

# JESX - JEX

## 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
- Pumping clean water in general

### TECHNICAL DETAILS

- Practical
- Easy to transport
- Light

### PUMP TECHNICAL DATA

- Maximum working pressure: 6 bar
- Maximum temperature of the liquid: 45°C
- Maximum suction depth: 8 m
- G1 suction connection for JESX, G1¼ for JEX
- G1 discharge connection

### PUMP TECHNICAL DATA

- IE2 and IE3 high energy-efficiency motors starting from 0.75kW
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- Protection degree IP54 (on request IP55)
- 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

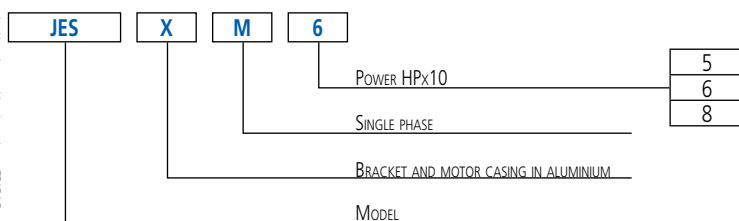
### MATERIALS

- Pump casing and seal housing disc in AISI 304
- Shaft in AISI 303 (part in contact with the liquid)
- Impeller in AISI 304 for JEX, in PPE + PS reinforced with fibreglass for JESX
- Venturi Unit + nozzle in PPO reinforced with fibreglass
- Mechanical seal in Ceramic/Carbon/NBR
- Bracket and motor casing in aluminium

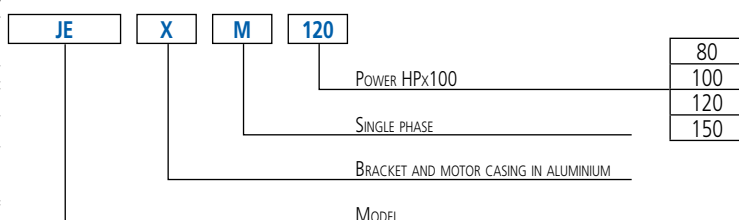
### ACCESSORIES (On request)

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

### JESX IDENTIFICATION CODE



### JEX IDENTIFICATION CODE



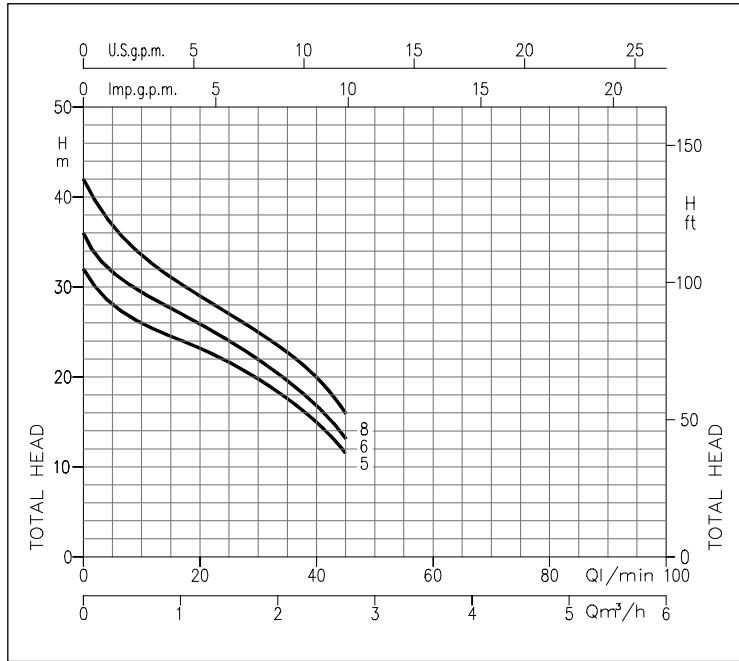
The content of this publication should not be considered mandatory. EBARA Pumps Europa S.p.A. reserves the right to change the content without prior notice.

# JESX - JEX

## SELF-PRIMING ELECTRIC PUMPS

in AISI 304

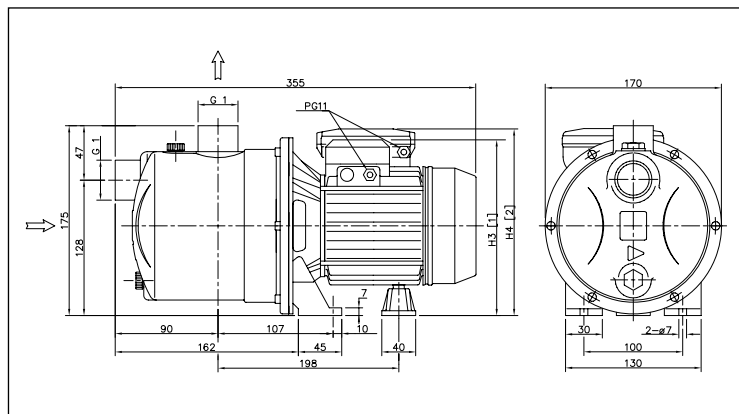
### PERFORMANCE CURVES (according to ISO 9906 Attachment A)



### JESX PERFORMANCE CHART

Model Single phase 230V	Model Three phase 230/400V	P <sub>2</sub>		Q = Flow Rate			
		[HP]	[kW]	l/min m³/h	5 0.3	20 1.2	40 2.4
JESXM 5	JESX 5	0.5	0.37	28.0	23.0	15.0	11.5
JESXM 6	JESX 6	0.6	0.44	31.5	26.0	17.0	13.5
JESXM 8	JESX 8	0.8	0.6	37.0	29.0	20.0	16.0

### JESX DIMENSIONS

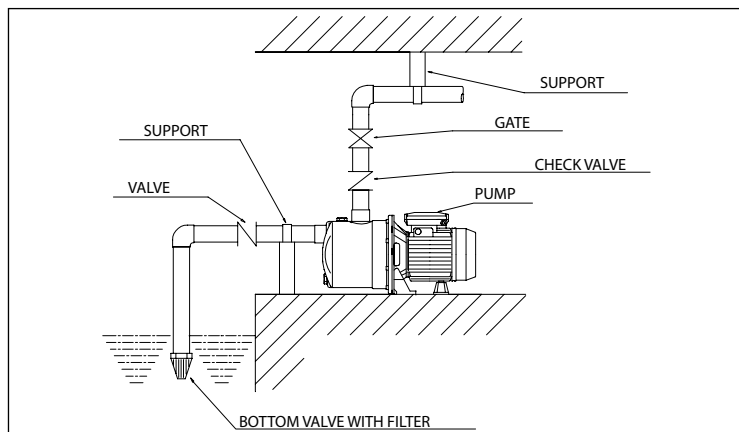


### DIMENSIONS TABLE

Model	Dimensions [mm]		Weight [kg]
	[1] H3	[2] H4	
JESX(M) 5	175	200	5.1
JESX(M) 6	175	200	5.5
JESX(M) 8	175	200	6.1

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

### INSTALLATION



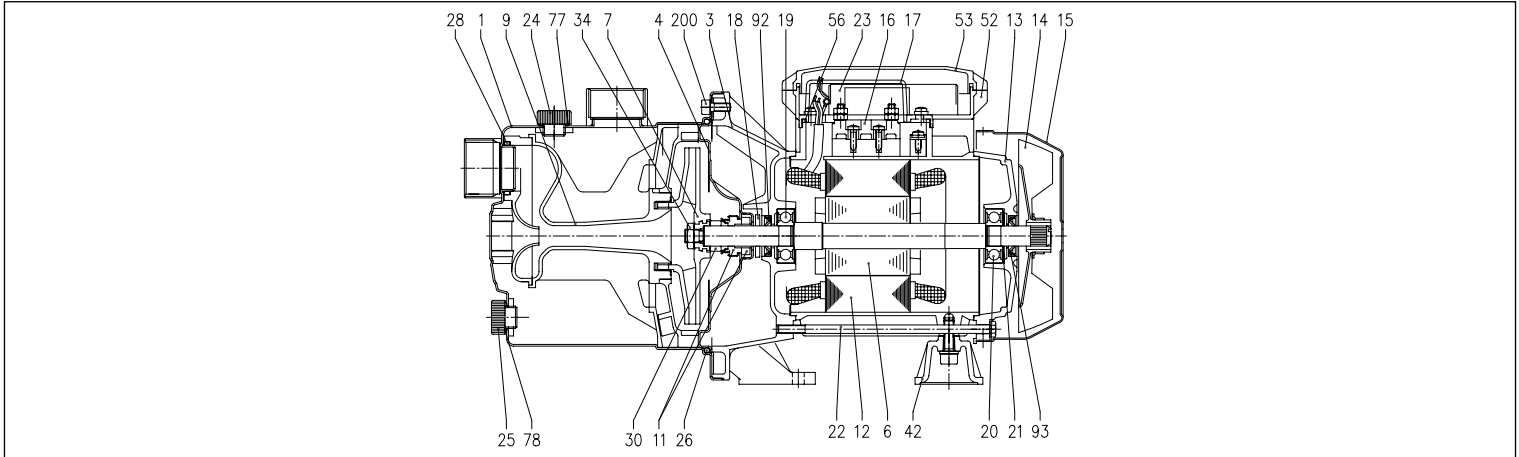
For correct installation of the system, it is recommended to fit a foot valve on the suction and support/anchorage for the piping.

# JESX - JEX

## SELF-PRIMING ELECTRIC PUMPS

in AISI 304

### JESX SECTIONAL VIEW

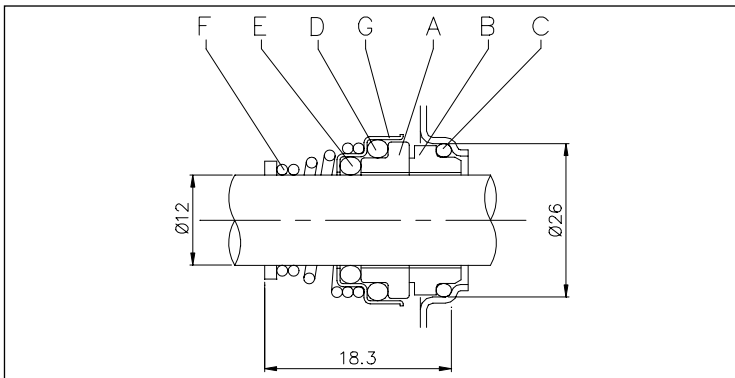


### MATERIALS TABLE

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	PA
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	25	Drain plug	PA
7	Impeller	PPE+PS reinforced with fibreglass	26	O-Ring	NBR
9	Venturi Unit + nozzle	PPE+PS reinforced with fibreglass	28	O-Ring	NBR
11	Mechanical seal	Ceramic/Carbon/NBR	30	Mechanical seal spacer	Brass
12	Motor case	-	34	Impeller nut [1]	AISI 304
13	Motor cover	Aluminium	42	Foot	Aluminium
14	Fan	PA	52	Capacitor-holder box [2]	ABS
15	Fan cover	Galvanised Fe P04	53	Terminal box cover with gasket	ABS + NBR
16	Terminal Box	-	56	Terminal box cover gasket	NBR
17	Terminal Box cover [1]	Aluminium	77	O-Ring	NBR
18	Spray protector washer	NBR	78	O-Ring	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjustment ring	Steel C70	200	Screw (pump body)	Stainless steel A2 UNI7323

- [1]= Three phase only
- [2]= Single phase only
- [3]= For IP55 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

The content of this publication should not be considered mandatory. EBARA pumps Europa S.p.A. reserves the right to change the content without prior notice.

# JESX - JEX

## SELF-PRIMING ELECTRIC PUMPS

in AISI 304

### JESX ELECTRIC DATA TABLE

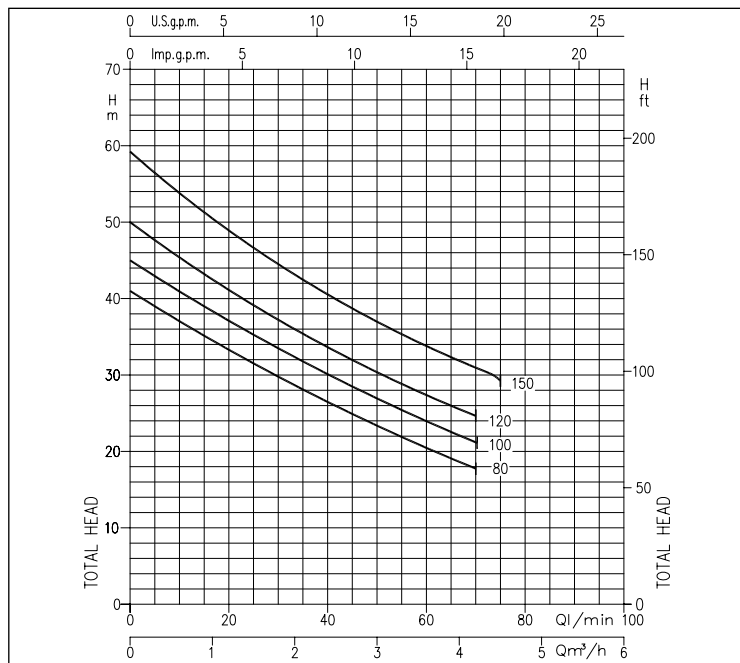
Model		P <sub>2</sub>		Capacitor		P <sub>1</sub>		Absorbed Current [A]		
Single phase 230V	Three phase 230/400V	[HP]	[kW]	Single phase μF	V <sub>c</sub>	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V	Three phase 400V
JESXM 5	JESX 5	0.5	0.37	10	450	0.44	0.43	2.1	1.5	0.85
JESXM 6	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

### JEX NOISE DATA TABLE

Model		P <sub>2</sub>		L <sub>PA</sub> - dB(A)*
Single phase 230V	Three phase 230/400V	[HP]	[kW]	
JESXM 5	JESX 5	0.5	0.37	<70
JESXM 6	JESX 6	0.6	0.44	<70
JESXM 8	JESX 8	0.8	0.6	<70

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

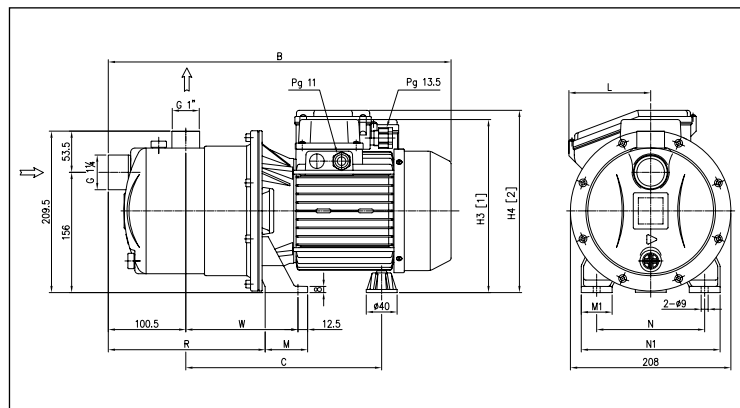
### PERFORMANCE CURVES (according to ISO 9906 Attachment A)



### JEX PERFORMANCE CHART

Model		P <sub>2</sub>		Q = Flow Rate															
Single phase 230V	Three phase 230/400V	[HP]	[kW]	l/min		20		30		40		50		60		70		75	
				m³/h		1.2		1.8		2.4		3		3.6		4.2		4.5	
				H=Head [m]															
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	H3 [1]	H4 [2]	L [2]	M	M1	N	N1	R	T	V [1]	W	[2]	[1]	*		
JEX(M) 80	419	-	232.5	207.5	216	84	50	38	120	160	206.5	PG11	-	PG11	143.5	102	102	-
JEX(M) 100	419	419	232.5	207.5	216	84	50	38	120	160	206.5	PG11	M16x1.5	PG11	143.5	116	116	11.6
JEX(M) 120	419	419	232.5	207.5	216	84	50	38	120	160	206.5	PG11	M16x1.5	PG11	143.5	116	116	11.6
JEX(M) 150	444.5	469.5	254	224.5	236.5	106	55	40	140	180	203.5	PG13.5	M20x1.5	PG11	145.5	143	153	16.2

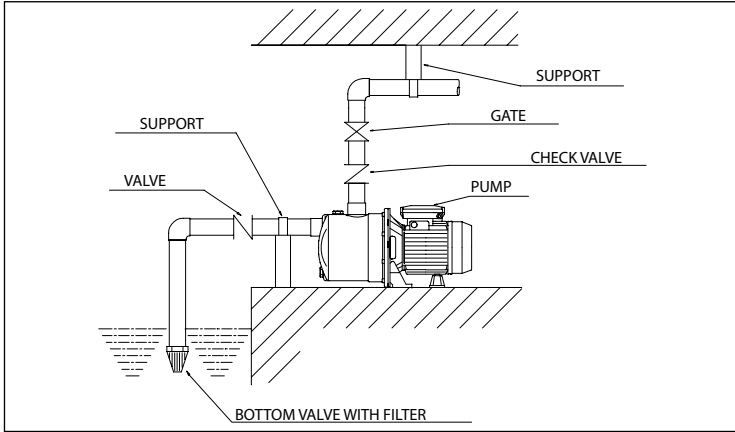
[1]= Three phase only  
[2]= Single phase only  
\* Models with IE3 motor only

# JESX - JEX

## SELF-PRIMING ELECTRIC PUMPS

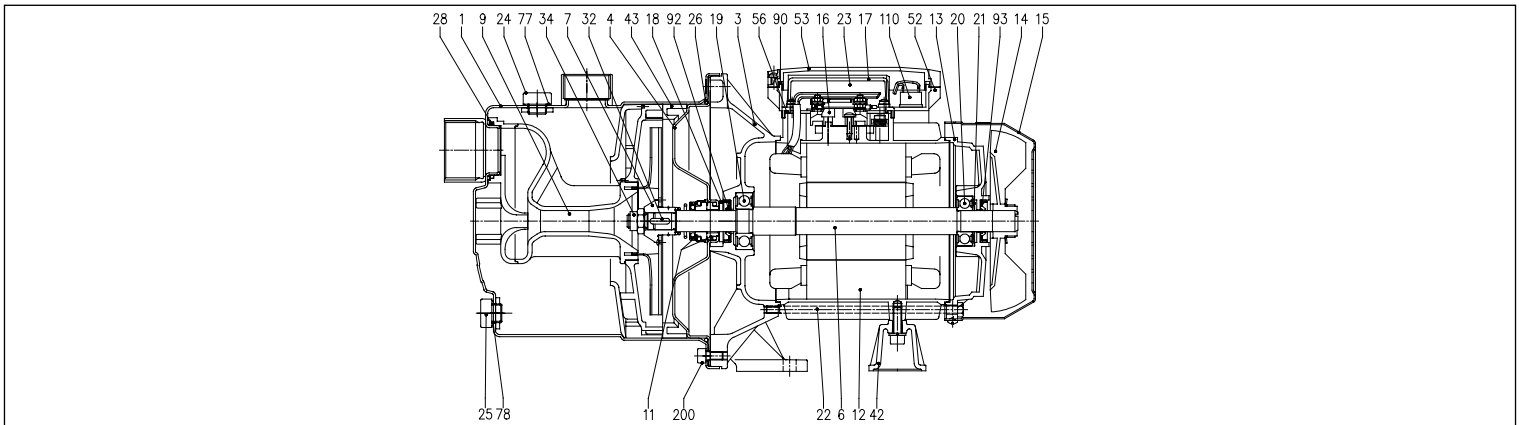
in AISI 304

### 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



### MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	AISI 304	24	Filler cap	PA
3	Motor support	Aluminium	25	Drain plug	PA
4	Seal housing disc	AISI 304	26	O-Ring	NBR
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	28	O-Ring	NBR
7	Impeller	AISI 304	32	Key	AISI 304
9	Venturi Unit + nozzle	PPE+PS reinforced with fibreglass	34	Impeller nut	AISI 304
11	Mechanical seal	Ceramic/Carbon/NBR	42	Foot	Aluminium
12	Motor case	-	43	Nozzle spacer	PPE+PS reinforced with fibreglass
13	Motor cover	Aluminium	52	Capacitor-holder box [2]	ABS
14	Fan	PA	53	Capacitor-holder box cover [4]	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 [5]	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjustment ring	Steel C70	110	Motor protector [2]	-
22	Tie-rod	Galvanised Fe 42	200	Screw (pump body)	Stainless steel A2 UNI7323
23	Capacitor [2]	-			

[1]= Three phase only  
[2]= Single phase only  
[3]= For IP 55 only

[4]= With gasket in NBR for JEX 80, JEX 100, JEX 120 single phase models  
[5]= For JEXM 150 IP55 only

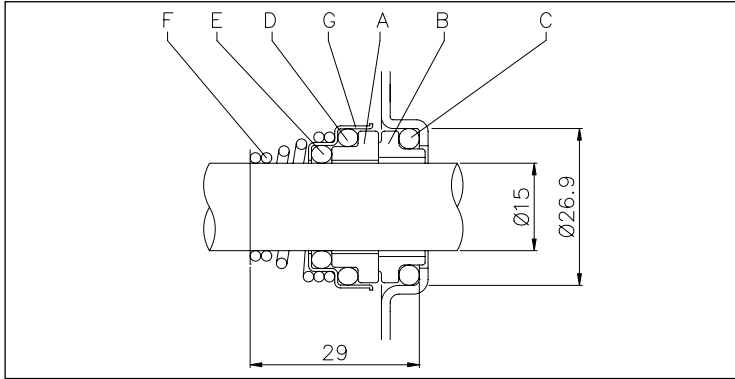
The content of this publication should not be considered mandatory. EBARA Pumps Europe S.p.A. reserves the right to change the content without prior notice.

# JESX - JEX

## SELF-PRIMING ELECTRIC PUMPS

in AISI 304

### JEX 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

### JEX ELECTRIC DATA TABLE

Model Single phase 230V	Three phase 230/400V	P <sub>2</sub>		Efficiency		Capacitor		Efficiency (%)			P <sub>1</sub>		Absorbed Current [A]		
		[HP]	[kW]	Single phase	Three phase	Single phase	Three phase	50%	75%	100%	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V	Three phase 400V
		μF	V.	η %	η %	η %									
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	-	IE2	20	450	77.2	80.9	81.3	1.33	1.13	6.4	3.5	2.0
-	-	1	0.75	-	IE3	-	-	80.9	82.3	82.1	-	0.91	-	3.0	1.7
JEXM 120	JEX 120	1.2	0.88	-	IE2	20	450	77.2	80.9	81.3	1.39	1.15	6.7	3.6	2.1
-	-	1.2	0.88	-	IE3	-	-	80.9	82.3	82.1	-	0.91	-	3.0	1.7
JEXM 150	JEX 150	1.5	1.1	-	IE2	35	450	79.7	82.5	83.0	1.70	1.80	7.6	5.5	3.2
-	-	1.5	1.1	-	IE3	-	-	83.0	85.8	85.6	-	1.77	-	5.8	3.3

### JEX NOISE DATA TABLE

Model Single phase 230V	Three phase 230/400V	P <sub>2</sub>		L <sub>pa</sub> - dB(A)*
		[HP]	[kW]	
JEXM 80	JEX 80	0.8	0.6	71
JEXM 100	JEX 100	1	0.75	71
JEXM 120	JEX 120	1.2	0.88	71
JEXM 150	JEX 150	1.5	1.1	76

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