



**EBARA**

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**SPECIFICATIONS**

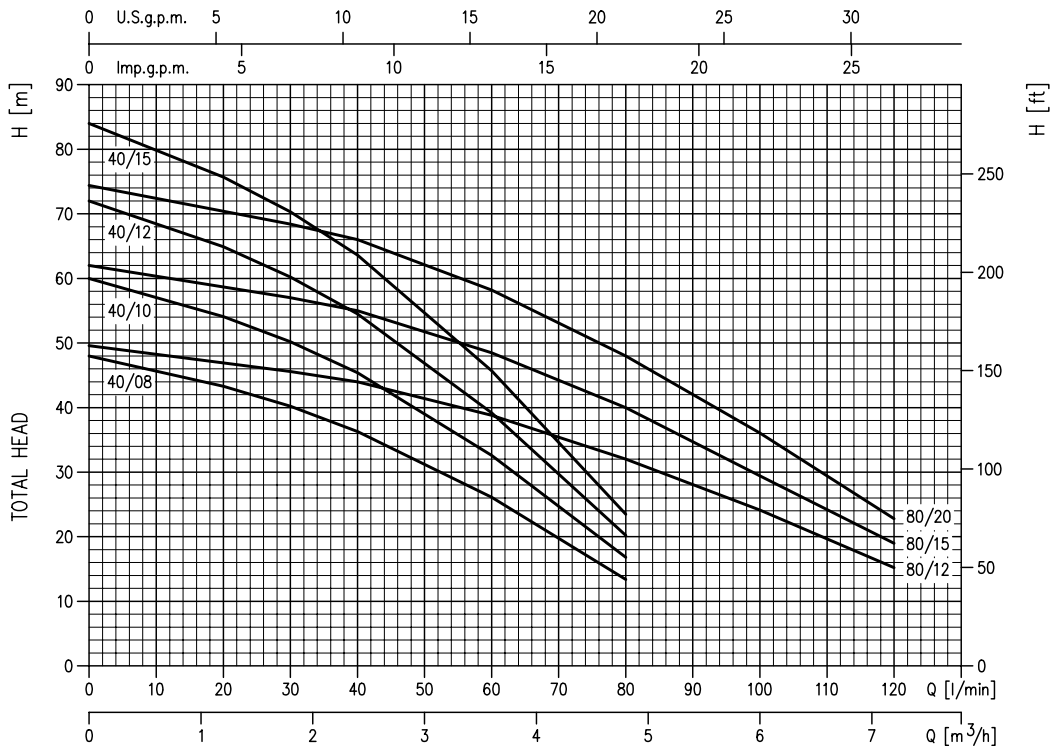
50 Hz

PUMP		
Liquid Handled	Type of liquid	Clean water
	Max temperature [°C]	40
Maximum working pressure	[MPa]	1
Maximum available negative suction head	[m]	-6
Construction	Impeller	Closed centrifugal type (multiple stages)
	Shaft seal type	Double mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction	G 1¼ UNI ISO 228
	Discharge	G 1¼ UNI ISO 228
Material	Casing	AISI 304
	Casing cover	AISI 304
	Impeller	PPO mod. glass fibre reinforced
	Diffuser	PPO mod. glass fibre reinforced
	Shaft	AISI 416
	Shaft seal	Pump side: Carbon/Ceramic/NBR Motor side: Carbon/Ceramic/NBR
	Lubricating oil	White mineral oil: Esso Marcol 172 (90cc)
Applicable standard of test		ISO 9906 – Annex A

MOTOR		
Type	Submersible dry type	
	Single Phase	Three Phase
No. of Poles ( )	2	
Synchronous speed	[min <sup>-1</sup> ]	3000
Insulation Class	Class F	
Protection degree	IP 68	
kW/HP Rating	[kW]	0.6 ÷ 1.1
	[HP]	0.8 ÷ 1.5
Frequency	[Hz]	50
Voltage	[V]	230 ±10%
Capacitor	Built in	
Over load protection	Built in	Provided by the user
Upper bearing bracket	Aluminium	
Lower bearing bracket	Brass	
Motor frame	AISI 304	
material	H07RN-F	
Power cable	size	3G1 (40/08, 40/10, 40/12, 40/15)
	length [m]	3G1.5 (80/12, 80/15)
		H07RN-F 4G1
Type of cable entry	Cable Gland	

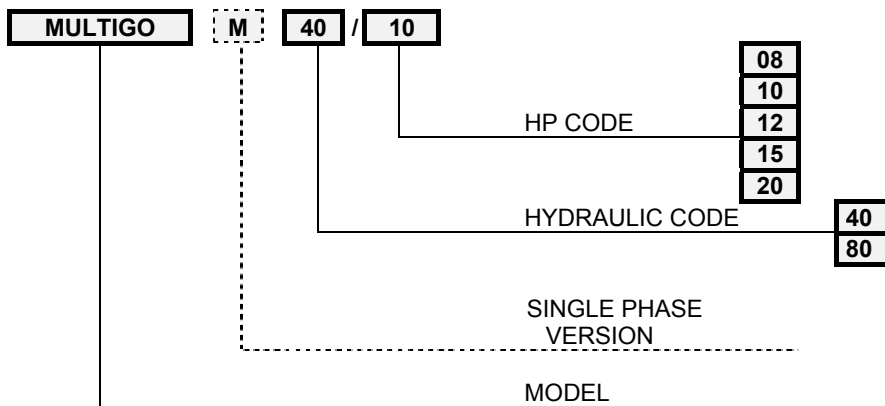
## SELECTION CHART

50 Hz



Pump type MULTIGO	kW	HP	Q=Capacity							
			l/min		m³/h		l/min		m³/h	
			20	30	1.2	1.8	2.4	3.6	4.8	6
H=Total manometric head in meters										
40/08	0,6	0,8	43,3	40,2	36,3	26,1	13,4	-	-	-
40/10	0,75	1	54,1	50,2	45,4	32,6	16,8	-	-	-
40/12	0,9	1,2	64,9	60,2	54,5	39,2	20,2	-	-	-
40/15	1,1	1,5	75,7	70,3	63,6	45,7	23,5	-	-	-
80/12	0,9	1,2	-	45,6	44	38,8	32	23,2	15,2	-
80/15	1,1	1,5	-	57	55	48,5	40	28	19	-
80/20	1,5	2	-	68,4	66	58,2	48	34,8	22,8	-

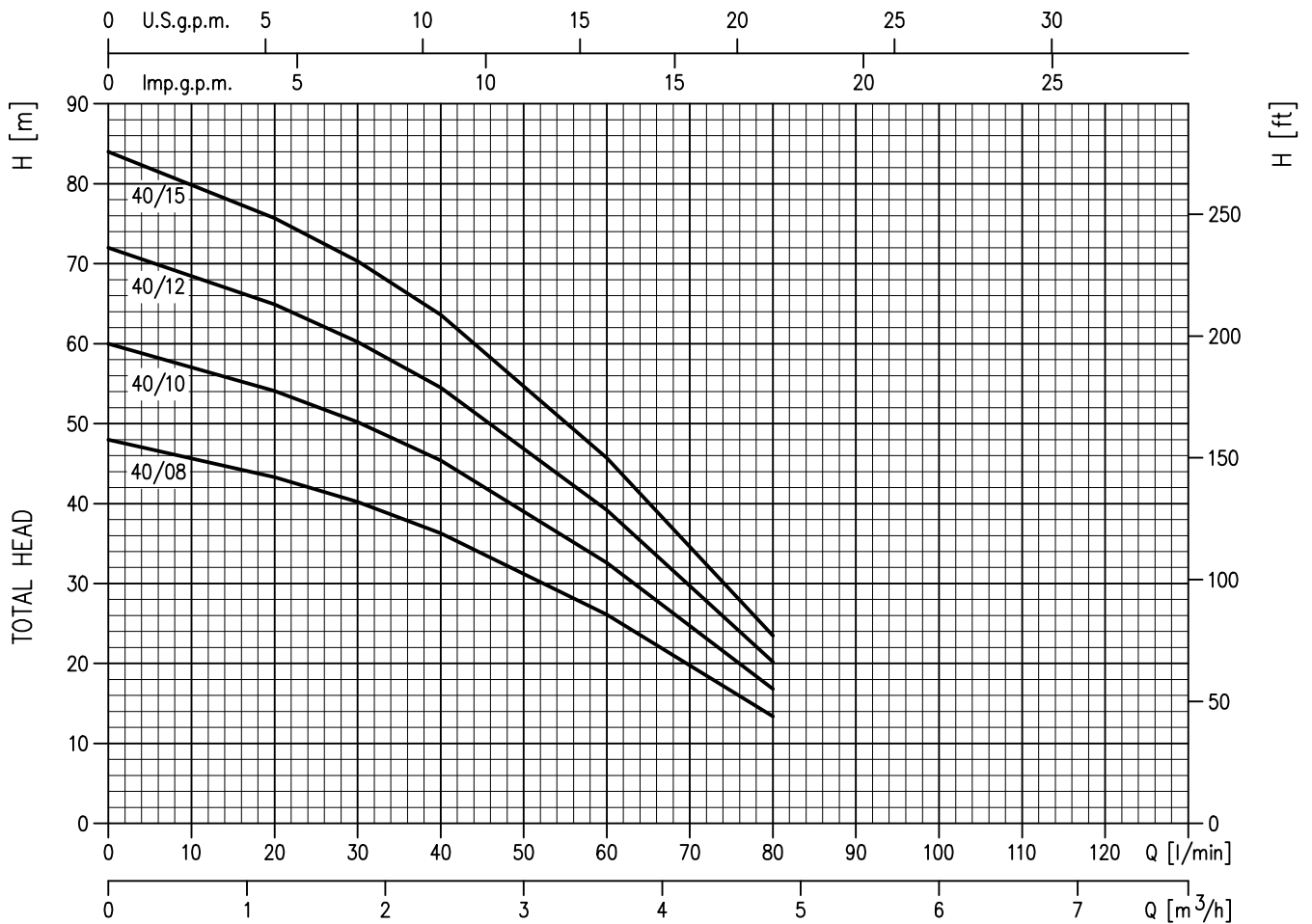
**TYPE KEY:**



PERFORMANCE CURVES

50 Hz

MULTIGO 40/08 (0.60 kW) - Impeller diameter = 104  
 MULTIGO 40/10 (0.75 kW) - Impeller diameter = 104  
 MULTIGO 40/12 (0.90 kW) - Impeller diameter = 104  
 MULTIGO 40/15 (1.10 kW) - Impeller diameter = 104

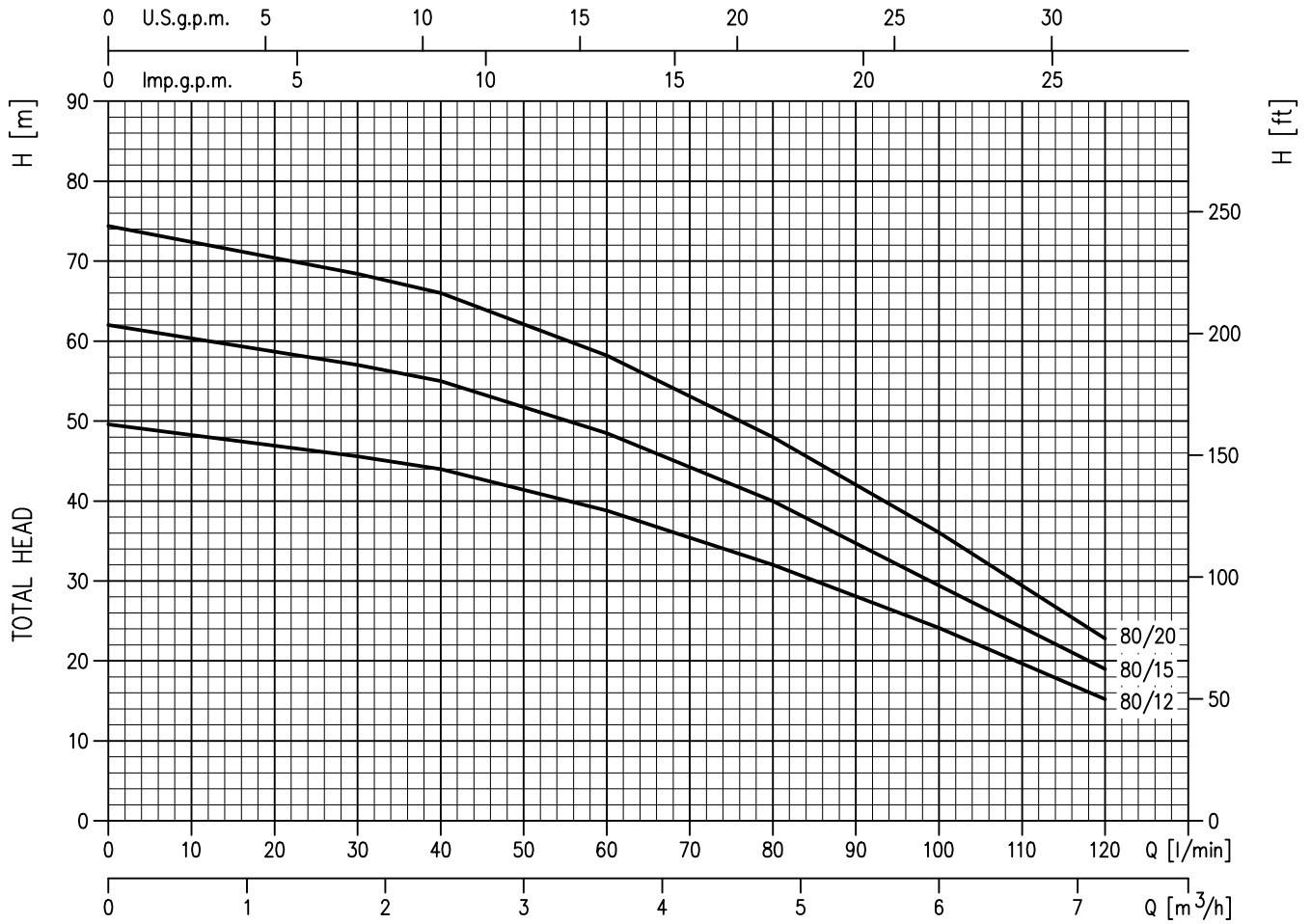


Rotation speed:  $\approx 2800 \text{ min}^{-1}$   
 Test fluid: clean water at  $20^\circ\text{C}$   
 Applicable standard of test: ISO 9906 - Annex A

PERFORMANCE CURVES

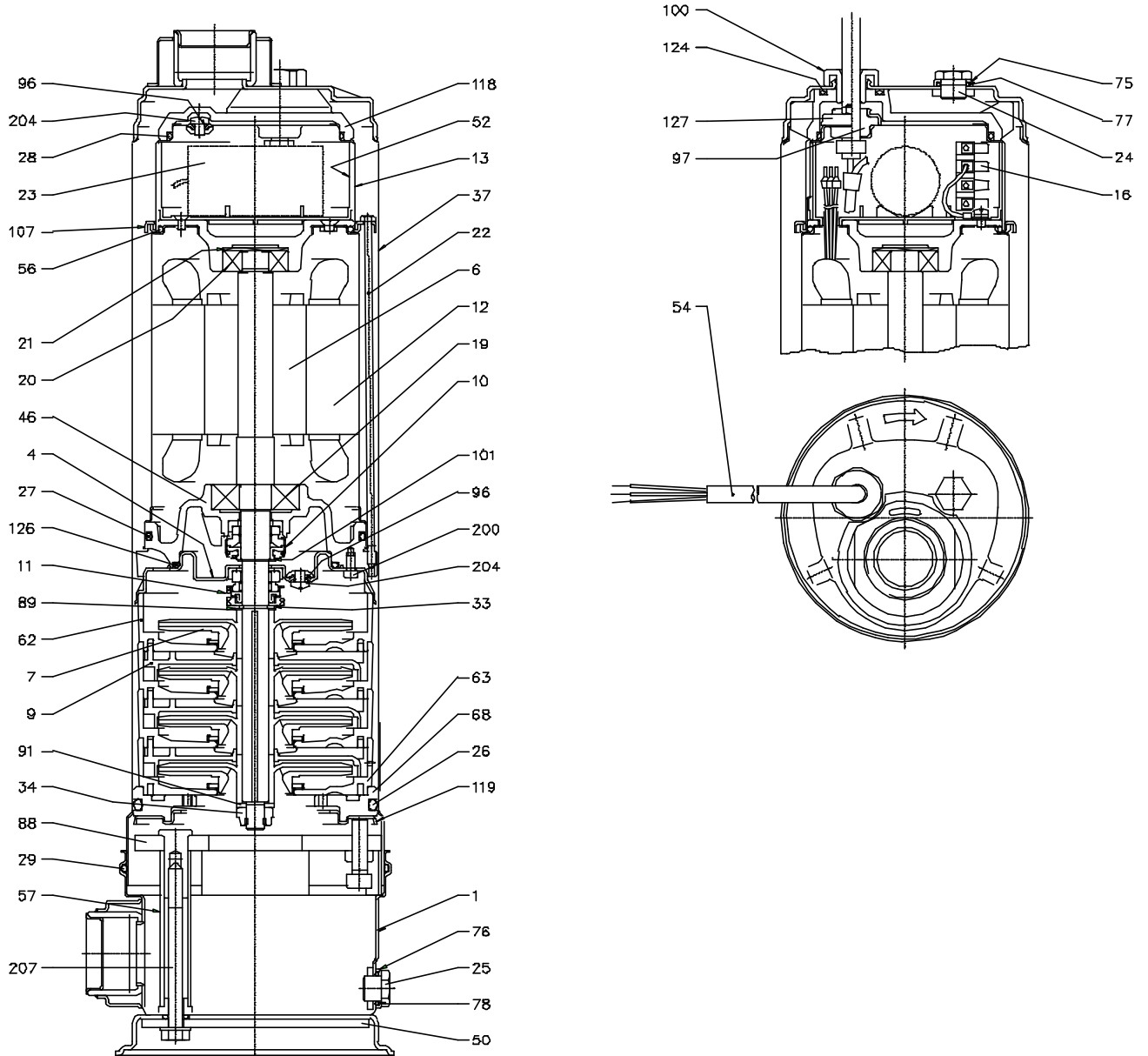
50 Hz

MULTIGO 80/12 (0.9 kW) - Impeller diameter = 102  
 MULTIGO 80/15 (1.1 kW) - Impeller diameter = 102  
 MULTIGO 80/20 (1.5 kW) - Impeller diameter = 102



Rotation speed:  $\approx 2800 \text{ min}^{-1}$   
 Test fluid: clean water at  $20^\circ\text{C}$   
 Applicable standard of test: ISO 9906 - Annex A

SECTIONAL VIEW



N°	PART NAME	MATERIAL	Q.TY	N°	PART NAME	MATERIAL	Q.TY
1	Casing	AISI 304	1	54	Power cable	-	1
4	Casing ring	AISI 304	1	56	O ring	NBR	1
6	Shaft with rotor	AISI 416	1	57	Bolt	AISI 303	2
7	Impeller	PPO mod. glass fibre reinforced	[3]	62	Stage housing	PPO mod. glass fibre reinforced	[3]
9	Diffuser	PPO mod. glass fibre reinforced	[3]	63	Stage housing with hall	PPO mod. glass fibre reinforced	1
10	Motor side mechanical seal [2]	Carbon/Ceramic/NBR	1	68	Lower spacer	PPO mod. glass fibre reinforced	1
11	Pump side mechanical seal [2]	Carbon/Ceramic/NBR	1	75	Washer	AISI 304	1
12	Motor frame with stator	-	1	76	Washer	AISI 304	1
13	Motor cover	AISI 304	1	77	O ring	NBR	1
16	Terminal	-	1	78	O ring	NBR	1
19	Lower side ball bearing	-	1	88	Retainer ring	AISI 304	1
20	Upper side ball bearing	-	1	89	Washer	AISI 304	1
21	Adjusting ring	Steel C70	1	91	Washer	AISI 304	1
22	Tie rod	AISI 303	3	96	O ring	NBR	3
23	Capacitor [1]	-	1	97	Cable entry	NBR	1
24	Header plug	AISI 303	1	100	Lock screw	AISI 303	1
25	Drain plug	AISI 303	1	101	Seeger ring	AISI 420	1
26	O ring	NBR	1	107	Retainer ring	AISI 304	1
27	O ring	NBR	1	118	Upper spacer	Brass	1
28	O ring	NBR	1	119	Flange	AISI 304	1
29	O ring	NBR	1	124	O ring	NBR	1
33	Seeger ring	AISI 304	1	126	O ring	NBR	1
34	Impeller nut	AISI 304	1	127	Cable connector	AISI 304	1
37	External pump casing	AISI 304	1	200	Screw	Stainless steel A2 UNI 7323	3
46	Bearing housing	Brass	1	204	Screw	Stainless steel A2 UNI 7323	3
50	Casing support	AISI 304	1	207	Screw	Stainless steel A2 UNI 7323	4
52	Terminal insulating box	PA66 glass fibre reinforced	1	-	-	-	-

[1] Only for single phase

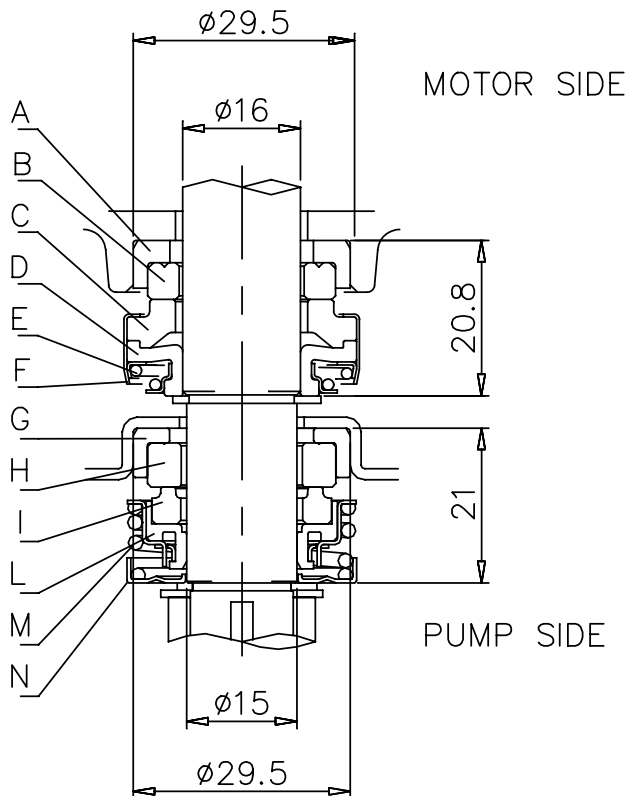
[2] See constructions mechanical seal page 302

[3] See table below:

Type pumps	[3] QUANTITY FOR MODEL		
	N°7 Impeller	N°9 Diffuser	N°62 Stage housing
MULTIGO 40/08	4	3	4
MULTIGO 40/10	5	4	5
MULTIGO 40/12	6	5	6
MULTIGO 40/15	7	6	7
MULTIGO 80/12	4	3	4
MULTIGO 80/15	5	4	5
MULTIGO 80/20	6	5	6



**MECHANICAL SEAL**



REF	PART NAME	MATERIAL product standard MULTIGO
A	Rubber seat	NBR
B	Stationary ring	Ceramic
C	Rotary ring	Carbon
D	Rotary seal	NBR
E	Coil spring	AISI 304
F	Seal cover	AISI 304
G	Rubber seat	NBR
H	Stationary ring	Ceramic
I	Rotary ring	Carbon
L	Rotary seal	NBR
M	Coil spring	AISI 304
N	Seal cover	AISI 304

DIAGRAM AND ELECTRIC CONNECTIONS

SINGLE PHASE MOTOR

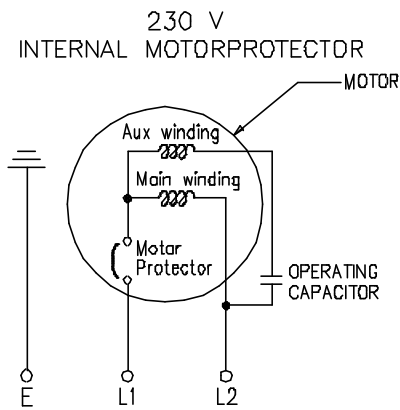
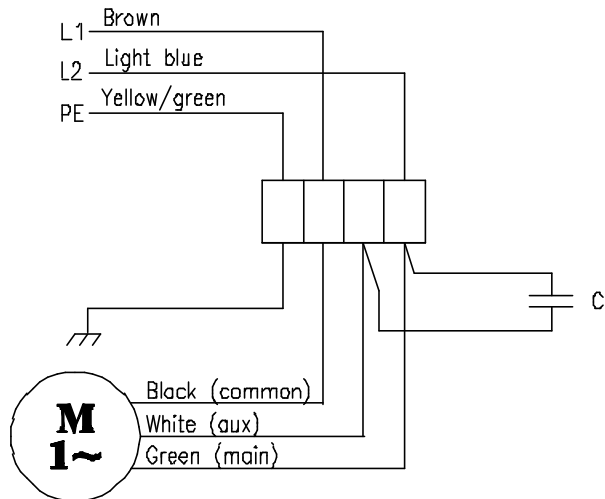
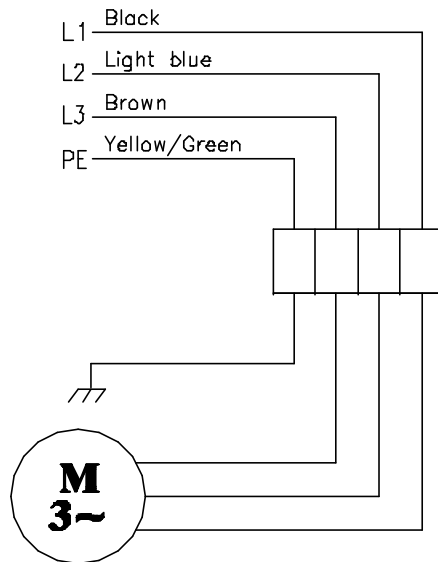
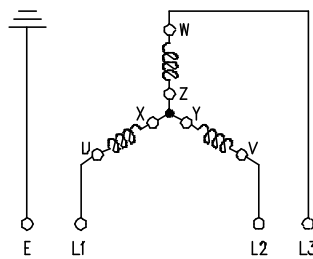


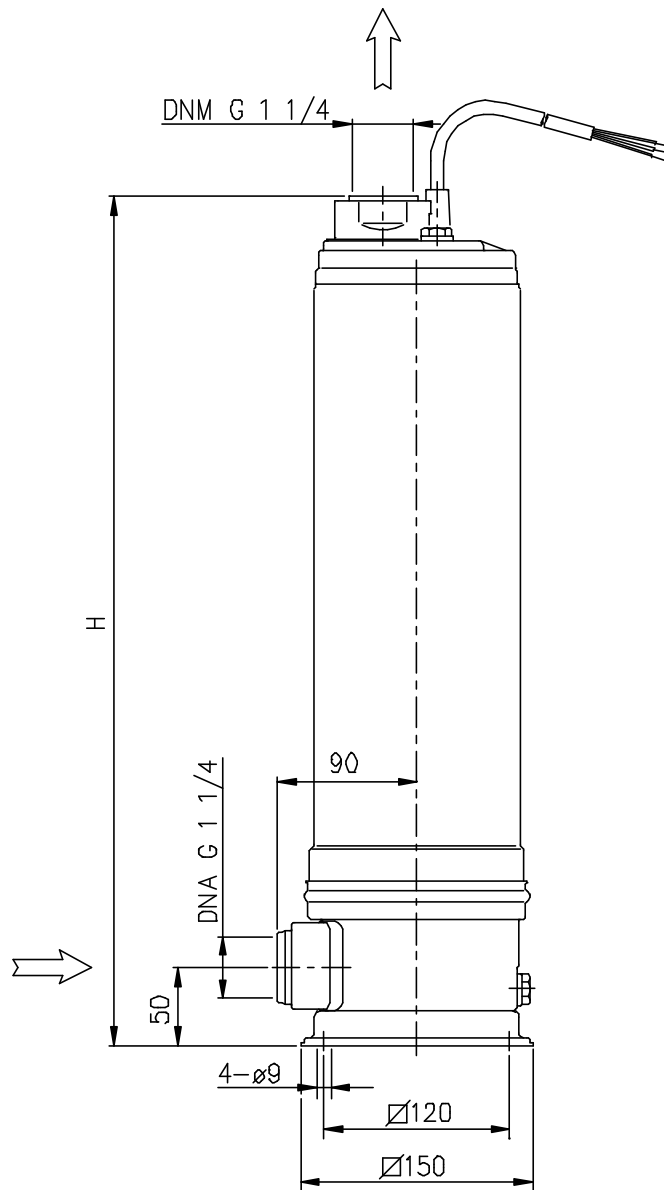
DIAGRAM AND ELECTRIC CONNECTIONS

THREE PHASE MOTOR

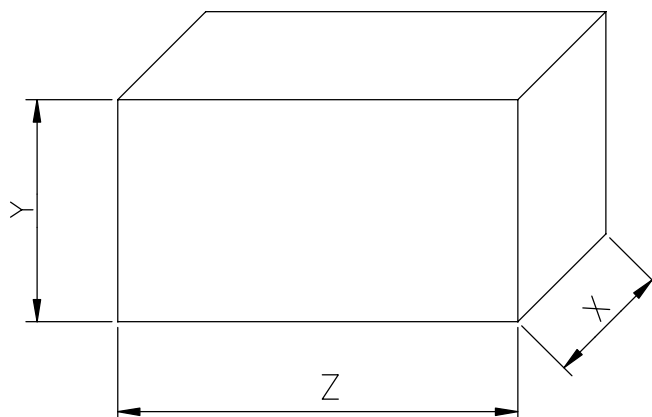


400 V  
STAR CONNECTION





Pump type MULTIGO	H [mm]
40/08	547
40/10	573
40/12	624
40/15	650
80/12	573
80/15	598
80/20	624



Type pumps		PACKING [mm]			WEIGHT [kg]	
Single Phase	Three Phase	Z	X	Y	Single Phase	Three Phase
MULTIGO M 40/08	MULTIGO 40/08	610	195	175	13.4	13
MULTIGO M 40/10	MULTIGO 40/10	610	195	175	14.4	14
MULTIGO M 40/12	MULTIGO 40/12	690	195	175	14.8	14.4
MULTIGO M 40/15	MULTIGO 40/15	690	195	175	16.4	16
MULTIGO M 80/12	MULTIGO 80/12	610	195	175	14.8	14.4
MULTIGO M 80/15	MULTIGO 80/15	690	195	175	16.1	15.7
-	MULTIGO 80/20	690	195	175	-	17.2

**TECHNICAL DATA**

50 Hz

Type pumps		Power		Capacitor		Input [kW]		Full load current [A]		Locked rotor current	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz	kW	HP	Single Phase $\mu\text{F}$	Three Phase $V_c$	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase 230 V 50 Hz	Single Phase 400 V 50 Hz
MULTIGO 40/08 M	MULTIGO 40/08	0,6	0,8	16	450	1	0,95	4,3	1,9	16	10
MULTIGO 40/10 M	MULTIGO 40/10	0,75	1	20	450	1,25	1,18	5,7	2,2	20	12
MULTIGO 40/12 M	MULTIGO 40/12	0,9	1,2	20	450	1,42	1,33	6,8	2,4	23	14
MULTIGO 40/15 M	MULTIGO 40/15	1,1	1,5	31,5	450	1,6	1,55	7,3	3	25	16,5
MULTIGO 80/12 M	MULTIGO 80/12	0,9	1,2	20	450	1,33	1,22	6,4	2,3	23	14
MULTIGO 80/15 M	MULTIGO 80/15	1,1	1,5	31,5	450	1,62	1,52	7,5	3,1	25	16,5
-	MULTIGO 80/20	1,5	2	-	-	-	1,9	-	3,5	-	16,5

Type pumps		Ball Bearing	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz	Pump side	Fan side
MULTIGO 40/08 M	MULTIGO 40/08	6303 ZZ	6202 ZZ
MULTIGO 40/10 M	MULTIGO 40/10	6303 ZZ	6202 ZZ
MULTIGO 40/12 M	MULTIGO 40/12	6303 ZZ	6202 ZZ
MULTIGO 40/15 M	MULTIGO 40/15	6303 ZZ	6202 ZZ
MULTIGO 80/12 M	MULTIGO 80/12	6303 ZZ	6202 ZZ
MULTIGO 80/15 M	MULTIGO 80/15	6303 ZZ	6202 ZZ
-	MULTIGO 80/20	6303 ZZ	6202 ZZ