

LENNTECH
WATER TREATMENT SOLUTIONS



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SPECIFICATIONS

60Hz

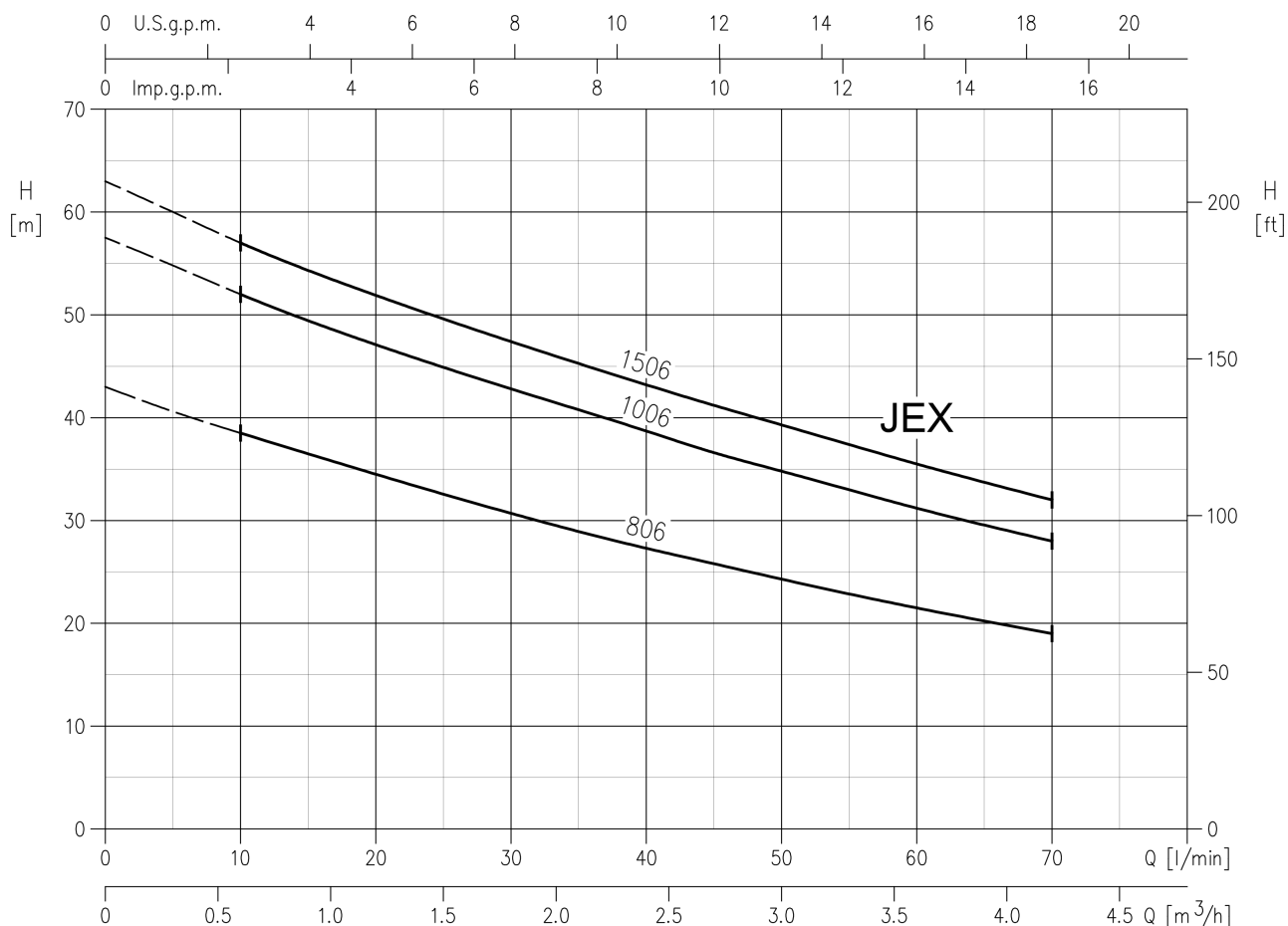
Rev. B

PUMP		
Liquid Handled	Type of liquid	Clean water
	Temperature [°C]	min. +5 max. +45
Maximum working pressure [MPa]		0.8
Maximum suction depth [m]		8
Construction	Impeller	Closed centrifugal type
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction [inch]	G 1¼ UNI ISO 228
	Discharge [inch]	G 1 UNI ISO 228
Material	Casing	AISI 304
	Impeller	AISI 304
	Shaft seal	Ceramic/Carbon/NBR
	Casing cover	AISI 304
	Shaft	AISI 303 (Wet extension)
	Bracket	Aluminium
	Ejector	PPE+PS glass fibre reinforced
	Diffuser	PPE+PS glass fibre reinforced
Applicable standard of test		ISO 9906:2012 - Grade 3B

MOTOR		
Type	Electric - TEFC	
	Single Phase	Three Phase
Efficiency Level	-	- 0.6 kW - 0.75 kW - 1.1 kW IE3* 0.75 kW - 1.1 kW (*only for 460 V)
No. of Poles	2	
Rotation speed [min ⁻¹]	≈ 3450	
Insulation Class	F	
Protection degree (CEI EN 60034-5)	IP 54 IP 55 (on request)	
Power rating [kW]	0.6 ÷ 1.1	
	[HP]	
	0.8 ÷ 1.5	
Frequency [Hz]	60	
Voltage [V]	110-115V ±6% 220-230V ±6%	220/380 -6% +10% (0.6 kW) 220/380 ±10% (0.75 kW - 1.1 kW) 220/380-460 ±10% (IE3* 0.75 - 1.1 kW)
Capacitor	Built in	-
Over load protection	Built in	Provided by the user
Casing material	Aluminium	
Base material/motor support	Aluminium	
Dimensions of cable entry	PG11 - M16x1.5 - M20x1.5 (see DIMENSIONS TABLE page 400)	

* only for 460 V

PERFORMANCE RANGE



SELECTION CHART

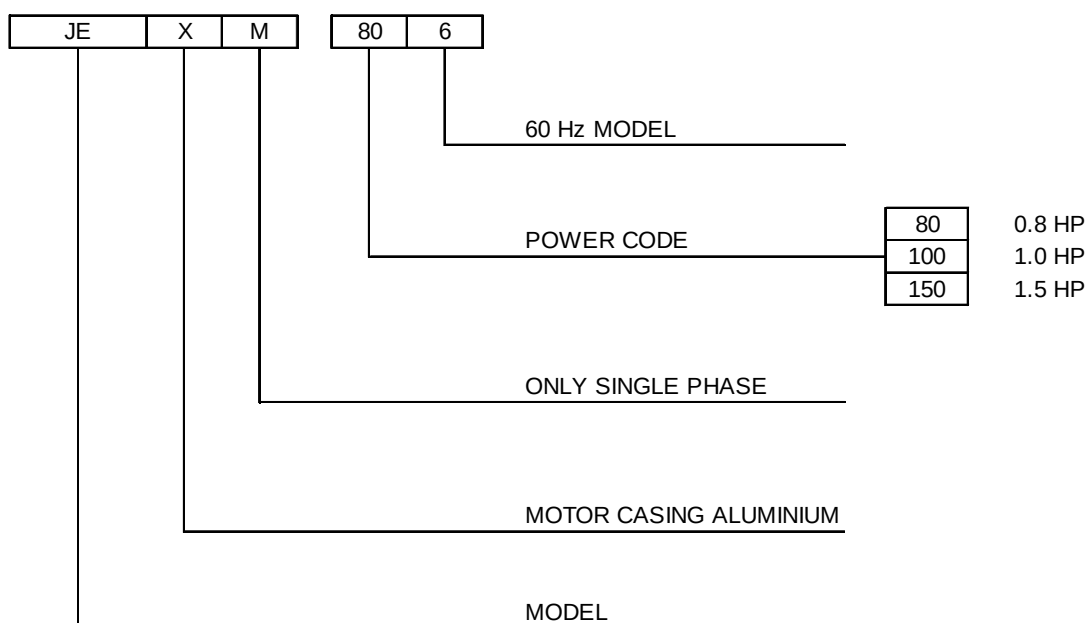
Pump type		Power		Q=Capacity										
				l/min.	0	5	10	20	30	40	45	50	60	70
Single-phase	Three-phase	[kW]	[HP]	m³/h	0	0.3	0.6	1.2	1.8	2.4	2.7	3.0	3.6	4.2
H=Total manometric head in meters														
JEXM 806	JEX 806	0.6	0.8	43	-	38.5	35	30.7	27.3	25.8	24.3	21.5	19	
JEXM 1006	JEX 1006	0.75	1.0	57.5	-	52	47	43	38.7	36.6	34.8	31.2	28	
JEXM 1506	JEX 1506	1.1	1.5	63	-	57	52	47.5	43.2	41.2	39.3	35.5	32	

TYPE KEY and CURVES SPECIFICATIONS

60Hz

Rev. B

TYPE KEY



CURVES SPECIFICATIONS

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

Tolerances according to ISO 9906:2012 - Grade 3B

The curves refer to effective speed of asynchronous motors at 60 Hz, 2 poles.

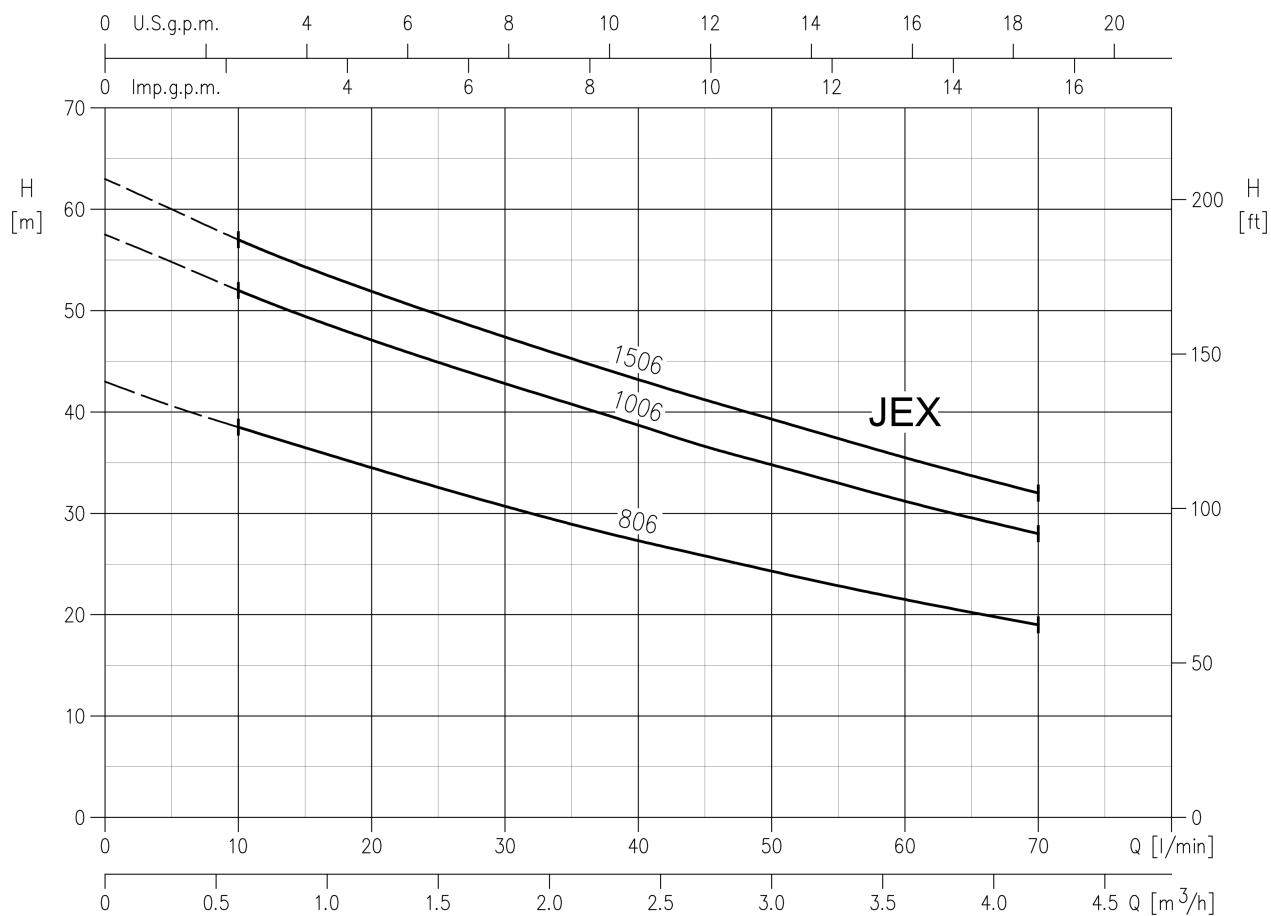
Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt)

The continuous curves indicate the recommended working range. The dotted curve is only a guide.

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.

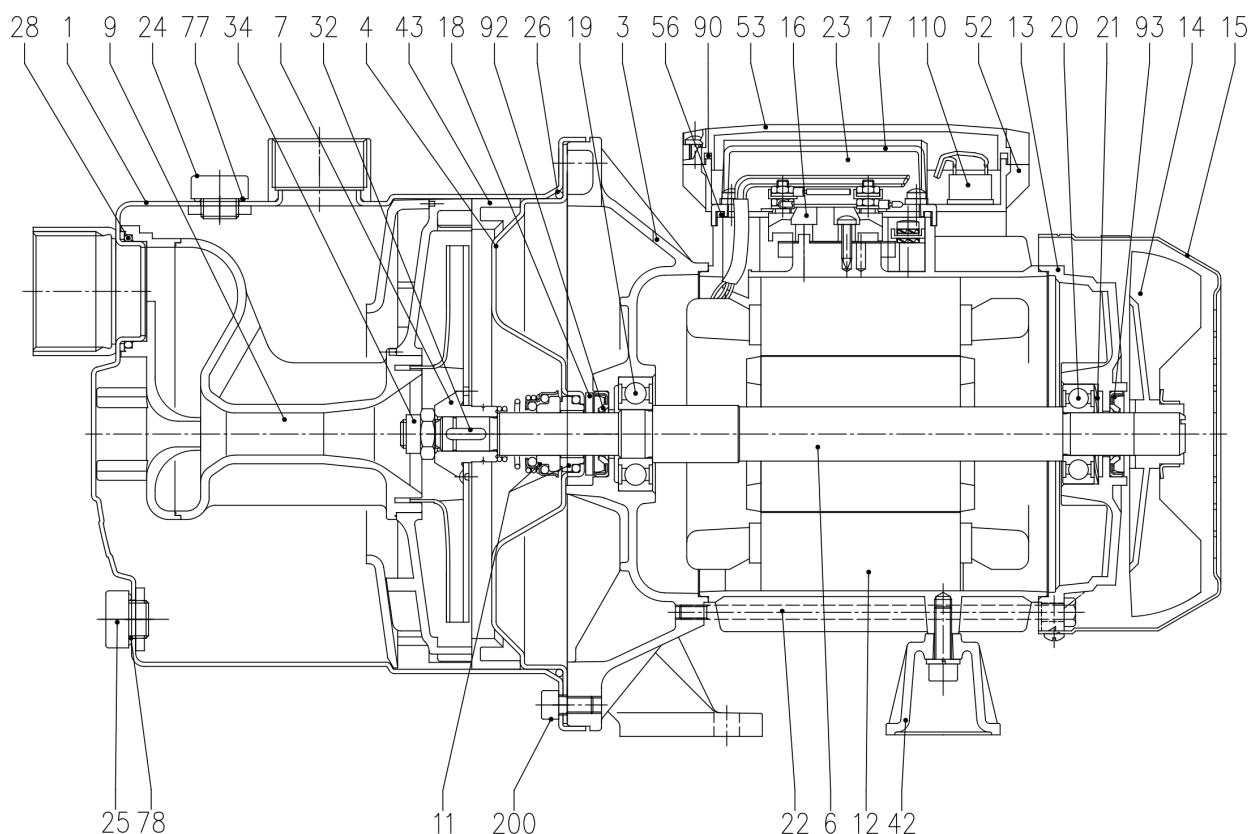
Symbols explanation:

Q = volume flow rate
H = total head

JEX 806 - Impeller diameter = 115 mm**JEX 1006 - Impeller diameter = 132 mm****JEX 1506 - Impeller diameter = 132 mm**

Rotation speed $\approx 3450 \text{ min}^{-1}$
Test standard: ISO 9906:2012 - Grade 3B

SECTIONAL VIEW



N°	PART NAME	MATERIAL	Q.TY
1	Casing	AISI 304	1
3	Motor bracket	Aluminium	1
4	Casing cover	AISI 304	1
6	Shaft with rotor	AISI 303 (Wet extension)	1
7	Impeller	AISI 304	1
9	Diffuser Venturi tube	PPE+PS glass fibre reinforced	1
11	Mechanical seal [4]	Carbon/Ceramic/NBR	1
12	Motor frame with stator	-	1
13	Motor cover	Aluminium	1
14	Fan	PA	1
15	Fan cover	Fe P04 Zincate	1
16	Terminal board	-	1
17	Terminal box cover [2]	Aluminium	1
18	Splash ring	NBR	1
19	Pump side ball bearing	-	1
20	Fan side ball bearing	-	1
21	Adjusting ring	Steel C70	1
22	Tie rod	Fe 420 Zincate	4
23	Capacitor [1]	-	1

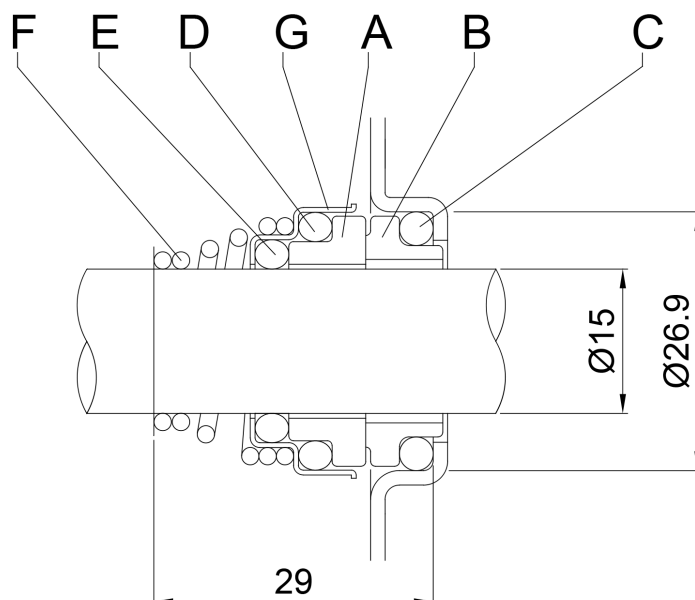
N°	PART NAME	MATERIAL	Q.TY
24	Priming plug	PA	1
25	Drain plug	PA	1
26	O-ring	NBR	1
28	O-ring	NBR	1
32	Key	AISI 304	1
34	Impeller nut	AISI 304	1
42	Motor support	Aluminium	1
43	Space diffuser	PPE+PS glass fibre reinforced	1
52	Capacitor box [1]	ABS class V-0	1
53	Capacitor box cover [1]	ABS class V-0	1
56	Box gasket	NBR	1
77	O-ring	NBR	1
78	O-ring	NBR	1
90	Terminal box cover gasket [1]	NBR	1
92	Lip seal [3]	-	1
93	Lip seal [3]	-	1
110	Protector [1]	-	1
200	Screw	Stainless steel A2 UNI7323	8

[1] Only for single phase

[2] Only for three phase

[3] Only for IP55

[4] See **MECHANICAL SEAL** page 301

MECHANICAL SEAL

REF	PART NAME	MATERIAL
		Standard version
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

BEARINGS

Pump type		Ball Bearing			
Single Phase	Three Phase	Pump side		Fan side	
			(*)		(*)
JEXM 806	JEX 806	6203 2RSH	-	6202 2RSH	-
JEXM 1006	JEX 1006	6203 2RSH	6203-ZZ C3	6202 2RSH	6202-ZZ C3
JEXM 1506	JEX 1506	6203 2RSH	6203-ZZ C3	6202 2RSH	6202-ZZ C3

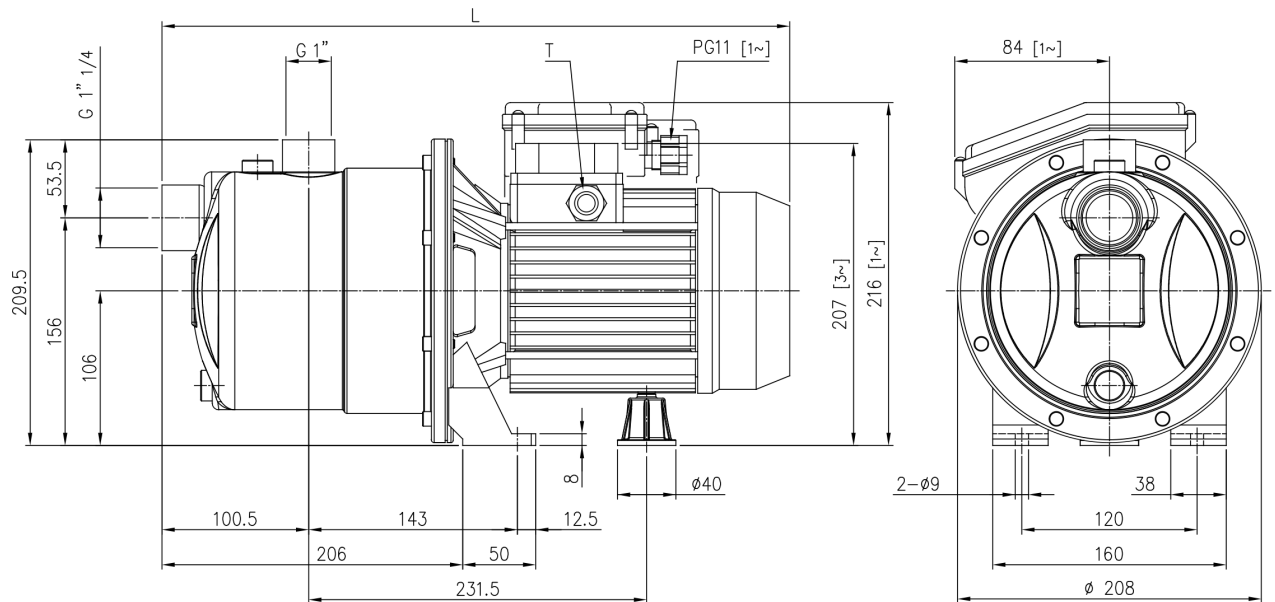
(*) only for IE3 motors

DIMENSIONS and WEIGHT

60Hz

Rev. B

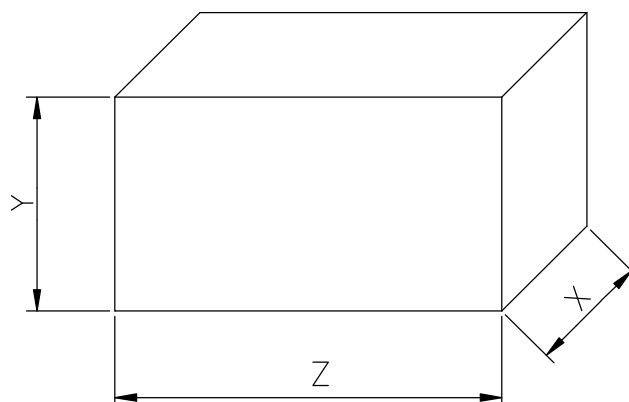
PUMP



Pump type JEX(M)	L			T		Weight [kgf]		
	[1~]	[3~]	(*)	[3~]	(*)	[1~]	[3~]	(*)
806	419	418	-	PG11	-	10	10	-
1006	419	418	418	PG11	M16x1.5	12	12	12
1506	419	430	455	PG11	M20x1.5	14	15	16

[1~] Single phase
[3~] Three phase
(*) only for IE3 motors

PACKING



Pump type		Packing [mm]						Weight [kgf]		
Single Phase	Three Phase	X		Y		Z		[1~]	[3~]	
		(*)		(*)		(*)				(*)
JEXM 806	JEX 806	215	-	275	-	462	-	11	11	-
JEXM 1006	JEX 1006	215	215	275	275	462	462	12	12	12
JEXM 1506	JEX 1506	215	215	275	275	462	462	15	16	17

[1~] Single phase

[3~] Three phase

(*) only for IE3 motors

MOTOR DATA

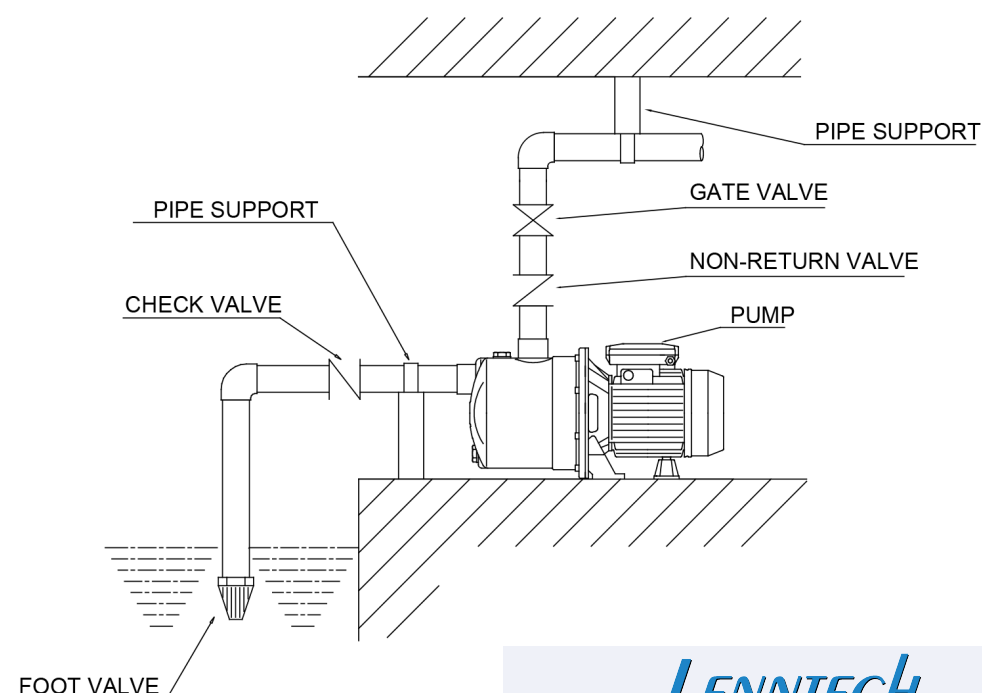
Pump type		Power		Efficiency		Capacitor				Efficiency (% load)			Efficiency (% load)			Input		Full load current						Locked rotor current					
Single Phase	Three Phase	[kW]	[HP]	Single Phase	Three Phase	110-115 V		220-230 V		Three phase (380 V)			Three phase (460 V)			Single Phase	Three Phase	[kW]	[A]			[A]			[A]				
						50%	75%	100%	50%	75%	100%	50%	75%	100%	Single Phase				220-230 V	220 V	380 V	460 V	Single Phase	220-230 V	220 V	380 V	460 V		
JEXM 806	JEX 806	0,6	0,8	-	-	60	250	14	450	-	-	-	-	-	-	1,0	0,87	9,2	4,9	2,8	1,6	-	48,8	23,2	16,0	9,2	-		
JEXM 1006	JEX 1006	0,75	1,0	-	-	70	250	20	450	77,2	79,5	79,3	76,6	80,9	82,3	1,5	1,00	13,3	7,2	2,9	1,7	-	68,0	34	20,6	11,9	-		
-	JEX 1006	0,75	1,0	-	IE3*	-	-	-	-	80,7	81,9	81,3	78,4	81,6	83,1	-	0,90	-	-	2,8	1,6	1,5	-	-	-	16,9	9,7	11,8	
JEXM 1506	JEX 1506	1,1	1,5	-	-	-	-	25	450	80,7	82,3	81,5	77,9	81,7	82,7	1,7	1,50	-	8,1	3,8	2,2	-	-	37	28,8	16,6	-		
-	JEX 1506	1,1	1,5	-	IE3*	-	-	-	-	84,8	84,5	82,7	82,0	84,4	84,5	-	1,30	-	-	4,0	2,3	2,2	-	-	24,6	14,2	17,2		

* only for 460 V

If you use this pump on suction condition, it tends to breath the air from outside because the pressure in pump becomes vacuum condition when it stopped. So water in the pump sometimes fall down to breath the air from pipe connection. If it is used to operate continuously under this condition, this is the cause of breakdown to overheat inside the pump.



So please install foot valve or check valve at suction pipe in order to prevent the pump from such a condition. And moreover will you please support the suction pipe and the delivery one to prevent the pump from leaning the weight of pipe.



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