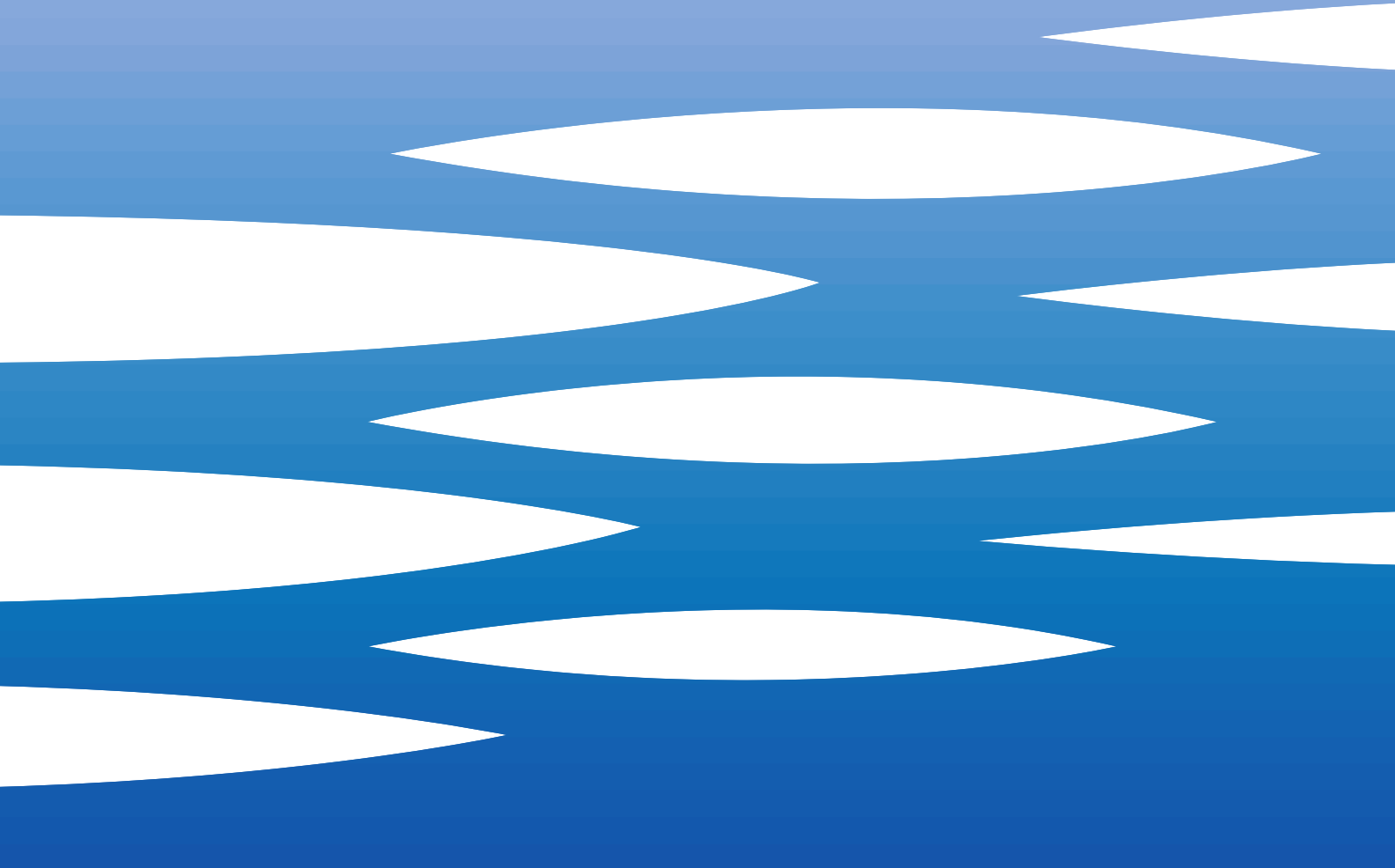


EBARA



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SPECIFICATION

50Hz

Rev. F

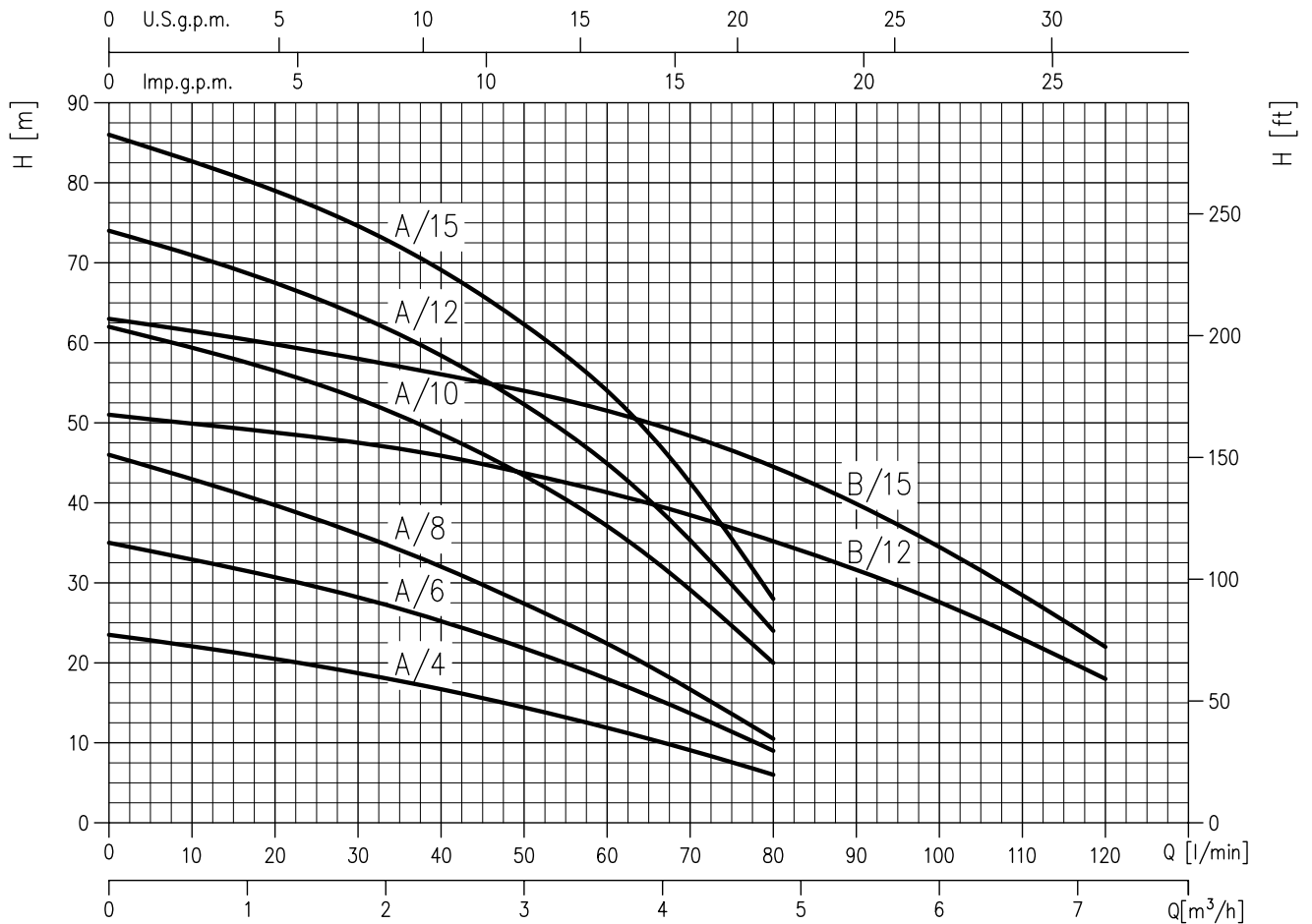
PUMP		
Liquid Handled	Type of liquid	Clean water
	Max temperature [°C]	40
Maximum working pressure	[MPa]	1
Construction	Impeller	Closed centrifugal
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction	G 1" (Compact A version) UNI ISO 228
		G 1 1/4" (Compact B version) UNI ISO 228
	Discharge	G 1" (All version) UNI ISO 228
Material	Casing	Cast iron
	Impeller	PPE+PS Glass Fiber Reinforced
	Shaft seal	Ceramic/Carbon/NBR
	External pump casing	AISI 304
	Shaft	AISI 416
	Stages	PPE+PS Glass Fiber Reinforced/PTFE
	Diffuser	PPE+PS Glass Fiber Reinforced
Bracket	Cast iron	
Applicable standard of test		ISO 9906 – Annex A

MOTOR		
Type	Electric - TEFC	
	Single Phase	Three Phase
No. of Poles	2	
Synchronous speed [min ⁻¹]	3000	
Insulation Class	F	
Protection degree	IP 44	
Power rating	[kW]	0.3 ÷ 1.1
	[HP]	0.4 ÷ 1.5
Frequency [Hz]	50	
Voltage [V]	230 ±10%	230/400 ±10%
Capacitor	Built in	-
Over load protection	Built in	Provided by the user
Casing material	Aluminium	
Base material/motor support	Cast iron	
Dimensions of cable entry	PG11	

SELECTION CHART

50Hz

Rev. F

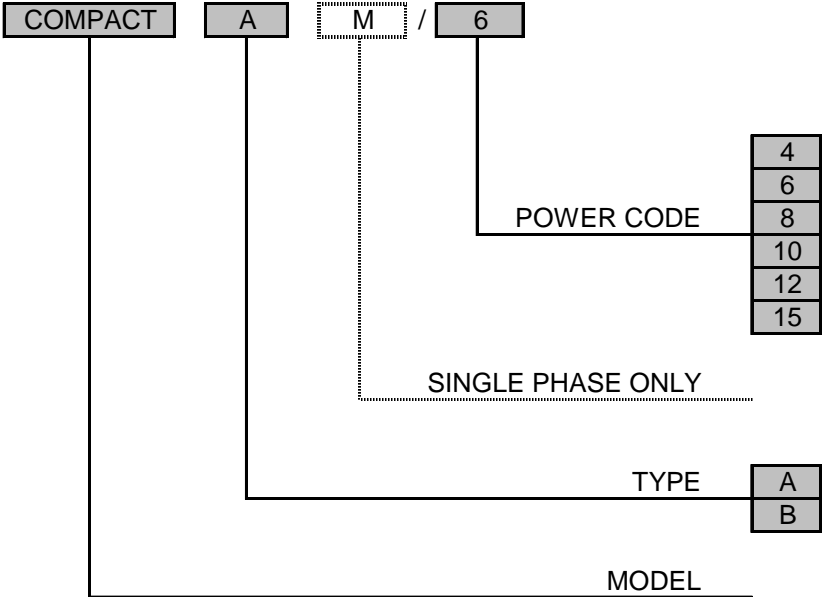


Type pumps		kW	HP	Q=Capacity																	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			l/min 0	20	30	40	50	60	80	100	120	m³/h 0	1,2	1,8	2,4	3	3,6	4,8	6	7,2
COMPACT AM/4	COMPACT A/4	0,3	0,4	23,5	20,5	18,7	16,7	14,4	11,9	6	-	-									
COMPACT AM/6	COMPACT A/6	0,44	0,6	35	30,7	28,2	25,2	21,8	18	9	-	-									
COMPACT AM/8	COMPACT A/8	0,6	0,8	46	39,7	36,1	32	27,4	22,4	10,5	-	-									
COMPACT AM/10	COMPACT A/10	0,75	1	62	56,5	53	48,5	43,5	37,1	20	-	-									
COMPACT AM/12	COMPACT A/12	0,9	1,2	74	67,5	63,5	58,5	52,5	45	24	-	-									
COMPACT AM/15	COMPACT A/15	1,1	1,5	86	79	74,5	69	62,5	54	28	-	-									
COMPACT BM/12	COMPACT B/12	0,9	1,2	51	-	47,5	46	43,5	41,5	35,2	27,6	18									
COMPACT BM/15	COMPACT B/15	1,1	1,5	63	-	58	56	54	51,5	44,5	34,5	22									

TYPE KEY

50Hz

Rev. F



Curve specifications

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906 Annex A.

The curves refer to effective speed of asynchronous motors at 50 Hz.

Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt).

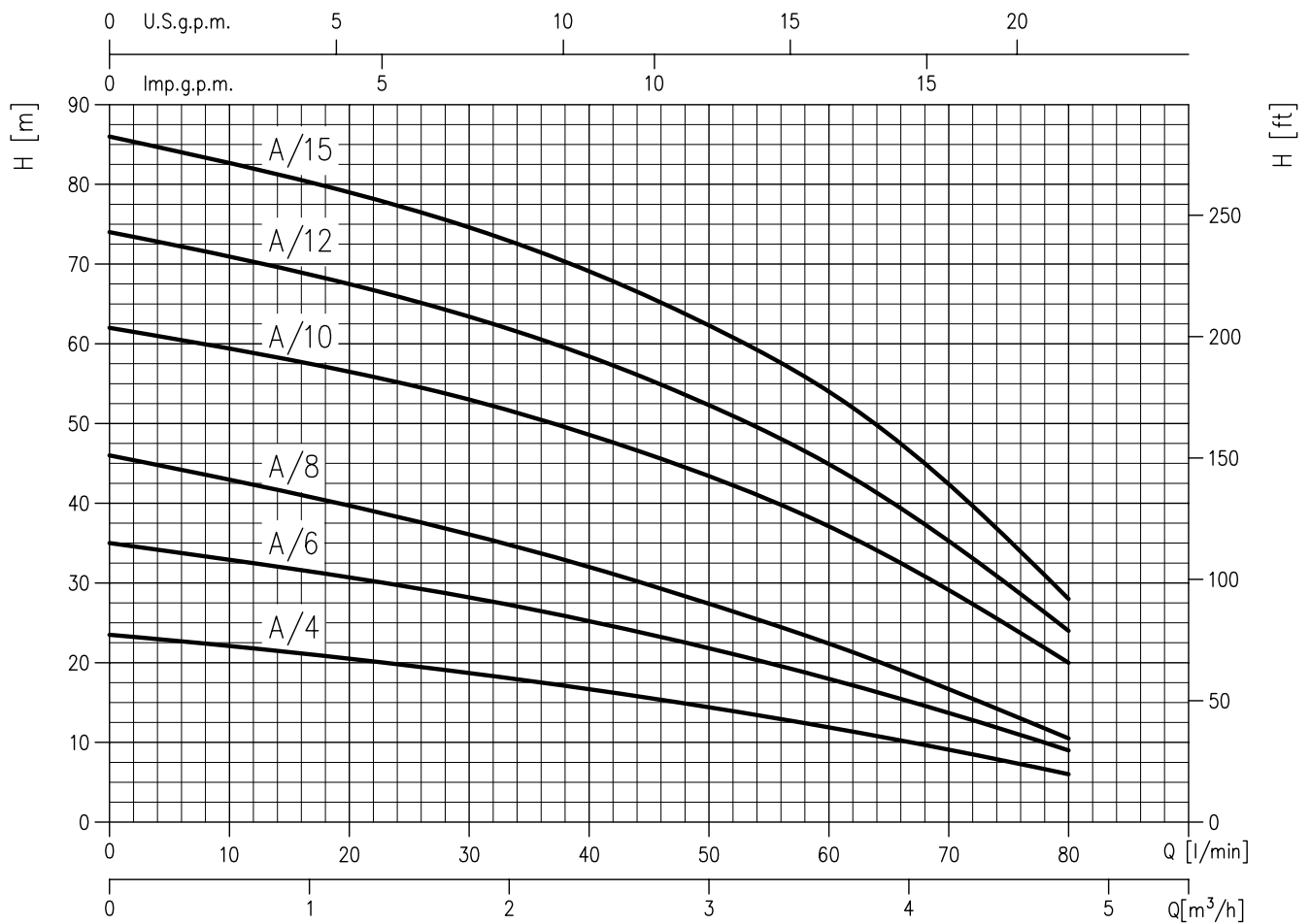
In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q = volume flow rate

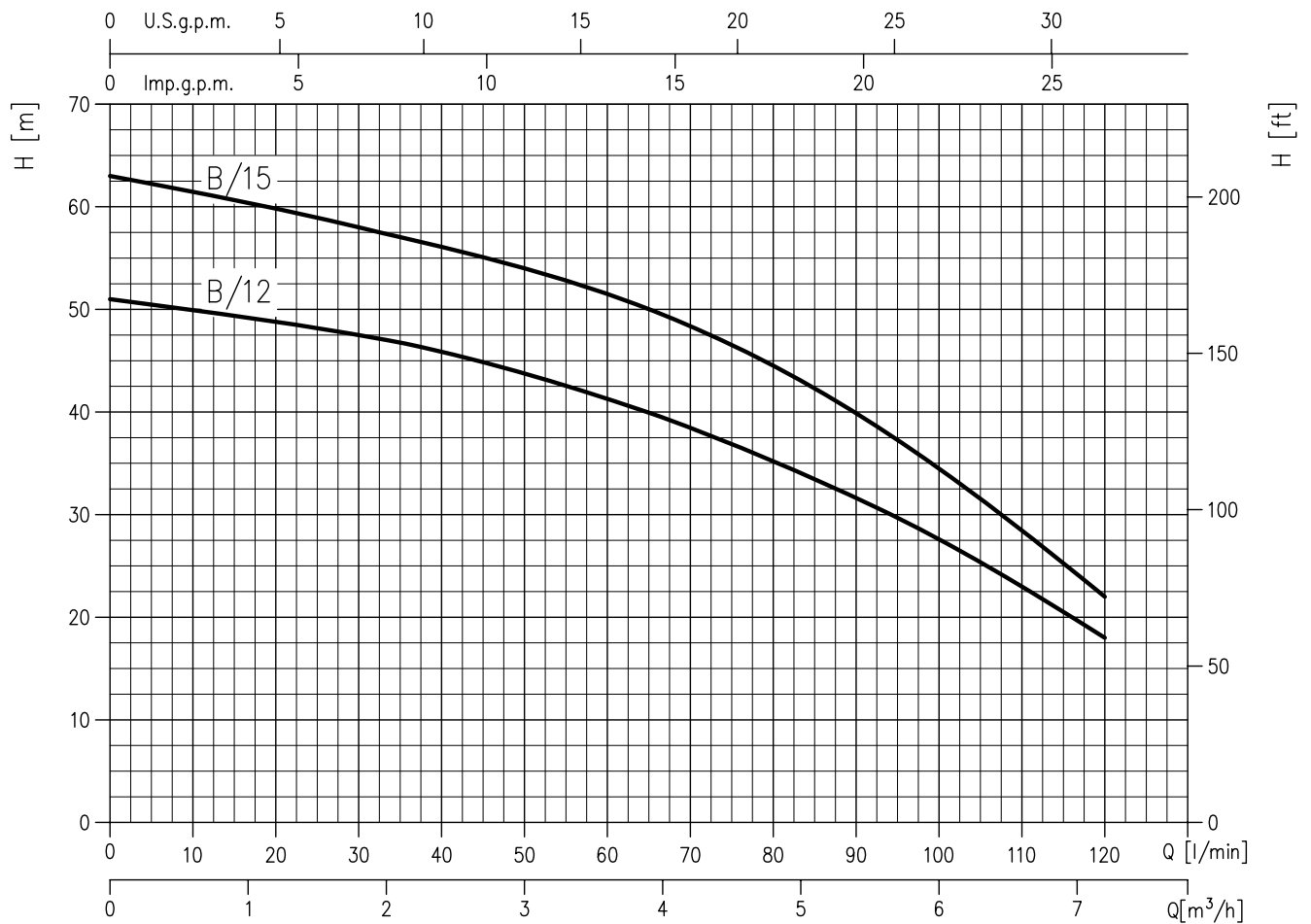
H = total head

COMPACT A/4 (0.3 kW)
COMPACT A/6 (0.44 kW)
COMPACT A/8 (0.6 kW)
COMPACT A/10 (0.75 kW)
COMPACT A/12 (0.9 kW)
COMPACT A/15 (1.1 kW)



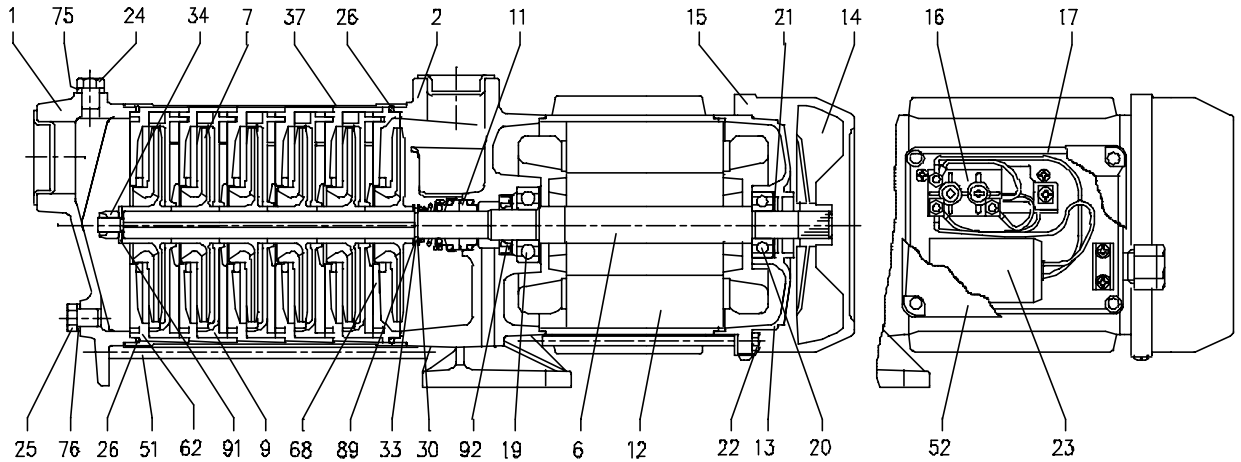
Impeller = Ø104 x 2.2 mm
 Test standard: ISO 9906 – Annex A

COMPACT B/12 (0.9 kW)
COMPACT B/15 (1.1 kW)



Impeller = Ø102 x 4 mm
Test standard: ISO 9906 – Annex A

SECTIONAL VIEW



N°	PART NAME	MATERIAL	Q.TY	N°	PART NAME	MATERIAL	Q.TY
1	Suction casing	G20	1	24	Priming plug	Brass	1
2	Delivery casing	G20	1	25	Drain plug	Brass	1
6	Shaft with rotor	AISI 416	1	26	O-ring	NBR	2
7	Impeller	PPE+PS Glass Fibre Reinforced	[3]	30	Washer	AISI 304	1
9	Diffuser	PPE+PS Glass Fibre Reinforced	[3]	33	Seeger ring	AISI 304	1
11	Mechanical seal [2]	Carbon/Ceramic/NBR	1	34	Impeller nut	AISI 304	1
12	Motor frame with stator	-	1	37	External pump casing	AISI 304	1
13	Motor cover	Aluminium	1	51	Tie rod	Fe P04 Zinked	4
14	Fan	PP	1	52	Capacitor box [1]	PP	1
15	Fan cover	Fe P04 Zinked	1	62	Stage housing	PPE+PS Glass Fibre Reinforced	[3]
16	Terminal board	-	1	68	Stage	PPE+PS Glass Fibre Reinforced/PTFE	1
17	Terminal box cover [2]	Aluminium [4] PP [1]	1	75	Washer	AISI 304	1
19	Pump side ball bearing	-	1	76	Washer	AISI 304	1
20	Fan side ball bearing	-	1	89	Washer	AISI 304	1
21	Adjusting ring	Steel C70	1	91	Washer	AISI 304	1
22	Tie rod	Fe 42 Zinked	4	92	Lip seal	-	1
23	Capacitor [1]	-	1				

[1] Only for single phase

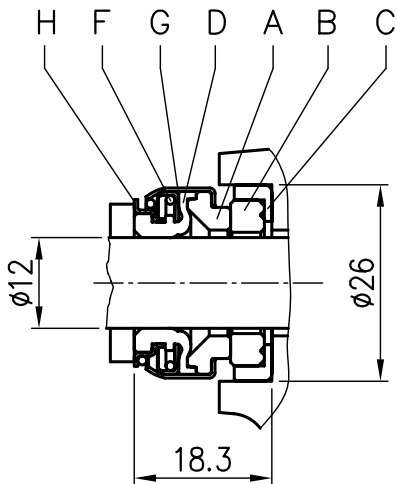
[2] See constructions mechanical seal 301

[3] See following table

PUMP	QUANTITY FOR MODEL		
	7 Impeller	9 Diffuser	62 Stage housing
COMPACT A/4	2	1	1
COMPACT A/6	3	2	2
COMPACT A/8	4	3	3
COMPACT A/10	5	4	4
COMPACT A/12	6	5	5
COMPACT A/15	7	6	6
COMPACT B/12	4	3	3
COMPACT B/15	5	4	4

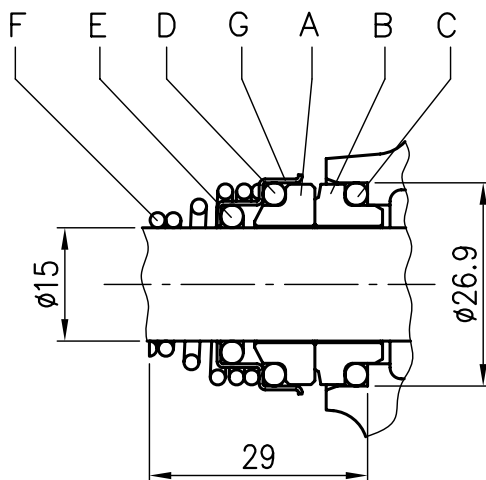
MECHANICAL SEAL

up to 0.6 kW



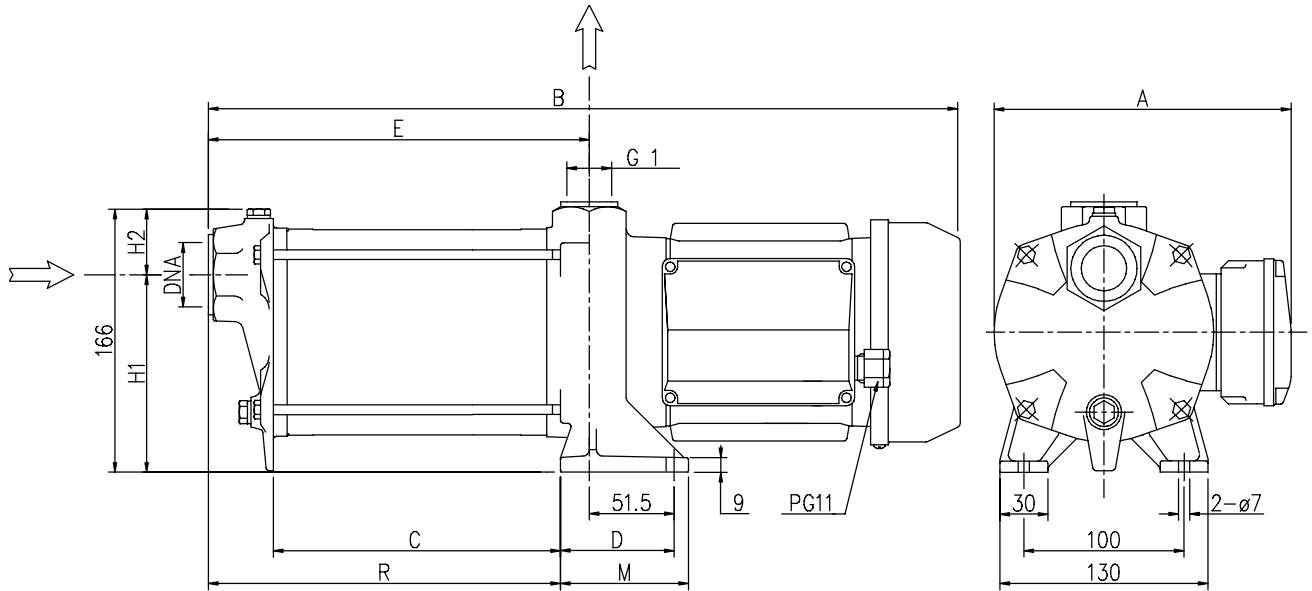
REF	PART NAME	MATERIAL
A	Rotary seal ring	carbon graphite
B	Stationary seal ring	ceramic
C	Gasket	NBR
D	Bellows	NBR
F	Self driving spring	AISI 304
G	Frame	AISI 304
H	Retainer ring	AISI 304

0.75 kW and above



REF	PART NAME	MATERIAL product standard
A	Rotary seal ring	ceramic
B	Stationary seal ring	carbon graphite
C	O Ring	NBR
D	O Ring	NBR
E	O Ring	NBR
F	Self driving spring	AISI 316
G	Frame	AISI 304

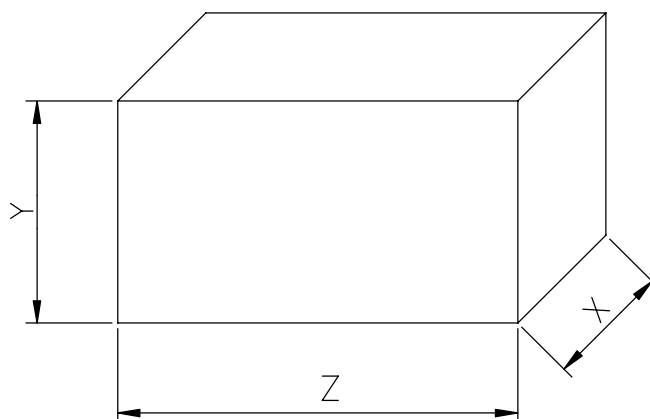
PUMP



Pump type		Dimensions mm										
Single phase	Three phase	A		B	C	D	E	H1	H2	M	R	DNA
		[1]	[2]									
COMPACT AM/4	COMPACT A/4	159	183.5	307.5	82	51.5	120.5	127.5	38.5	62	120.5	G 1
COMPACT AM/6	COMPACT A/6	159	183.5	333.5	108	51.5	146.5	127.5	38.5	62	146.5	G 1
COMPACT AM/8	COMPACT A/8	159	183.5	359.5	134	51.5	172.5	127.5	38.5	62	172.5	G 1
COMPACT AM/10	COMPACT A/10	169	193.5	426	142	69.5	198.5	123.5	42.5	80	180.5	G 1
COMPACT AM/12	COMPACT A/12	169	193.5	452	168	69.5	224.5	123.5	42.5	80	206.5	G 1
COMPACT AM/15	COMPACT A/15	169	193.5	490	194	69.5	250.5	123.5	42.5	80	232.5	G 1
COMPACT BM/12	COMPACT B/12	169	193.5	400	116	69.5	172.5	123.5	42.5	80	154.5	G 1 ¼
COMPACT BM/15	COMPACT B/15	169	193.5	438	142	69.5	198.5	123.5	42.5	80	180.5	G 1 ¼

[1] Only for three phase
 [2] Only for single phase

PACKING



Type pumps		PACKING [mm]			WEIGHT [kg]
Single Phase	Three Phase	X	Y	Z	
COMPACT AM/4	COMPACT A/4	375	185	195	8.4
COMPACT AM/6	COMPACT A/6	375	185	195	9.3
COMPACT AM/8	COMPACT A/8	375	185	195	10.3
COMPACT AM/10	COMPACT A/10	515	212	201	14.5
COMPACT AM/12	COMPACT A/12	515	212	201	15.5
COMPACT AM/15	COMPACT A/15	515	212	201	16.7
COMPACT BM/12	COMPACT B/12	515	212	201	14.9
COMPACT BM/15	COMPACT B/15	515	212	201	15.9

MOTOR DATA

Type pumps		kW	HP	Capacitor		Input [kW]		Full load current [A]			Locked rotor current		
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			Single Phase µF	VI	Single Phase	Three Phase	Single Phase	Three Phase 230 V 400 V	Single Phase 230 V 50 Hz	Three Phase 230 V 50 Hz	400 V 50 Hz	
COMPACT AM/4	COMPACT A/4	0.3	0.4	10	450	0.53	0.50	2.5	1.9	1.1	8.6	8.7	5
COMPACT AM/6	COMPACT A/6	0.44	0.6	12.5	450	0.70	0.65	3.0	2.3	1.3	10.6	10.5	6.1
COMPACT AM/8	COMPACT A/8	0.6	0.8	14	450	0.90	0.82	4.0	2.6	1.5	13.2	13.1	7.6
COMPACT AM/10	COMPACT A/10	0.75	1	20	450	1.25	1.15	6.0	4.2	2.4	24	24.2	14
COMPACT AM/12	COMPACT A/12	0.9	1.2	31.5	450	1.38	1.30	6.2	4.7	2.7	25	28.6	16.5
COMPACT AM/15	COMPACT A/15	1.1	1.5	31.5	450	1.60	1.60	7.3	5.7	3.3	31	31.5	18.2
COMPACT BM/12	COMPACT B/12	0.9	1.2	31.5	450	1.30	1.30	5.8	4.7	2.7	25	28.6	16.5
COMPACT BM/15	COMPACT B/15	1.1	1.5	31.5	450	1.60	1.65	7.3	5.9	3.4	31	31.5	18.2

BEARINGS

Type pumps		Ball Bearing	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz	Pump side	Fan side
COMPACT AM/4	COMPACT A/4	6201 ZZ	6201 ZZ
COMPACT AM/6	COMPACT A/6	6201 ZZ	6201 ZZ
COMPACT AM/8	COMPACT A/8	6201 ZZ	6201 ZZ
COMPACT AM/10	COMPACT A/10	6203 ZZ	6202 ZZ
COMPACT AM/12	COMPACT A/12	6203 ZZ	6202 ZZ
COMPACT AM/15	COMPACT A/15	6203 ZZ	6202 ZZ
COMPACT BM/12	COMPACT B/12	6203 ZZ	6202 ZZ
COMPACT BM/15	COMPACT B/15	6203 ZZ	6202 ZZ