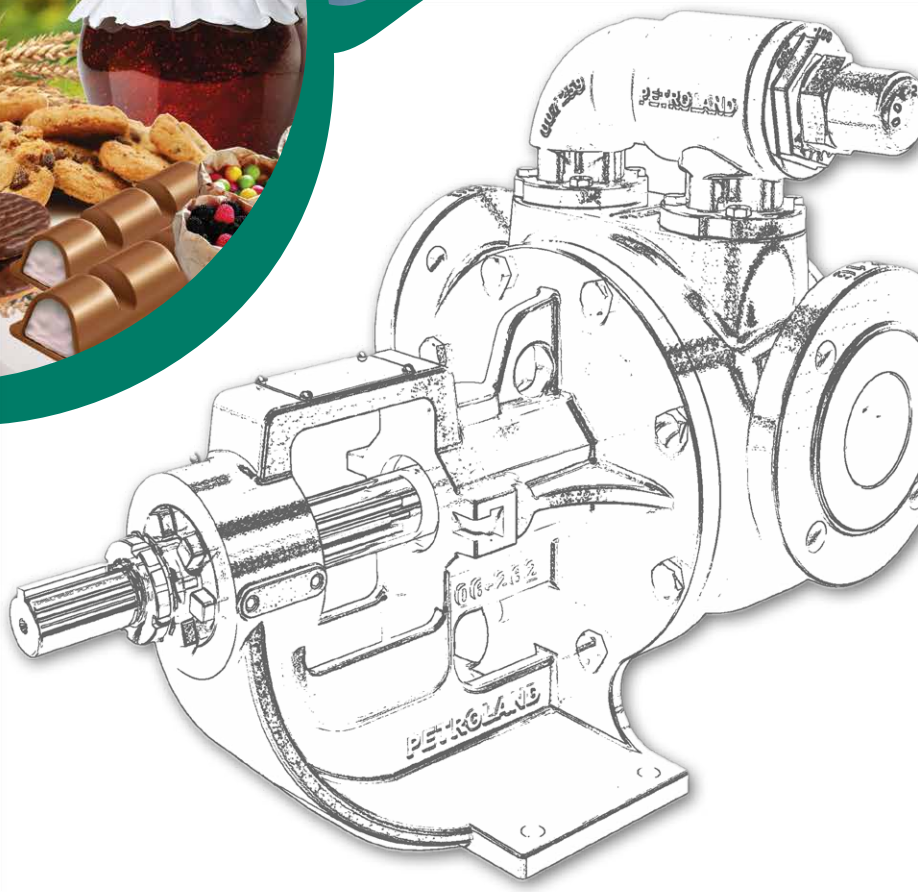
PETROL LAND®

INDUSTRIAL PUMPS



TSE CE Ex TÜV NORD ISO 9001

CERTIFICATES

APPLICATIONS & INDUSTRY

ASPHALT & BITUMEN INDUSTRY

PAINT INDUSTRY

FOOD INDUSTRY

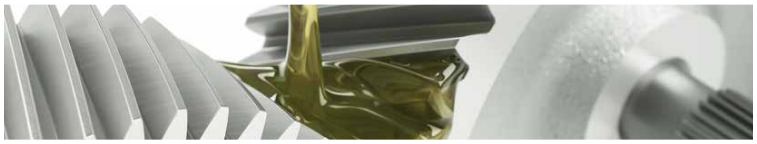
PHARMACEUTICAL INDUSTRY

PAPER INDUSTRY

CHEMICAL INDUSTRY

COSMETICS INDUSTRY

LPG INDUSTRY



LUBRICATION OIL INDUSTRY

MARINE INDUSTRY

PETRO-CHEMICAL INDUSTRY

SUGAR INDUSTRY

AGRICULTURAL INDUSTRY

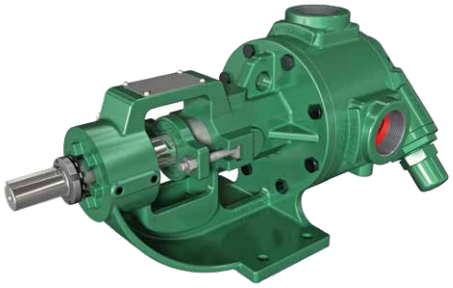
PD SERIES
Internal Gear Pumps

Max. Capacity: 390 m³/h

Max. Differential Pressure: 14 bar

Max. Viscosity: 450.000 cSt

Temperature Range: -50°C to +350°C

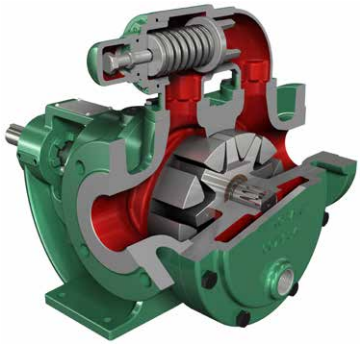


With Bracket Design

Universal series

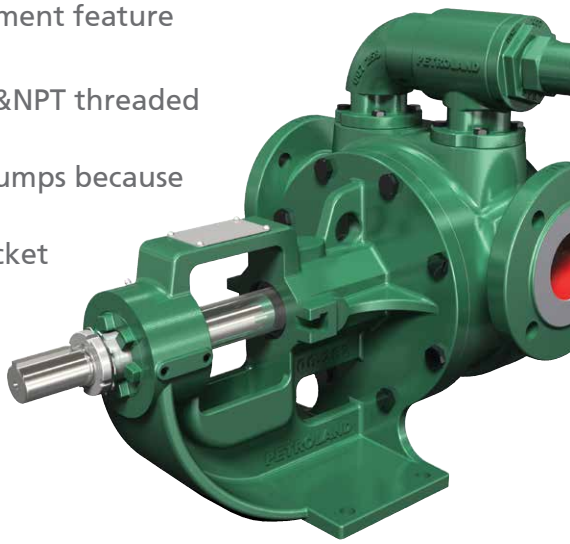
Internal Gear Pumps are self-priming positive displacement pumps and they have reliable design with only two moving parts. Because of both direction properties, they are suitable for filling and discharge.

Internal gear pumps are used for low viscosity mediums (solvent, fuel… etc.) and high viscosity mediums (asphalt, chocolate, honey… etc.) with adjustable clearance. They can transfer the fluids, which viscosity is between 1 cSt - 450.000 cSt

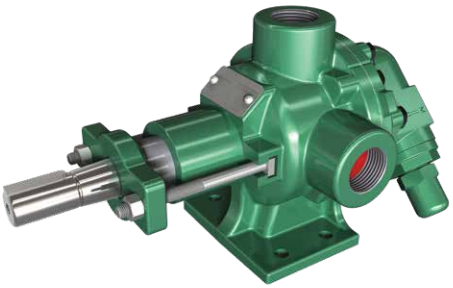


FEATURES AND ADVANTAGES:

- Applications variety with 60 different casing size
- Easy of usage and maintenance with only two moving parts
- Operating wide range of viscosity
- Can be used same pump for filling and discharge with both direction properties
- Cavitation possibility is less because of low NPSHr
- Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)
- The design is suitable for many applications
- The pump isn't effected any pressure drops in order to displacement feature
- Suitable for all kind of coupling (with motor, gearbox, v-belt)
- Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection
- They are more economical than rotary lobe pumps and screw pumps because can be applied only one seal
- Heating / Cooling jackets can be applied to cover, casing or bracket
- The rotor casing can rotate 360°
- Not required special tools for maintenance
- Connection design is adjustable 90° or 180°
- Self-priming is up to 950 mbar
- Relief Valve can be applied to pump cover or case



In-Line Design



Without Bracket Design

High Speed Design

Mono-Block Design

Model	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Speed (rpm)	Max. Differential Pressure	
	Inch	mm	m³/h	GPM		PSI	Bar
AS	½"	15	0.7	3	1750	100	7
A	¾"	20	1.5	6.5			
GL	1"	25	3.5	15			
FL	1 ½"	40	7	30			
B	1"	25	2.4	10		200	14
BM	1"	25	2.4	10			
T	1"	25	2	8			
TL	1"	25	2.4	10			
CL	1"	25	3.5	15			
H	1 ½"	40	3.5	15			
HM	1 ½"	40	5	22			
HL	1 ½"	40	7	30			
JS	2"	50	8.5	37	1150		
J	2"	50	11	50			
JL	2"	50	17	75			
K	2"	50	19	85	900		
KL	2"	50	26	115			
S	2 ½"	65	36	160	750		
SL	2 ½"	65	52	230			
M	3"	80	52	230			
ML	3"	80	65	290	500		
N	4"	100	65	290			
NL	4"	100	113	495			
NM	5"	125	113	495			
P	5"	125	120	525	400		
R	6"	150	157	695			
Z	8"	200	267	1180	300	125	8.5
ZL	10"	250	390	1720			

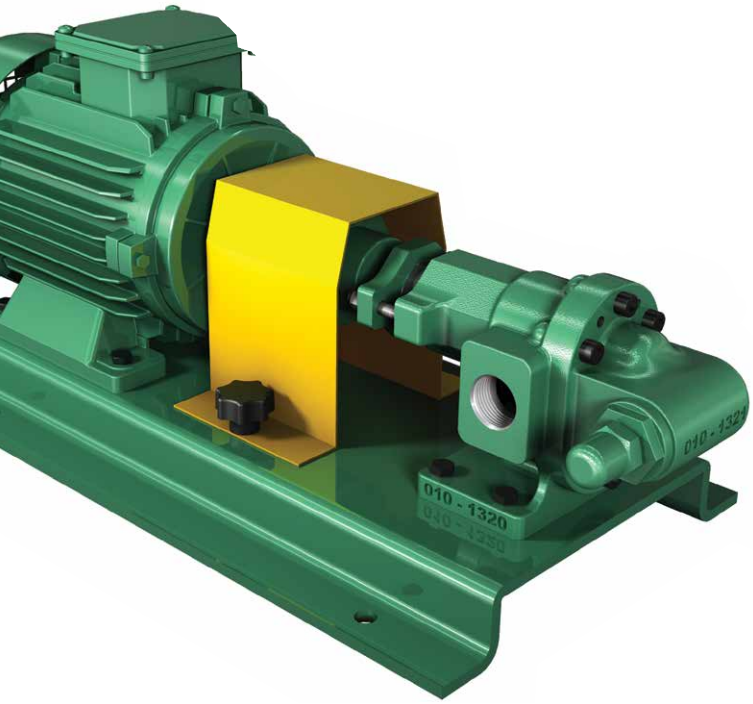
PM SERIES
External Gear Pumps

- Max. Capacity: 50 m³/h
- Max. Differential Pressure: 10 bar
- Max. Viscosity: 450.000 cSt
- Temperature Range: -30℃ to +250℃

External Gear Pumps are self-priming positive displacement pumps and they have very good vacuum capability. Can be used for low, medium and high viscosity applications with adjustable clearances. They require less parts in order to compact design and to save space. Can be used for both direction with suitable seal. Application variety with helical and spur gear options

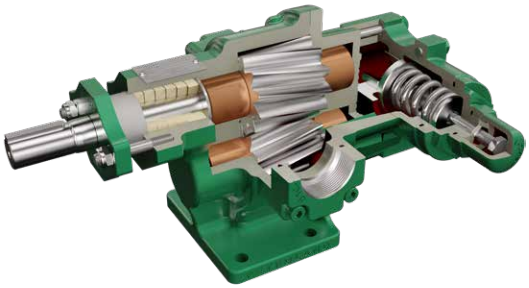
> With Cartridge Mechanical Seal

> With Flanged & Single Mechanical Seal



> Direct Coupling With Relief Valve

> With Cover Jacketed

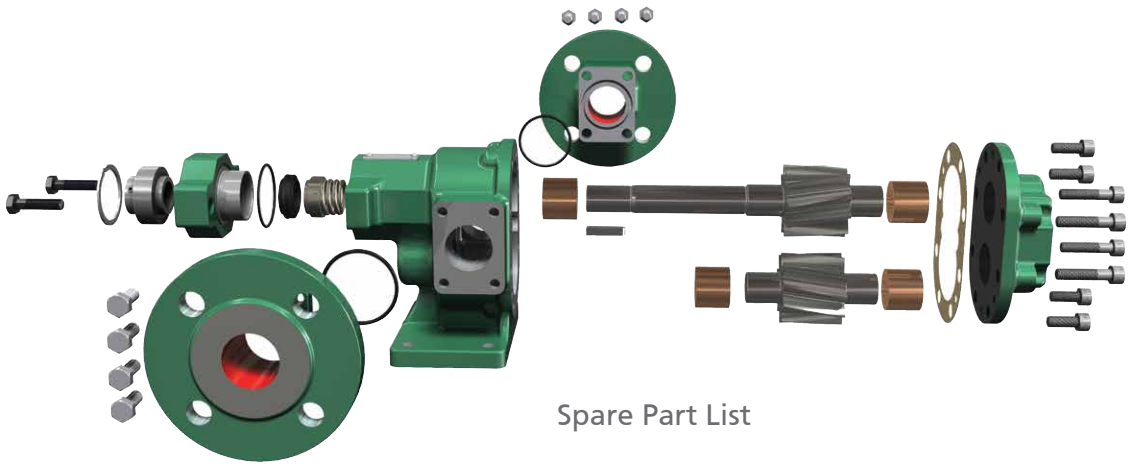


FEATURES AND ADVANTAGES:

> Applications variety with 12 different casing size
> Operating wide range of viscosity
> Easy of usage and maintenance with only two moving parts
> Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
> The pump design is suitable for every type of seal (lip seal, packing gland, single mechanical seal, double mechanical seal)
> Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection
> They are more economical than rotary lobe pumps and screw pumps because can be applied only one seal
> Heating / Cooling jackets can be applied to cover
> Not required special tools for maintenance
> Connection design is adjustable only for 180°
> Self-priming is up to 950 mbar
> Relief Valve can be applied to pump cover
> The design is allowed for dosing applications

Model	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Speed (rpm)	Max. Differential Pressure *	
	mm	Inch	m³/h	GPM		PSI	Bar
PM 15	15	½"	0.7	3	1750	145	10
PM 15L	15	½"	1.5	6.5			
PM 20	20	¾"	2.4	10			
PM 25	25	1"	3.5	15			
PM 32	32	1 ¼"	4.8	21			
PM 32L	32	1 ¼"	7	31			
PM 40	40	1 ½"	9,5	42			
PM 50	50	2"	10	44	1450		
PM 50L	50	2"	18	80	950		
PM 65	65	2 ½"	25	110			
PM 80	80	3"	35	155			
PM 100	100	4"	50	220			

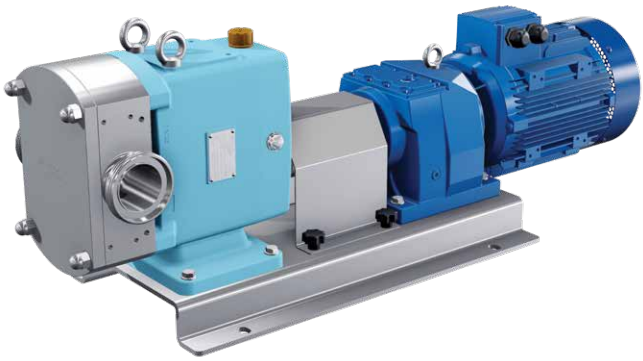
* (Higher pressures are available with factory approval.)



Spare Part List

PL SERIES
Lobe Pumps

- Max. Capacity: 58 m^3/h
- Max. Differential Pressure: 20 bar
- Max. Viscosity: 250.000 cSt
- Temperature Range: -15℃ to +250℃

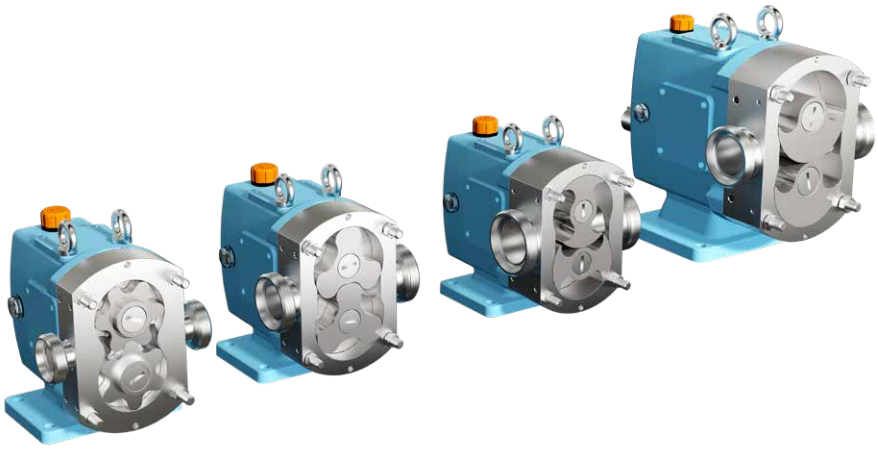


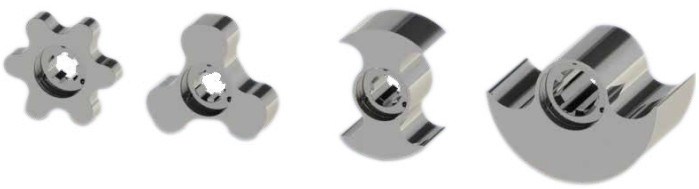
PL series pumps have been specially designed to make dismantling (whether for inspection, cleaning and maintenance) quicker and easier. The forward-seal position places the seals in direct contact with CIP fluides. Superior seal cleanlines lengthens seal life and minimizes seal flaking (products contaminations) . Because the seals are located directly behind the rotors, areas of product entrapment are eliminated for superior hygienic performance.

Unique front loading seal design gives faster maintenance, easier cleaning and less downtime. The only dismantling front cover, the rotors and seals are take out without pump dismantling from pipe.

PL series pumps have been working to suit all hygienic pumping applications in the food, diary, beverage, pharmaceutical and another places where the stainless steel is resistant to liquids to be pumped.

The all lobe types can be applicable for same casing.

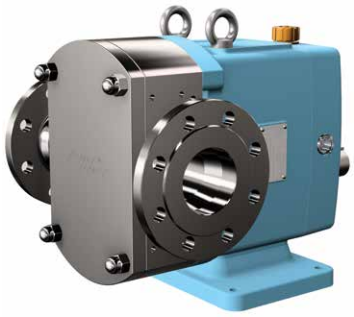




The lobe types according to application: Single Wing, Bi-Wing, Tri Lobe, Multi Lobe

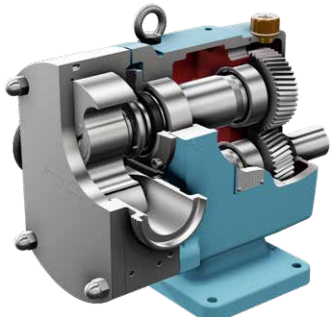
FEATURES AND ADVANTAGES:

> Three kind of gear boxes with seven kinds of pump models.
> Heating / Cooling jackets easy to fit on the front cover and/or rotor casing
> The inlet/outlet connection ports are monoblock with casing. It is hygienic due to not welding
> Single seal which can be modified to a double type (flushing) with a minimum of additional part
> Horizontal ports which can be fitted vertical simply
> The offered rotor shaft as down as standard, can be easily change to up
> It is suitable to drive clockwise / counter clockwise direction (both).
> The inlet / outlet connection ports can be offered with DIN 11851, tri clamp or flange
> The lobe type can be offered with single wing, bi-wing, tri-lobe and multi lobe according to application
> The clearances can be setted according to viscosity.
> The inlet port can be rectangular for high viscosity applications to feed well.



> Flange Connection

> Casing & Cover Jacketed



> The Cutted Way

PL Series	Model	Capacity			Standard Connection Diameter		Max. Pressure		Max. Speed
		Liter 1 rev.	Int Galon 100 rev.	Us Galon 100 rev.	mm	Inches	PSI	Bar	rpm
1	PL 125	0.05	1.10	1.32	25	1	300	20	1000
	PL 140	0.12	2.64	3.17	40	1.5	175	12	800
	PL 150	0.21	4.61	5.54	50	2	115	8	800
2	PL 250	0.4	9.01	10.81	50	2	175	12	700
	PL 265	0.62	13.63	16.35	65	2.5	115	8	700
3	PL 380	1.02	22.42	26.90	80	3	175	12	600
	PL 3100	1.44	31.65	37.98	100	4	115	8	600

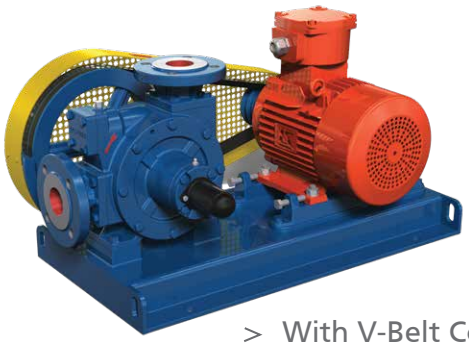
PV SERIES
Sliding Vane Pumps

- Max. Capacity: 83 m³/h
- Max. Differential Pressure: 8,5 bar
- Max. Viscosity: 100 cSt
- Temperature Range: -40 ℃ to +150 ℃

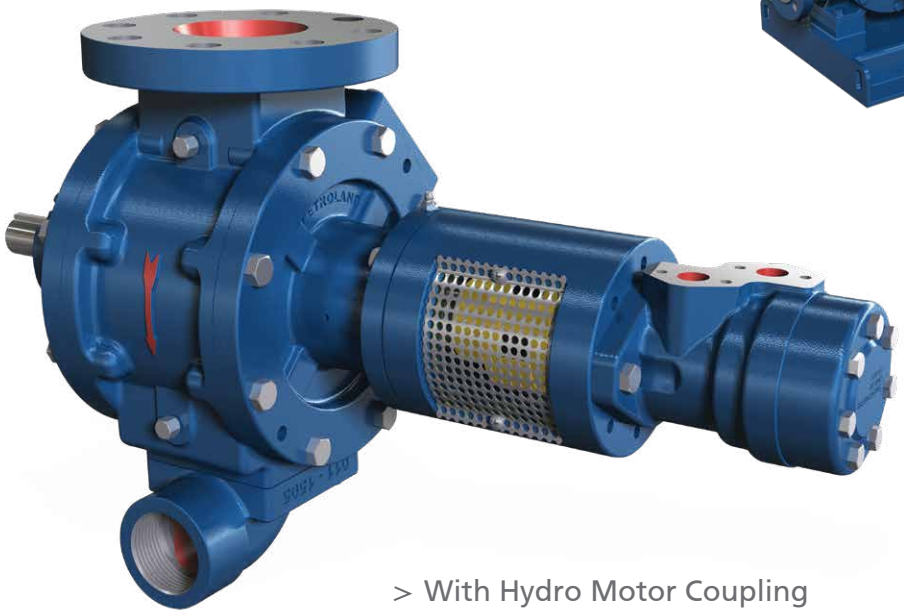
> With Flange Connection

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.



> With V-Belt Coupling

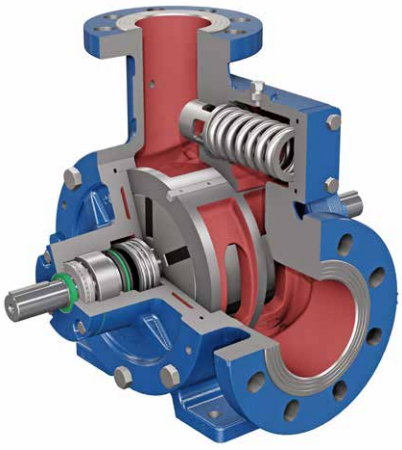


> With Hydro Motor Coupling

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 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		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			

PS SERIES
Side Channel Pumps

Max. Capacity: 42 m³/h

Max. Differential Pressure: 40 bar

Max. Viscosity: 100 cSt

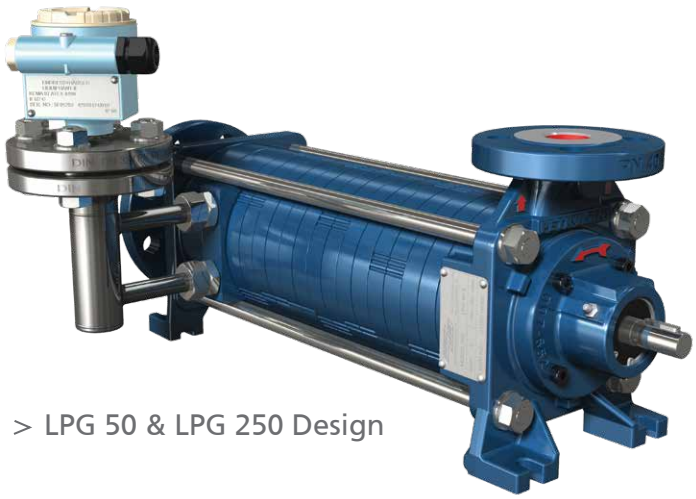
Temperature Range: -40℃ to +220℃

> PSC Design

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.

> LPG 150 Design



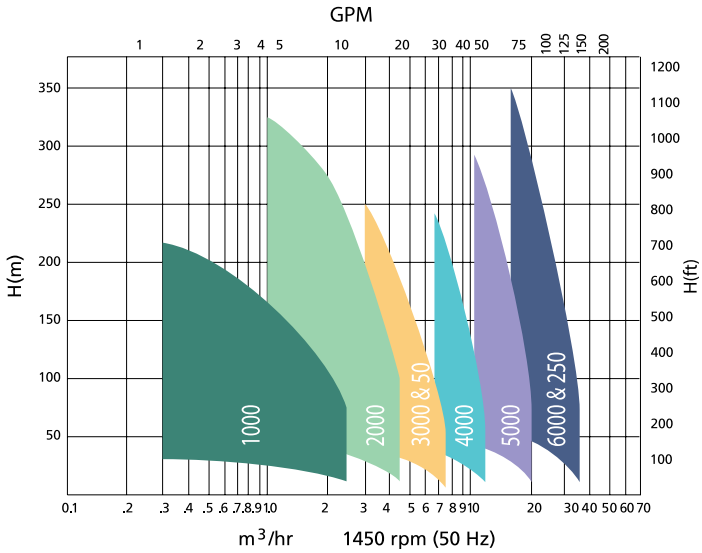
> LPG 50 & LPG 250 Design

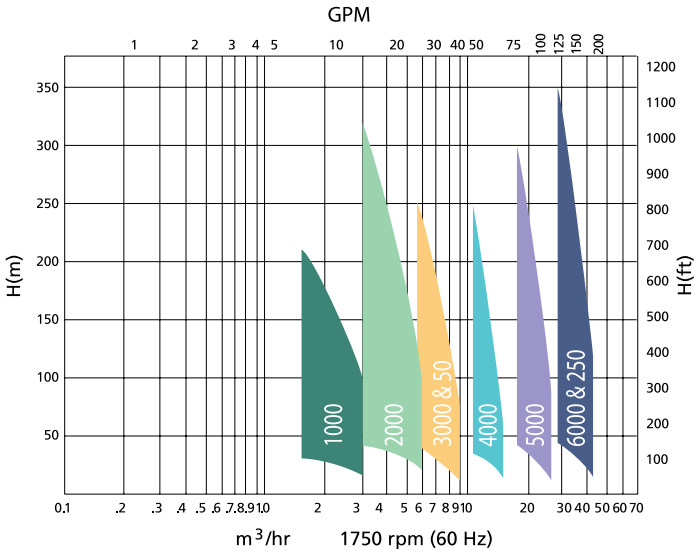
FEATURES AND ADVANTAGES:

> 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

> PSV Design

> PSD Design





* Performance curves are prepared for water (1 cSt)

ACCESSORIES

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

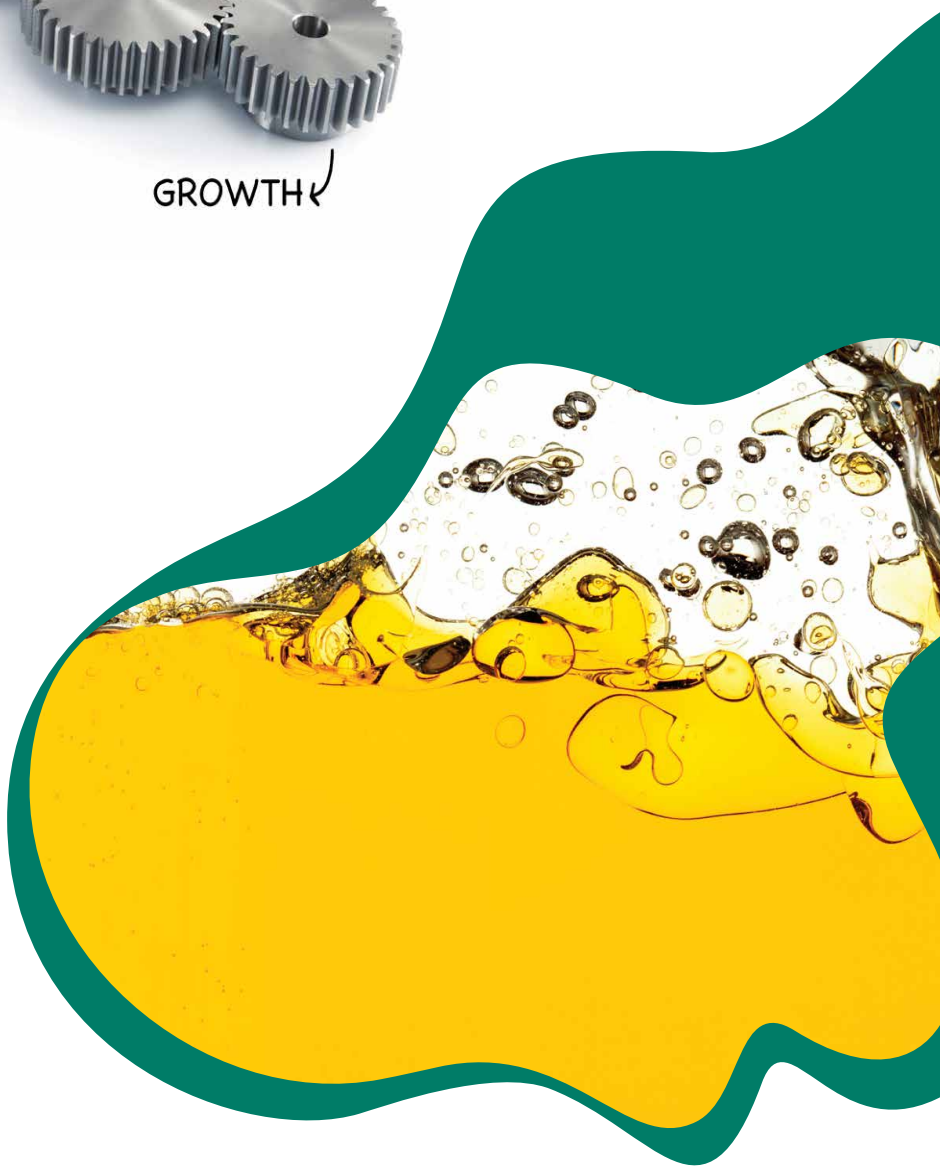
BY-PASS MODEL AND FEATURES						
By-Pass Type			Inlet / Outlet Size		Max. Working Pressure	
Threaded Connection		Flange Connection	Inch	mm	PSI	Bar
PB 20	PC 20	-------	¾"	20	360	25
PB 25	PC 25	PB 25F	1"	25		
PB 32	PC 32	PB 32F	1 ¼"	32		
PB 40	PC 40	PB 40F	1 ½"	40		
PB 50K	-------	PB 50F	2"	50		

Orifis Set

Reduction

Ex-Proof Coupling


VISION
RESEARCH
INNOVATION
TEAMWORK
STRATEGY
GROWTH



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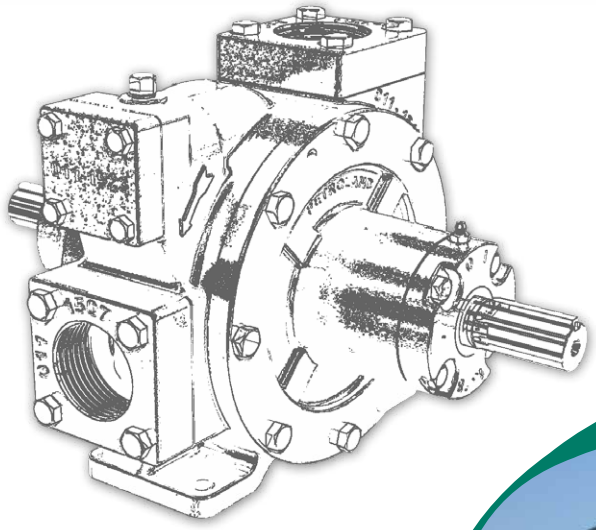

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