# PV SERIES Sliding Vane Pumps





Max. Capacity: 83 m<sup>3</sup>/h



Max. Differential Pressure: 8,5 bar



Max. Viscosity: 100 cSt



Temperature Range: -40 °C to +150 °C



> With Flange Connection

Sliding vane pumps are specifically designed to comply with the pumping requirements demanded by the LPG industry. Bulk delivery of LPG requires the use of heavy duty, reliable equipment and is an important part of every LPG marketer. The equipment used in modern bulk trucks must be designed and constructed to perform in a broad spectrum of operating conditions. Sliding vane design is ideal for butane, propane, freon, fuel, gasoline, DME, anhydrous ammonia, propellants, refrigerants and similar liquefied gases.

Utilizing Petroland's unique sliding vane design, these positive displacement pumps offer the best combined characteristics of sustained high-level performance, energy efficiency, trouble-free operation and low maintenance cost.



#### **FEATURES AND ADVANTAGES:**

- > Applications variety with 8 different casing size
- > They require less horsepower than other positive displacement pumps. So you spend less on motors initially and less on electricity to operate the pumps after they are installed.
- > High capacity at lower speeds. These lower operating speeds mean quieter operation, longer service life, and reduced maintenance requirements
- > Can be used same pump for filling and discharge with both direction properties
- > Self-adjusting vanes keep performance high
- > Vane replacement in easy inspection and no special tools require
- > Replaceable casing liner and end discs
- > Advanced polymer
- > Internal relief valve
- > Cavitation suppression liner
- > The design allows only mechanical seal. (Dual mechanical seals)
- > Dual-Ended shaft allows for both directions
- > External ball bearings
- > These vane pumps can be couplings with V-Belt, Hydro Motor and Gearbox.
- > Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection







> With Flanged Cutted Way

Model	Inlet / Outlet Size		Capacity (at 0 bar)		Max. Speed (rpm)	Max. Differential Pressure	
	Inlet	Outlet	m³/h	GPM	(ipili)	PSI	Bar
PV 150	DN50	DN40	9	40	1750	120	8.5
PV 200	DN50	DN50	19	83	750		
PV 220	DN50	DN50	19	83			
PV 320	DN80	DN50	27	118			
PV 330	DN80	DN50	29	128			
PV 350	DN80	DN80	40	176			
PV 360	DN80	DN80	40	176			
PV 450	DN100	DN80	83	365			

10 | 11

## PS SERIES Side Channel Pumps



13



Max. Capacity: 42 m<sup>3</sup>/h



Max. Differential Pressure: 40 bar



Max. Viscosity: 100 cSt



Temperature Range: -40 °C to +220 °C



PS series pump is a self-priming side channel pump capable of handling gas along with the medium and operates at a low noise level. PS pumps are used for problem-free pumping of clean liquids at unfavorable suction side conditions. They are also very suitable for positive suction heads below 0,5m. PS pumps provide the most appropriate solutions for liquefied gases, liquids under vapor pressure, refrigerants and especially LPG applications.

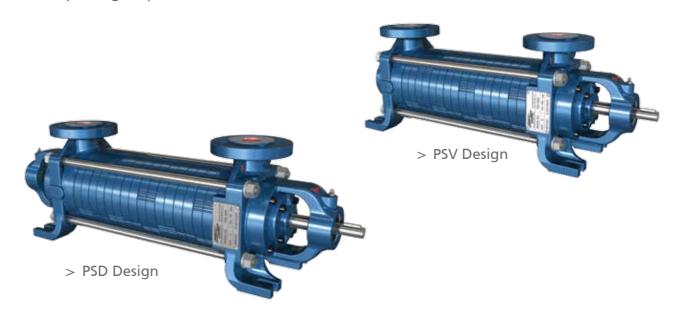
Side channel designs fill the hydraulic performance void between positive displacement pumps and centrifugal pumps. Fully open "star" impellers interact with the side channel casing creating an intense transfer of energy to the pumped liquid or liquid / gas mixture. The corresponding pressure increase (pump head) equals 5 to 10 times the amount generated by a similar size centrifugal pump at the same rpm.

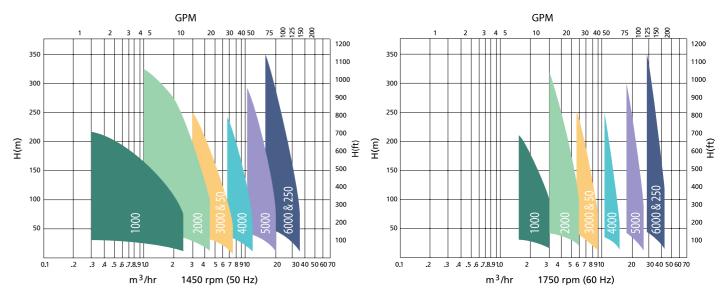




#### **FEATURES AND ADVANTAGES:**

- > The range comprises of 21 sizes each with 1 to 8 hydraulic stages whereby an optimum rating is obtained, ensuring the pump selected meets the required capacity and head.
- > Applications variety with 168 different case size
- > High pressure at low capacity
- > Liquefied gas handling
- > High resistant materials for the critical conditions
- > Performance curve characteristic
- > High efficiency
- > Modular hydraulic design allows easy maintenance
- > Low NPSHr value
- > Ability to pump vapour laden liquids (up to 50%)
- > The pump design is suitable for every type of seal (packing gland, single mechanical seal, double mechanical seal)
- > Self-priming is up to 970 mbar





<sup>\*</sup> Performance curves are prepared for water (1 cSt)

12

### **CERTIFICATES**



## By-Pass:

Differential by-pass valves are designed to protect pumps and system components from excessive pressure damage.

Petroland by-pass valves can be set between 0-25 bar.

With only two moving parts, operations simple and reliable..

By-pass should not be open continuously to protect system against any damage or explosion.









PB Design PBK Design

PC Design

With Flange Design

BY-PASS MODEL AND FEATURES										
By-Pass Type			Inlet / Outlet Size		Max. Working Pressure					
Threaded Connection		Flange Connection	Inch	mm	PSI	Bar				
PB 20	PC 20		3/4″	20						
PB 25	PC 25	PB 25F	1"	25						
PB 32	PC 32	PB 32F	1 ¼"	32	360	25				
PB 40	PC 40	PB 40F	1 ½"	40						
PB 50K		PB 50F	2"	50						











14 15









#### PETROLAND POMPA A.Ş.

Aydınlı Mh. İstanbul Anadolu Yakası O.S.B. 1.Sokak No:7 Tuzla - İstanbul / TURKEY Tel: +90 216 593 46 60 (6 hat)

Fax: +90 216 593 46 66 E-mail : sales@petroland.com.tr www.petroland.com.tr