

# Double Acting JD Pump

## Class 1 J Series

These Sprague hydraulic pumps move relatively large flows of liquids at low to moderate pressures. The pumps deliver liquid with each up and down stroke of the liquid piston rather than, only with a down stroke like other J pumps. The pump's air-driving action is the same as the Sprague air driven S-216-J series hydraulic pumps described on page 18. Being air driven, these double-acting pumps are non-arcing and non-sparking, safe for use in hazardous or confined areas.

See Charts on page 17 for liquid discharge rates and pressures. See page 60 for power unit arrangements of these pump models.

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### S-216-JD-6.8

Services oil and non-corrosive liquids. **Not for water service.** With a 6.8 pumping ratio, this double-acting pump is well suited for liquid transfer, low pressure hydrostatic testing and other industrial uses.

This pump discharges volume liquids up to 12 gallons per minute and provides for selected discharge pressures up to 680 psi. With its liquid body and main components made from anodized aluminum alloy, the pump is reduced in weight and lower in cost. The standard pump's special seals in the wetted section are compatible with a wide range of chemicals while other seals in the pump are nitrile. Other seal compounds are optional.

### S-216-JD-34

Services oil, water and many corrosive liquids. With a 34 to 1 pumping ratio, this double-acting pump discharges volume liquids at any selected pressure up to 3,400 psi, suitable to many industrial applications requiring volume liquid delivery at higher pressures and holding cycles.

This pump uses an internal check valve in its liquid piston head, to obtain a double-acting, steady flow of liquid. This unique design results in higher pressures and uses material resistant to many corrosive liquids. The pump has special dynamic seals to accommodate low lubricity liquids. The pump body is brass. Mounting brackets facilitate installation.

### S-216-JD-36

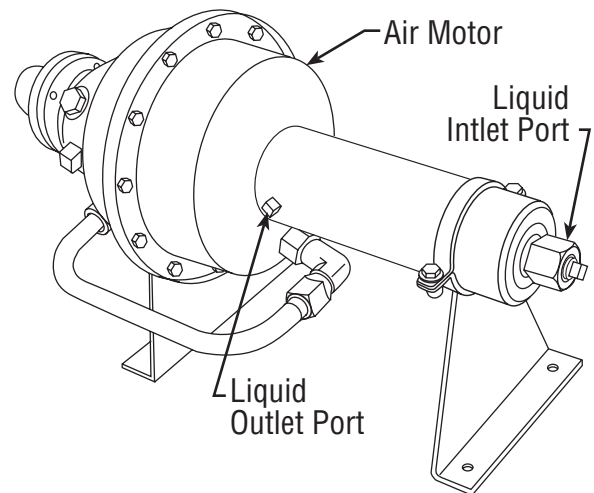
Services oil and non-corrosive liquids. **Not for water service.** Its general design is identical to the S-216-JD-34 pump described above. The -36 pump has an aluminum body which significantly lowers the price of the pump and reduces its weight by four pounds. The pump has nitrile seals.

### S-216-JD-60

Non-contaminating pump for cleanroom or laboratory use has self-lubricating dynamic seals. The pump uses clean, dry driving air.



S-216-JD(-)



# Double Acting JD Pump - Dimensions

	S-216-JD-6.8	S-216-JD-34	S-216-JD-36	S-216-JD-60	S-216-JDN-60
<b>Height:</b>	8.3 in. (21.08 cm)	10-1/4 in. (26.0 cm)	10-1/4 in. (26.0 cm)	10-1/2 in. (26.7 cm)	10-1/2 in. (26.7)
<b>Length:</b>	15.75 in. (40.01 cm)	20-1/4 in. (51.4 cm)	20-1/4 in. (51.4 cm)	20-3/4 in. (52.7)	20-3/4 in. (52.7)
<b>Width:</b>	8 in. (20.32 cm)	8-1/8 in. (21.6 cm)	8-1/8 in. (21.6 cm)	8-1/8 in. (20.6 cm)	8-1/8 in. (20.6 cm)
<b>Reference:</b>	90615	89320-1	81557-20	90977-2	91616

Pump Model Number	Displacement per cycle (Cu. Inch)	DISCHARGE CAPACITY - gallons per minute, approximate, based on 50 SCFM* of driving air at 100 psi										
		Discharge Pressure - psi										
		0	100	250	350	500	1000	2000	3000	4000	5000	6000
S-216-JD-6.8	9.72	12.00	10.9	8.6	7.0	4.0						
S-216-JD-34	4.90	3.1	2.95	-	2.9	2.85	2.7	2.1	1.1			
S-216-JD-36	4.90	2.9	-	2.1	-	1.98	1.74	1.23	0.6			
S-216-JD-60*	2.82	-	-	-	-	2.23	2.10	1.84	1.44	1.07	0.71	0.14

\*Discharge capacity of S-216-JD-60 is based on 85 SCFM of driving air at 100 psi.

Pump Model Number	Displacement per cycle (liters)	DISCHARGE CAPACITY -liters per minute, approximate, based on 1.4 cubic meters* per minute of driving air at 6.9 bar										
		Discharge Pressure - psi										
		0	6.9	17.2	24.1	34.5	69	138	207	275	345	414
S-216-JD-6.8	0.159	45.1	41.3	32.5	26.5	15.1						
S-216-JD-34	0.080	11.7	11.1	-	10.9	10.8	10.2	7.9	4.2			
S-216-JD-36	0.080	11.0	-	7.9	-	7.5	6.6	4.7	2.3			
S-216-JD-60*	0.462	-	-	-	-	8.44	7.95	6.96	5.45	4.05	2.69	0.53

\*Discharge capacity of S-216-JD-60 is based on 2.41 cubic meters per minute of driving air at 6.9 bar.