CLARK

Series PA 70-400 Stainless Steel Rotary Vane Pumps

Flow to 140 GPH, Pressure to 200 PSI

DESCRIPTION

The PA Stainless series rotary vane pumps are available in 8 displacements to achieve the desired flow rate when close coupled to a motor and operated at the motor rpm. The pump housing and rotor are AISI 303 stainless steel, and the pump chamber and vanes are carbon graphite. Shaft sealing is provided by a mechanical face seal.

The inlet and outlet ports are 3/8" NPT female threaded. A built-in adjustable by-pass to protect the pump and the system from unexpected pressure spikes is an available option. The pump can be connected to direct coupling motors with a stainless steel clamp or to M71 and M80 UNELMEC or NEMA 56C frame motors with optional coupling and adaptor sets.

PA pumps are NSF listed pumps for potable water and are suitable for clean, non-hazardous fluids only. Max speed is 1725 rpm.

TYPICAL APPLICATIONS

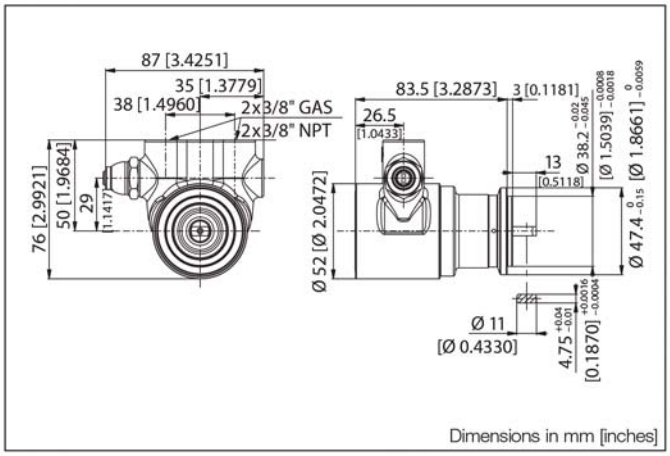
- Beverage vending machines
- Post-mix dispensers
- Soda circulation
- Reverse osmosis systems
- Cooling systems

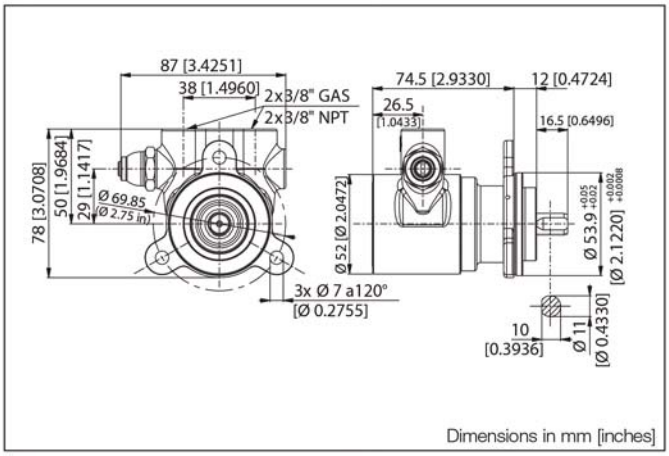
SPECIFICATIONS

Pump Housing: AISI 303 Stainless Steel
Pumping Chamber: Carbon Graphite
Ports: 3/8" NPT
Max Temperature : 70° C (158° F)
Seals: NBR (Viton, EPDM upon request)
Max Motor Speed : 1725 rpm
Max Differential Pressure: 15.9 Bar (230 PSI)

Max System Pressure : 20 Bar (290 psi)
Mounting: Clamp or Flange
Pump Weight: clamp mount- 1.2 kg (2.7 lb)
flange mount- 1.5 kg (3.3 lb)

DIMENSIONS (MM)





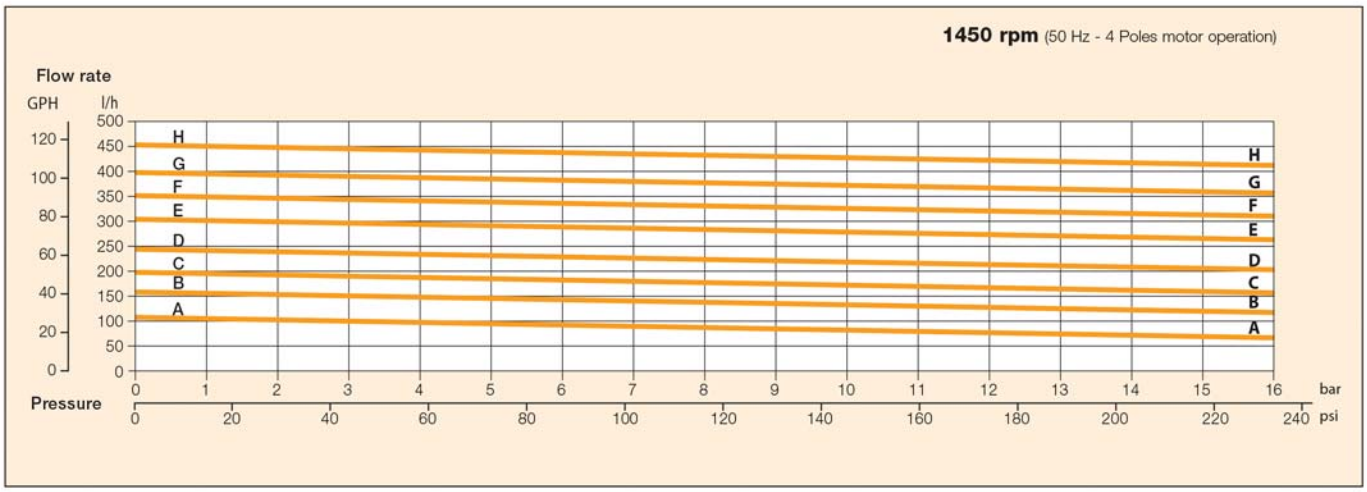
Relief valves are offered on select models of rotary vane pumps throughout the product line. Two types of relief valves are offered:
1) Standard Relief valve: A spring loaded bypass check valve diverts flow from the pump outlet to the pump inlet when outlet pressure exceeds setpoint (set with spring tensioning set screw).
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).

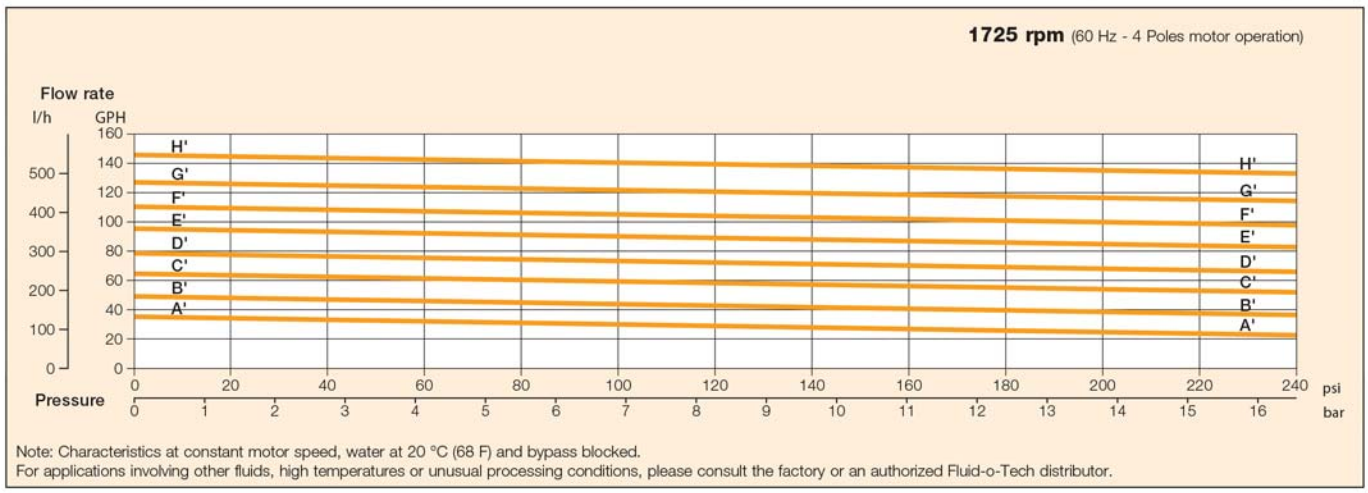
The cracking pressure can be field set by adjusting the spring tension with the adjusting screw. If the cracking pressure is not customer specified it is factory preset at approximately 190 PSI for PA 70-400 series.

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.

Clark Solutions • 10 Brent Drive • Hudson, MA 01749 • Tel. 978 / 568 3400 • Fax 978 / 568 0060

PUMP MODEL SELECTION/FLOW CURVES/NEMA 56C ADAPTER



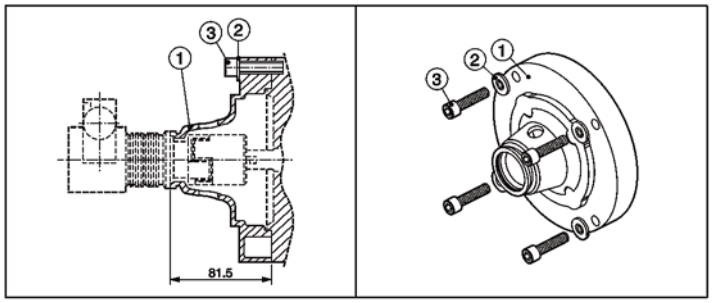


Note: Characteristics at constant motor speed, water at 20 °C (68 F) and bypass blocked.
For applications involving other fluids, high temperatures or unusual processing conditions, please consult the factory or an authorized Fluid-o-Tech distributor.

Model	PA0710	PA0711	PA0711F	PA110	PA111	PA111F	PA1510	PA1511	PA1511F	PA210	PA211	PA211F
Flow Figure	A-A			B-B			C-C			D-D		
Mounting	Clamp	Clamp	Flange	Clamp	Clamp	Flange	Clamp	Clamp	Flange	Clamp	Clamp	Flange
Relief Valve	NO	STD	STD	NO	STD	STD	NO	STD	STD	NO	STD	STD

Model	PA2510	PA2511	PA511F	PA310	PA311	PA311F	PA3510	PA3511	PA3511F	PA410	PA411	PA411F
Flow Figure	E-E			F-F			G-G			H-H		
Mounting	Clamp	Clamp	Flange	Clamp	Clamp	Flange	Clamp	Clamp	Flange	Clamp	Clamp	Flange
Relief Valve	NO	STD	STD	NO	STD	STD	NO	STD	STD	NO	STD	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