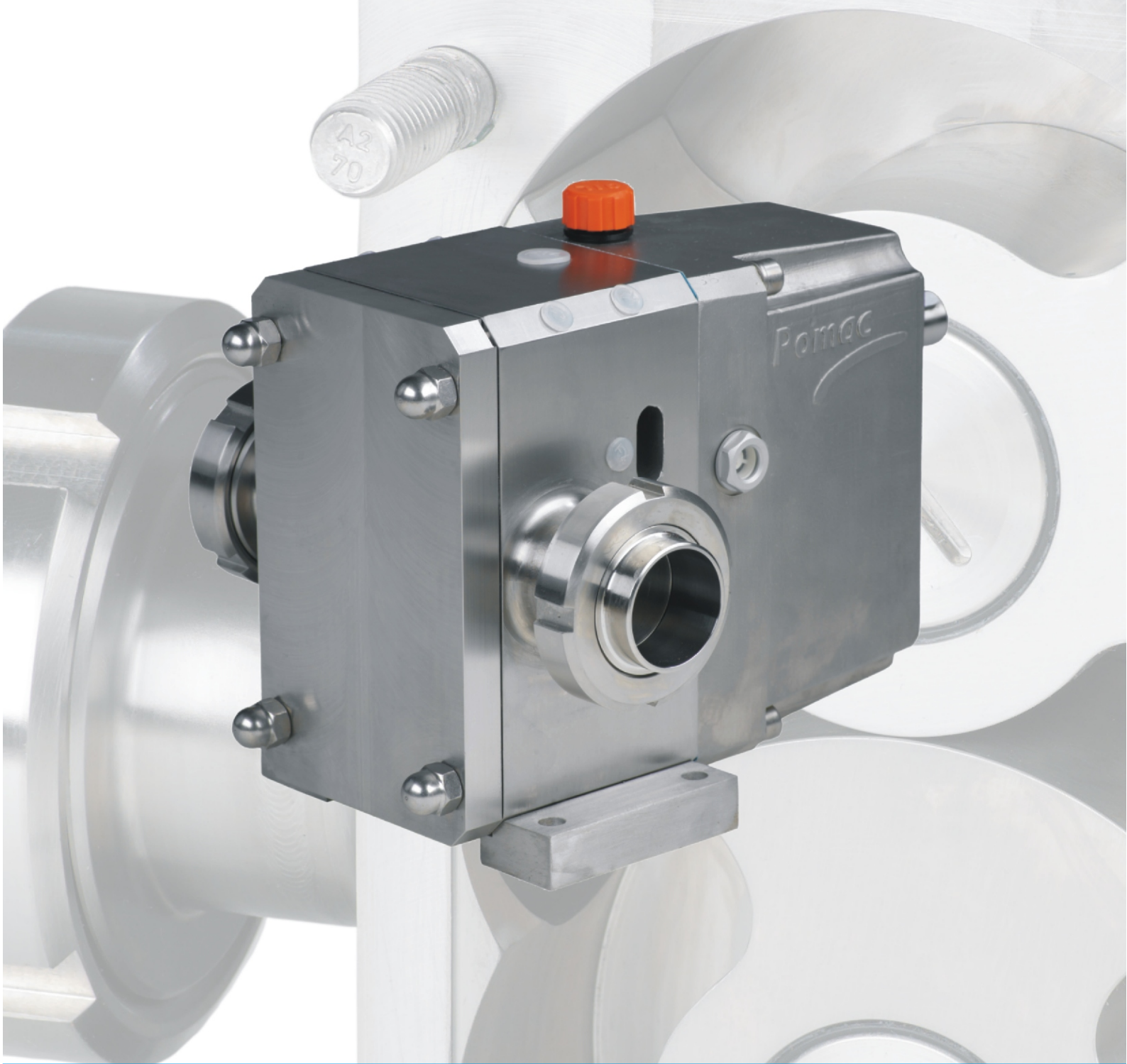


Pomac Pumps

Stainless steel lobe pumps
for industrial and hygienic process applications



PLP



PLP

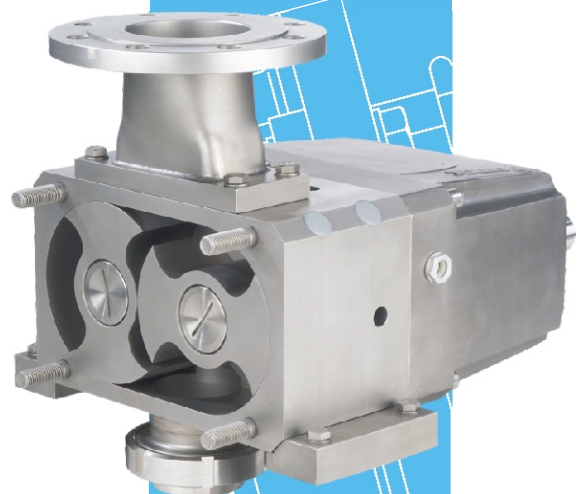
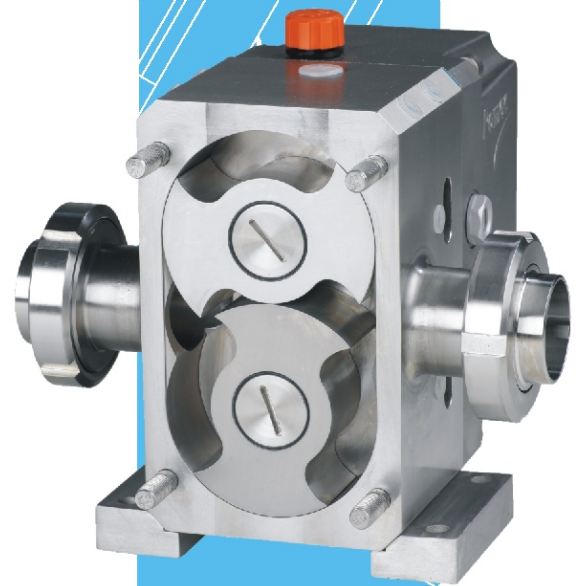
Lobe pumps

Pomac PLP Lobe pumps are designed to achieve maximum pump performance combined with minimal product damage. Specific attention is paid to the bearing construction and the rigidity of the shaft. The design is kept as compact as possible and the volume between the lobes is optimised.

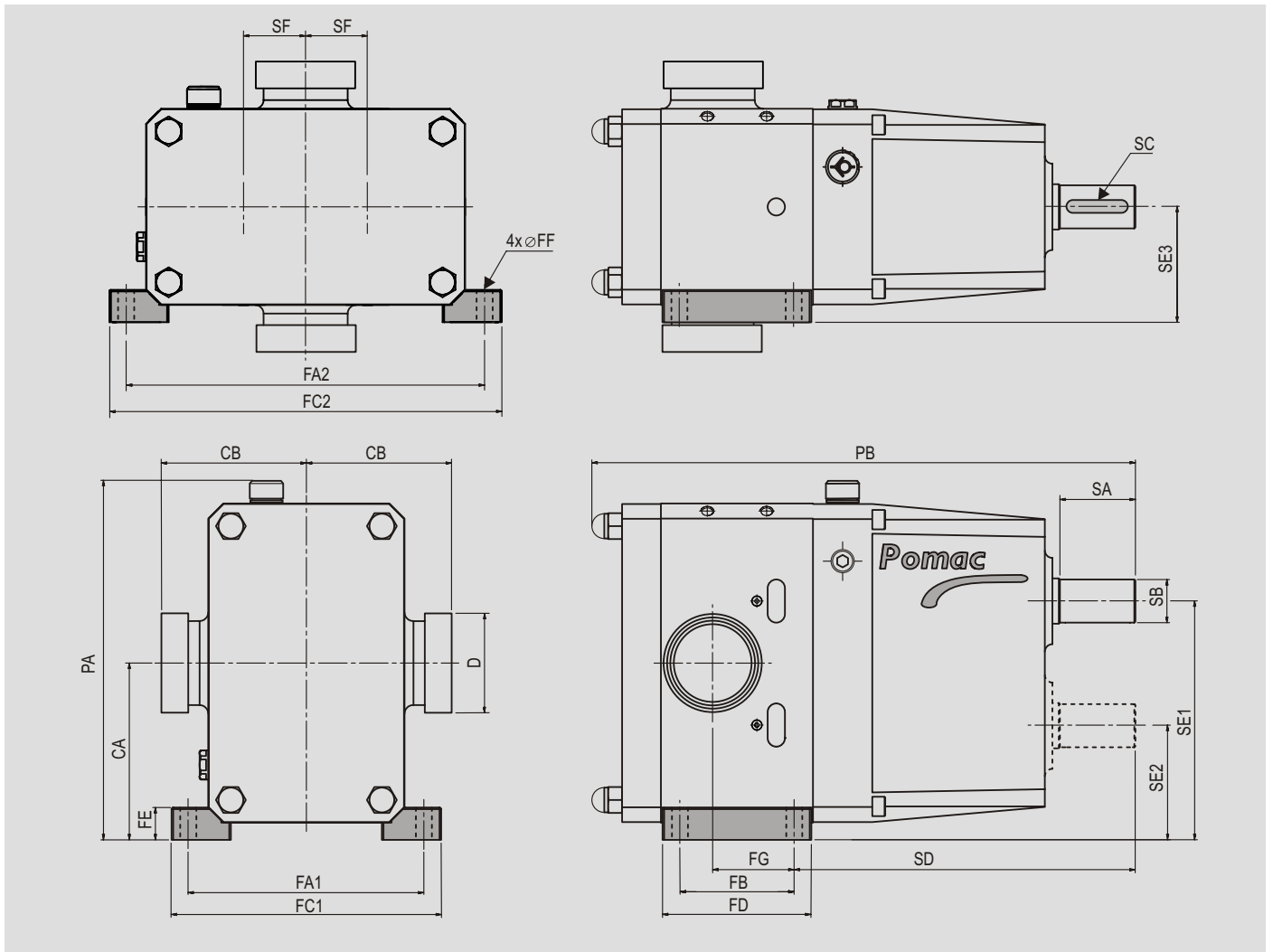
This makes the PLP range suitable for high working pressures up to 15 bar. The application range comprises a capacity of up to 110 m³/h.

The entire pump section as well as the gearbox is made of stainless steel. The pump can easily be cleaned and is EHEGD certified.

The applied "front pull out" principle makes maintenance very easy. The possibility to mount the pump with the connections placed horizontally as well as vertically ("self-draining position") makes it universally applicable.



Dimensions



Type	D	CA	CB ^{*)}	FA1	FA2	FB	FC1	FC2	FD	FE	FF	FG	PA	PB	SA	SB	SC	SD	SE1	SE2	SE3
PLP 1-3/4	DN15	84	65,5	114	169	50	136	191	72	19	9	41,5	178	219	30	15	25x5	137	111,5	56,5	57
PLP 1-1	1"	84	84	114	169	50	136	191	72	19	9	45	178	226	30	15	25x5	137	111,5	56,5	57
PLP 1-1,5	1,5"	84	77,5	114	169	50	136	191	72	19	9	50,5	178	245	30	15	25x5	137	111,5	56,5	57
PLP 2-1,5	1,5"	123	111	162	248	80	190	276	106	24	11	57,5	253	343,5	48	25	40x8	219	165,5	80,5	80
PLP 2-2	2"	123	113	162	248	80	190	276	106	24	11	62	253	358	48	25	40x8	219	165,5	80,5	80
PLP 2-2,5	2,5"	123	118	162	248	80	190	276	106	24	11	67	253	367	48	25	40x8	219	165,5	80,5	80
PLP 3-2	2"	164	141	218	332	106	250	364	138	30	13	63	334	474	70	40	60x12	317	221,5	106,5	107
PLP 3-3	3"	164	135	218	332	106	250	364	138	30	13	75	334	507	70	40	60x12	317	221,5	106,5	107
PLP 3-4	4"	164	160	218	332	106	250	364	138	30	13	90,5	334	532	70	40	60x12	317	221,5	106,5	107
PLP 4-4	4"	230	214	338	472	142	378	512	182	58	18	100	462	675	98	55	90x16	350	310	150	163

*) dimension depends on the chosen connection.

Dimensions subject to alterations.

Technical data

Type	displacement [Liters/100rev]	max. press. [bar]	max speed [rev/min]	weight [kg]
PLP 1-3/4	4,2	15	1000	12
PLP 1-1	6	15	1000	12,5
PLP 1-1,5	10	10	1000	14
PLP 2-1,5	22	15	1000	37
PLP 2-2	30	15	1000	39
PLP 2-2,5	36	10	1000	44
PLP 3-2	55	15	750	101
PLP 3-3	100	15	750	105
PLP 3-4	130	10	750	115
PLP 4-4	250	15	750	295

The EHEDG-marking only applies to PLP pumps in vertical, self-draining execution, fitted with EHEDG approved connections.



Safety valve

The PLP can be supplied with a spring-loaded safety valve. The opening pressure is adjustable by means of a setscrew.

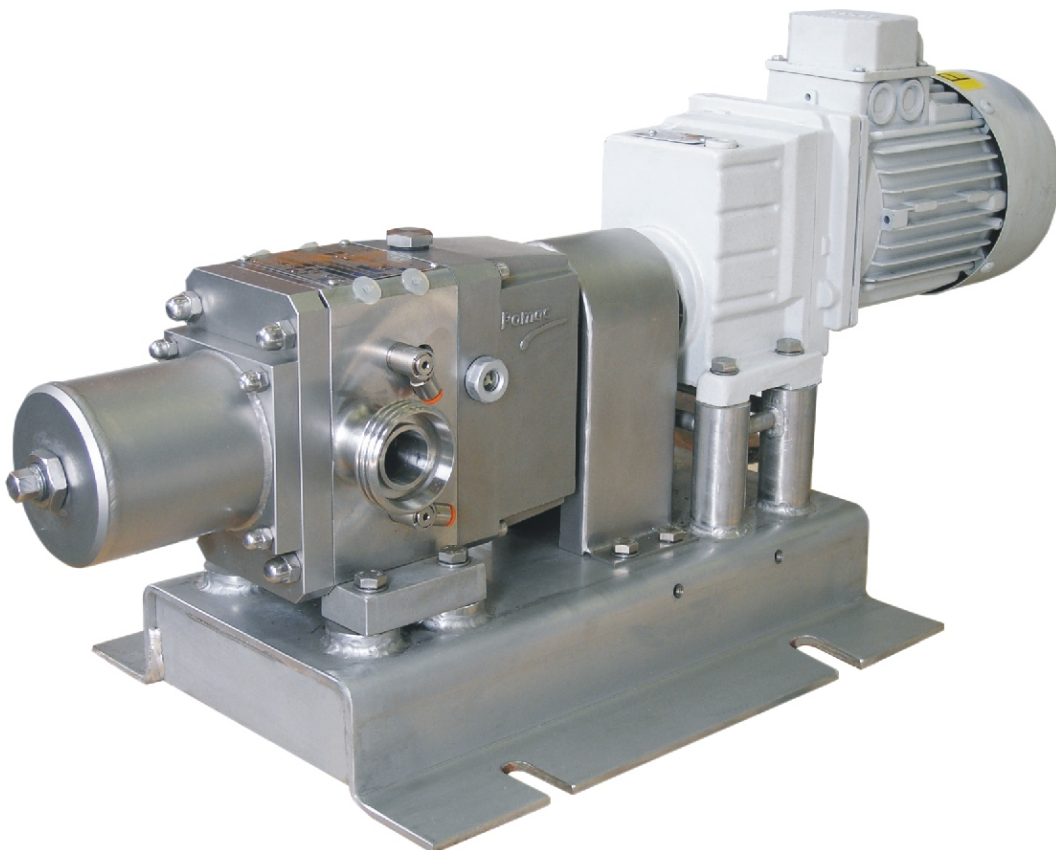
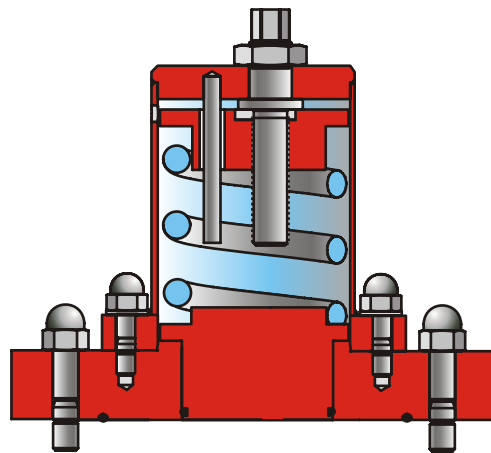
The Pomac spring loaded safety valve is mounted directly to the pump cover. This facilitates maintenance and guarantees optimal hygienic conditions. When the valve opens a direct by-pass is created between pressure side and suction side of the pump.

The valve almost completely covers the front side of the rotors and partially the spaces on suction side and pressure side.

At pump side the valve is submitted to the differential pressure inside the pump; the spring load set exerts the external force on the valve.

Because fluid characteristics, pressure division, process factors, etc. all can influence the load characteristic on the valve, the spring load must be adjusted on-site.

When the differential pressure inside the pump exceeds the closing pressure, exerted by the spring load set, the valve will open. Dimensions of valve and valve housing are such, that a part of the pump capacity can be by-passed from pressure side to suction side.



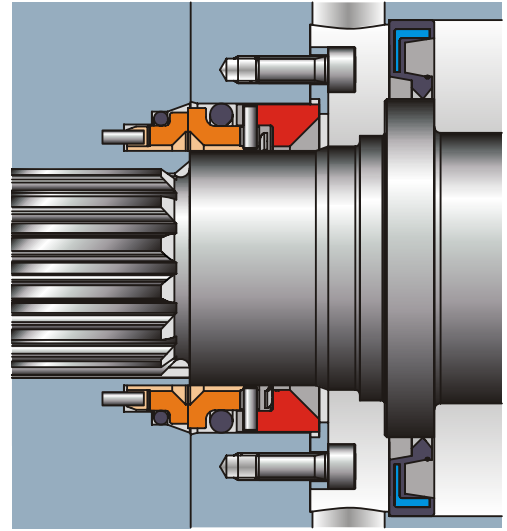
Shaft sealing

Pomac PLP Lobe pumps are available with several shaft sealing variants. The shaft seals are modularly built and mounted according to the Front Pull Out-principle. This makes maintenance of the pump very easy.

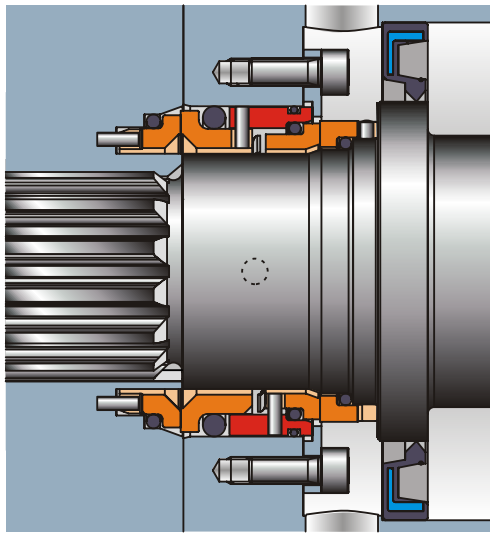
The type of shaft seal that is applied depends on the product to be pumped. The mechanical seals can be provided with Silicon Carbide/Silicon Carbide and Tungsten Carbide/Tungsten Carbide sliding rings.

The elastomers are available in NBR, EPDM, Viton, PTFE and Kalrez.

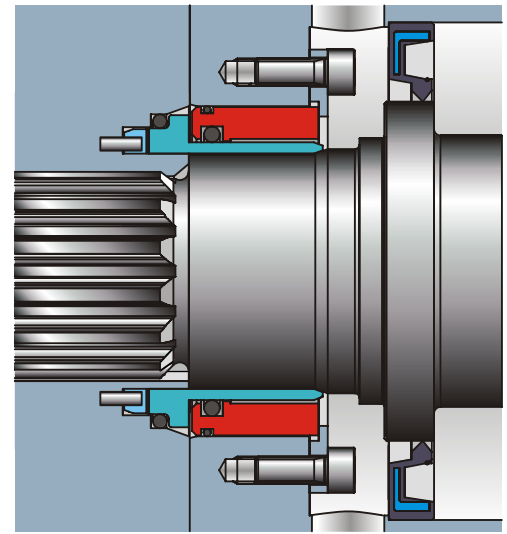
Mechanical seal



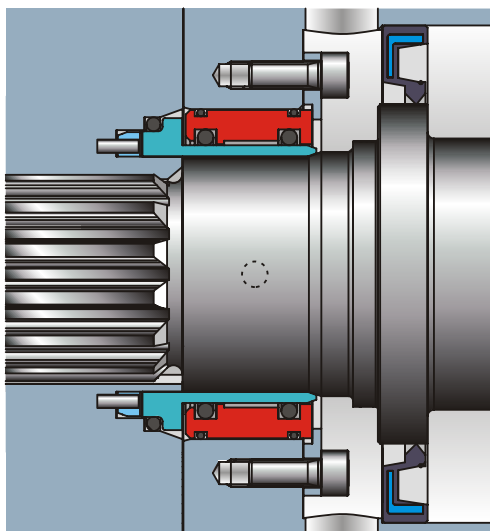
Mechanical seal, flushed



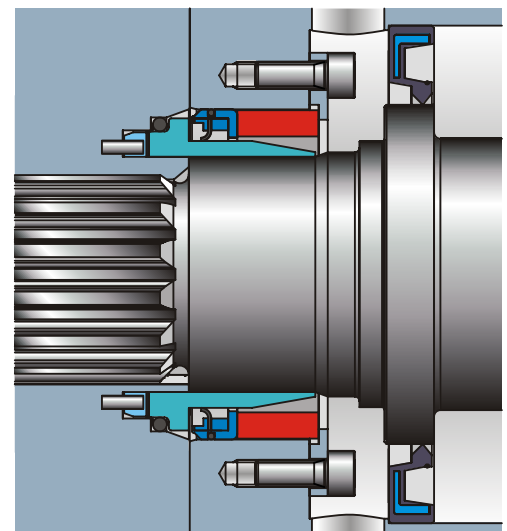
O-ring



O-ring, flushed



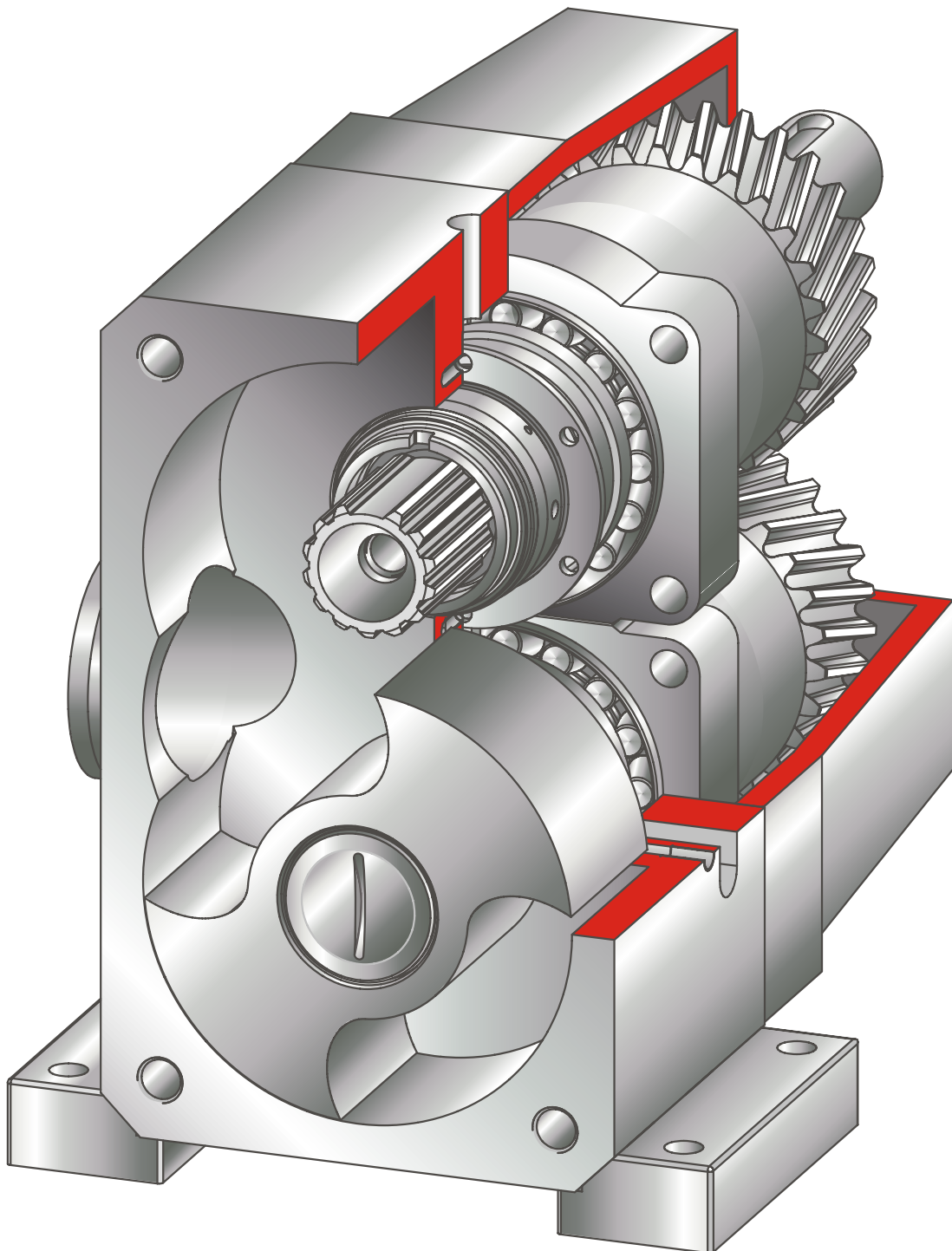
Lip seal



Specifications

Pomac PLP Lobe pumps are made entirely of stainless steel AISI 316.

Its special lobe design ensures an optimal pump performance in the entire application area. The pump can be fitted with all common connections like DIN 11851, DIN 11864-1/2, Tri-clamp, SMS, BS, NPT and flanges. The pump can be mounted in a horizontal as well as in a vertical (self-draining) position. Optionally the pump can be fitted with a pressure relief valve and a heating jacket.

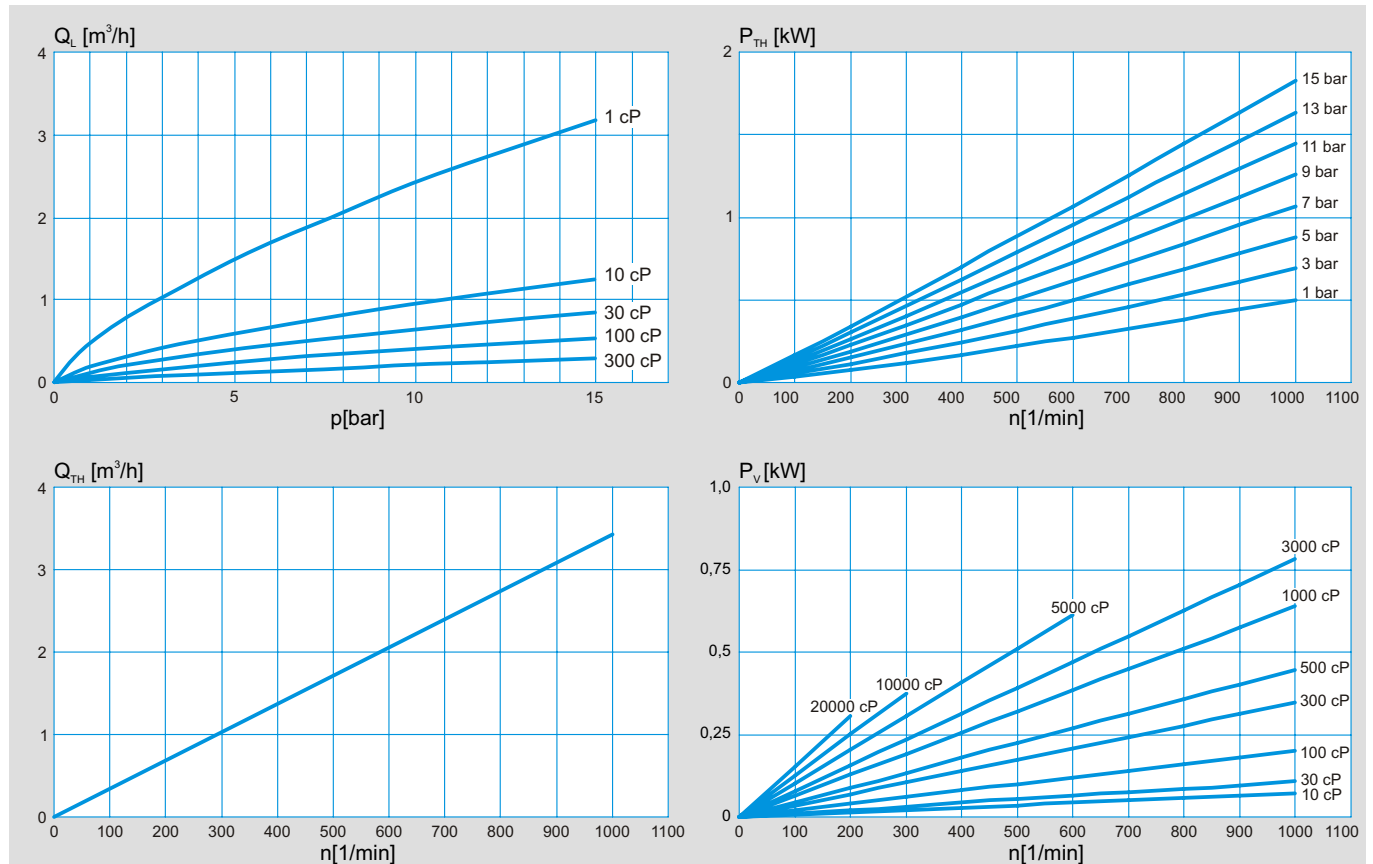


Survey curves

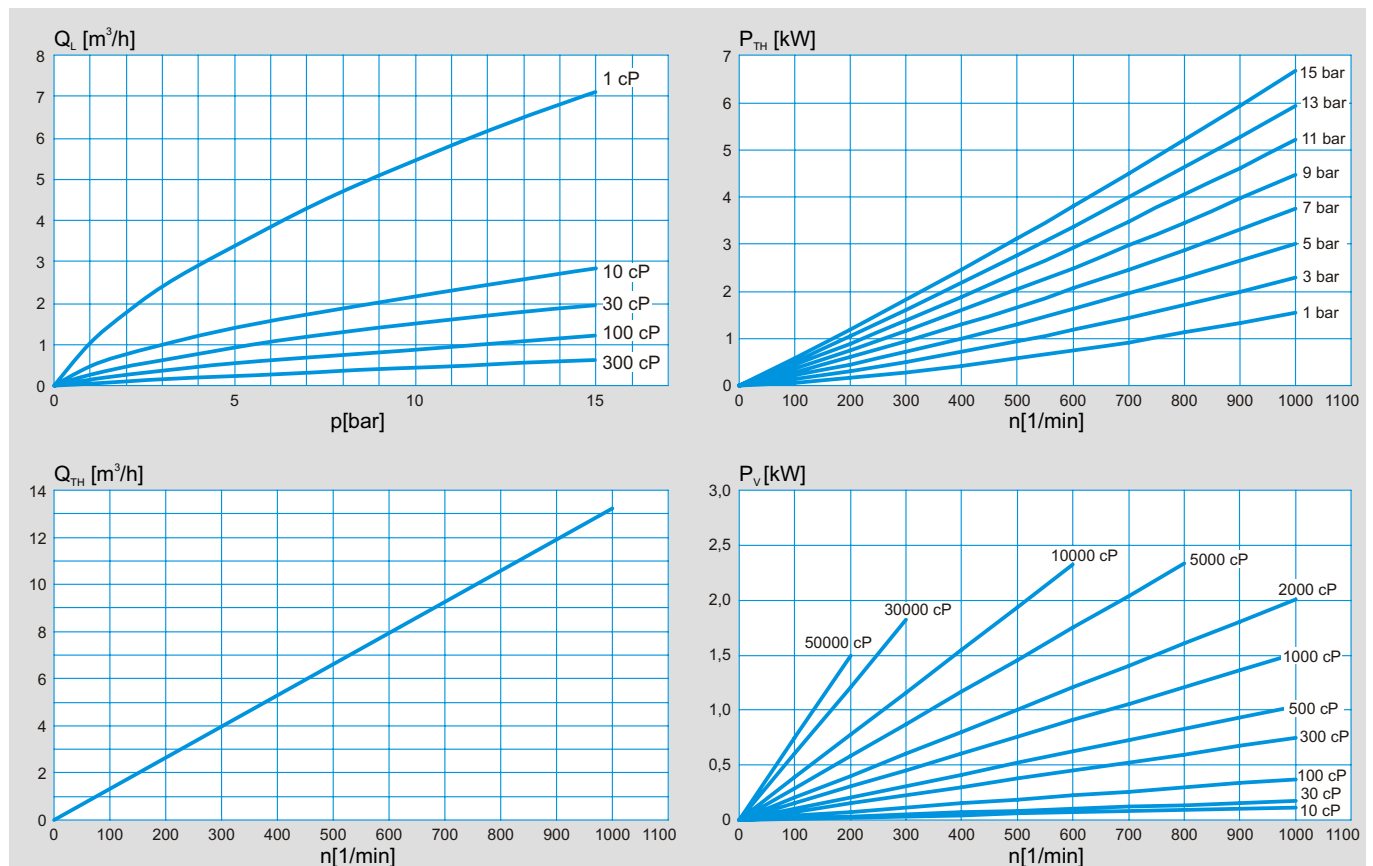
$$Q_{TOT} = Q_{TH} - Q_L$$

$$P_{TOT} = P_{TH} + P_V$$

PLP 1-1



PLP 2-1,5

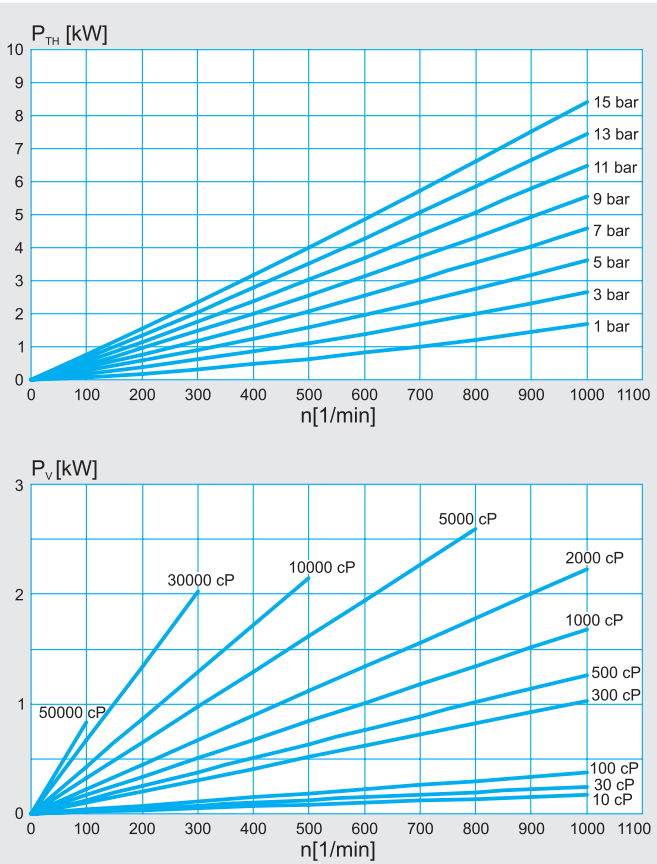
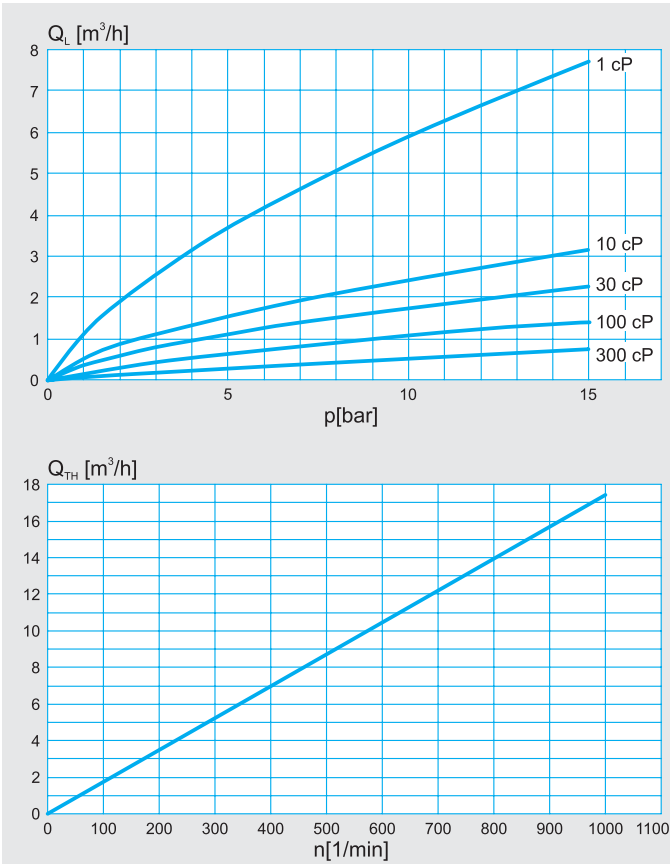


Survey curves

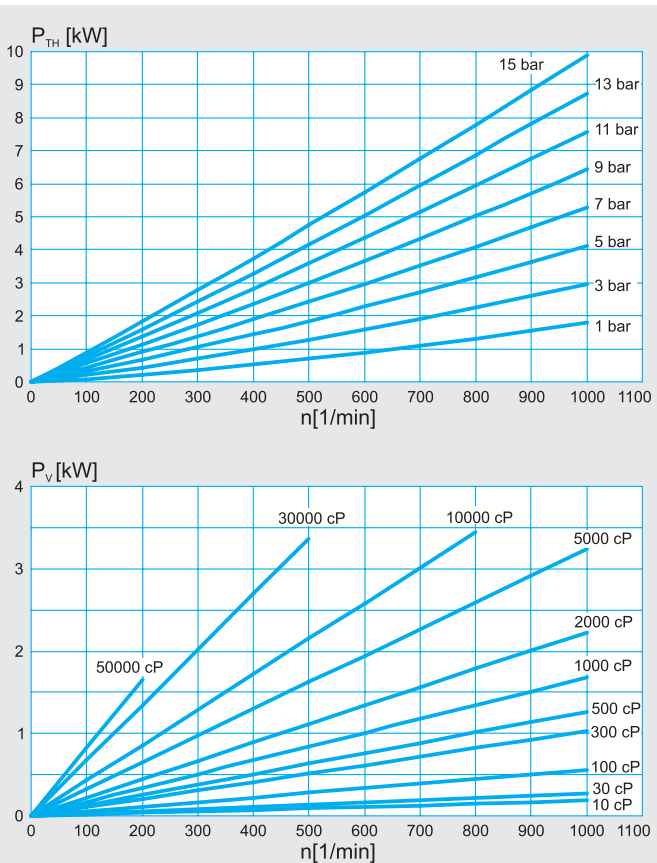
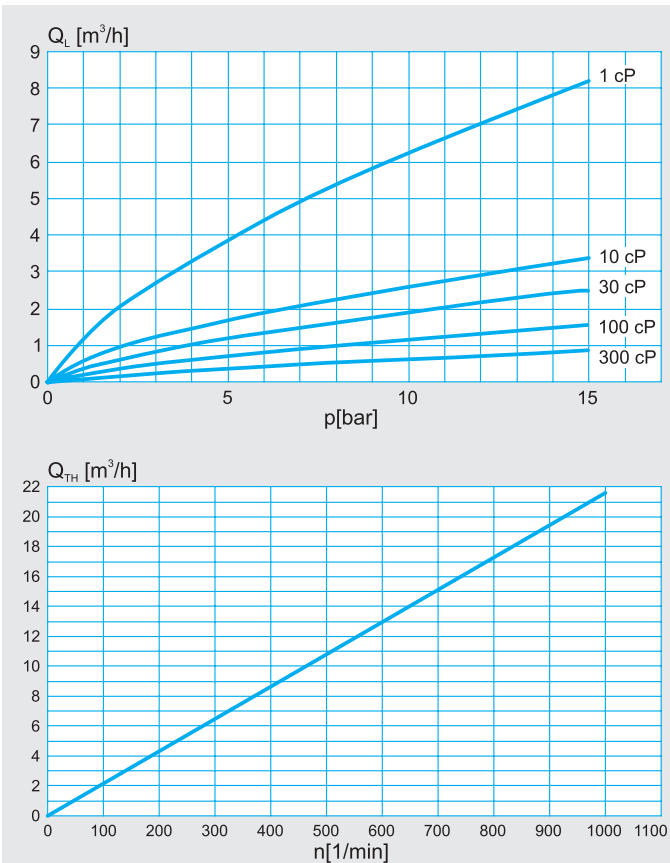
PLP 2-2

$$Q_{TOT} = Q_{TH} - Q_L$$

$$P_{TOT} = P_{TH} + P_V$$



PLP 2-2,5

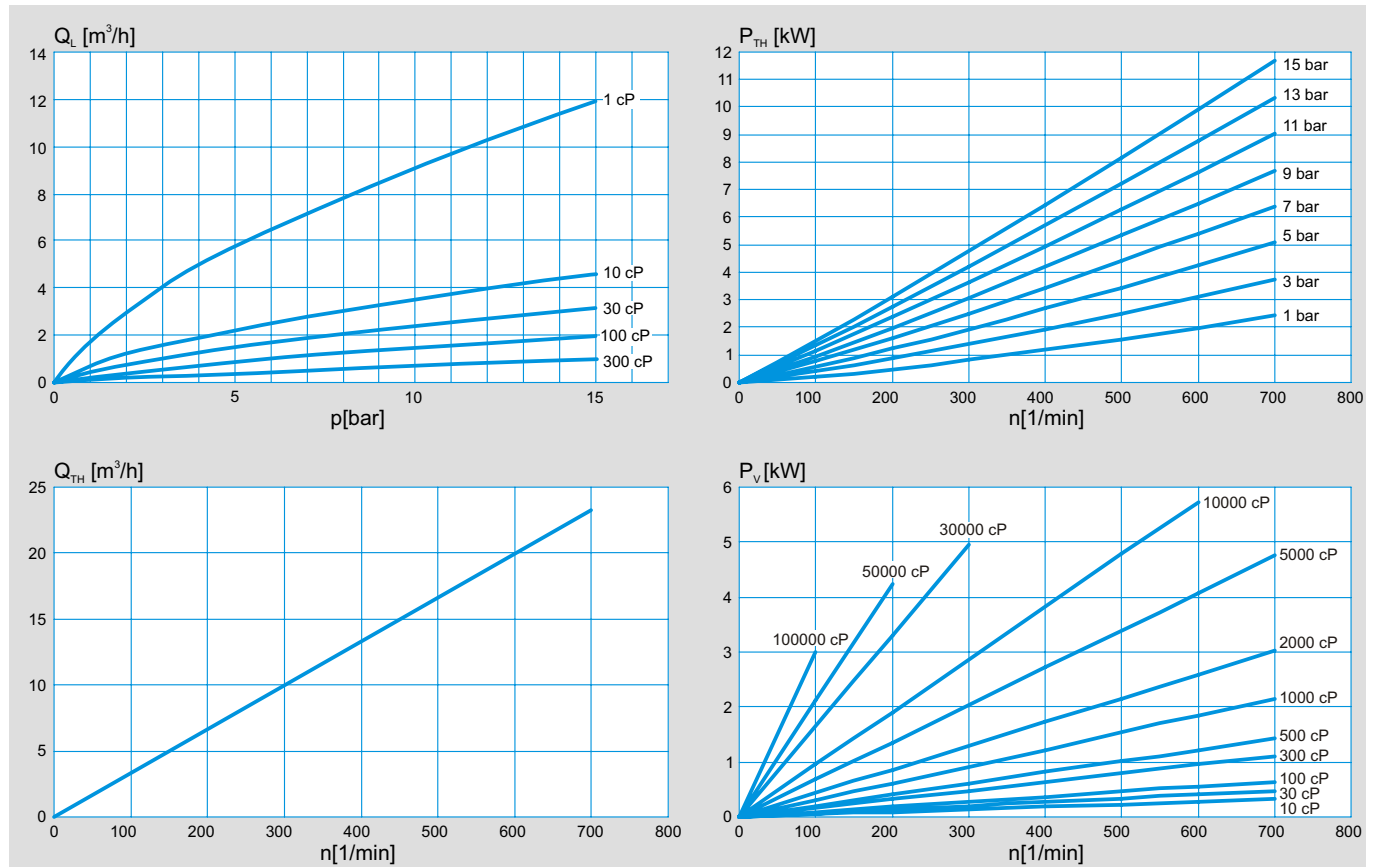


Survey curves

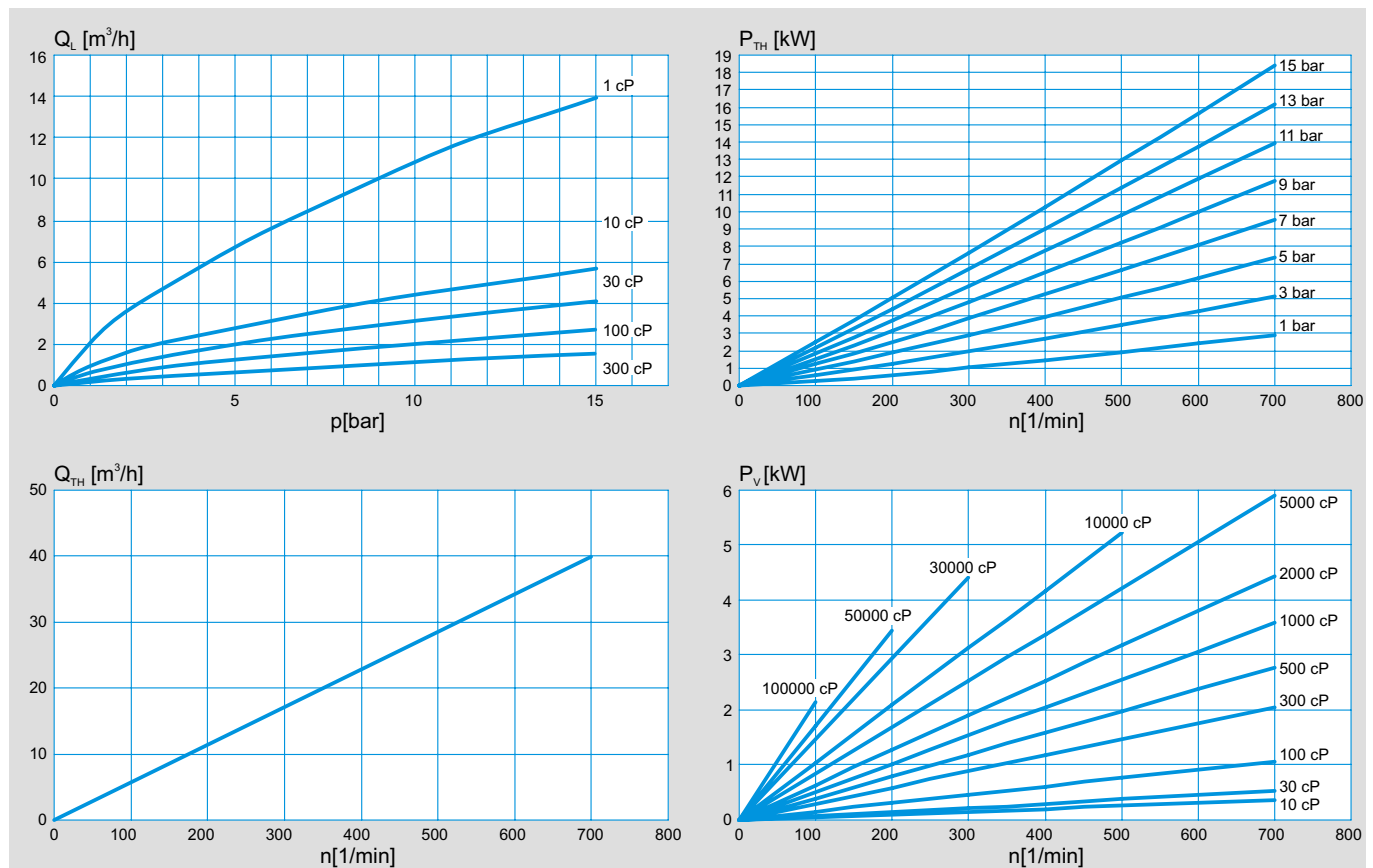
$$Q_{TOT} = Q_{TH} - Q_L$$

$$P_{TOT} = P_{TH} + P_V$$

PLP 3-2



PLP 3-3

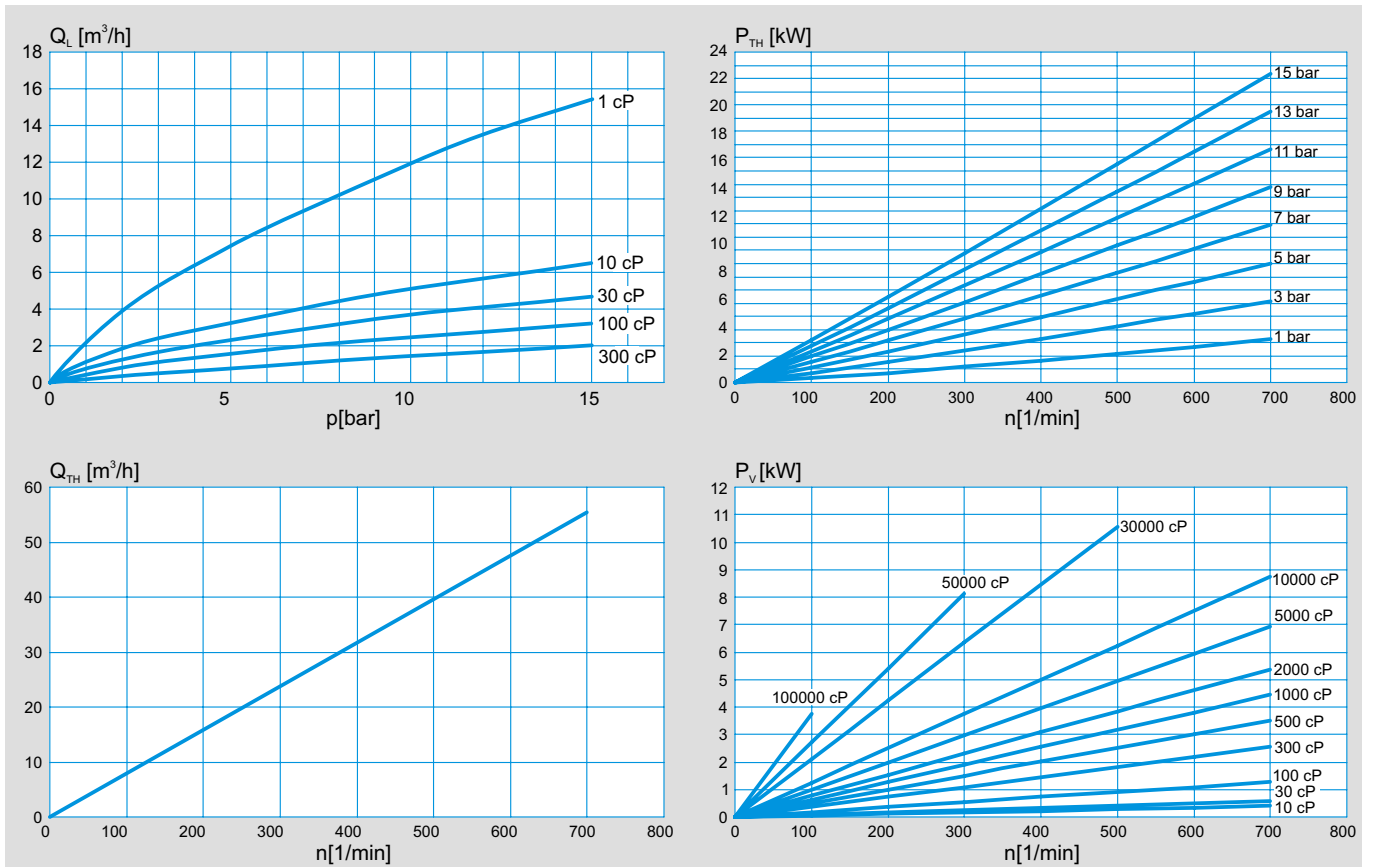


Survey curves

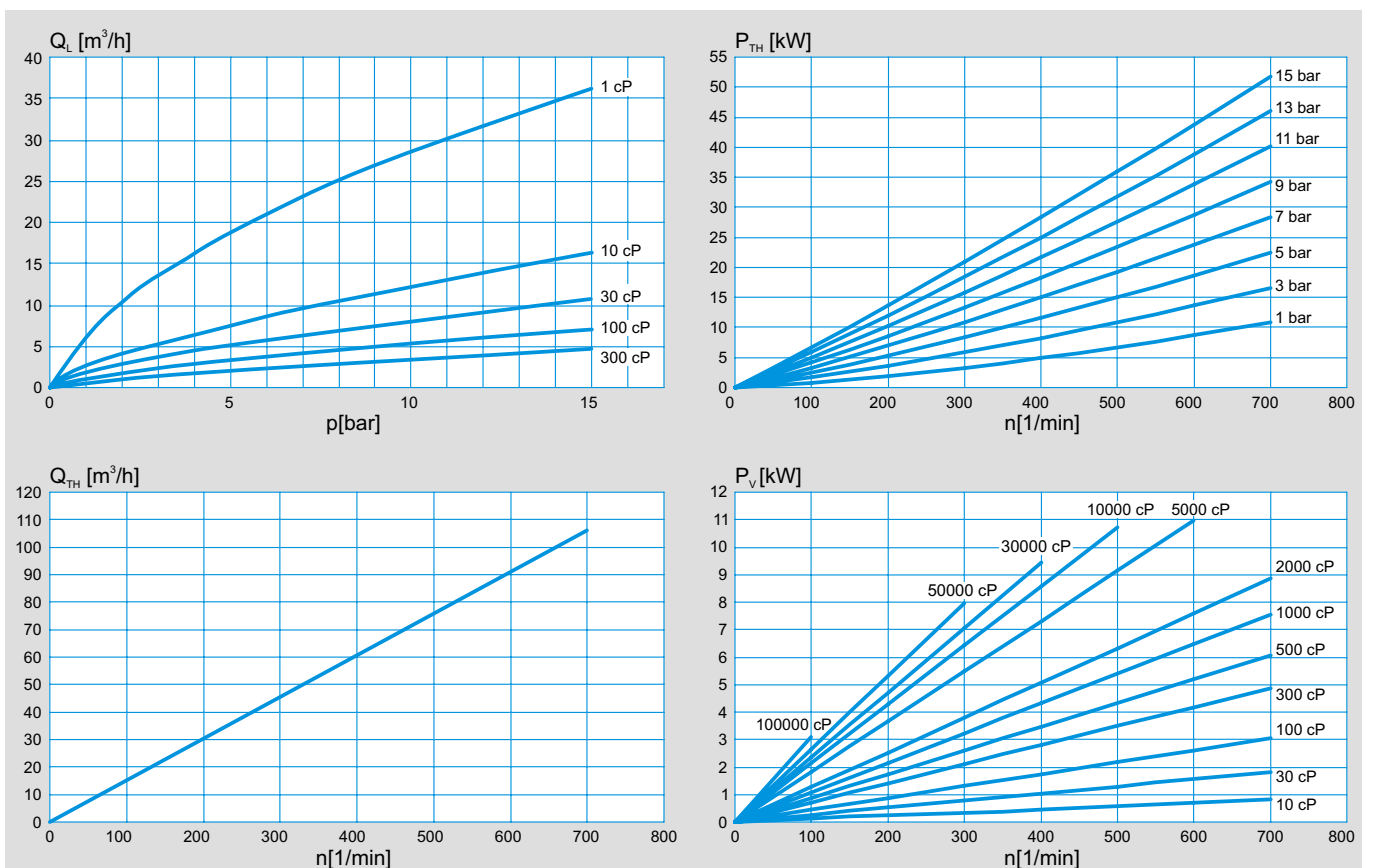
$$Q_{TOT} = Q_{TH} - Q_L$$

$$P_{TOT} = P_{TH} + P_V$$

PLP 3-4



PLP 4-4



Applications

- Viscous dairy products with vulnerable ingredients: yoghurt, custard, butter, curdled milk
- Bakery products: dough, fat, paste, fondant, creams
- Beverages: beer, fruit juice, lemonade
- Cosmetic products: cream, shampoo, etc
- Meat products: chopped meat, extracts, animal food
- Egg products: albumen, yolk
- Viscous products: sauces, salads, soups, glucose syrup, chocolate
- Starch products: mashed potatoes
- Chemical industry

The Pomac delivery program - besides the pump assortment in this brochure - comprises an extensive choice of:

- stainless steel hygienic pumps
- screw pumps
- impeller pumps
- magnet driven pumps

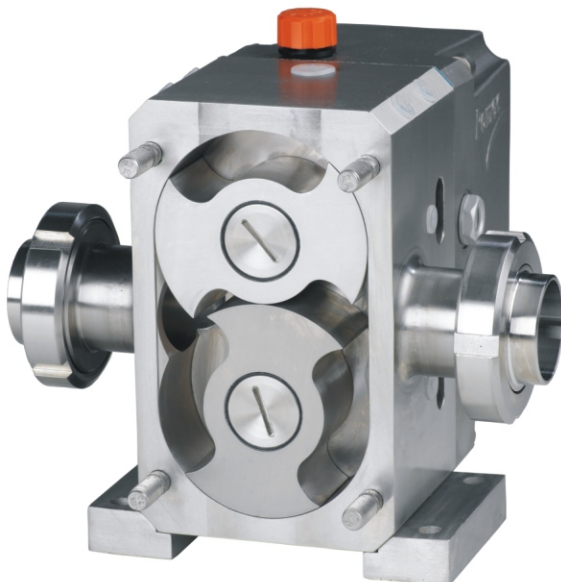
More detailed information on these pump types is available and will be sent to you on request.



Pomac Pumps produces and supplies a complete range of stainless steel centrifugal and positive displacement pumps for the international market. These pumps are used in food and drug industries as well as in pharmaceutical and chemical industries.

The Pomac organisation is characterised by a high degree of customer focussing, flexibility, good service and fast deliveries.

Pomac guarantees high quality and reliability in every detail!



Pomac Pumps

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