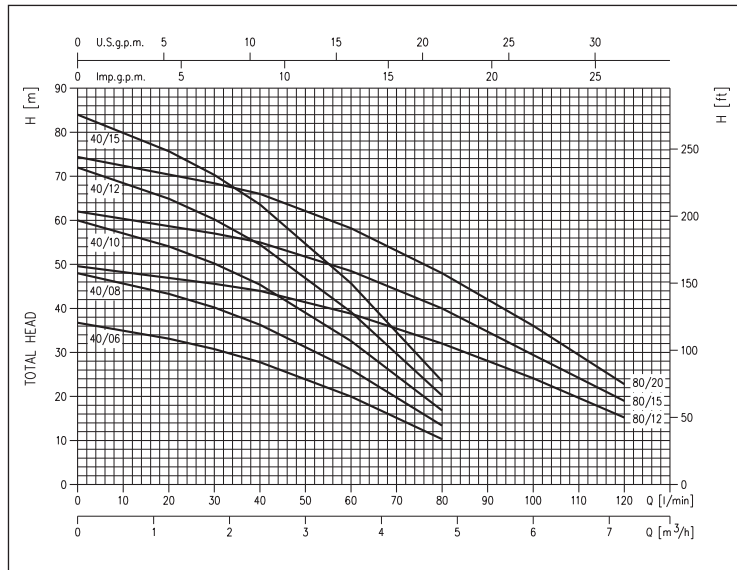


5" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304



PERFORMANCE CURVES (according to ISO 9906 Attachment A)



AISI 304 5" submersed multistage centrifugal electric pumps.

APPLICATIONS

- Moving clear water from wells, cisterns and primary collection reservoirs
- Pressure boosting domestic plants
- Small-sale irrigation
- Washing vehicles
- General pressure increases

TECHNICAL DETAILS

- Equipped with twin mechanical seal with interposed oil chamber
- Supplied with 20 m of H07 RN-F power supply cable
- Single phase version with float on request
- Available in the 230V $\pm 10\%$ 50Hz three phase version
- Installation: in horizontal and vertical position

TECHNICAL DATA

- Maximum working pressure: 10 bar
- Maximum temperature of the liquid: 40°C
- Maximum immersion: 20 m, (10 m with float)
- 2 pole self-ventilated asynchronous motor cooled via the moving liquid
- Class of insulation F
- IP68 Protection rating
- 230V $\pm 10\%$, 50Hz single phase voltage
- 400 $\pm 10\%$, 50Hz three phase voltage
- Permanent capacitor inserted and thermo-ampereometric protection with automatic reset incorporated for the single phase motor
- Protection under user's responsibility for the three phase version
- G1¼ discharge connection

MATERIALS

- External casing, motor cover, seal housing disc, filter and closing ring in AISI 304
- Impeller, nozzle and spacer in PPO reinforced with fibreglass
- Shaft in AISI 431
- Upper mechanical seal (motor side) in Carbon/Ceramic/NBR and lower (pump side) in SiC/Carbon/NBR

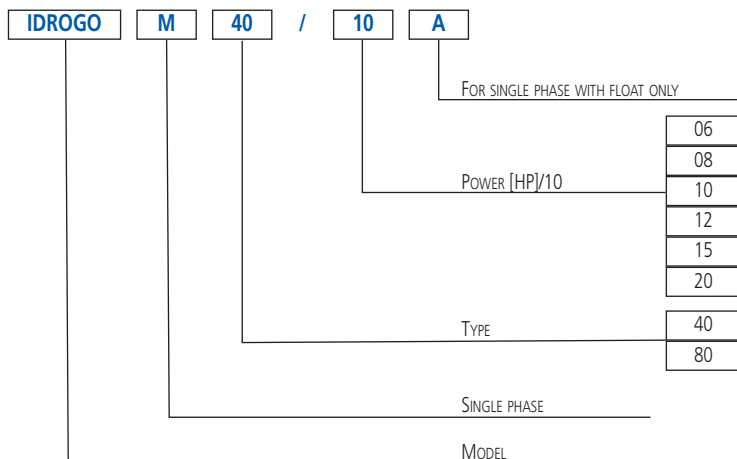
CONTROL PANELS

- 1EPBH (see page 43)

ACCESSORIES (on request)

- 5 litre 10 bar $\frac{3}{4}$ " EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- PVC 5m key float with counter-weight
- PVC 10m key float with counter-weight
- SQUARE-D FSG-2 1.4÷4.6 bar G¼ F pressure switch
- FYG-22 2.8÷7 bar G¼ F pressure switch
- Presscomfort - Pressure regulator (see page 45)
- Press•o•Matic - Variable speed control system (single phase 230V $\pm 10\%$ power supply - three phase 220V output - maximum motor power 2.2 kW - 3 HP - see page 46) for IDROGO three phase 230V $\pm 10\%$, 50Hz
- IDROGO discharge hydraulic kit (manifold, valves, pressure switches, pressure gauge) set-up for autoclave
- IDROGO TWIN discharge hydraulic kit (manifold, valves, manometer) set-up for functioning with TWIN inverter control panel (see page 44) and with IDROGO three phase 230V $\pm 10\%$, 50Hz electric pumps.

IDENTIFICATION CODE

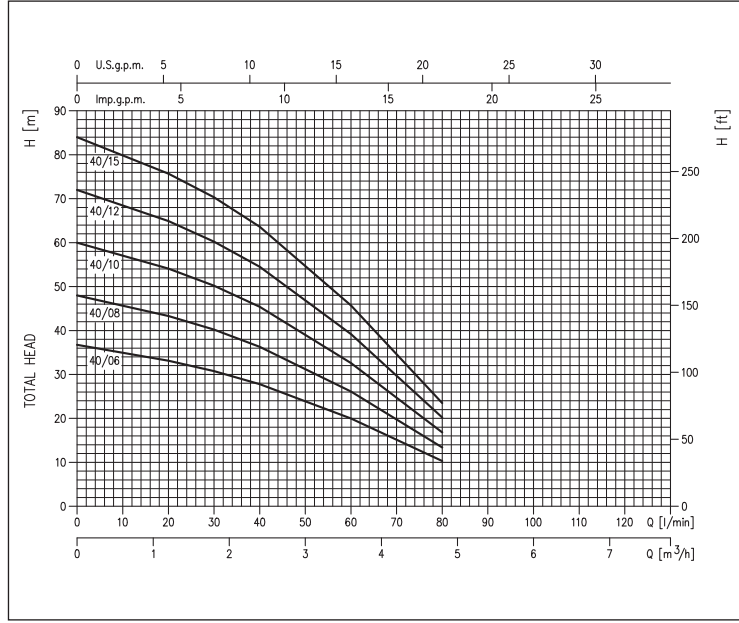


5" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

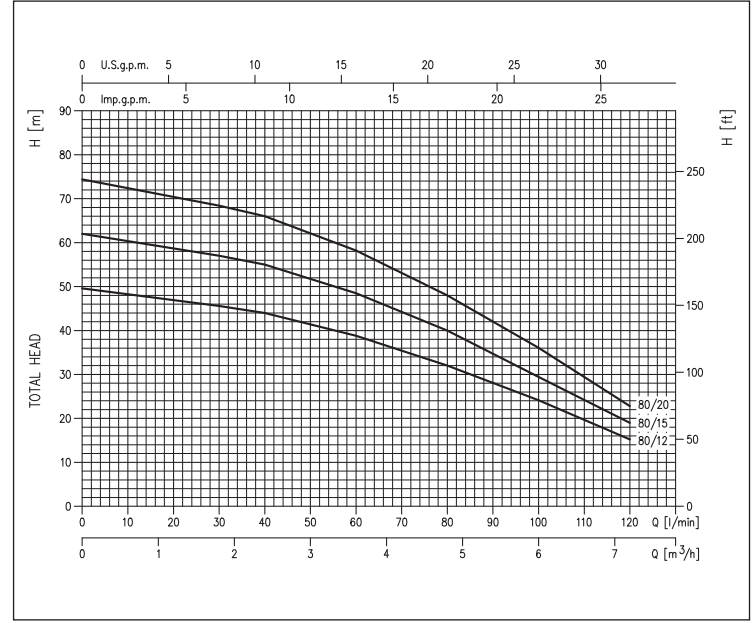
IDROGO 40 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



IDROGO 80 range PERFORMANCE CURVES

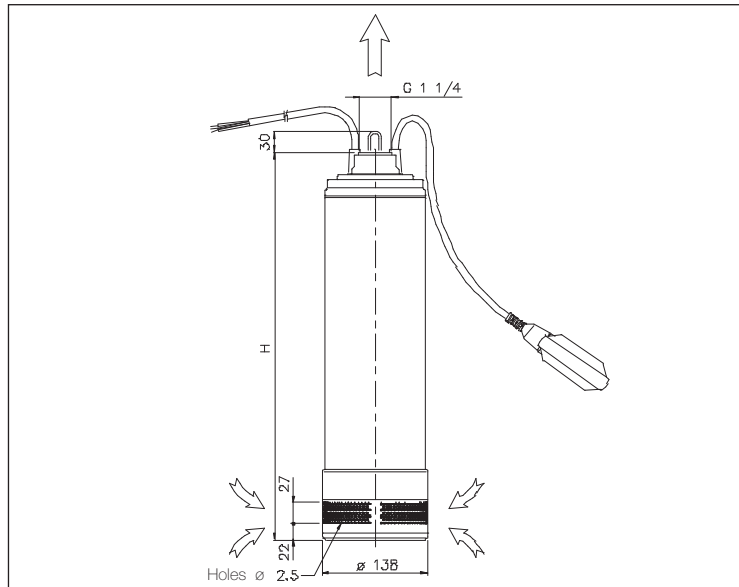
(according to ISO 9906 Attachment A)



PERFORMANCE TABLE

Single phase 230V	Model	Three phase 230/400V	P ₂		Q=Flow rate						
			[HP]	[kW]	l/min m ³ /h	20 1,2	30 1,8	40 2,4	60 3,6	80 4,8	100 6
					H=Head [m]						
IDROGO M 40/06		-	0,6	0,44	33,1	30,8	27,8	20,0	10,3	-	-
IDROGO M 40/08	IDROGO 40/08		0,8	0,6	43,3	40,2	36,3	26,1	13,4	-	-
IDROGO M 40/10	IDROGO 40/10		1	0,75	54,1	50,2	45,4	32,6	16,8	-	-
IDROGO M 40/12	IDROGO 40/12		1,2	0,9	64,9	60,2	54,5	39,2	20,2	-	-
IDROGO M 40/15	IDROGO 40/15		1,5	1,1	75,7	70,3	63,6	45,7	23,5	-	-
IDROGO M 80/12	IDROGO 80/12		1,2	0,9	-	45,6	44,0	38,8	32,0	23,2	15,2
IDROGO M 80/15	IDROGO 80/15		1,5	1,1	-	57,0	55,0	48,5	40,0	28,0	19,0
-	IDROGO 80/20		2	1,5	-	68,4	66,0	58,2	48,0	34,8	22,8

DIMENSIONS



DIMENSIONS TABLE

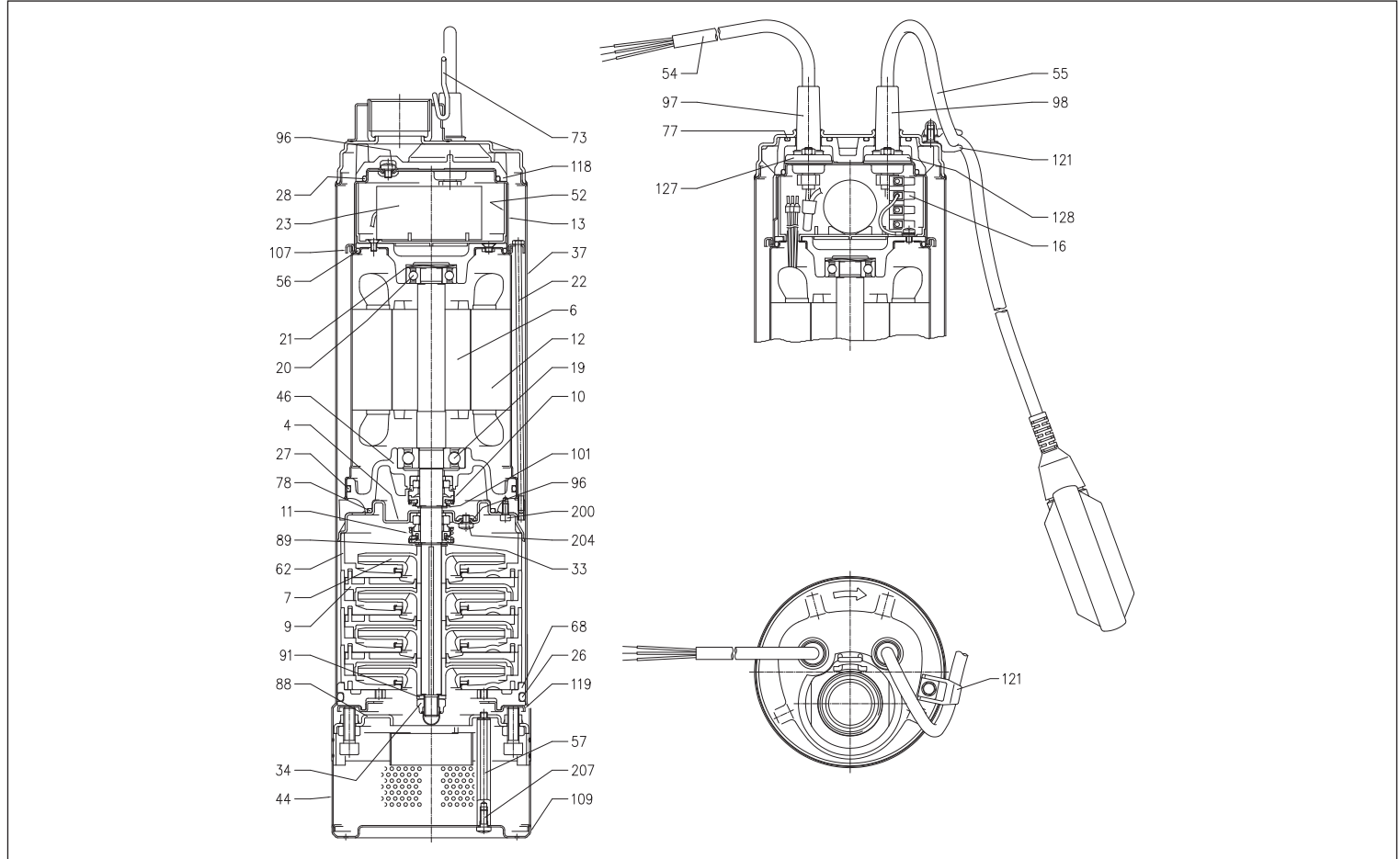
Model	H [mm]	Weight [kg]	
		[2]	[1]
IDROGO 40/06	513	13,0	-
IDROGO 40/08	513	15,0	15,0
IDROGO 40/10	539	16,0	16,0
IDROGO 40/12	590	17,0	17,0
IDROGO 40/15	616	18,0	18,0
IDROGO 80/12	540	16,0	16,0
IDROGO 80/15	564	17,0	17,0
IDROGO 80/20	590	-	18,0

[1]= Three-phase only
[2]= Single phase only

5" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

SECTIONAL VIEW



MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
4	Seal housing disc	AISI 304	55	Float [2]	-
6	Shaft	AISI 431	56	O-Ring	NBR
7	Impeller	PPO reinforced with fibreglass	57	Filter spacer	AISI 303
9	Nozzle	PPO reinforced with fibreglass	62	Stage box	PPO reinforced with fibreglass
10	Motor side mechanical seal	Carbon/Ceramic/NBR	68	Lower spacer	PPO reinforced with fibreglass
11	Pump side mechanical seal	SiC/Carbon/NBR	73	Submersed hook	AISI 304
12	Motor case	-	77	O-Ring	NBR
13	Motor cover	AISI 304	78	O-Ring	NBR
16	Terminal box	-	89	Washer	AISI 304
19	Bearing (pump side)	-	91	Washer	AISI 304
20	Bearing (motor side)	-	96	O-Ring	NBR
21	Adjusting ring	Steel C70	97	Cable gland (power supply)	NBR
22	Tie-rod	AISI 303	98	Cable gland (float) [2]	NBR
23	Capacitor [1]	-	101	Seeger ring	AISI 420
26	O-Ring	NBR	107	Lock ring	AISI 304
27	O-Ring	NBR	109	Filter base	AISI 304
28	O-Ring	NBR	118	Upper spacer	PPO reinforced with fibreglass
33	Seeger ring	AISI 304	119	Flange for lower spacer	AISI 304
34	Impeller nut	AISI 304	121	Support for float [2]	PPO reinforced with fibreglass
37	Casing	AISI 304	127	Cable gland connector (power supply)	AISI 304
44	Filter	AISI 304	128	Cable gland connector (float)	AISI 304
46	Bearing holder support	Brass	200	Screw	Stainless steel A2 UNI 7323
52	Capacitor-holder box	PA66 reinforced with fibreglass	204	Screw	Stainless steel A2 UNI 7323
54	Power supply cable	-	207	Screw	Stainless steel A2 UNI 7323

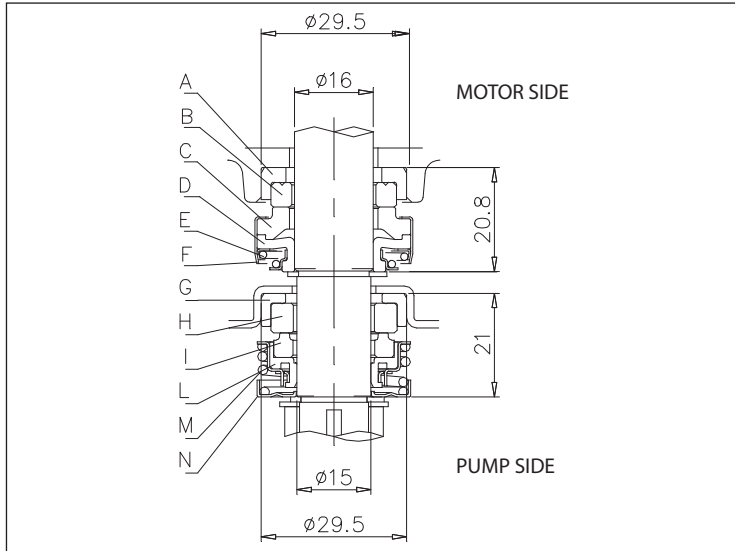
[1]= For single phase only

[2]= For single phase with float only

5" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

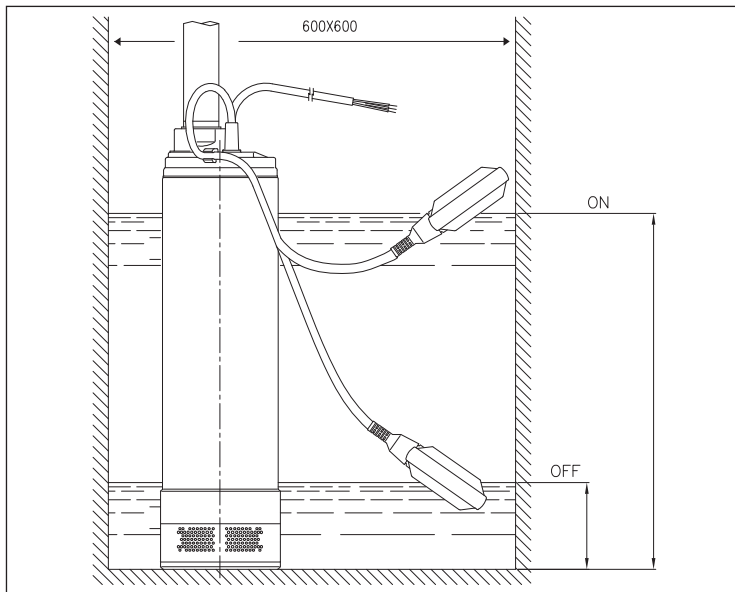
MECHANICAL SEAL



MATERIALS TABLE

Ref.	Name	Material
A	Fixed gasket	NBR
B	Fixed sealing ring	Ceramic
C	Rotating sealing ring	Carbon
D	Rotating gasket	NBR
E	Spring	AISI 304
F	Structure/frame	AISI 304
G	Fixed gasket	NBR
H	Fixed sealing ring	Ceramic
I	Rotating sealing ring	Carbon
L	Rotating gasket	NBR
M	Spring	AISI 304
N	Structure/frame	AISI 304

INSTALLATION



INSTALLATION TABLE

Model	Dimensioni [mm]	
	ON	OFF
IDROGO 40/06	560	180
IDROGO 40/08	560	180
IDROGO 40/10	590	190
IDROGO 40/12	660	220
IDROGO 40/15	730	240
IDROGO 80/12	590	190
IDROGO 80/15	640	210
IDROGO 80/20	660	220

ELECTRIC DATA TABLE

Model	230V Single phase	230/400V Three phase	P ₂		Single phase Capacitor		P ₁		Absorbed Current [A]	
			[HP]	[kW]	μF	V _c	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230/400V
IDROGO M 40/06	-	-	0,6	0,44	16	450	0,82	-	3,8	-
IDROGO M 40/08	IDROGO 40/08	IDROGO 40/08	0,8	0,6	16	450	1	0,95	4,3	1,9
IDROGO M 40/10	IDROGO 40/10	IDROGO 40/10	1	0,75	20	450	1,25	1,18	5,7	2,2
IDROGO M 40/12	IDROGO 40/12	IDROGO 40/12	1,2	0,9	20	450	1,42	1,33	6,8	2,4
IDROGO M 40/15	IDROGO 40/15	IDROGO 40/15	1,5	1,1	31,5	450	1,6	1,55	7,3	3
IDROGO M 80/12	IDROGO 80/12	IDROGO 80/12	1,2	0,9	20	450	1,33	1,22	6,4	2,3
IDROGO M 80/15	IDROGO 80/15	IDROGO 80/15	1,5	1,1	31,5	450	1,62	1,52	7,5	3,1
-	IDROGO 80/20	IDROGO 80/20	2	1,5	-	-	-	1,9	-	3,5