

# Self-Priming Jet Pumps for Special Applications

#### **Features**

This new version of the JCC - the JCC DELUXE - is designed for water treatment applications. Its components were developed to resist the extreme working conditions of systems pumping liquid with sulfur. The JCC DELUXE is sized to work in boosting operations, with components that resist pressure better than standard pumps.

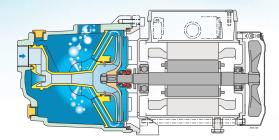
An exclusive diffuser design with a flow control device allows for compact construction, fast self-priming, and low noise.

Built with reliable new design features, the JCC DELUXE is more robust and forgiving in situations where temporary abnormal operating conditions may exist.

Fast air evacuation reduces the risk of air pockets developing in the mechanical seal, eliminating the danger of seal failure due to a lack of flushing and cooling.

The JCC DELUXE 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, using a long suction pipe above the water level.

The new diffuser and flow control device guides the fluid from the impeller into the central part of the pump casing, reducing turbulence and velocity, while effectively using the surrounding liquid to dampen the noise of flow.



### **Applications**

- Boosting water from well pumps to reverse osmosis filtration systems.
- Pumping water with sulfur content.
- Lifting water out of a well that contains sulfur.
- Lifting water containing air or other gases.
- Increasing water pressure from flooded suction
- A pressure boosting pump for water systems with low pressure (follow local specifications if increasing network pressure).

### **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.
- Liquid-filled pressure gauge in stainless steel.

# Special Features Available Upon Request Other voltages.

#### **Materials**

	Ï			
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	Stainless Steel AISI 316			
Mechanical Seal	Carbon - Ceramic - Viton			

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# Technical Data | n= 3450 rpm

		Total Suction Lift Hs	Discharge Pressure in PSI						Max.
MODEL	HP		20	30	40	50	60	70	Shut - OFF
		ft		Pump Capacity US (GPM)					PSI
JCC 05 DELUXE	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 DELUXE	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 DELUXE	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.

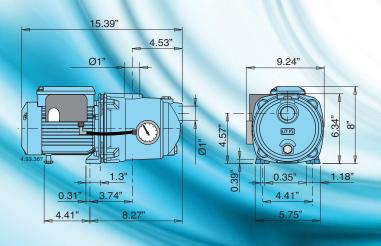
### **Nominal Currents**

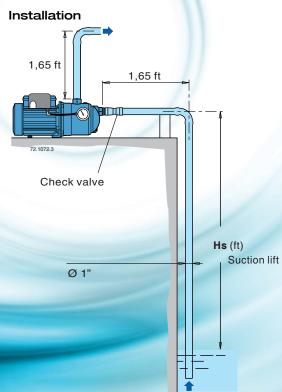
MODEL	P2	3 ~		1~				
MODEL HP	HP	230 / 460V In A	la / In	115V In A	230V In A	115 / 230V In A	IA / IN	
JCC 05 DELUXE	0.5	2.6 / 1.6	3.7	10.8	5.4	8.8 / 4.5	3.1	
JCC 07 DELUXE	0.75	3.8 / 2.3	6.8	12.4	6.2	10.5 / 5.4	3.5	
JCC 10 DELUXE	1	5.4 / 3.1	5.5	13.8	7.2	13.6 /7	3.5	

P2 Rated motor power output  $\mid$  Ia / In D.O.L. starting current / Rated current.

# Weights and Dimensions

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





 <sup>□</sup> Recommended operating range.