

Pearl

JCC

Self priming jet pumps

Features

An exclusive diffuser design with flow control device provides for compact construction, fast self-priming capability and low noise.

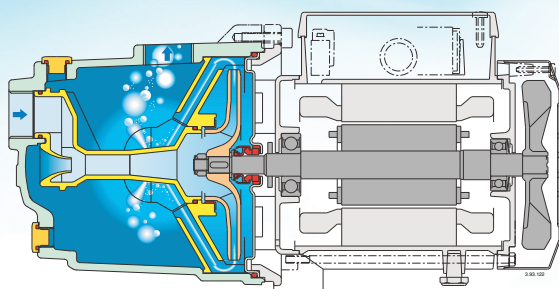
Reliable with new design features, the JCC is more robust and forgiving when temporary abnormal operating conditions may exist.

The JCC is smaller than conventional pumps of a similar type, allowing for installation in restricted spaces and providing for easier retrofit applications.

Fast air evacuation reduces the risk of air-pockets developing at the mechanical seal preventing the danger of seal failure due to a lack of flushing and cooling.

The JCC is capable of lifting water from depths of 22 ft in less than 3 minutes, offers new possibilities on suction lift applications, and provides better trouble free service on normal shallow-well suction lift duties, also with a long suction pipe above the water level.

The new diffuser and flow control device guide the fluid from the impeller into the central part of the pump casing, reducing turbulence and velocity, with effective use of the surrounding liquid in dampening the noise of flow.



Applications

- For lifting water out of a well.
- For lifting water containing air or other gases.
- For increasing water pressure from flooded suction applications.
- A pressure boosting pump for water systems with low pressure (follow local specifications if increasing network pressure).
- For garden use.
- For washing with a jet of water.

Operating Conditions

- Liquid temperature: 32 °F to 95 °F.
- Ambient temperature up to 104 °F.
- Suction lift up to 22 ft.
- Maximum permissible pressure in the pump casing: 116 psi
- Continuous duty.



Construction

- Close-coupled self-priming shallow-well jet pump with built-in ejector.
- Connections: threaded ports NPT.

Motor

- 2-pole induction motor, 60 Hz ($n \approx 3450$ rpm).
- Three-phase 230/460 V.
- Single-phase 115/230 V, 115 V, 230 V.
- Capacitor inside the terminal box.
- Insulation class F.
- Protection IP 44.

Assembled with:

- Pressure switch.
- Pressure gauge.

Special Features on request

Other voltages.

Materials

COMPONENT	MATERIAL
Pump Casing	Cast iron GJL 200 EN 1561
Casing Cover	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Impeller	Brass P-Cu Zn 40 Pb 2 UNI 5705
Wear Ring Impeller-Diffuser	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Diffuser	PPO-GF20 (Noryl)
Ejector	PPO-GF20 (Noryl)
Shaft	Chrome Steel 1.4104 EN 10088 (AISI 304)
Mechanical Seal	Carbon - Ceramic - Viton

Self priming jet pumps

Technical Data | n= 3450 rpm

MODEL	HP	TOTAL SUCTION LIFT HS FT	DISCHARGE PRESSURE (PSI)						MAX. SHUT - OFF PSI
			20	30	40	50	60	70	
			PUMP CAPACITY US (GPM)						
JCC 05	0.5	5		12.3	9.0	5.5	2.4		73
		10		11.9	8.5	5.0	2.0		71
		15		11.1	7.6	4.2	1.4		69
		20		10.5	7.0	3.6	1.0		66
		25		9.6	6.1	2.9	0.6		64
JCC 07	0.75	5	21.3	14.7	8.7	3.3			58
		10	20.4	13.9	8.0	2.7			56
		15	18.7	12.3	6.6	1.4			54
		20	17.5	11.3	5.6	0.6			51
		25	15.8	9.7	4.2	-			49
JCC 10	1	5		22.2	16.3	11.1	6.2		74
		10		21.4	15.6	10.4	5.6		72
		15		19.8	14.2	9.1	4.3		70
		20		18.8	13.3	8.3	3.5		67
		25		17.3	12	7	2.3		65

P2 Rated motor power output | Tolerance according to UNI EN ISO 9906:2012 | H D.O.L. starting current / Rated current.

Recommended operating range.

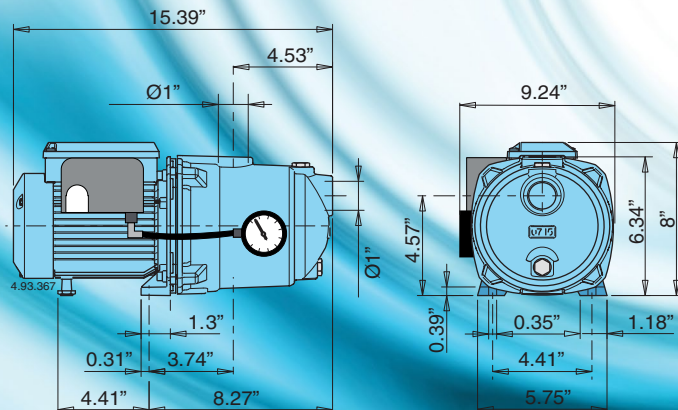
Nominal Currents

MODEL	P2 HP	3 ~		1 ~			
		230 / 460V In A	Ia / In	115V In A	230V In A	115 / 230V In A	Ia / In
JCC 05	0.5	2.6 / 1.6	3.7	10.8	5.4	8.8 / 4.5	3.1
JCC 07	0.75	3.8 / 2.3	6.8	12.4	6.2	10.5 / 5.4	3.5
JCC 10	1	5.4 / 3.1	5.5	13.8	7.2	13.6 / 7	3.5

P2 Rated motor power output | Ia / In D.O.L. starting current / Rated current.

Weights and Dimensions

MODEL	NET WEIGHT LBS	
	3 ~	1 ~
JCC 05	25.7	27.7
JCC 07	27.7	29.9
JCC 10	31.4	31.5



Installation

