

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron



Cast iron horizontal multistage centrifugal electric pumps.

APPLICATIONS

- Domestic pressure boosting
- General pressure increases
- Small-scale garden irrigation
- Washing vehicles
- Moving clean water

TECHNICAL DETAILS

- Particularly silent
- Light and easy to handle

PUMP TECHNICAL DATA

- Maximum working pressure: 10 bar
- Maximum temperature of the liquid: 40°C
- G1 for COMPACT A, G1¼ for COMPACT B of the range
- G1 discharge connection

MOTOR TECHNICAL DATA

- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP44 Protection degree
- 230V ±10%, 50Hz single phase voltage, 230/400V ±10%, 50Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version

MATERIALS

- Cast iron pump casing and bracket
- External casing in AISI 304
- Impeller and diffuser in PPE+PS reinforced with fibreglass
- Stages in PPE+PS reinforced with fibreglass/PTFE
- Shaft in AISI 416
- Mechanical seal in Carbon/Ceramic/NBR

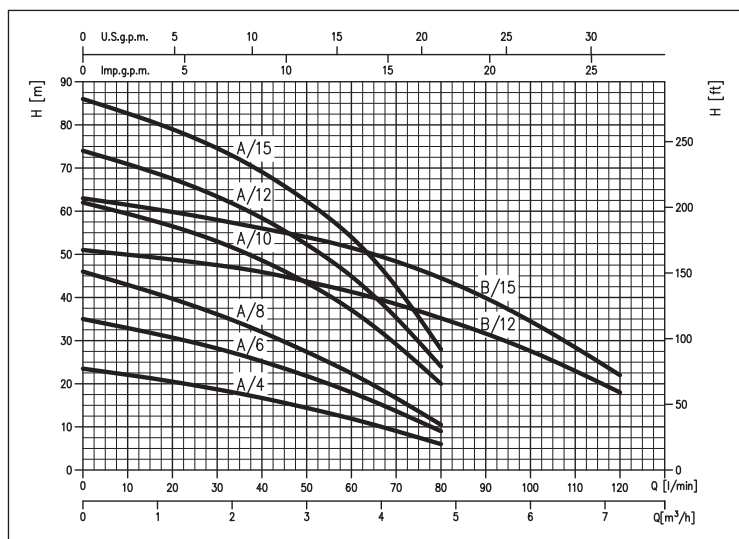
CONTROL PANELS

- 1EPBH

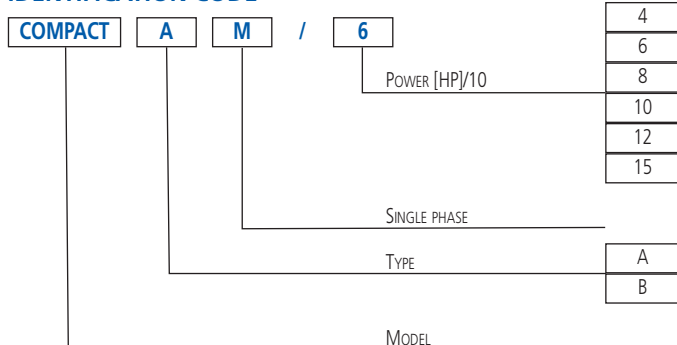
ACCESSORIES (on request)

- 5 litre 10 bar ¾ EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- 24 litre 16 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
- FYG-32 5.6÷10.5 bar G¼ F pressure switch
- Presscomfort - Pressure regulator
- Press•o•Matic - Variable speed control system (230V±10% single phase - power supply three phase 220V output – maximum motor power 2.2 kW - 3 HP)
- E-drive - Frequency converter

PERFORMANCE CURVES (according to ISO 9906 Attachment A)



IDENTIFICATION CODE

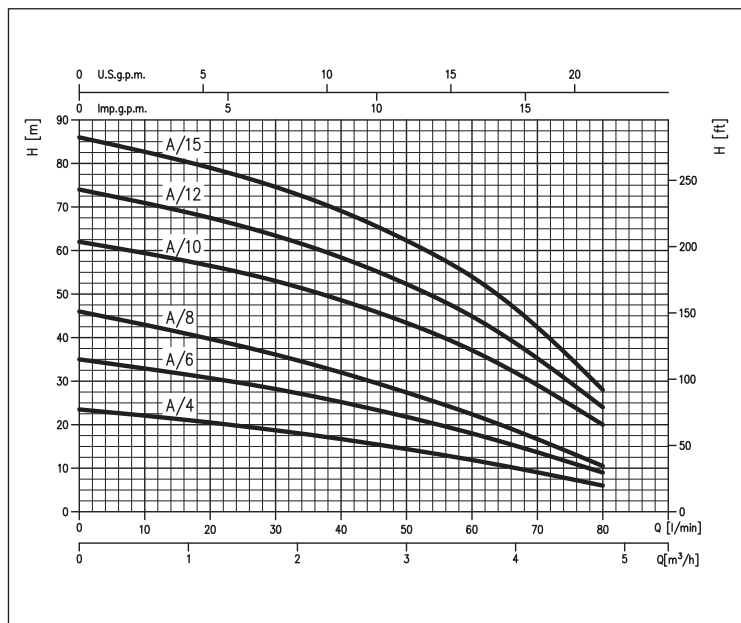


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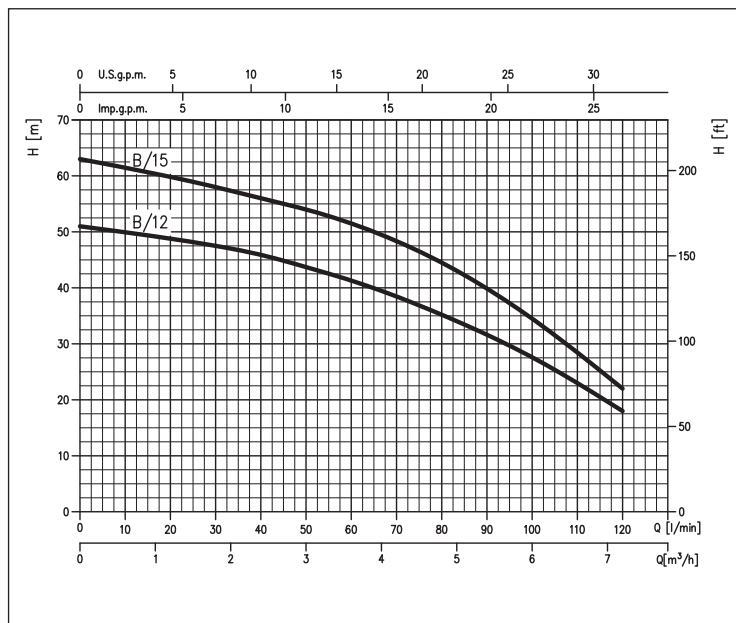
COMPACT A range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



COMPACT B range PERFORMANCE CURVES

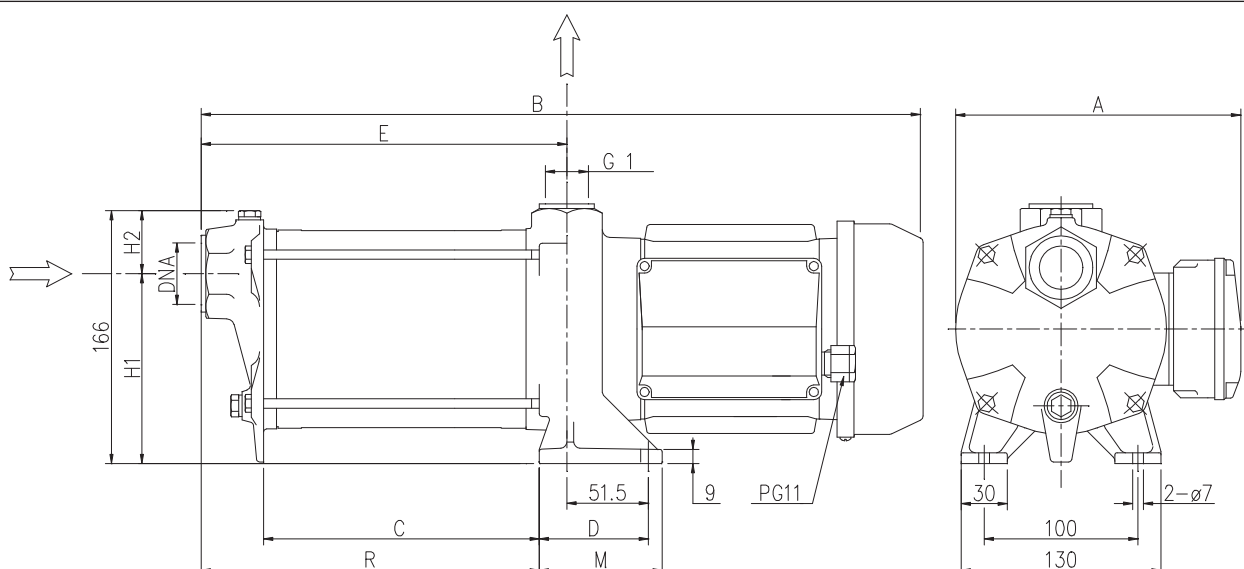
(according to ISO 9906 Attachment A)



PERFORMANCE TABLE

Model		P ₂		Q=Flow rate								
Single phase 230V	Three phase 230/400V	[HP]	[kW]	l/min m³/h	20 1,2	30 1,8	40 2,4	50 3	60 3,6	80 4,8	100 6	120 7,2
				H=Head [m]								
COMPACT AM/4	COMPACT A/4	0,4	0,3	20,5	18,7	16,7	14,4	11,9	6,0	-	-	-
COMPACT AM/6	COMPACT A/6	0,6	0,44	30,7	28,2	25,2	21,8	18,0	9,0	-	-	-
COMPACT AM/8	COMPACT A/8	0,8	0,6	39,7	36,1	32,0	27,4	22,4	10,5	-	-	-
COMPACT AM/10	COMPACT A/10	1	0,75	56,5	53,0	48,5	43,5	37,1	20,0	-	-	-
COMPACT AM/12	COMPACT A/12	1,2	0,9	67,5	63,4	58,5	52,5	45,0	24,0	-	-	-
COMPACT AM/15	COMPACT A/15	1,5	1,1	79,0	74,6	69,0	62,5	54,0	28,0	-	-	-
COMPACT BM/12	COMPACT B/12	1,2	0,9	-	47,5	46,0	43,5	41,5	35,2	27,6	18,0	-
COMPACT BM/15	COMPACT B/15	1,5	1,1	-	58,0	56,0	54,0	51,5	44,5	34,5	22,0	-

DIMENSIONS



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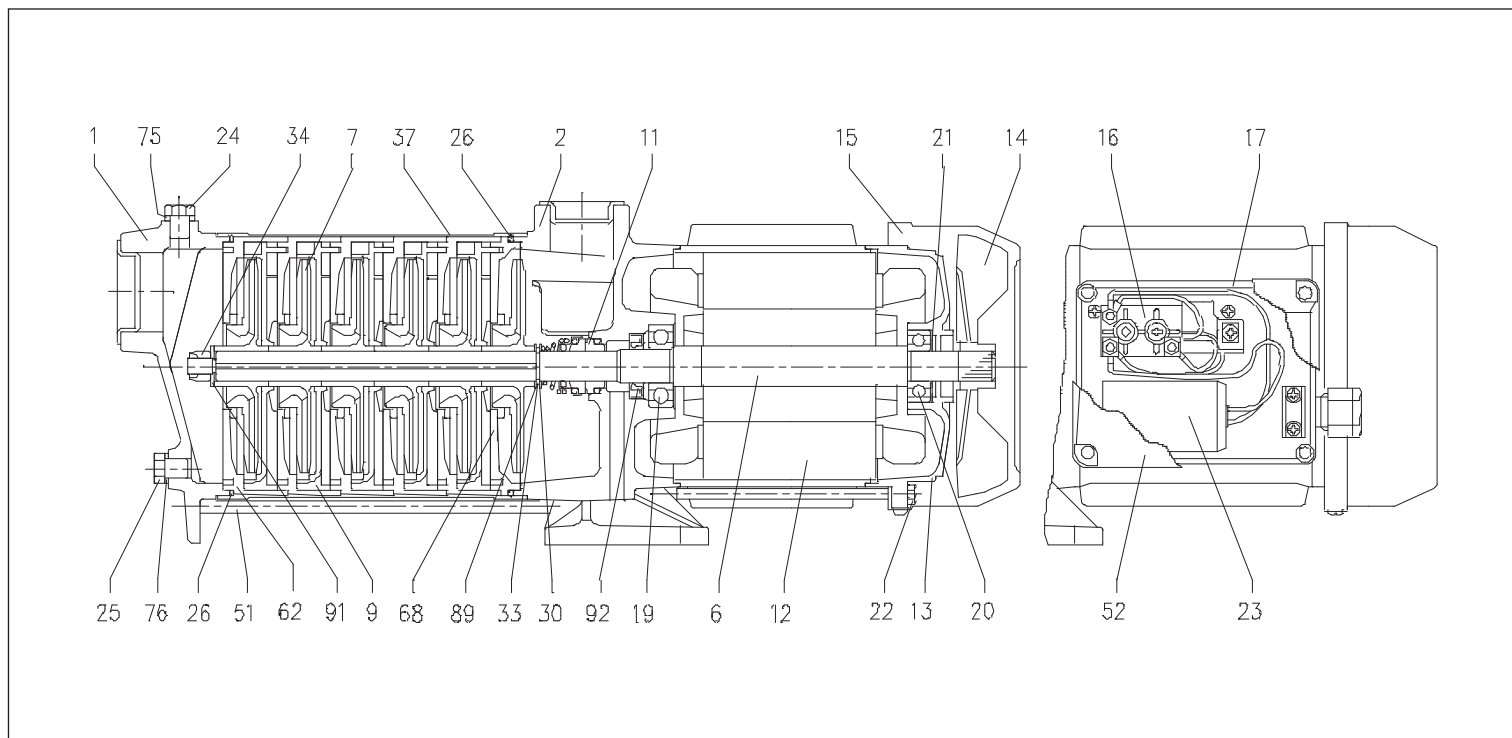
DIMENSIONS TABLE

Model		Dimensions [mm]												Weight [kg]	
		A		B		C	D	E	H1	H2	M	R	DNA	Single phase	Three phase
Single phase	Three phase	[1]	[2]	[2]	[1]										
COMPACT AM/4	COMPACT A/4	159	183,5	307,5	307,5	82	51,5	120,5	127,5	38,5	62	120,5	G1	8,4	8,4
COMPACT AM/6	COMPACT A/6	159	183,5	333,5	333,5	108	51,5	146,5	127,5	38,5	62	146,5	G1	9,3	9,3
COMPACT AM/8	COMPACT A/8	159	183,5	359,5	359,5	134	51,5	172,5	127,5	38,5	62	172,5	G1	10,3	10,3
COMPACT AM/10	COMPACT A/10	169	193,5	426	426	142	69,5	198,5	123,5	42,5	80	180,5	G1	14,5	14,5
COMPACT AM/12	COMPACT A/12	169	193,5	452	464	168	69,5	224,5	123,5	42,5	80	206,5	G1	15,5	16,3
COMPACT AM/15	COMPACT A/15	169	193,5	490	490	194	69,5	250,5	123,5	42,5	80	232,5	G1	16,7	16,7
COMPACT BM/12	COMPACT B/12	169	193,5	400	412	116	69,5	172,5	123,5	42,5	80	154,5	G1¼	14,9	15,7
COMPACT BM/15	COMPACT B/15	169	193,5	438	438	142	69,5	198,5	123,5	42,5	80	180,5	G1¼	15,9	15,9

[1]= Three phase only

[2]= Solo single phase

SECTIONAL VIEW



MATERIALS TABLE

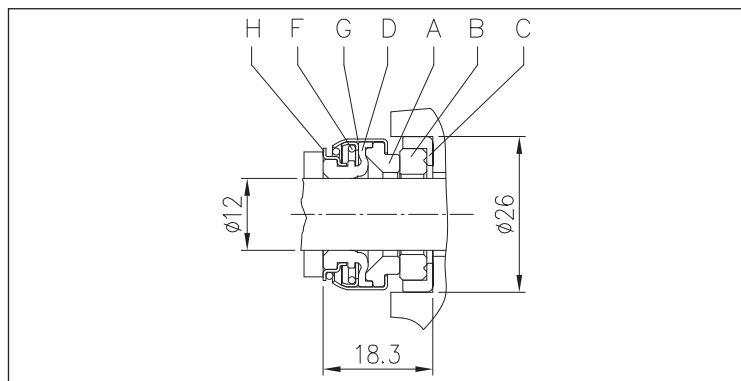
Ref.	Name	Material	Ref.	Name	Material
1	Pump body	G20	23	Capacitor [1]	-
2	Pump body support	G20	24	Filler cap	Brass
6	Rotor shaft	AISI 416	25	Drain plug	Brass
7	Impeller	PPE+PS reinforced with fibreglass	26	O-Ring	NBR
9	Nozzle	PPE+PS reinforced with fibreglass	30	Washer	AISI 304
11	Mechanical seal	Carbon/Ceramic/NBR	33	Seeger ring	AISI 304
12	Motor case	-	34	Impeller nut	AISI 304
13	Motor cover	Aluminium	37	Pump casing	AISI 304
14	Fan	PP	51	Pump tie-rod	Galvanised Fe P04
15	Fan cover	Galvanised Fe P04	52	Capacitor-holder box [1]	PP
16	Terminal box	-	62	Stage box	PPE+PS reinforced with fibreglass
17	Terminal box cover	Aluminium	68	Stage	PPE+PS reinforced with fibreglass/PTFE
19	Bearing (pump side)	PP [1]	75	Washer	AISI 304
20	Bearing (motor side)	-	76	Washer	AISI 304
21	Adjusting ring	-	89	Washer	AISI 304
22	Motor tie-rod	Steel C70	91	Washer	AISI 304
		Galvanised Fe 42	92	Sealing ring	-

[1]= Single phase only

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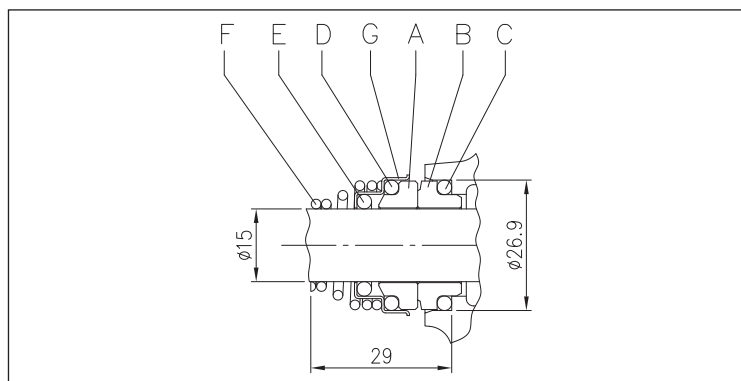
MECHANICAL SEAL for COMPACT A(M)/4, A(M)/6, A(M)/8



MATERIALS TABLE

Ref.	Name	Material
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Diaphragm	NBR
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

MECHANICAL SEAL for COMPACT A(M)/10, A(M)/12, A(M)/15 - B(M)/12, B(M)/15



MATERIALS TABLE

Ref.	Name	Material
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

ELECTRIC DATA TABLE

Model		P ₂		Efficiency		Capacitor		Efficiency (%)			P ₁		Absorbed Current		
Single phase 230V	Three phase 230/400V	[HP]	[kW]	Single phase	Three phase	Single phase μF	V _c	Three phase			Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V	Three phase 400V
								50%	75%	100%					
COMPACT AM/4	COMPACT A/4	0,4	0,3	-	-	10	450	-	-	-	0,53	0,50	2,5	1,9	1,1
COMPACT AM/6	COMPACT A/6	0,6	0,44	-	-	12,5	450	-	-	-	0,70	0,65	3,0	2,3	1,3
COMPACT AM/8	COMPACT A/8	0,8	0,6	-	-	14	450	-	-	-	0,90	0,82	4,0	2,6	1,5
COMPACT AM/10	COMPACT A/10	1	0,75	-	IE2	20	450	77,2	80,9	81,3	1,25	0,92	6,0	2,9	1,7
COMPACT AM/12	COMPACT A/12	1,2	0,9	-	IE2	31,5	450	79,0	81,7	81,6	1,38	1,35	6,2	4,3	2,5
COMPACT AM/15	COMPACT A/15	1,5	1,1	-	IE2	31,5	450	79,0	81,7	81,6	1,60	1,35	7,3	4,3	2,5
COMPACT BM/12	COMPACT B/12	1,2	0,9	-	IE2	31,5	450	79,0	81,7	81,6	1,30	1,35	5,8	4,3	2,5
COMPACT BM/15	COMPACT B/15	1,5	1,1	-	IE2	31,5	450	79,0	81,7	81,6	1,60	1,35	7,3	4,3	2,5

NOISE DATA TABLE

Model		P ₂		L _{pA} - dB(A)*
Single phase 230V	Three phase 230/400V	[HP]	[kW]	
COMPACT AM/4	COMPACT A/4	0,4	0,3	<70
COMPACT AM/6	COMPACT A/6	0,6	0,44	
COMPACT AM/8	COMPACT A/8	0,8	0,6	
COMPACT AM/10	COMPACT A/10	1	0,75	
COMPACT AM/12	COMPACT A/12	1,2	0,9	
COMPACT AM/15	COMPACT A/15	1,5	1,1	
COMPACT BM/12	COMPACT B/12	1,2	0,9	<70
COMPACT BM/15	COMPACT B/15	1,5	1,1	

* Mean value of several measures at 1m distance around the pump.
Tolerance ± 2,5 dB.