

# COMPACT

## 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 of vehicles
- Pumping 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 suction connection for COMPACT A, G1¼ for COMPACT B
- G1 discharge connection

### MOTOR TECHNICAL DATA

- IE2 and IE3 high energy-efficiency motors starting from 0.75kW
- 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-ampereometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version

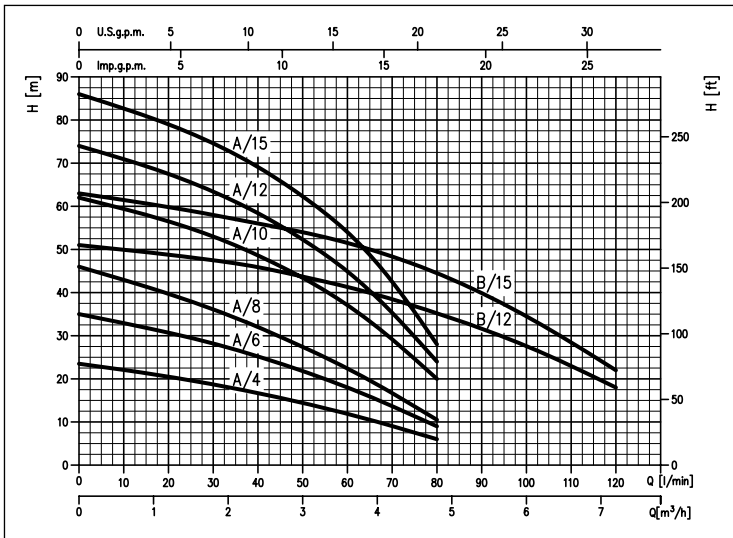
### MATERIALS

- Cast iron pump body and support
- 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 Ceramic/Carbon/NBR

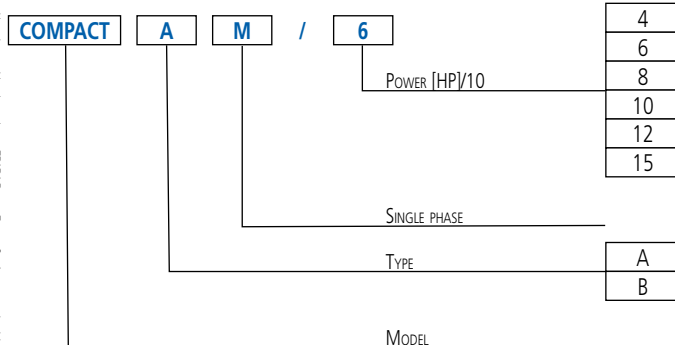
### ACCESSORIES (On request)

- Electric panels
- Vessels
- Floats
- Pressure switches
- Presscomfort - Pressure regulator
- E-power - Variable speed control system
- E-drive - Frequency converter

### PERFORMANCE CURVES (according to ISO 9906 Attachment A)



### IDENTIFICATION CODE

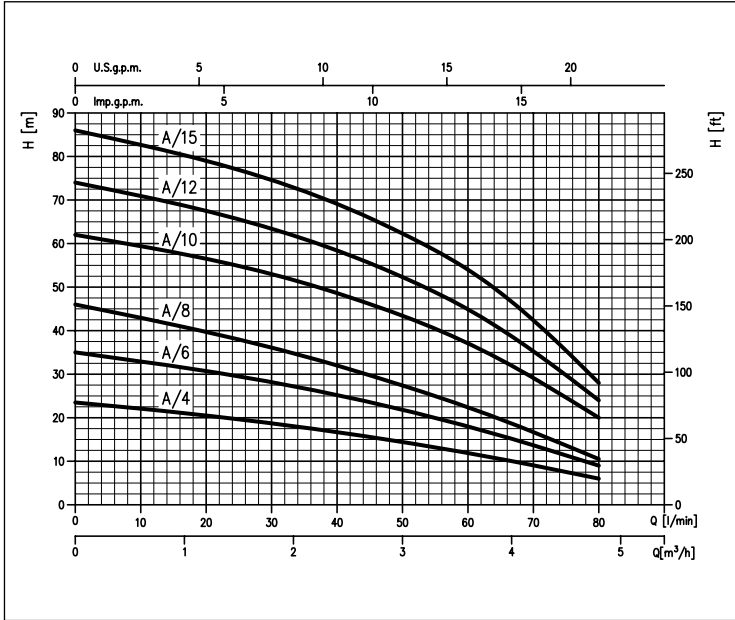


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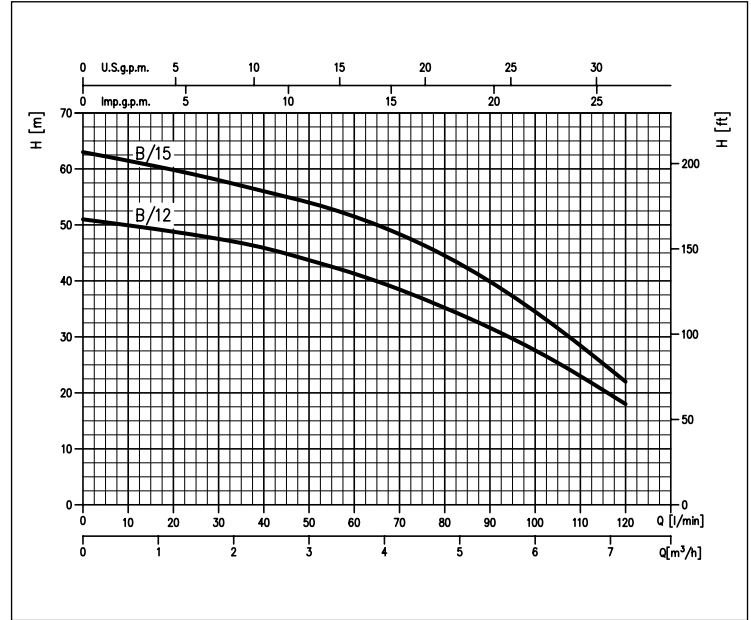
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## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS in cast iron

**COMPACT A range PERFORMANCE CURVES**  
(according to ISO 9906 Attachment A)



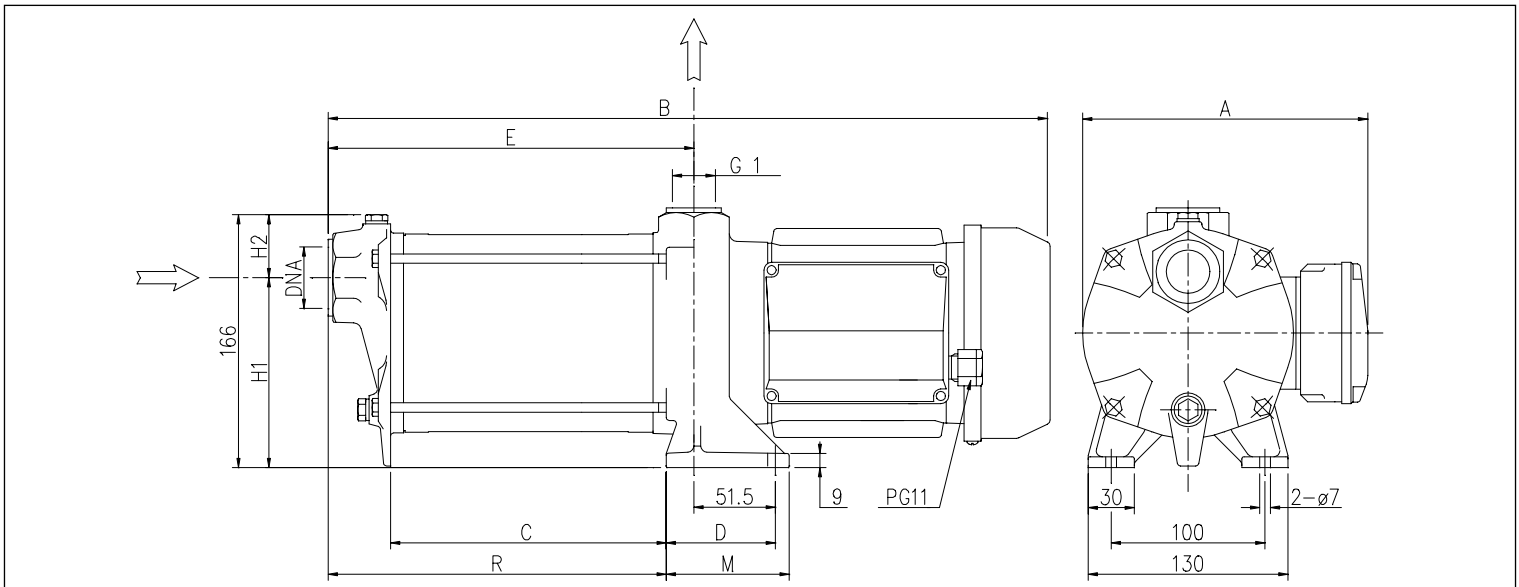
**COMPACT B range PERFORMANCE CURVES**  
(according to ISO 9906 Attachment A)



**PERFORMANCE CHART**

Single phase 230V	Model Three phase 230/400V	P <sub>2</sub>		Q = Flow Rate								
		[HP]	[kW]	l/min	20	30	40	50	60	80	100	120
				m <sup>3</sup> /h	1.2	1.8	2.4	3	3.6	4.8	6	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**



# COMPACT

## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

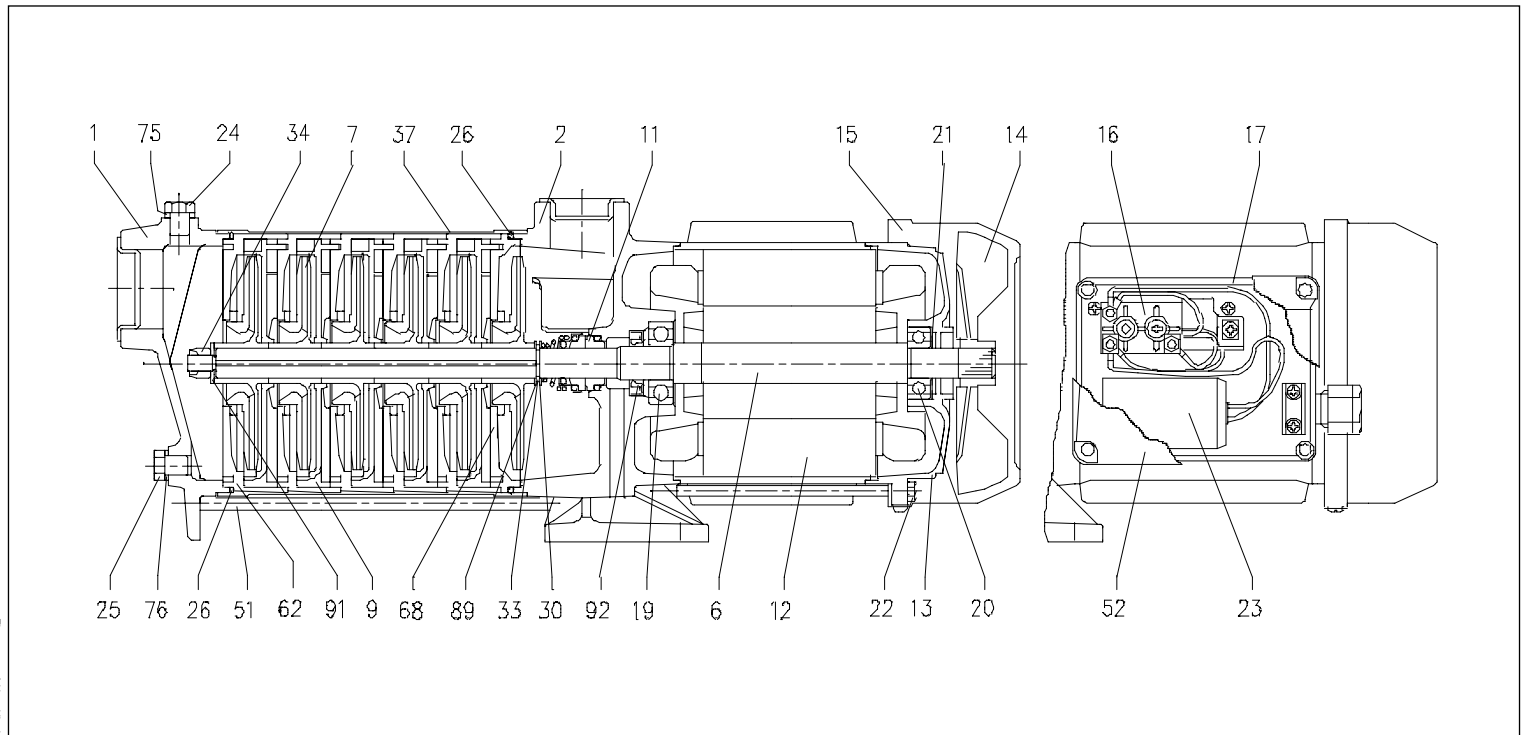
### DIMENSIONS TABLE

Single phase	Model	Three phase	Dimensions [mm]														Weight [kg]	
			A [1]	A [2]	B [2]	B [1]	C	D	E	H1	H2	M	R	T	*	DNA	[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	PG11	-	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	PG11	-	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	PG11	-	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	PG11	M16x1.5	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	PG11	M16x1.5	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	PG11	M16x1.5	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	PG11	M16x1.5	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	PG11	M16x1.5	G1¼	15.9	15.9

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

\* Models with IE3 motor only

### 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	Diffuser	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)	-	75	Washer	AISI 304
20	Bearing (motor side)	-	76	Washer	AISI 304
21	Adjustment ring	Steel C70	89	Washer	AISI 304
22	Motor tie-rod	Galvanised Fe 42	91	Washer	AISI 304
			92	Sealing ring	-

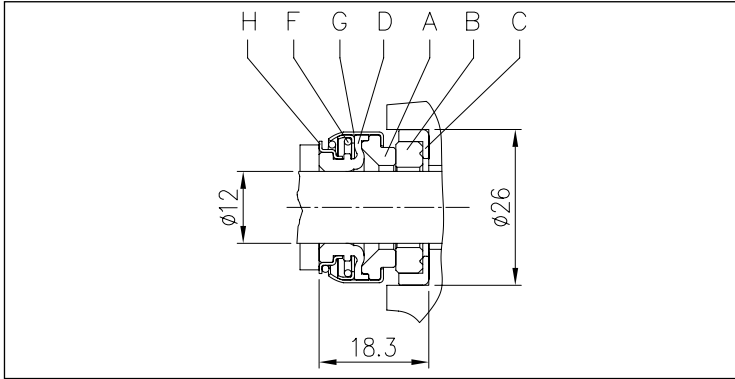
[1]= Single phase only

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## HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

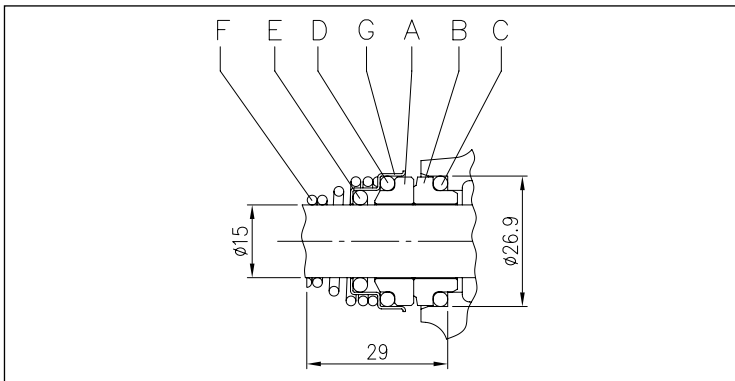
### MECHANICAL SEAL for COMPACT A(M)/4, A(M)/6, A(M)/8



### 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	Single phase 230V	Three phase 230/400V	P <sub>2</sub>		Efficiency		Capacitor Single phase μF	V <sub>c</sub>	Efficiency (%) Three phase			P <sub>1</sub>		Absorbed Current [A]		
			[HP]	[kW]	Single phase	Three phase			50%	75%	100%	Single phase [kW]	Three phase [kW]	Single phase 230V	230V	400V
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
-			1	0.75	-	IE3	-	-	80.9	82.3	82.1	-	0.91	-	3.0	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
-			1.2	0.9	-	IE3	-	-	81.7	83.1	82.4	-	1.34	-	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
-			1.5	1.1	-	IE3	-	-	81.7	83.1	82.4	-	1.34	-	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
-			1.2	0.9	-	IE3	-	-	81.7	83.1	82.4	-	1.34	-	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
-			1.5	1.1	-	IE3	-	-	81.7	83.1	82.4	-	1.34	-	4.3	2.5

### NOISE DATA TABLE

Model	Single phase 230V	Three phase 230/400V	P <sub>2</sub>		L <sub>pa</sub> - dB(A)*
			[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	

\* Average noise level measured at 1 m from the motor pump.  
Tolerance ± 2.5 dB.