CLARK Series PA 500-1000 Brass & SS Rotary Vane Pumps

Flow to 316 GPH, Pressure to 230 PSI

DESCRIPTION

The PA 500-1000 series high volume rotary vane pumps are available in 6 flow ratings to meet the needs of high capacity pumping.

The rotary vane pump with brass or stainless steel housing utilizes a stainless steel AISI 304 rotor, while the pumping chamber and the vanes are in graphite carbon.

Inlet and outlet ports are 1/2" NPT female threaded.

Certain models are equipped with a built-in adjustable relief valve.

The pump can be connected to a motor with a metallic clamp or through an adapter and a flexible coupling.

SPECIFICATIONS

Pump Housing: Brass or AISI 303 Stainless Steel Pumping Chamber: Carbon Graphite Ports: 1/2" NPT Max Temperature : 70° C (158° F) Seals: NBR (Viton, EPDM upon request) Max Motor Speed : 1725 rpm Max System Pressure : 20 Bar (290 psi) Mounting: Clamp or Flange Pump Weight: clamp mount- 1.9 kg (4.2 lb) flange mount- 2 kg (4.4 lb)

DIMENSIONS (MM)



TYPICAL APPLICATIONS

- Post mix dispensers
- Cooling and booster systems
- Reverse osmosis
- · Fuel injection systems
- Ultra filtration 1



NSF/ANSI 169

Stainless steel models also evaluated and determined to possess weighted average lead content of <=0.25% and complies with lead content requirements for "lead free" plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act.





Relief valves are offered on select models of rotary vane pumps throughout the product line. Two types of relief valves are offered:

 Standard Relief valve: A spring loaded bypass check valve diverts flow from the pump outlet to the pump inlet when outlet pressure exceeds setpoint (set with spring tensioning set screw).
 Balanced relief valve: A pressure compensation plunger with dynamic seal and referenced (ported on one side) to atmosphere is added to the downstream side of the related valve accemble.

2) Balanced relief valve: A pressure compensation plunger with dynamic seal and referenced (ported on one side) to atmosphere is added to the downstream side of the standard check-valve assembly. This insures that cracking pressure of the relief valve remains unchanged regardless of changes in inlet pressure (that might be a condition in a pressurized system).

The cracking pressure can be field set by adjusting the spring tension with the adjusting screw. If the cracking pressure is not customer specified it is factory preset at approximately 220 PSI for PA 500-1000 series.

It is not recommended to use the relief/bypass valve for flow control. This will result in premature wear of the valve assembly and require frequent maintenance.

PUMP MODEL SELECTION/FLOW CURVES/NEMA 56C ADAPTER



| Brass Model | PA500 | PA501 | PA500F | PA501F | PA600 | PA601 | PA600F | PA601F | PA/00 | PA/01 | PA/00F | PA/01F | PA800 | PA801 | PA800F | PA801F | PA900 | PA901 | PA900F | PA901F | PA1000 | PA1001 | PA1000F | PA1001F |
|--------------|--------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|--------|--------|--------|---------|---------|
| Flow Figure | re L-L | | | | M-M | | | | N-N | | | | P-P | | | | R-R | | | | S-S | | | |
| Mounting | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange |
| Relief Valve | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD |
| SS Model | PA510 | PA511 | PA510F | PA511F | PA610 | PA611 | PA610F | PA611F | PA710 | PA711 | PA710F | PA711F | PA810 | PA811 | PA810F | PA811F | PA910 | PA911 | PA910F | PA911F | PA1010 | PA1011 | PA1010F | PA1011F |
| Flow Figure | L-L | | | M-M | | | | N-N | | | | P-P | | | | R-R | | | | S-S | | | | |
| Mounting | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange | Clamp | Clamp | Flange | Flange |
| Relief Valve | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD | NO | STD |

| Model 92-80-03 NEMA 56C Adapter | | | | | | | |
|---------------------------------|-----------------------|--|--|--|--|--|--|
| # | Description | | | | | | |
| 1 | NEMA 56C Adapter | | | | | | |
| 2 | 10 mm Washer | | | | | | |
| 3 | Screw 1 3/8-16x38 UNC | | | | | | |

| Model 91-81-11 NEMA 56C Coupling | | | | | | | |
|----------------------------------|----------------------|--|--|--|--|--|--|
| # | Description | | | | | | |
| 1 | Coupling w/5/8" Bore | | | | | | |
| 2 | M6 x 8 Set Screw | | | | | | |
| 3 | Spider | | | | | | |
| 4 | Coupling, Flat Side | | | | | | |





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