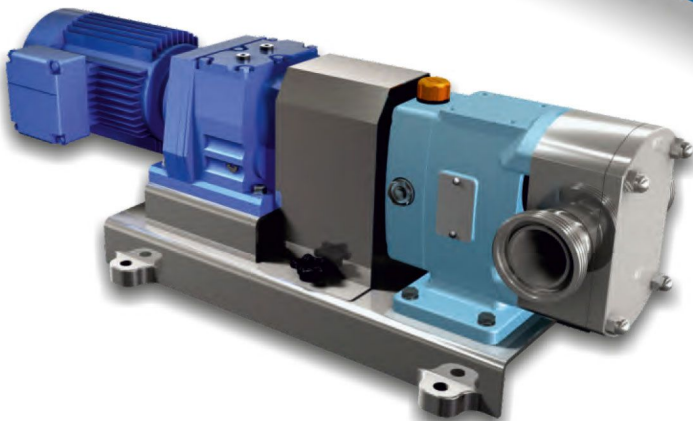


PETROLAND[®]

PL Series Rotary Lobe Pump

اینرژی

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Beverage Industry



Chocolate & Cream Industry



Confectionery Industry



Diary Products Industry



Bakery Foods Industry



Cleaning Products Industry



Personal Care Products Industry



Pharmaceutical Industry

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 fluids. 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.



Max. Capacity: 40 m³/h



Max. Temperature: 250 °C



Max. Pressure: 20 bar



Max. Viscosity: 250.000 cSt

Working Principle

PL series pumps are positive displacement pumps. The volume at the inlet increases when the rotors rotate and the product is drawn into the pump. It is then transported in the space between the lobes and the periphery of the pump housing to the discharge side. The volume between the rotors are reduced here and the product is forced out through the outlet.

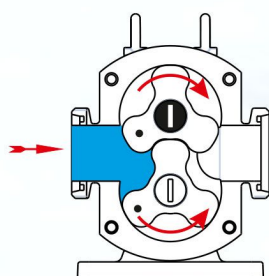


Figure 1

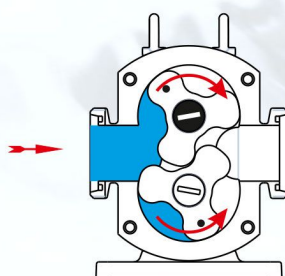


Figure 2

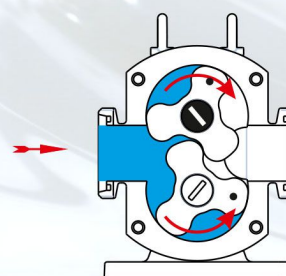


Figure 3

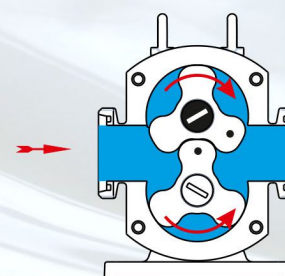
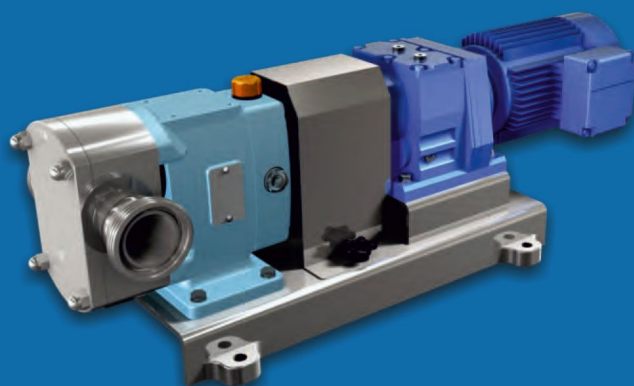


Figure 4

Shows the liquid flow through the PL series pump – seen from the front end.

I - ROTOR SHAFT

II - IDLER SHAFT



Motor & Gearbox Coupled



Vertical Inlet / Outlet

- Three kind of gear boxes with six 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
- A Single seal which can be modified to a double type (flushing) with a minimum of additional parts
- 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 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.

MATERIAL PARTICULARS

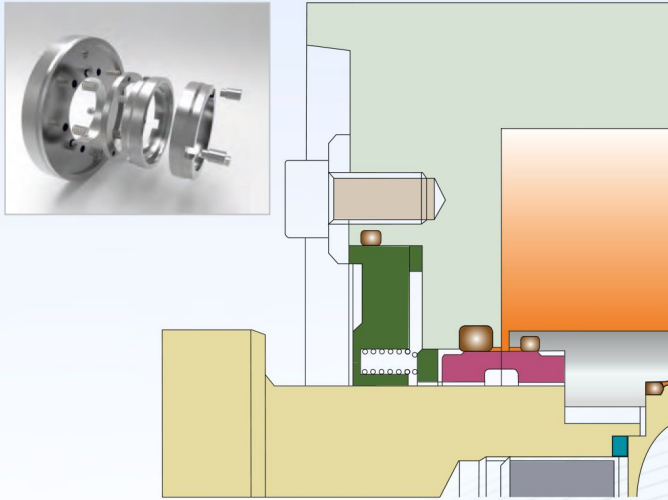
Parts	Material	Parts	Material
Rotor shaft	AISI 316L Stainless Steel	Casing	AISI 316 Stainless Steel
Idler shaft	AISI 316L Stainless Steel	Cover	AISI 316 Stainless Steel
Lobes	AISI 316L Stainless Steel	Gearbox	GG25 Cast Iron



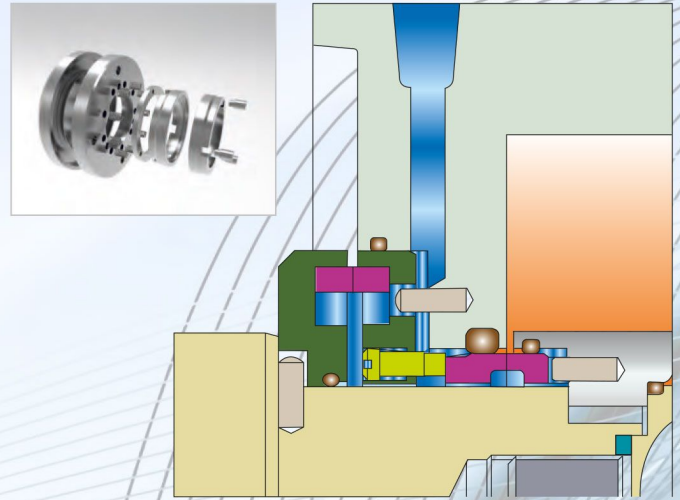
Cover Jacketed



Flange Connection



Single Mechanical Seal

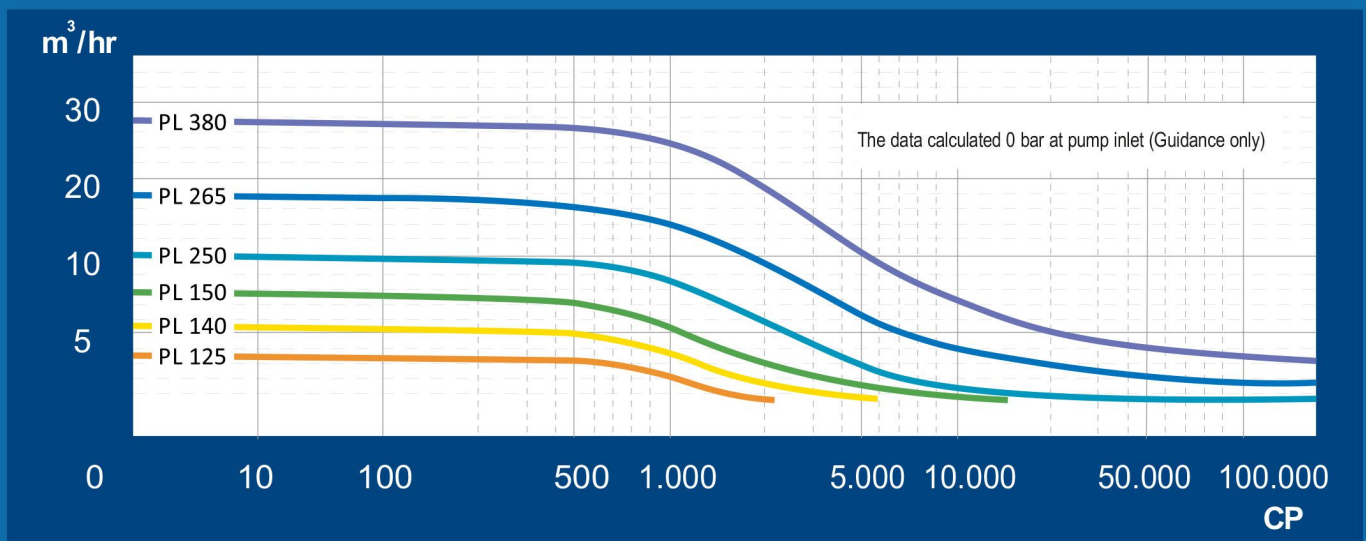


Double Mechanical Seal (Flushing)

Capacity Table and Performance Curve

PL Series	Model No.	Capacity			Standard Connection Diameter		Maximum Pressure		Maximum Speed Rev/min
		Liters/1rev	Int Galon/100 rev	US Galon/100 rev	mm	Inches	BAR	PSI	
1	PL 125	0.05	1.10	1.32	25	1	20	300	1000
	PL 140	0.12	2.64	3.17	40	1.5	12	175	800
	PL 150	0.21	4.61	5.54	50	2	8	115	800
2	PL 250	0.41	9.01	10.81	50	2	12	175	700
	PL 265	0.62	13.63	16.35	65	2.5	8	115	700
3	PL 380	1.02	22.42	26.90	80	3	12	175	600

Capacity Table



Performance Curve

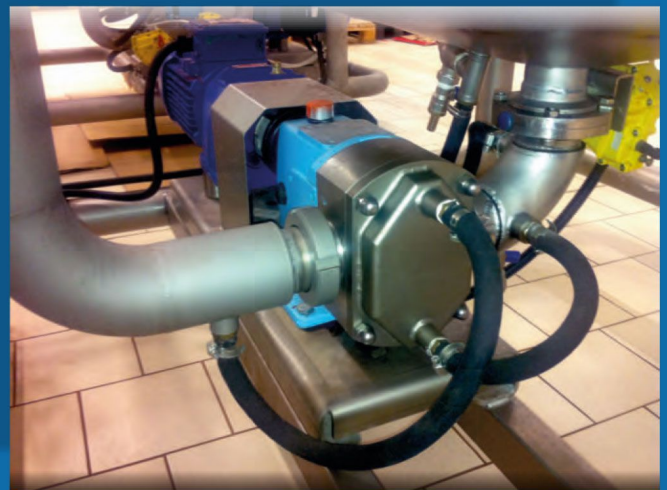
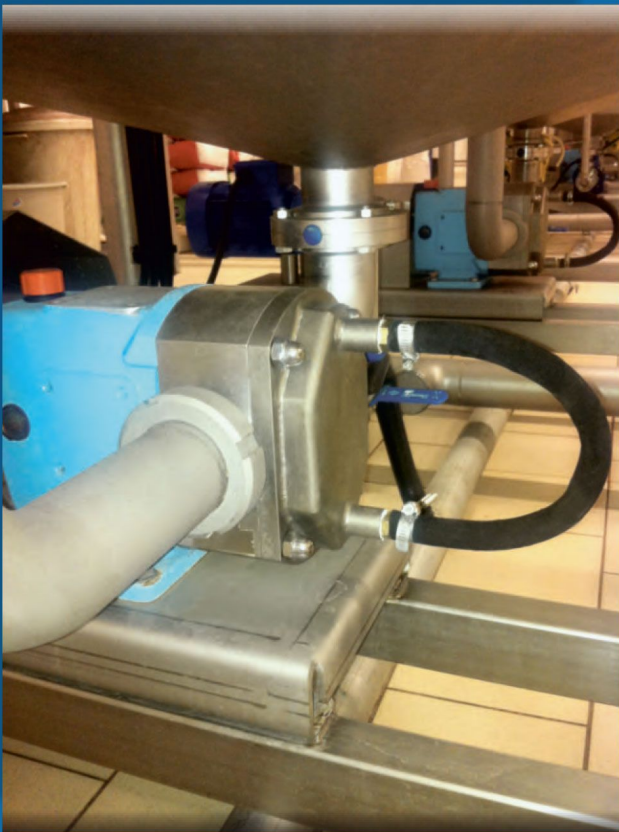
The all lobe types can be applicable for same casing.

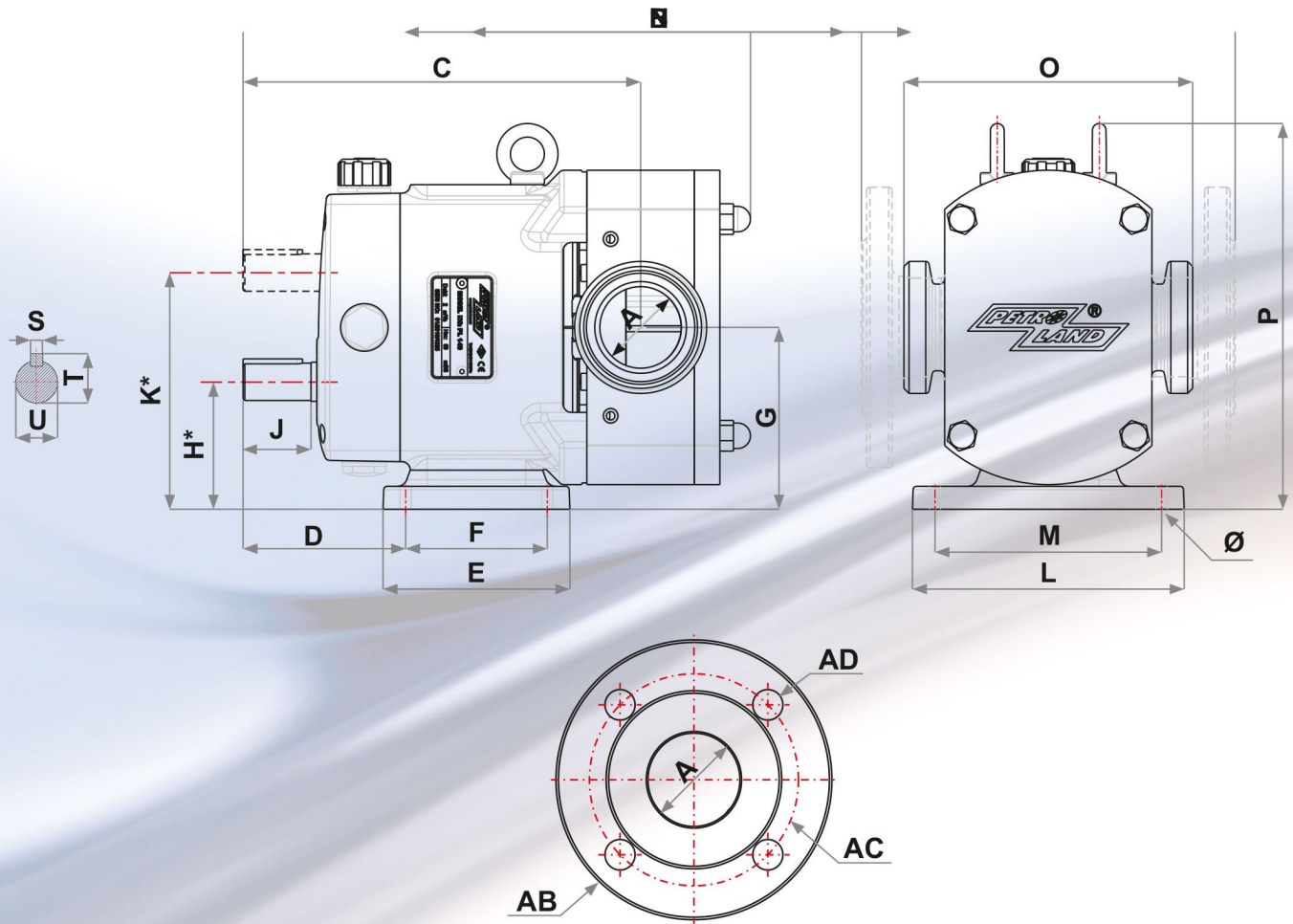


The lobe types according to application:

Single Wing, Bi-Wing, Tri Lobe,
Multi Lobe

Applications

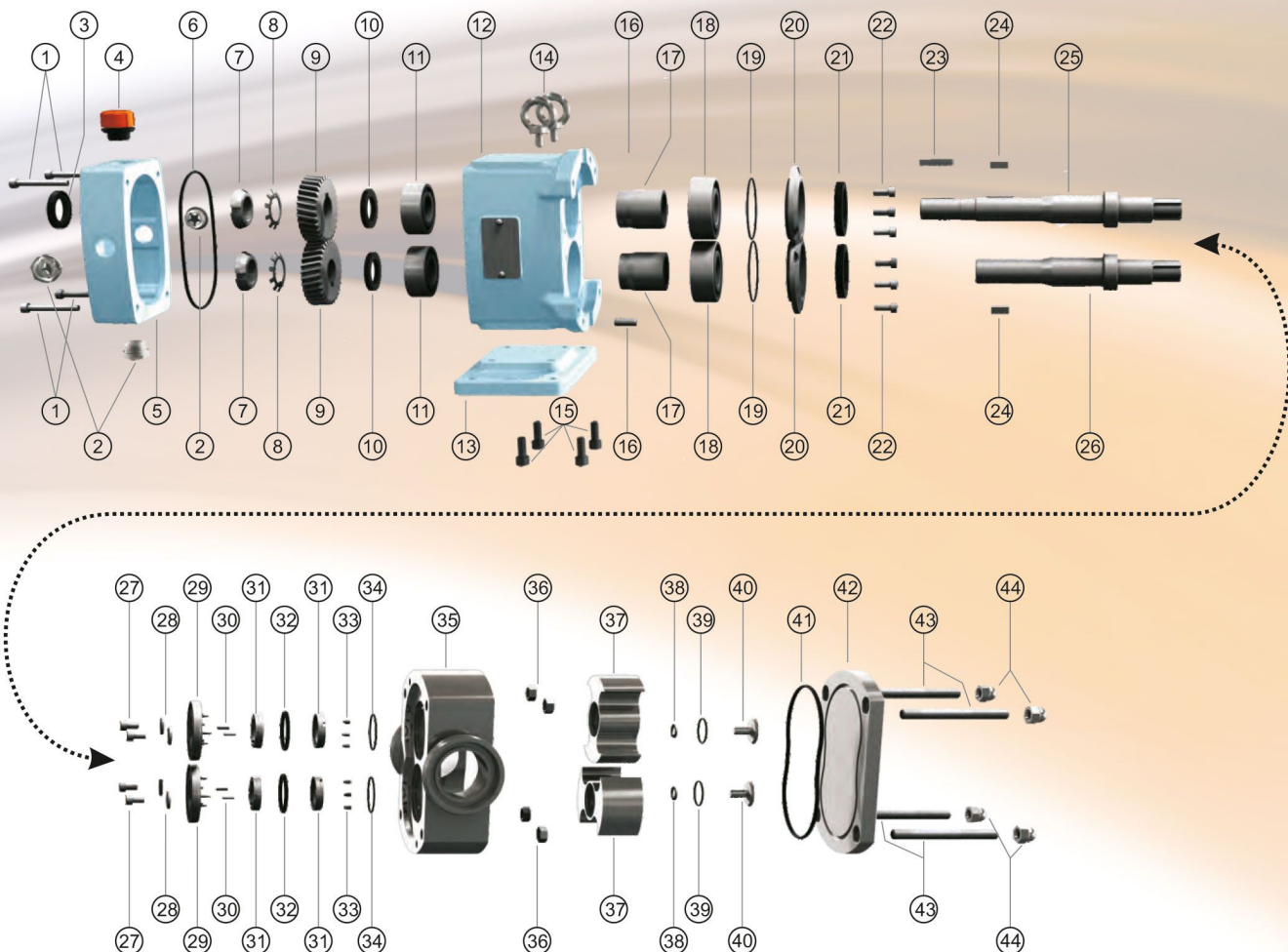




Dimensions (mm)																							Pressure Rating	Pump Weight (Kg)	Weight (Kg) with flange
Model No.:	A	B	C	D	E	F	G	H*	J	K*	L	M	N	O	P	Ø	S	T	U	AB	AC	AD			
PL 125	25	274	220	97	110	80	107	75	40	139	160	134	220	174	227	10	6	25.5	22	115	85	14	PN 16	13	18
PL 140	40	283	225	97	110	80	107	75	40	139	160	134	220	174	227	10	6	25.5	22	150	110	18	PN 16	21	26
PL 150	50	300	234	97	110	80	107	75	40	139	160	134	220	170	227	10	6	25.5	22	165	125	18	PN 16	24	29
PL 250	50	382	310	116	160	125	157	115	55	199	200	170	260	225	312	14	10	36	32	165	125	18	PN 16	46	52
PL 265	65	407	322	116	160	125	157	115	55	199	200	170	260	220	312	14	10	36	32	185	145	18	PN 16	52	60
PL 380	80	535	390	160	210	160	186	128	70	243	280	242	322	322	400	14	14	49	45	200	160	18	PN 16	95	105

*H and K dimensions can be produced by 15 mm longer than dimension of standard design for the models PL 125, PL 140 and PL 150. Flange norm DIN 2633

PL Series Lobe Pump Spare Part List



* Number of screws is 6 for PL 250 and bigger sizes.



Petroland Pump Inc.

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