

PERIPHERAL ELECTRIC PUMPS

in cast iron



Cast iron peripheral electric pumps.

APPLICATIONS

- Domestic uses
- Boilers power supply
- Booster units

TECHNICAL DETAILS

- Silent
- Practical
- Easy to transport
- Available also in the nickel-plated version (PRN 0.50 model)

TECHNICAL DATA

- Maximum working pressure:
 - 6 bar for PRA 0.50
 - 7.5 bar for PRA 0.80
 - 12 bar for the rest of the range
- Maximum temperature of the liquid: 80°C
- Asynchronous motor, 2 poles
- Class of insulation F
- IP44 Protection rating
- 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
- G1 discharge connection
- G1 suction connection

MATERIALS

- Cast iron pump body and support
- Shaft in C10 for the PRA 0.50 model, in AISI 420 for PRA models 0.80 and PRA 1.00, in AISI 303 for the rest of the range
- Brass impeller
- Mechanical seal in Carbon/Ceramic/NBR

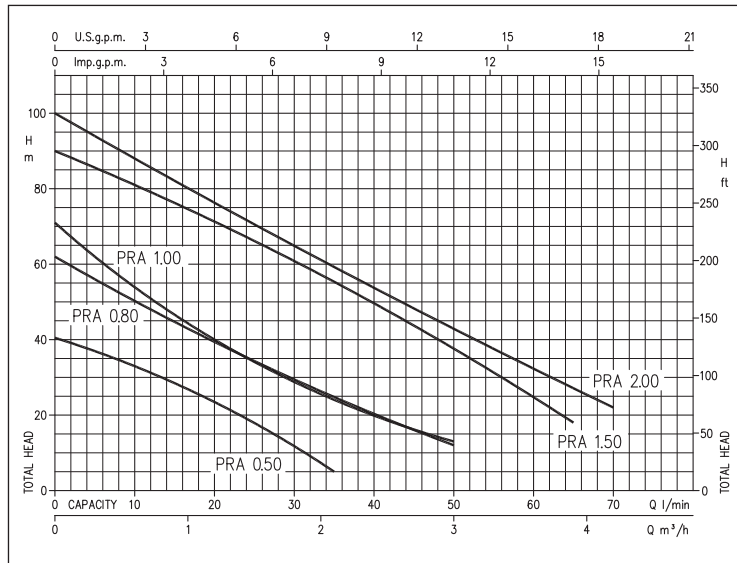
CONTROL PANELS

- 1EPBH (see page 68)

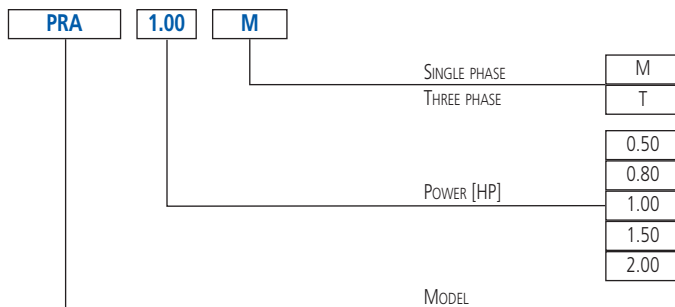
ACCESSORIES (on request)

- 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 (see page 70)
- 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 - see page 71)

PERFORMANCE CURVES (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



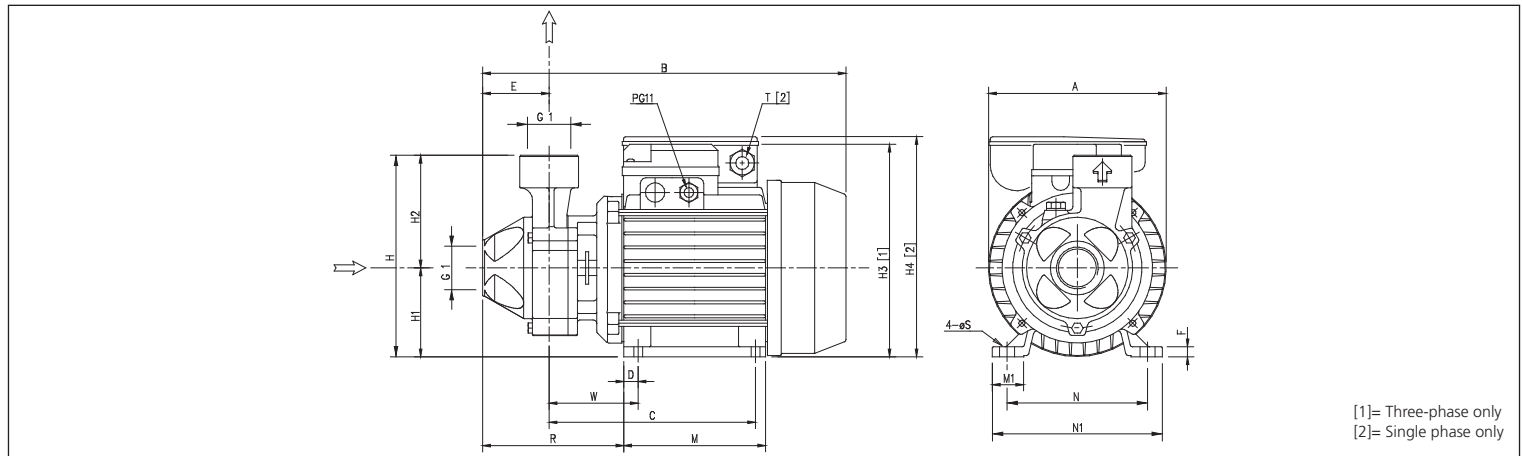
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PERFORMANCE TABLE

230V single phase	Model 230/400V three-phase	P ₂		l/min m ³ /h	Q=Flow rate																
		[HP]	[kW]		5	10	15	20	35	50	65	70									
					0,3	0,6	0,9	1,2	2,1	3	3,9	4,2									
					H=Head [m]																
PRA 0.50 M	PRA 0.50 T	0,5	0,37	37,0	33,3	28,7	23,7	5,0	-	-	-	-	-	-	-	-	-	-	-	-	-
PRA 0.80 M	PRA 0.80 T	0,8	0,6	56,0	50,7	45,1	39,8	25,0	12,0	-	-	-	-	-	-	-	-	-	-	-	-
PRA 1.00 M	PRA 1.00 T	1	0,75	62,0	54,4	47,0	40,4	24,3	13,0	-	-	-	-	-	-	-	-	-	-	-	-
PRA 1.50 M	PRA 1.50 T	1,5	1,1	-	81,0	76,9	71,9	55,8	37,9	18,0	-	-	-	-	-	-	-	-	-	-	-
PRA 2.00 M	PRA 2.00 T	2	1,5	-	88,0	82,9	77,0	59,8	43,3	27,4	22,0	-	-	-	-	-	-	-	-	-	-

DIMENSIONS

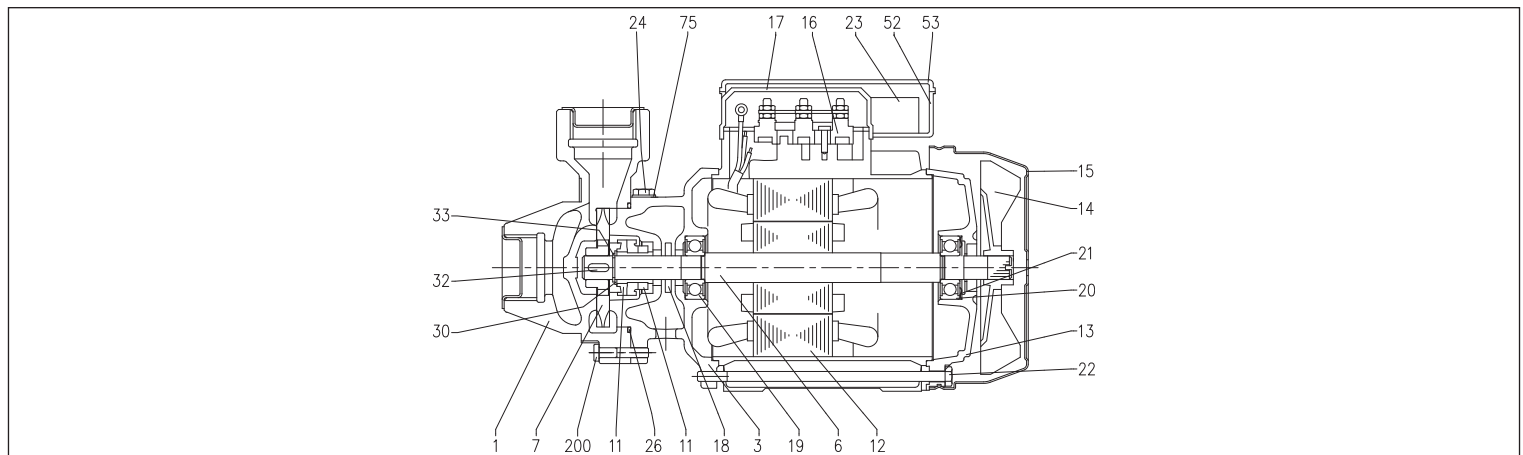


[1]= Three-phase only
[2]= Single phase only

DIMENSIONS TABLE

Model	Dimensions [mm]																			Weight [kg]
	A	B	C	D	E	F	H	H1	H2	H3	H4	M	M1	N	N1	R	T	W	S	
PRA 0.50M	130	263,5	148,5	10	50	7	143	63	80	-	160	100	23	100	120	118,5	PG11	69	7	5,6
PRA 0.50T	130	263,5	148,5	10	50	7	143	63	80	149,5	-	100	23	100	120	118,5	-	69	7	5,6
PRA 0.80M	130	290,5	159,3	11	53,8	9	161	71	90	-	178	112	25	112	135	122	PG11	69	7	9,2
PRA 0.80T	150	290,5	159,3	11	53,8	9	161	71	90	167,5	-	112	25	112	135	122	-	69	7	9,2
PRA 1.00M	150	290,5	159,3	11	53,8	9	161	71	90	-	178	112	25	112	135	122	PG11	69	7	9,7
PRA 1.00T	150	290,5	159,3	11	53,8	9	161	71	90	167,5	-	112	25	112	135	122	-	69	7	9,7
PRA 1.50M	162	330,5	188	12	57	12	175	80	95	-	212	124	28	125	152	144	PG13,5	88	9	14,5
PRA 1.50T	162	330,5	188	12	57	12	175	80	95	186,5	-	124	28	125	152	144	-	88	9	14,5
PRA 2.00M	162	330,5	188	12	57	12	175	80	95	-	212	124	28	125	152	144	PG13,5	88	9	15,8
PRA 2.00T	162	330,5	188	12	57	12	175	80	95	186,5	-	124	28	125	152	144	-	88	9	15,8

SECTIONAL VIEW



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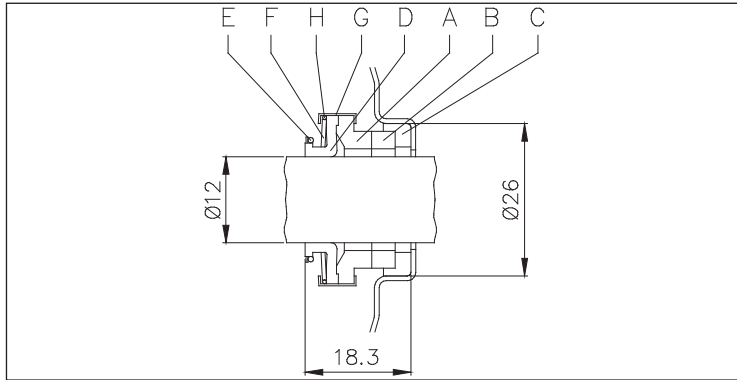
MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	Cast iron	20	Bearing (motor side)	-
3	Motor support	Cast iron	21	Adjusting ring	Steel C70
6	Shaft with rotor	[3]	22	Tie-rod	Galvanised Fe 42
7	Impeller	Brass	23	Capacitor [2]	-
11	Mechanical seal	Carbon/Ceramic/NBR	24	Filler cap	Brass
12	Motor casing with stator	-	26	O-Ring	NBR
13	Motor cover	Aluminium	30	Washer	AISI 304
14	Fan	Polypropylene	32	Key	AISI 304
15	Fan cover	Galvanised Fe P04	33	Ring	AISI 304
16	Terminal box	-	52	Capacitor-holder [2]	Polypropylene
17	Terminal box cover [1]	Aluminium	53	Capacitor-holder box [2]	Polypropylene
18	Spray protector ring	NBR	75	Washer	Aluminium
19	Bearing (pump side)	-	200	Screw	Stainless steel A2 UNI 7323

[1]= For three phase only [2]= For single phase only

[3]= Material: C10 for PRA 0.50, AISI 420 for PRA 0.80 and PRA 1.00, AISI 303 (part in contact with the liquid) for the rest of the range

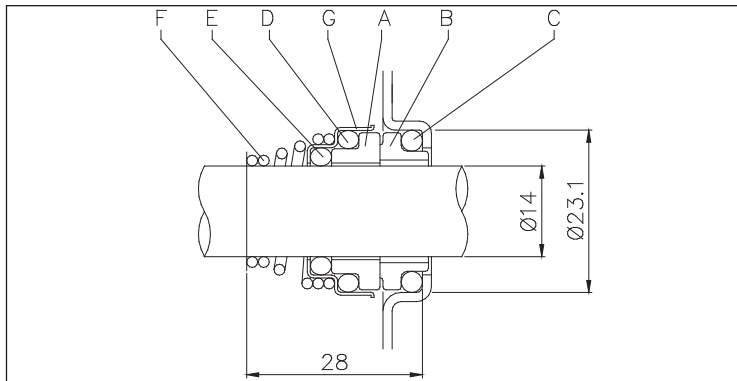
MECHANICAL SEAL for PRA 0.50 - 0.80 - 1.00



MATERIALS TABLE for PRA 0.50 - 0.80 - 1.00

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

MECHANICAL SEAL for PRA 1.50 - 2.00



MATERIALS TABLE for PRA 1.50 - 2.00

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	Single phase Capacitor		P ₁		Absorbed Current [A]				
		230V single phase	230/400V three-phase	μF	V _c	Single phase	Three phase	Three phase		
	[HP]	[kW]			Single phase [kW]	Three phase [kW]	230V	400V		
PRA 0.50 M	PRA 0.50 T	0,5	0,37	10	450	0,6	0,5	2,6	1,7	1,0
PRA 0.80 M	PRA 0.80 T	0,8	0,6	16	450	1,1	1,1	4,9	3,6	2,1
PRA 1.00 M	PRA 1.00 T	1	0,75	20	450	1,3	1,3	5,6	4,1	2,4
PRA 1.50 M	PRA 1.50 T	1,5	1,1	35	450	2,3	2,0	10,0	6,3	3,6
PRA 2.00 M	PRA 2.00 T	2	1,5	40	450	2,5	2,3	10,9	7,0	4,0