

SELF-PRIMING ELECTRIC PUMPS

in AISI 304



Self-priming electric pumps in AISI 304 stainless steel.

APPLICATIONS

- Supply of drinking water
- Domestic pressure boosting
- Small-scale garden irrigation
- Emptying reservoirs and swimming pools
- Moving clean water in general

TECHNICAL DETAILS

- Practical
- Easy to transport
- Light

TECHNICAL DATA

- Maximum working pressure: 6 bar
- Maximum temperature of the liquid: 45°C
- Maximum suction depth: 8 m
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- Protection rating IP54 (on request IP55)
- 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 suction connection for JESX, G1¼ for JEX
- G1 discharge connection

MATERIALS

- Pump body and seal housing disc in AISI 304
- AISI 303 shaft (part in contact with the liquid)
- Impeller in AISI 304 for JEX, in PPO reinforced with fibreglass for JESX
- Mechanical seal in Carbon/Ceramic/NBR
- Support and motor casing in aluminium

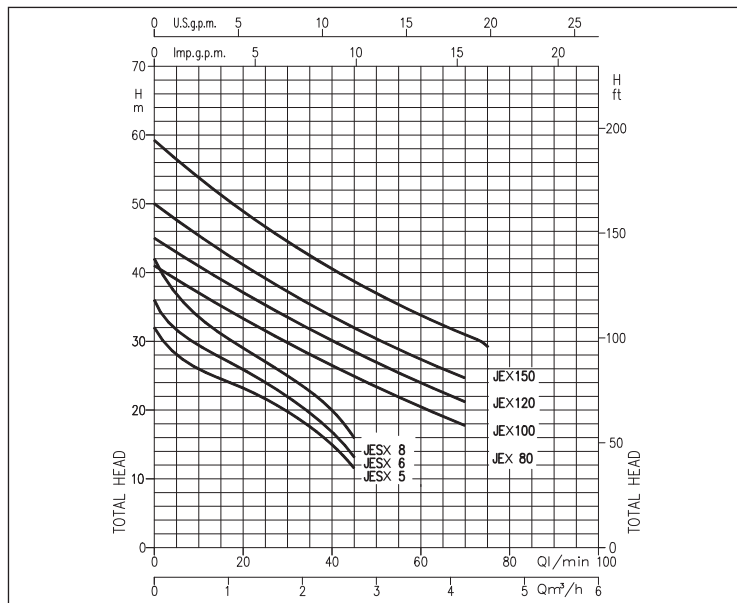
CONTROL PANELS

- 1EPBH (see page 68)

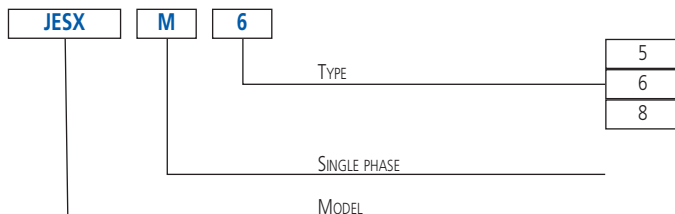
ACCESSORIES (on request)

- 5 litre 10 bar ¾ EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- 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
- 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)

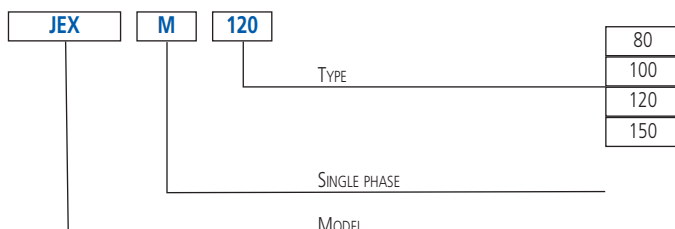
PERFORMANCE CURVES (according to ISO 9906 Attachment A)



JESX IDENTIFICATION CODE



JEX IDENTIFICATION CODE



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MATERIALS TABLE

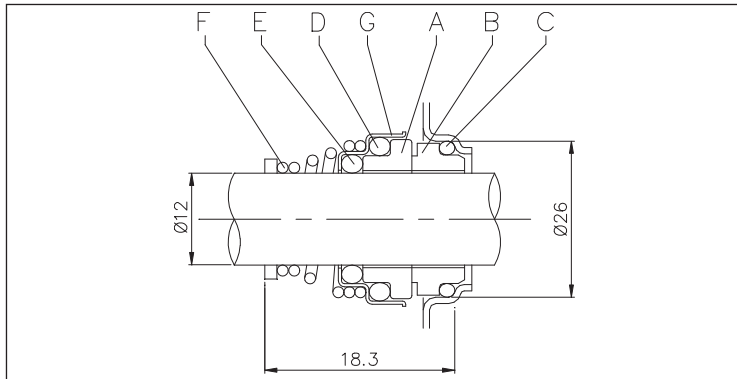
Ref.	Name	Material	Ref.	Name	Material
1	Pump body	AISI 304	22	Tie-rod	Galvanised Fe 42
3	Motor support	Aluminium	23	Capacitor [2]	-
4	Seal housing disc	AISI 304	24	Filler cap	PA6
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	25	Drain plug	PA6
7	Impeller	PPO reinforced with fibreglass	26	O-Ring	NBR
9	Venturi Unit + nozzle	PPO reinforced with fibreglass	28	O-Ring	NBR
11	Mechanical seal	Carbon/Ceramic/NBR	30	Mechanical seal spacer	Brass
12	Motor case	-	34	Impeller nut [1]	AISI 304
13	Motor cover	Aluminium	42	Foot	Aluminium
14	Fan	PA6	52	Capacitor-holder box [2]	ABS
15	Fan cover	Galvanised Fe P04	56	Terminal box cover gasket	NBR
16	Terminal box	-	77	O-Ring	NBR
17	Terminal box cover [1]	Aluminium	78	O-Ring	NBR
18	Spray protector washer	NBR	90	Cover gasket [2] [3]	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjusting ring	Steel C70	200	Screw (pump body)	A2 UNI7323 stainless steel

[1]= For three-phase only

[2]= For single phase only

[3]= For IP 55 only

JESX MECHANICAL SEAL



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

JESX ELECTRIC DATA TABLE

Model		P ₂		Single phase Capacitor		P ₁		Absorbed Current [A]		
230V single phase	230/400V three-phase	[HP]	[kW]	µF	V _c	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase	
									230V	400V
JESXM 5	JESX 5	0,5	0,37	10	450	0,44	0,43	2,1	1,5	0,85
JESXM 6	JESX 6	0,6	0,44	10	450	0,54	0,49	2,4	1,9	1,1
JESXM 8	JESX 8	0,8	0,6	12,5	450	0,63	0,58	3,0	2,25	1,3

JESX - JEX

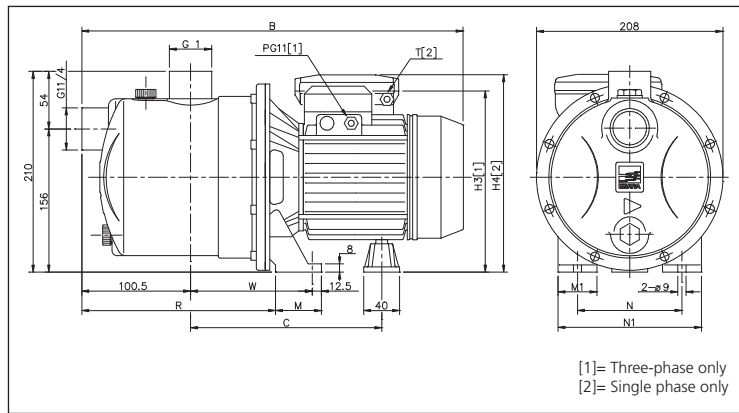
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JEX PERFORMANCE TABLE

Model	P ₂	Q=Flow rate											
		230V single phase	230/400V three-phase	[HP]	[kW]	l/min m ³ /h	20	30	40	50	60	70	75
JEXM 80	JEX 80	0,8	0,6	33,0	29,0	26,5	23,5	20,5	18,0	-	-	-	-
JEXM 100	JEX 100	1	0,75	37,0	33,5	30,0	27,0	24,0	21,0	-	-	-	-
JEXM 120	JEX 120	1,2	0,88	41,0	37,0	34,0	30,5	27,5	24,5	-	-	-	-
JEXM 150	JEX 150	1,5	1,1	49,0	44,5	40,5	37,0	34,0	31,0	29,5	-	-	-

JEX DIMENSIONS

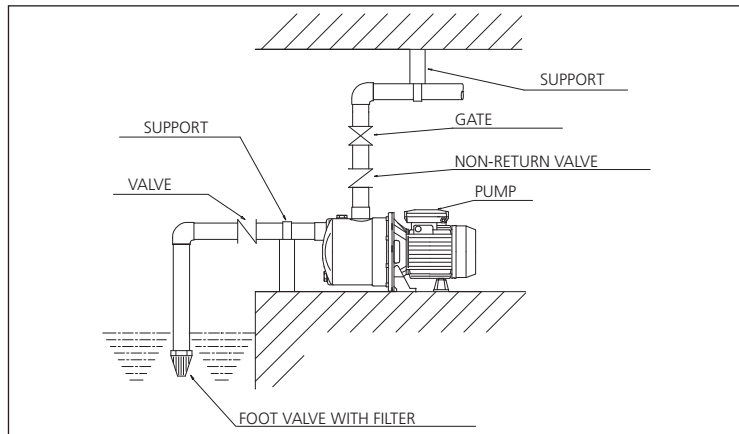


DIMENSIONS TABLE

Model	Dimensions [mm]											Weight [kg]
	B	C	[1] H3	[2] H4	M	M1	N	N1	R	[2] T	W	
JEX(M) 80	417	230	206	215	50	38	120	160	206	PG11	143	10,3
JEX(M) 100	417	230	206	215	50	38	120	160	206	PG11	143	10,8
JEX(M) 120	417	230	206	215	50	38	120	160	206	PG11	143	11,5
JEX(M) 150	445	250	216	240	55	40	140	180	203,5	PG13,5	145,5	14,1

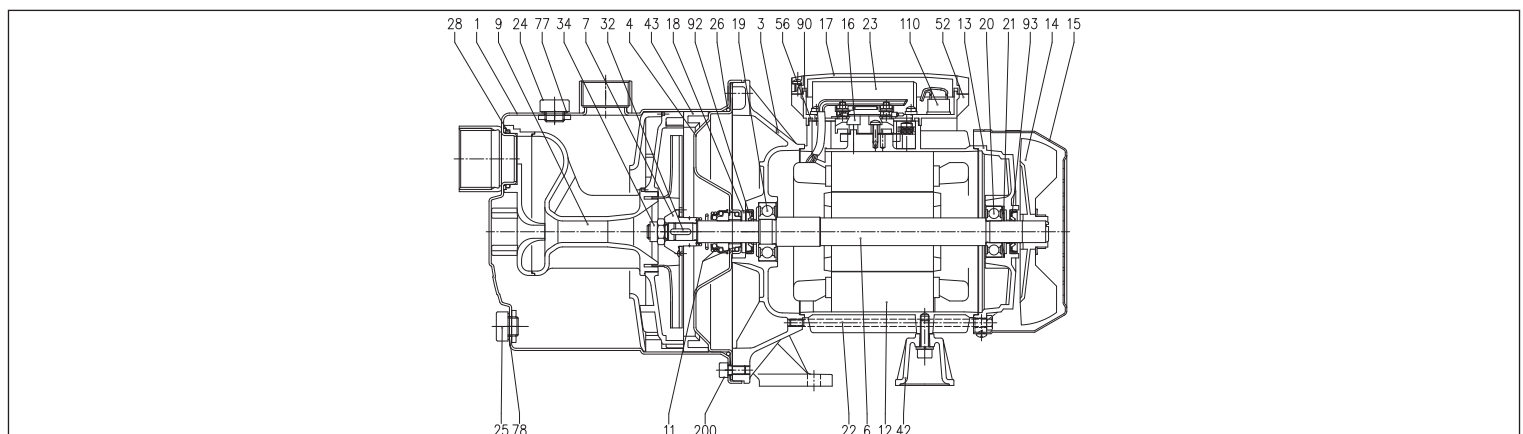
[1]= Three-phase only
[2]= Single phase only

INSTALLATION



For correct installation of the system, it is recommended to fit a foot valve on the suction and support/anchorage for the piping.

JEX SECTIONAL VIEW



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MATERIALS TABLE

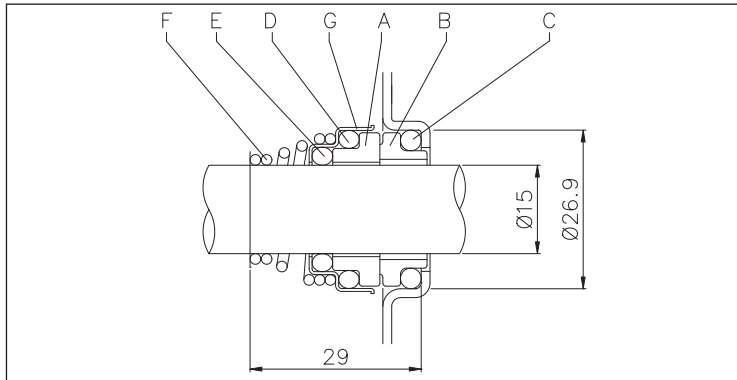
Ref.	Name	Material	Ref.	Name	Material
1	Pump body	AISI 304	23	Capacitor [2]	-
3	Motor support	Aluminium	24	Filler cap	PA6
4	Seal housing disc	AISI 304	25	Drain plug	PA6
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	26	O-Ring	NBR
7	Impeller	AISI 304	28	O-Ring	NBR
9	Venturi Unit + nozzle	PPO reinforced with fibreglass	32	Key	AISI 304
11	Mechanical seal	Carbon/Ceramic/NBR	34	Impeller nut	AISI 304
12	Motor case	-	42	Foot	Aluminium
13	Motor cover	Aluminium	43	Nozzle spacer	PPO reinforced with fibreglass
14	Fan	PA6	52	Capacitor-holder box [2]	ABS
15	Fan cover	Galvanised Fe P04	56	Terminal box cover gasket	NBR
16	Terminal box	-	77	O-Ring	NBR
17	Terminal box cover [1]	Aluminium	78	O-Ring	NBR
18	Spray protector washer	NBR	90	Cover gasket [2] [3]	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjusting ring	Steel C70	110	Motorprotector [2]	-
22	Tie-rod	Galvanised Fe 42	200	Screw (pump body)	A2 UNI7323 stainless steel

[1]= For three-phase only

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JEX MECHANICAL SEAL



MATERIALS TABLE

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

JEX ELECTRIC DATA TABLE

Model		P ₂		Single phase Capacitor		P ₁		Absorbed Current [A]		
230V single phase	230/400V three-phase	[HP]	[kW]	μF	V _c	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase	
								230V	230V	400V
JEXM 80	JEX 80	0,8	0,6	16	450	1,05	0,97	4,7	3,3	1,9
JEXM 100	JEX 100	1	0,75	20	450	1,33	1,25	6,4	4,5	2,6
JEXM 120	JEX 120	1,2	0,88	20	450	1,39	1,30	6,7	4,7	2,7
JEXM 150	JEX 150	1,5	1,1	31,5	450	1,70	1,58	7,6	5,9	3,3