Size	H07RN-F 3G1	N/A
Casing material	AISI 304	
Base material/motor support	AISI 304	
Power cable length	5 m	
Power cable material / Size	H07RN-F 3G1	H07RN-F 4G1
Dimensions of cable entry	Cable Gland	

SUBMERSIBLE SEWAGE PUMPS

RIGHT

SELECTION CHART

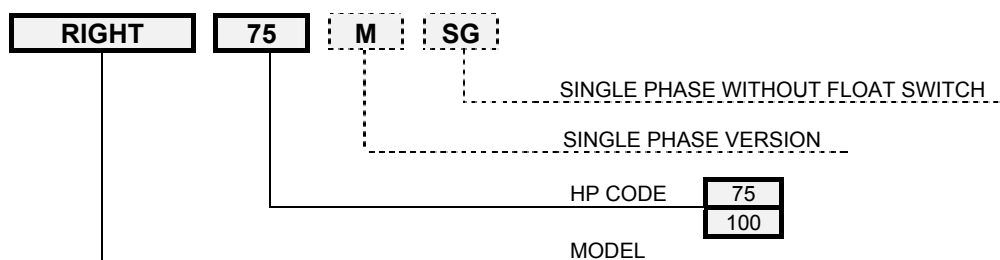
50Hz



Type pumps		kW	HP	Q=Capacity							
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			l/min m³/h	40 2	80 4.8	120 7.2	160 9.6	200 12	240 14.4	300 18
RIGHT 75 M	RIGHT 75	0.55	0.75	7.8	6.8	5.7	4.7	3.4	2	-	
RIGHT 100M	RIGHT 100	0.75	1	9.5	8.6	7.6	6.6	5.4	4.2	2	

H=Total manometric head in meters

TYPE KEY:



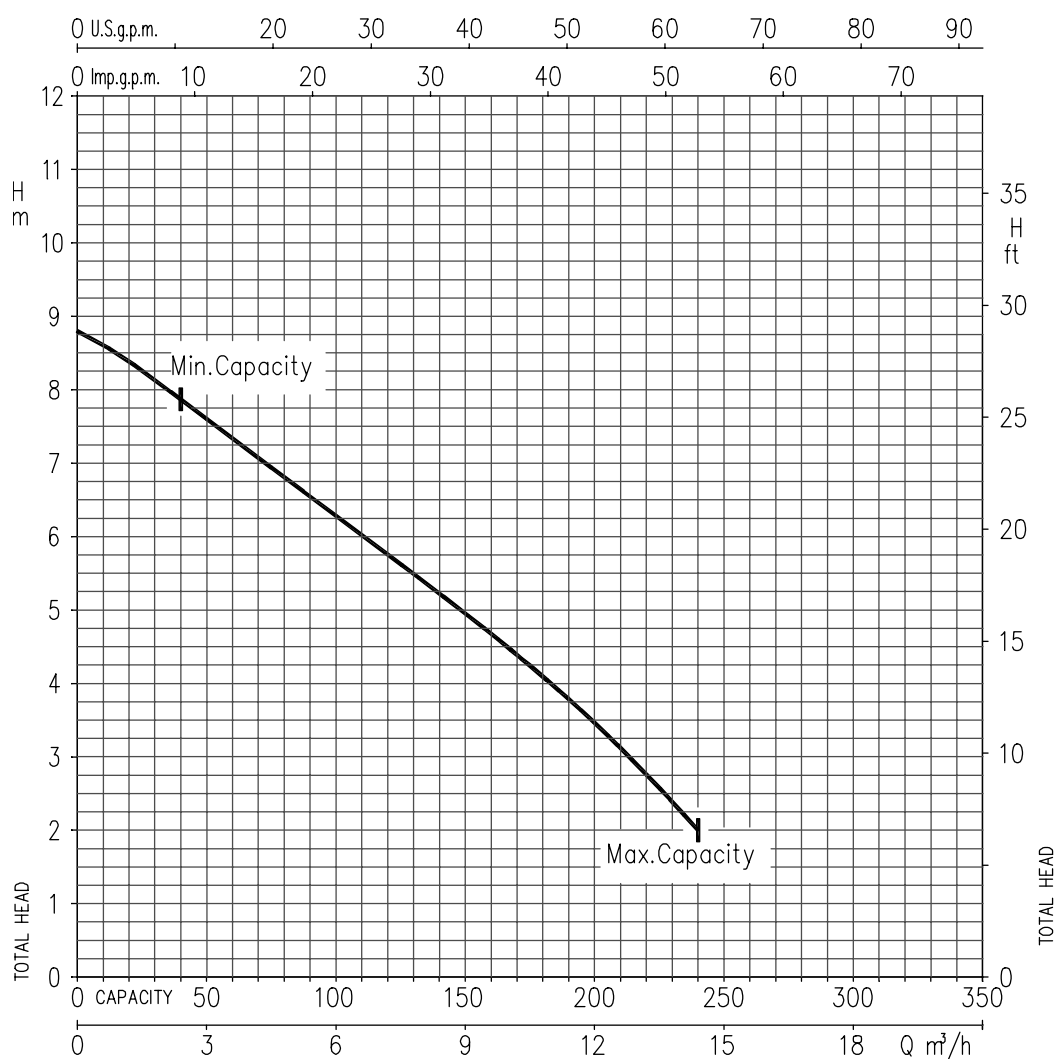
SUBMERSIBLE SEWAGE PUMPS

RIGHT

PERFORMANCE CURVE

50Hz

PUMP CHARACTERISTIC PERFORMANCE

RIGHT 75 (0.55 kW) SYNCHRONOUS SPEED: 3000 min⁻¹

Temperature of water: 20°C
 Impeller diameter= 100 mm
 Applicable standard of test: ISO 9906 – Annex A

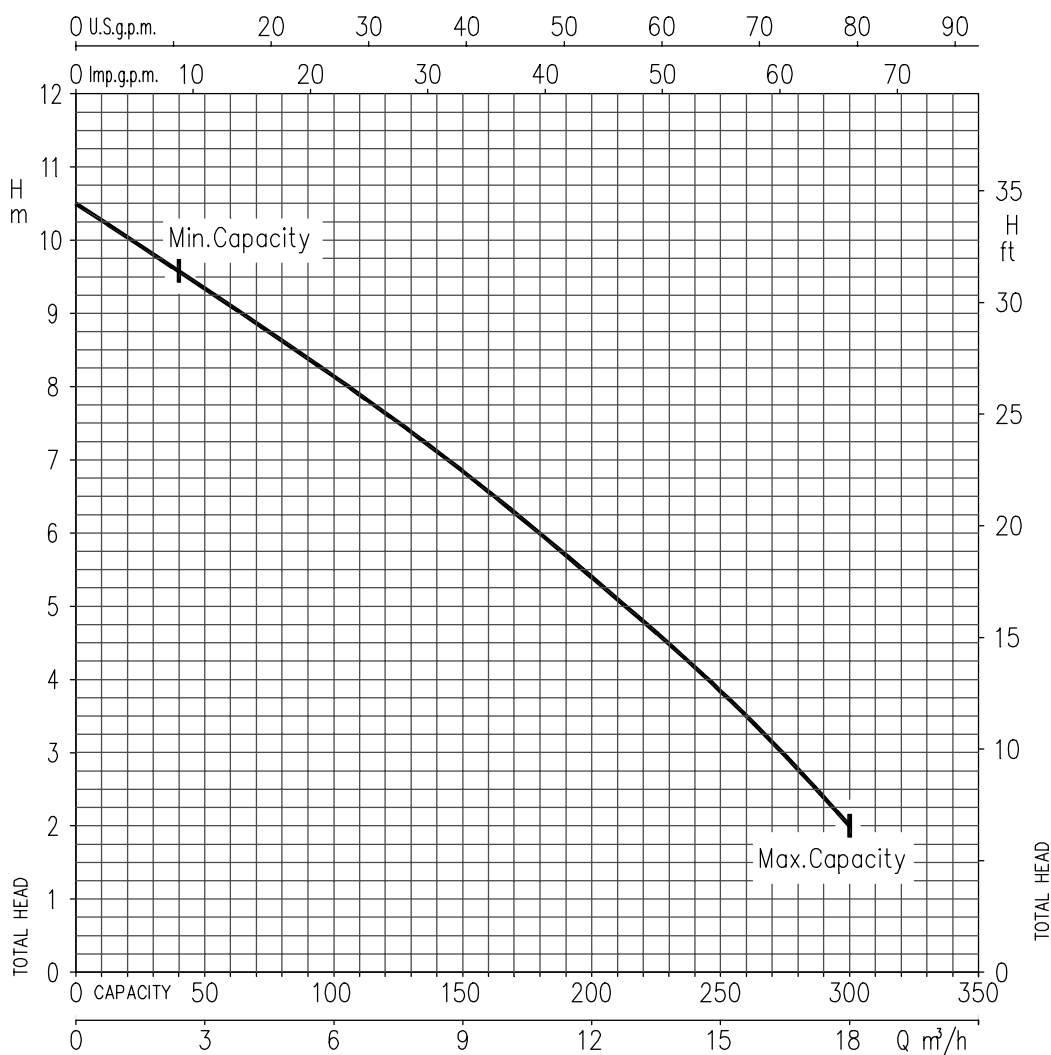
SUBMERSIBLE SEWAGE PUMPS

RIGHT

PERFORMANCE CURVE

50Hz

PUMP CHARACTERISTIC PERFORMANCE

RIGHT 100 (0.75 kW) SYNCHRONOUS SPEED: 3000 min⁻¹

Temperature of water: 20°C
 Impeller diameter = 100 mm
 Applicable standard of test: ISO 9906 – Annex A

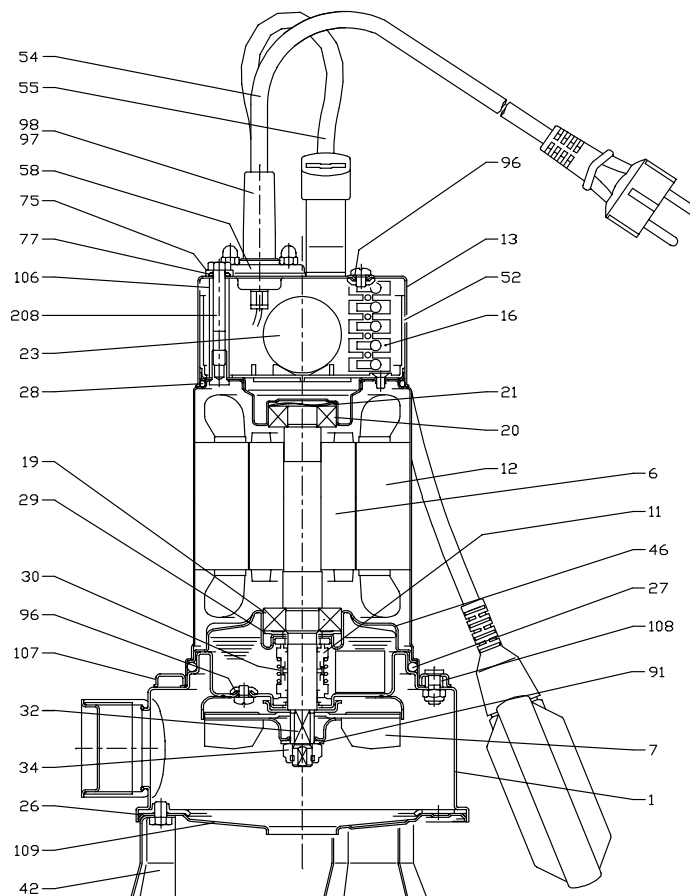
SUBMERSIBLE SEWAGE PUMPS

RIGHT

CONSTRUCTIONS

50Hz

SECTIONAL VIEW



N°	PART NAME	MATERIAL	Q.TY	N°	PART NAME	MATERIAL	Q.TY
1	Casing	AISI 304	1	42	Foot	AISI 304	3
6	Shaft with rotor	AISI 303	1	46	Lower bearing bracket	AISI 304	1
7	Impeller	AISI 304	1	52	Capacitor box	PA66 glass fibre reinforced	1
11	Mechanical seal	Ceramic/Carbon/NBR	1	54	Submersible power cable	-	1
12	Motor frame with stator	-	1	55	Float switch [1]	-	1
13	Cover	AISI 304	1	58	Cable gland	AISI 304	1
16	Terminal	-	1	75	Washer	AISI 303	1
19	Lower ball bearing	-	1	77	"O" Ring	NBR	1
20	Upper ball bearing	-	1	91	Washer	AISI 304	1
21	Adjusting washer	AISI 304	1	96	"O" Ring	NBR	1
23	Capacitor [2]	-	1	97	Cable connector	NBR	1
26	"O" Ring	NBR	1	98	Cable connector [1]	NBR	1
27	"O" Ring	NBR	1	106	Spacer	AISI 304	1
28	"O" Ring	NBR	1	107	Stopper ring	AISI 304	1
29	Washer	AISI 304	1	108	Gasket	NBR	1
30	Mechanical seal spacer	Brass	1	109	Suction cover	AISI 304	1
32	Key	AISI 304	1	208	Screw	AISI 304	1
34	Nut	AISI 303	1	-	-	-	-

[1] Only for single phase version with float switch

[2] Only for single phase version

SUBMERSIBLE SEWAGE PUMPS

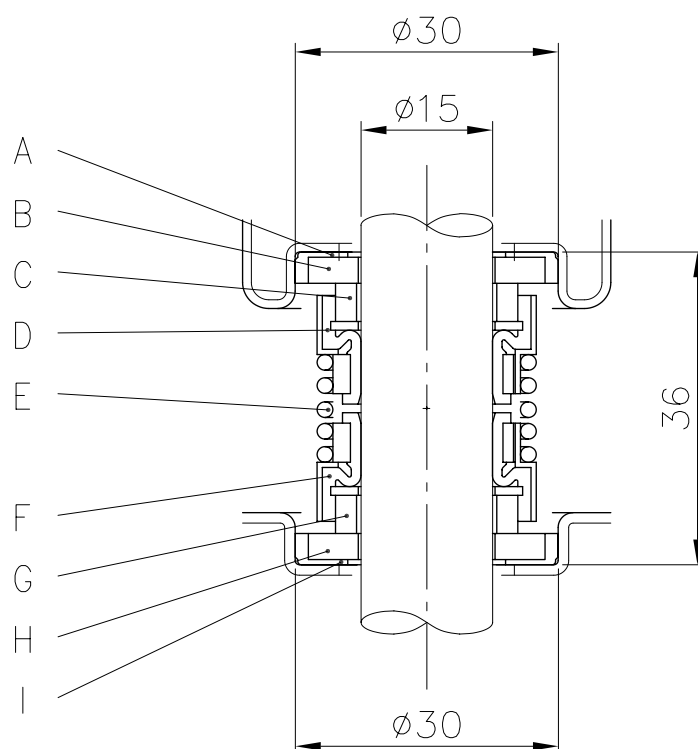
RIGHT

CONSTRUCTIONS

50Hz

MECHANICAL SEAL

MOTOR SIDE



IMPELLER SIDE

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

DIAGRAM AND ELECTRIC CONNECTIONS

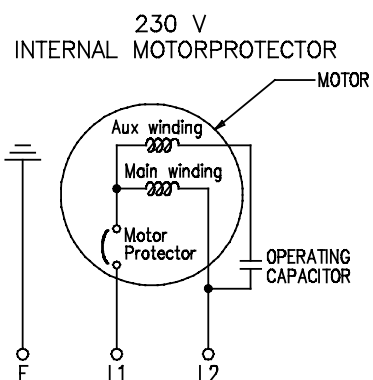
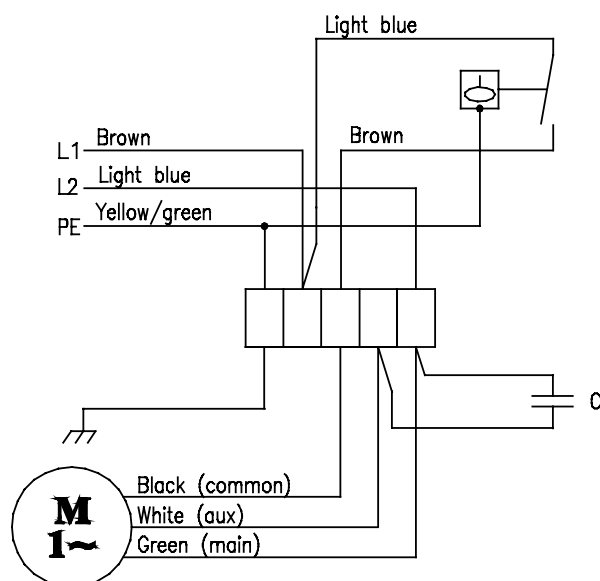
SINGLE PHASE MOTOR
WITH FLOAT SWITCH

DIAGRAM AND ELECTRIC CONNECTIONS

**SINGLE PHASE MOTOR
WITHOUT FLOAT SWITCH**

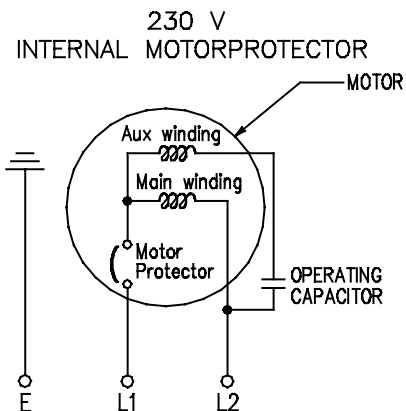
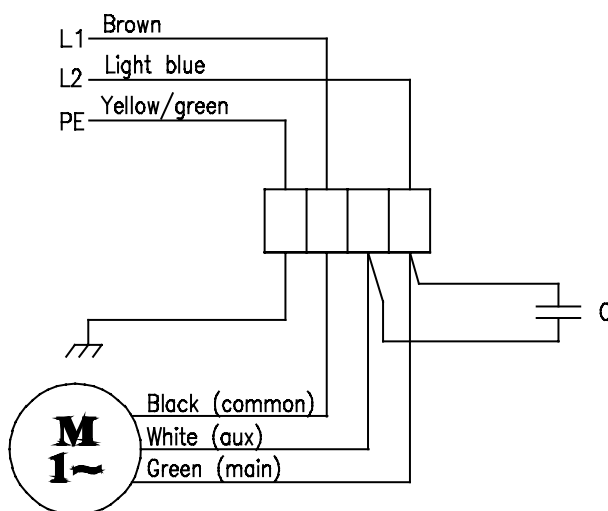
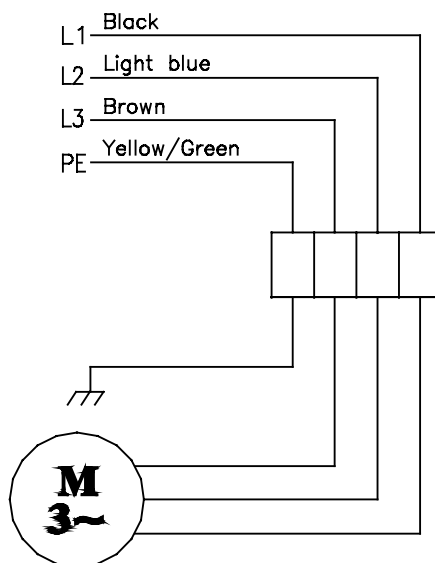
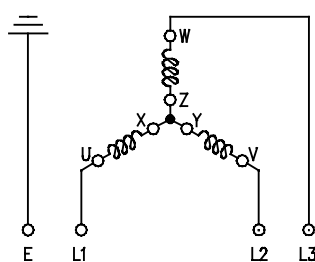


DIAGRAM AND ELECTRIC CONNECTIONS

THREE PHASE MOTOR



400 V
STAR CONNECTION

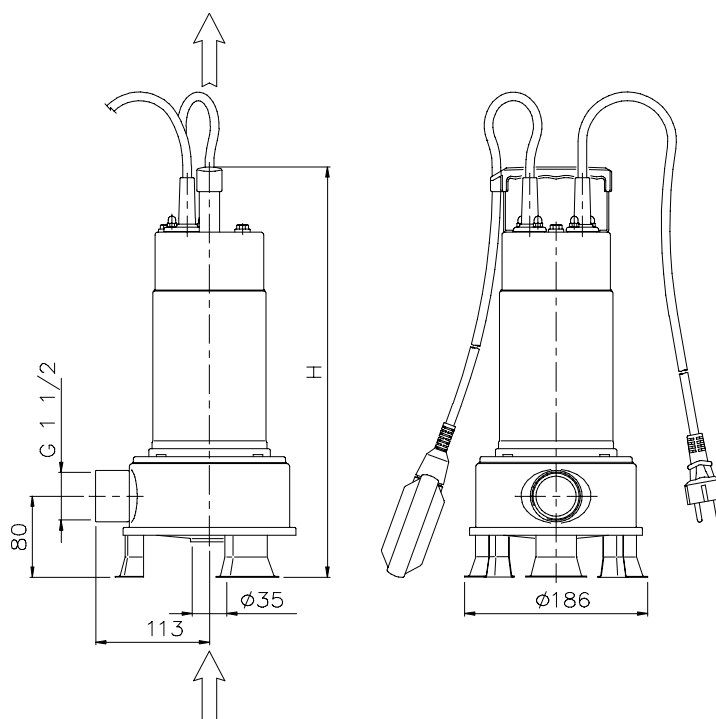


SUBMERSIBLE SEWAGE PUMPS

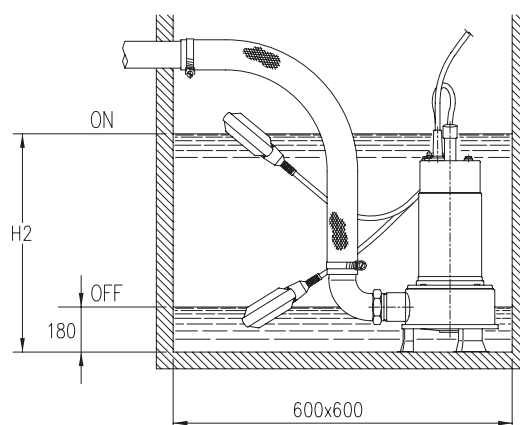
RIGHT

DIMENSIONS

50Hz



Pump type	Dimensions mm H
RIGHT 75	405
RIGHT 100	430



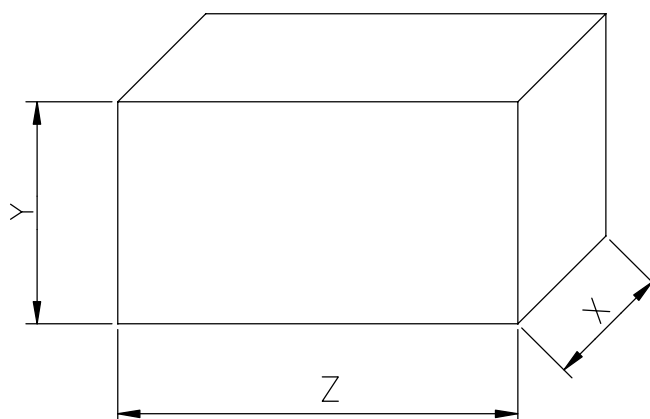
Pump type	Dimensions mm H2
RIGHT 75	410
RIGHT 100	430

SUBMERSIBLE SEWAGE PUMPS

RIGHT

PACKING AND WEIGHT

50Hz



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	10
RIGHT 100 M	RIGHT 100	450	195	245	11.5	11.5

SUBMERSIBLE SEWAGE PUMPS**RIGHT****TECHNICAL DATA****50 Hz**

Type pumps		kW	HP	Capacitor		Input [kW]		Full load current [A]		Locked rotor current	
Single Phase 230 V 50 Hz	Three Phase 400 V 50 Hz			Single Phase μ F	Vc	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase 230 V 50 Hz	Three Phase 400 V 50 Hz
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

Type pumps		Ball Bearing	
Single Phase 230 V 50 Hz	Three Phase 400 V 50 Hz	Pump side	Fan side
RIGHT 75 M	RIGHT 75	6203 ZZ	6202 ZZ
RIGHT 100 M	RIGHT 100	6203 ZZ	6202 ZZ