RIGHT

ELETTROPOMPE SOMMERGIBILI PER ACQUE CARICHE

in AISI 304

Elettropompe sommergibili per acque cariche in acciaio inox AISI 304.

APPLICAZIONI

- Movimentazione di liquidi carichi contenenti sostanze solide e/o filamentose in sospensione
- Svuotamento di acque di infiltrazione
- Movimentazione di acque di scarico (servizi sanitari)
- Svuotamento di pozzi neri e scarico nelle fognature

PECULIARITÁ TECNICHE

- Provviste di 5 m di cavo di alimentazione tipo H07 RN-F (a richiesta 10 m cavo H07 RN-F)
- Disponibili con o senza galleggiante

DATI TECNICI

- Immersione massima: 7 m
- Temperatura massima del liquido: 50°C
- Passaggio massimo di solidi: 35 mm
- Motore asincrono 2 poli autoventilato
- Classe di isolamento F
- Grado di protezione IPX8
- Tensione monofase 230V ± 10%, 50Hz
  tensione trifase 400V ± 10%, 50Hz
- Condensatore permanentemente inserito e protezione termoamperometrica a riarmo automatico incorporata per il motore monofase
- Protezione a cura dell'utente per la versione trifase
- Attacco mandata: G1½

MATERIALI

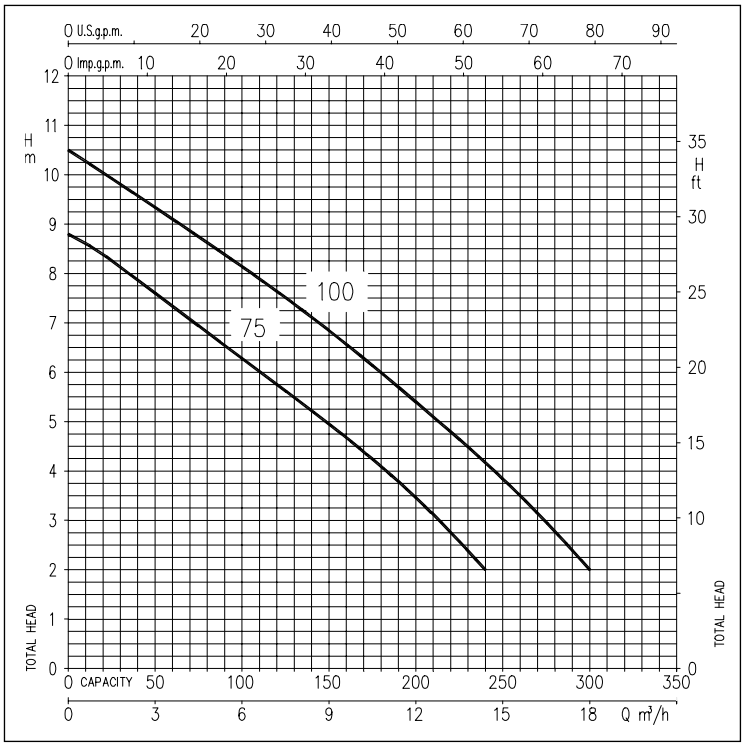
- Corpo pompa, girante, coperchio motore, disco porta tenuta e cassa motore in AISI 304
- Albero in AISI 303 (parte in contatto con il liquido)
- Doppia tenuta meccanica con camera d'olio:
  - superiore in Carbone/Ceramica/NBR (lato motore)
  - inferiore in SiC/SiC/NBR (lato pompa)

VERSIONI SPECIALI

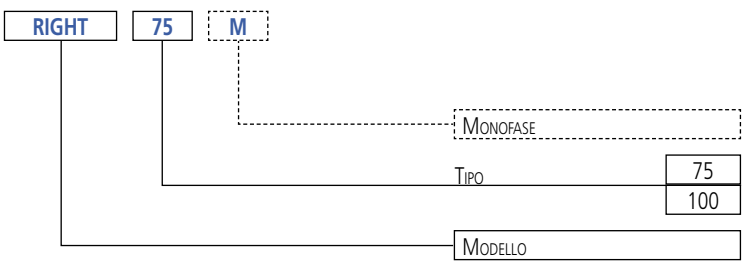
- Versione MA con galleggiante
- Versione con 10 m di cavo

Per accessori e quadri vedi a partire da pag. 151

CURVE DI PRESTAZIONE (secondo ISO 9906 Allegato A)



SIGLA IDENTIFICATIVA



RIGHT

ELETTROPOMPE SOMMERGIBILI PER ACQUE CARICHE

in AISI 304

TABELLA PRESTAZIONI

Modello		P_2		Condensatore		Corr. Assorb. [A]		Q=Portata						
Monofase 230V	Trifase 400V	[HP]	[kW]	µF	Vc	1~	3~	l/min	40	80	120	160	200	240	300
								m^3/h	2	4,8	7,2	9,6	12	14,4	18
								H=Prevalenza [m]							
RIGHT 75 M	RIGHT 75	0,75	0,55	20	450	4,8	2,1		7,8	6,8	5,7	4,7	3,4	2,0	-
RIGHT 100 M	RIGHT 100	1	0,75	31,5	450	5,7	2,6		9,5	8,6	7,6	6,6	5,4	4,2	2,0

DIMENSIONI

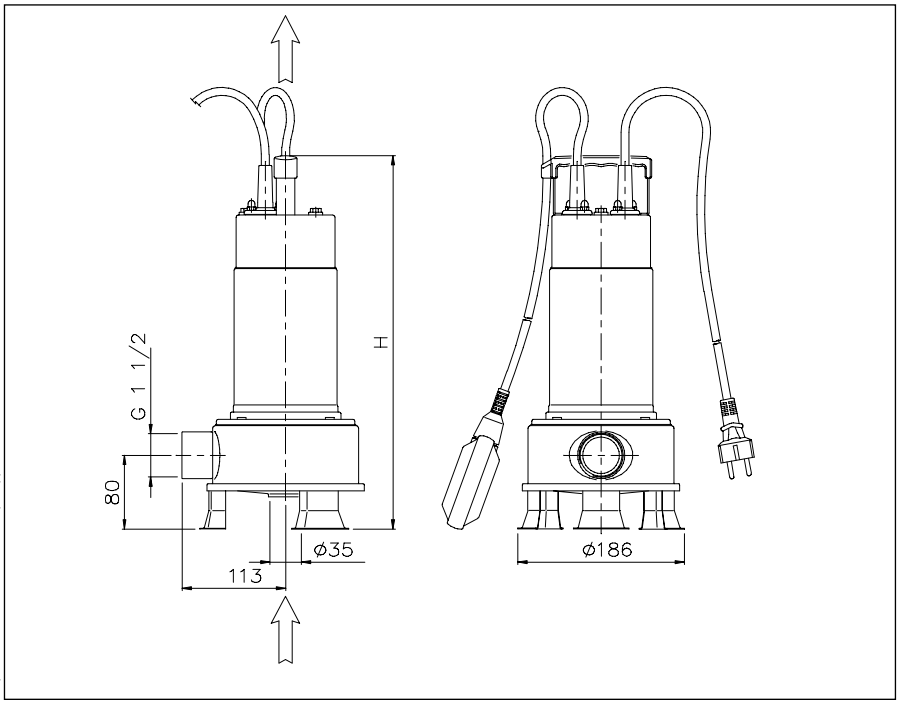
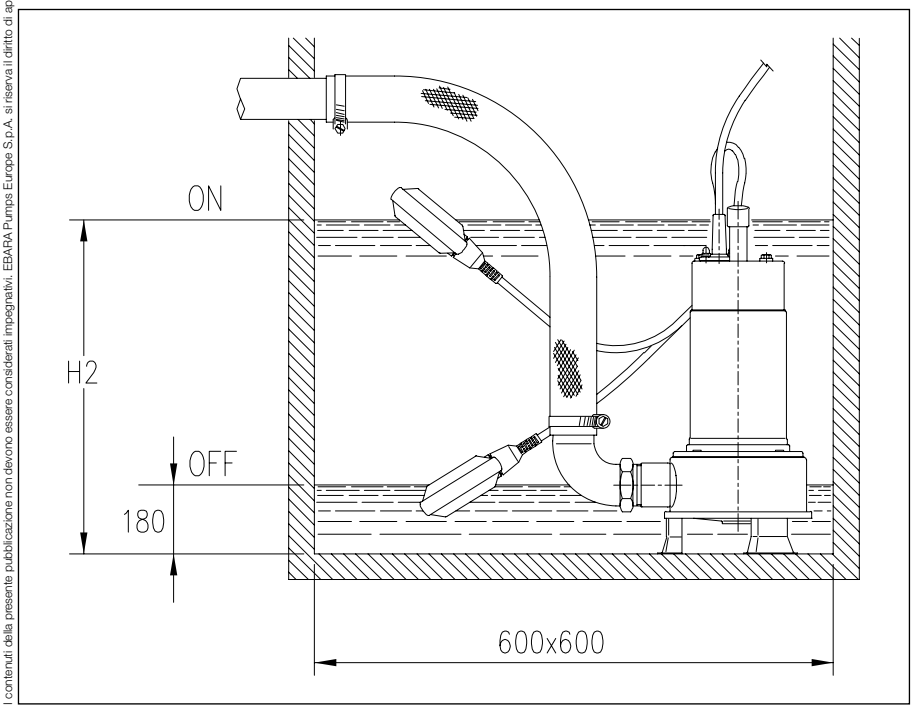


TABELLA DIMENSIONI

Modello	Dimensioni [mm] H	H2	Peso [kg]
RIGHT 75	405	410	10,0
RIGHT 100	430	430	11,5

INSTALLAZIONE



ELETTROPOMPE SOMMERGIBILI PER ACQUE CARICHE

in AISI 304

VISTA IN SEZIONE

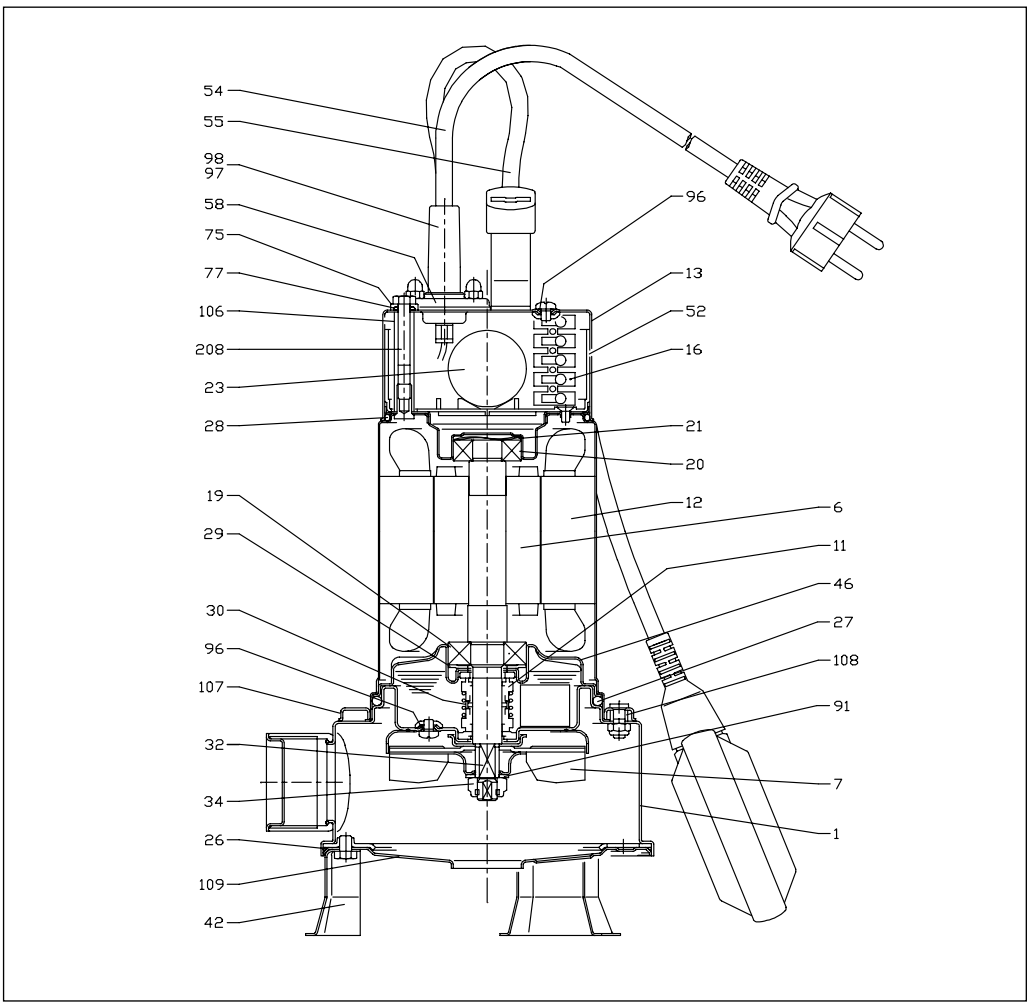


TABELLA DIMENSIONI

Rif.	Nome	Materiale	Rif.	Nome	Materiale
1	Corpo pompa	AISI 304	42	Piede	AISI 304
6	Albero con rotore	AISI 303	46	Supp. cuscinetto inf.	AISI 304
7	Girante	AISI 304	52	Scatola per condensatore	PA66 Rinforzato con fibre di vetro
11	Tenuta meccanica	Ceramica/Carbone/NBR	54	Cavo	-
12	Cassa motore	-	55	Galleggiante	-
13	Coperchio	AISI 304	58	Fermacavo	AISI 304
16	Scatola	-	75	Rondella	AISI 303
19	Cuscinetto inferiore	-	77	Anello OR	NBR
20	Cuscinetto superiore	-	91	Rondella	AISI 304
21	Anello di compensazione	AISI 304	96	Anello OR	NBR
23	Condensatore	-	97	Pressacavo	NBR
26	Anello OR	NBR	98	Pressacavo	NBR
27	Anello OR	NBR	106	Distanziale	AISI 304
28	Anello OR	NBR	107	Flangia di fissaggio	AISI 304
29	Rondella	AISI 304	108	Guarnizione	NBR
30	Distanziale per tenuta maccanica	Ottone	109	Coperchio lato asp.	AISI 304
32	Linguetta	AISI 304	208	Vite	AISI 304
34	Dado	AISI 303	-		-


EBARA

CONTENTS

50Hz

Rev. I

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

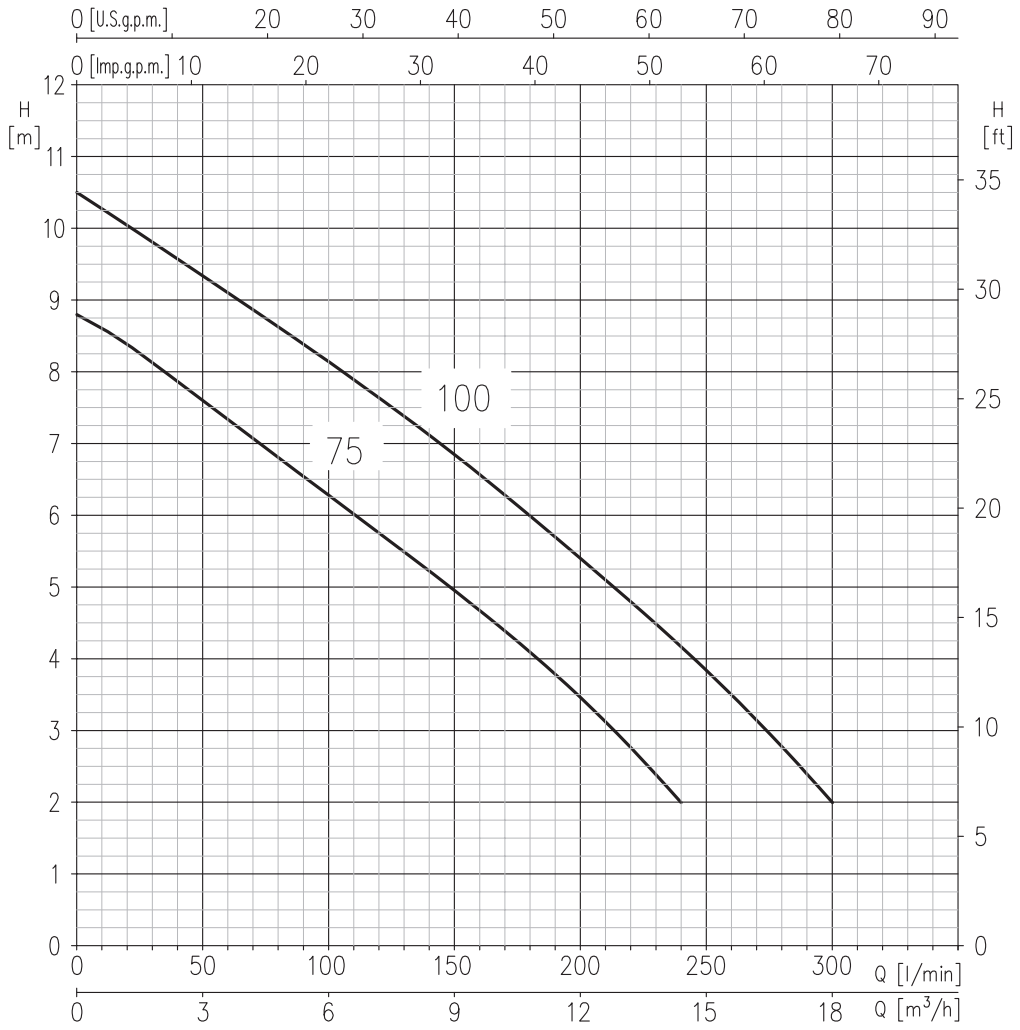
MOTOR				
Type			Submersible dry type	
			Single Phase	Three Phase
No. of Poles			2	
Rotation speed		[min^{-1}]	≈ 2875	
Insulation Class			F	
Protection degree			IP X8	
kW/HP Rating		[kW]	0.55 ÷ 0.75	
		[HP]	0.75 ÷ 1	
Frequency		[Hz]	50	
Voltage		[V]	230 ± 10%	400 ± 10%
Capacitor			Built in	-
Over load protection			Built in	User to provide
Float Switch			Optional	N/A
Float Switch Cable	Material		H07RN-F	N/A
	Size		3G1	N/A
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 CURVE

50Hz

Rev. I

PERFORMANCE RANGE



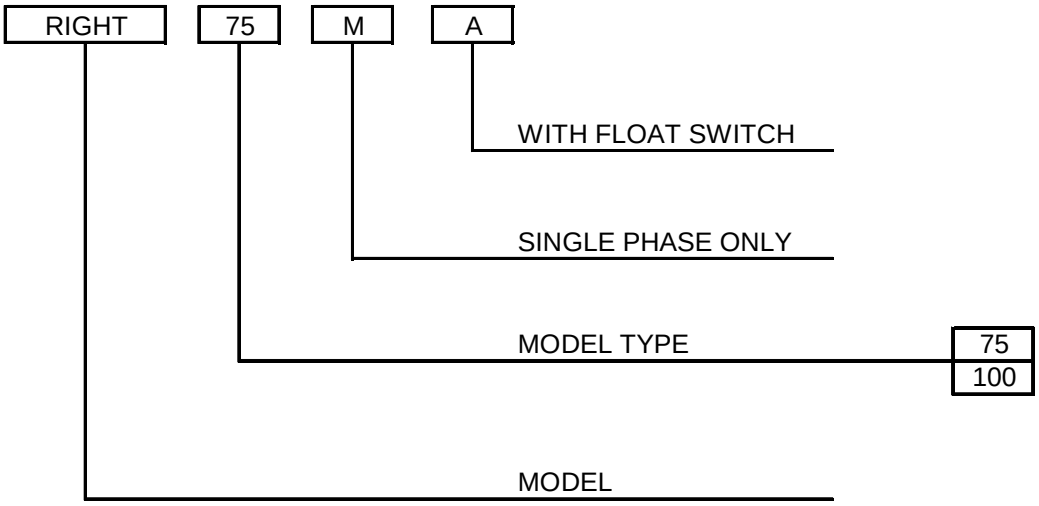
SELECTION CHART

Pump Type		Power		Q=Capacity							
				l/min	0	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

PERFORMANCE CURVE 50Hz

Rev. I

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℃ of temperature and with a kinematic viscosity of $\nu = 1\ mm^2/s$ (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:

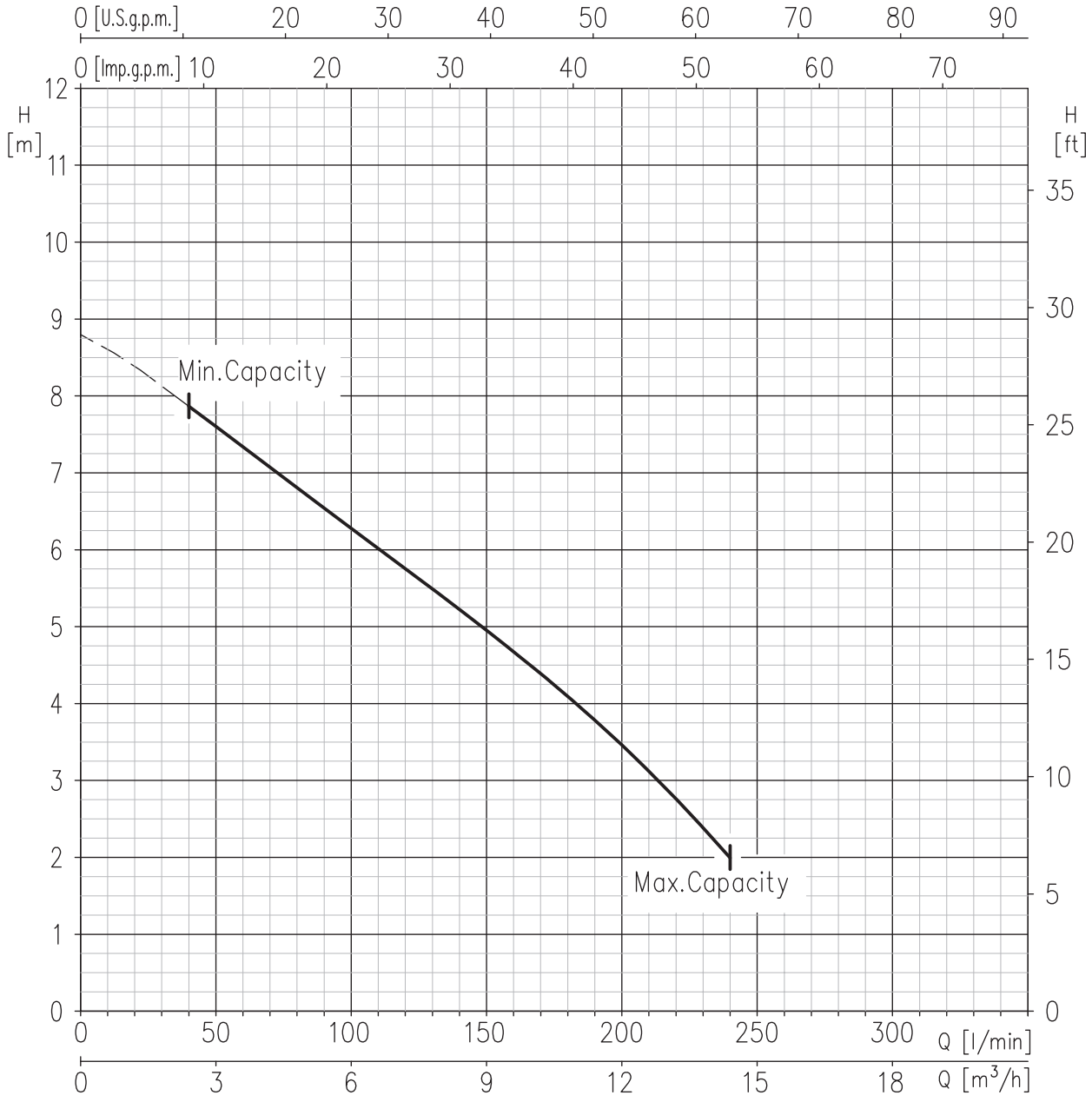
Q = volume flow rate
H = total head

PERFORMANCE CURVE

50Hz

Rev. I

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



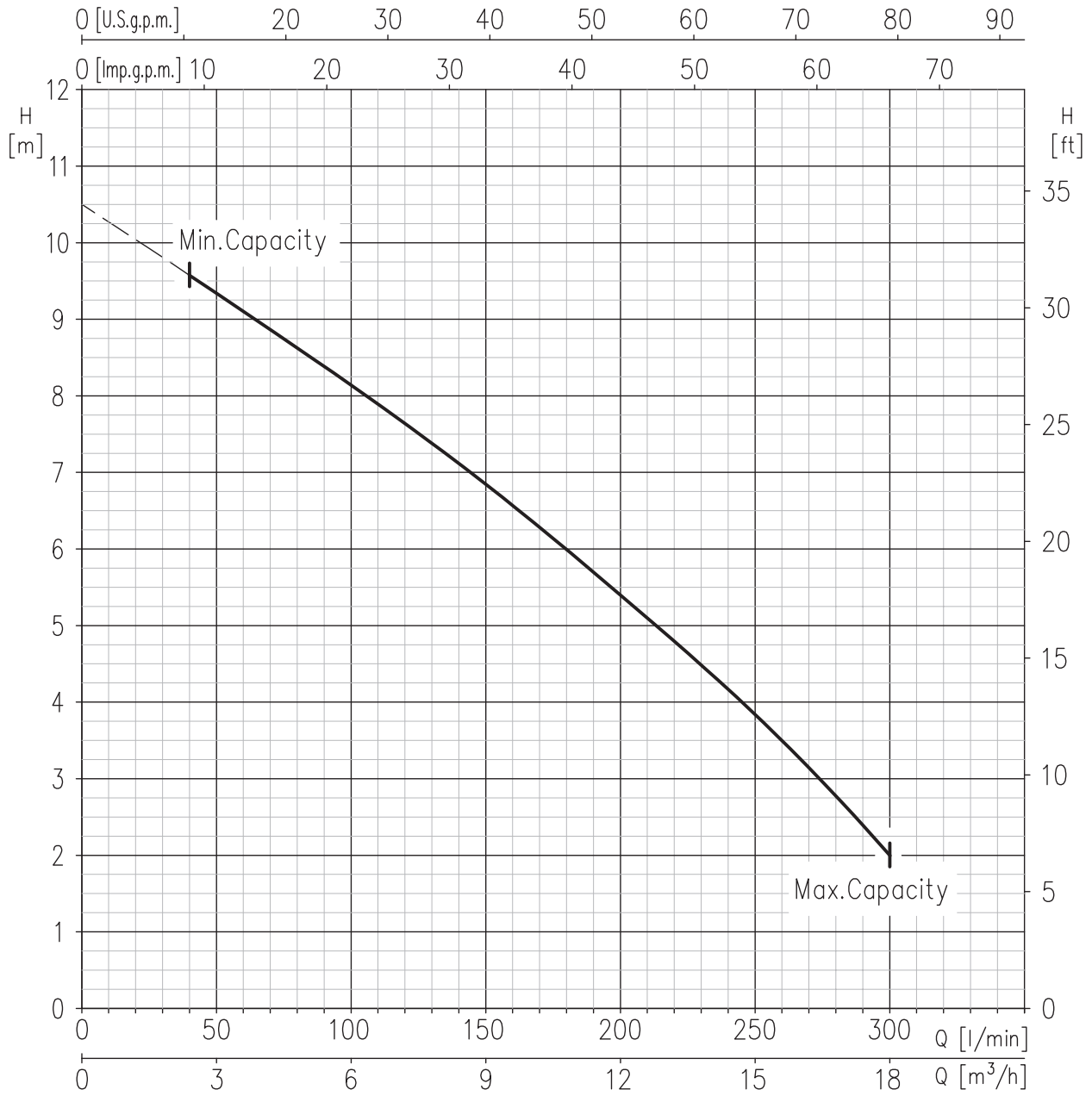
Rotation speed ≈ 2875 min^{-1}
Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE

50Hz

Rev. I

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

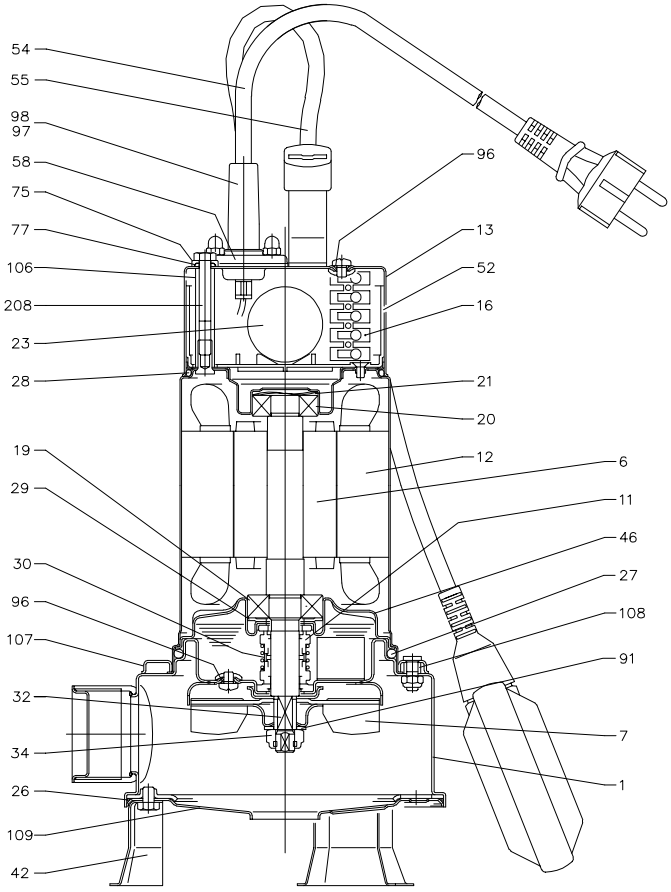


Rotation speed ≈ 2875 min^{-1}
Test standard: ISO 9906:2012 - Grade 3B

PERFORMANCE CURVE 50Hz

Rev. I

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

PERFORMANCE CURVE

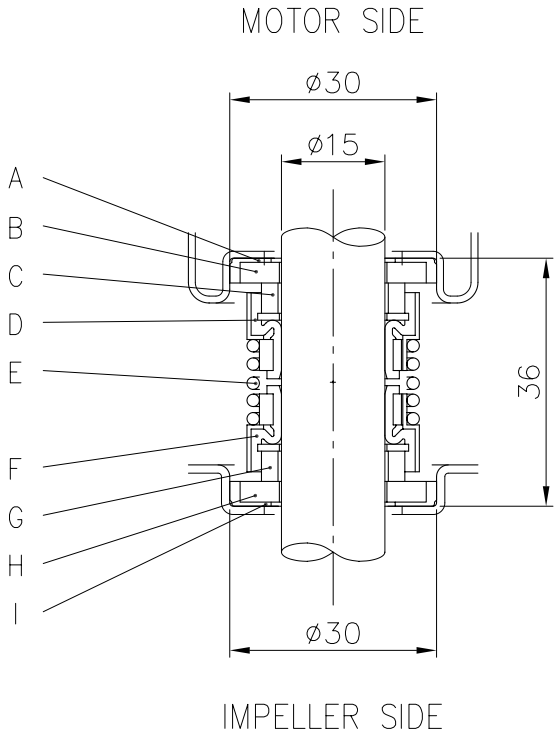
50Hz

Rev. I

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



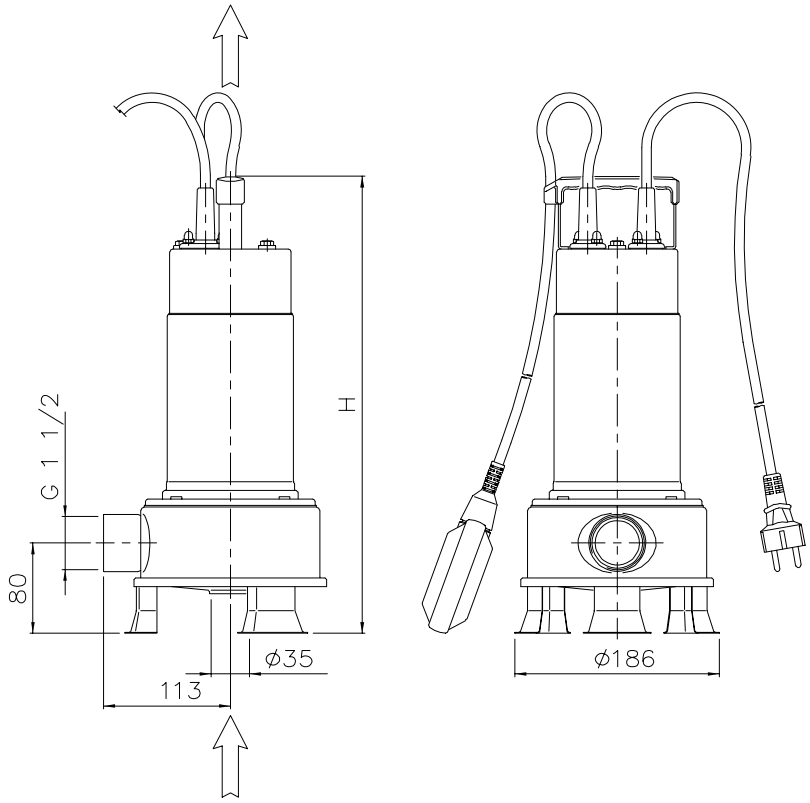
REF	PART NAME	MATERIAL
A	Rubber cup	NBR
B	Seat	Ceramic
C	Seal face	Carbon
D	Bellow	NBR
E	Spring	AISI 304
F	Bellow	NBR
G	Seal face	Silicon carbide
H	Seat	Silicon carbide
I	Rubber cup	NBR

DIMENSIONS AND WEIGHT

50Hz

Rev. I

PUMP



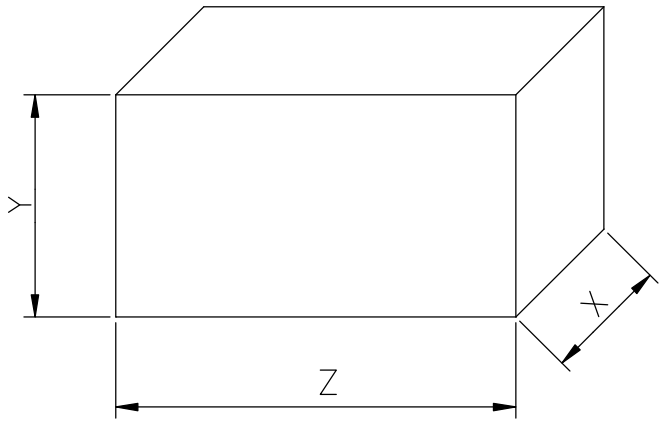
Type pumps		Dimension	Weight [kg]	
Single Phase	Three Phase	H [mm]	Single Phase	Three Phase
RIGHT 75 M	RIGHT 75	405	10	10
RIGHT 100 M	RIGHT 100	430	11.5	11.5

DIMENSIONS AND WEIGHT

50Hz

Rev. I

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

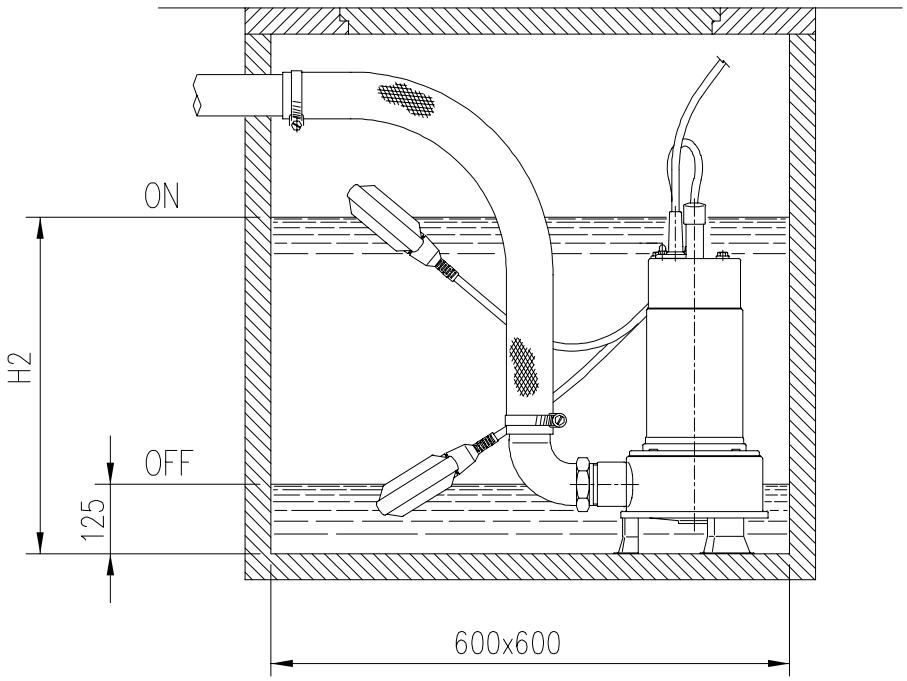
TECHNICAL DATA 50Hz

Rev. I

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