

LIGHTWEIGHT HAND PUMPS 700 - 1000 - 1600 - 2800 BAR

FEATURES

The main quality of PL is their lightness (**their weight is reduced of over 50% when compared to traditional products**) They are made from light alloy metal that is normally used in the aviation field due to its mechanical resistance. Because of this, PL pumps are extremely handy and stand out because of a **very low effort on their handle**.

All 700 bar models have:

- Externally adjustable relief valve.
- Side port for the direct fitting of the gauge (PL26# range excluded).
- Carry handle and fixing holes .

Available with 0,7 - 1,3 – 2,3 - 4,3 e 7,8 lt. tank.

All 1000/1600/2800 bar models have:

- Double stage
- Externally adjustable low and high pressure relief valves
- Second port (also usable as gauge port) only PL16#28.
- Carry handle and fixing holes.

Available with 2,3 - 4,3 e 7,8 lt. tank.

All **PL** pumps can work vertically with the pumping head pointing downward.

APPLICATIONS

- **PL13# Series**
Single stage pumps with 0,7 – 1,3 – 2,3 lt. reservoirs, for **single acting** cylinders with short strokes and small/medium oil capacities.
- **PL14# Series**
Double stage pumps with 0,7 – 1,3 – 2,3 lt. reservoirs, pressure relief valve in the first stage, for **single acting** cylinders with medium strokes and medium oil capacities.
- **PL16# Series**
Double stage pumps with 2,3 – 4,3 – 7,8 lt. reservoirs, unloading valve for ease of pumping in the second stage; for **single acting** cylinders with long strokes and large oil capacities.
- **PL26# Series**
Double stage pumps with 2,3 – 4,3 – 7,8 lt. reservoirs, unloading valve for ease of pumping in the second stage; with **4 way** valve, for **double acting** cylinders with long strokes and large oil capacities.
- **PL16#10 Series**
Used in extracting operations, in lab tests and to operate hydraulic bolt tensioners model **UTN** and **UTH**
- **PL16#16 Series**
Used in all bearings extractions and to operate hydraulic bolt tensioners model **UTV**.
- **PL16#28 Series**
Particularly useful in pressing on and pulling off drive elements, crimping operations, when pretensioning of studs, in burst and calibration tests.
It has an innovative and special pre-storage device of the internal pressure® which enables them to use fluids with a **viscosity up to 1200 cSt**. This device is an Europresspack patent



STANDARD

1/4" NPT side port for direct connection of the gauge in the pump body of 700 bar pumps (apart from the PL26# series).



OPTION

G Version 700 bar pump with **G106L** gauge, already fitted in the body (apart from the PL26# series).



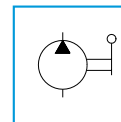
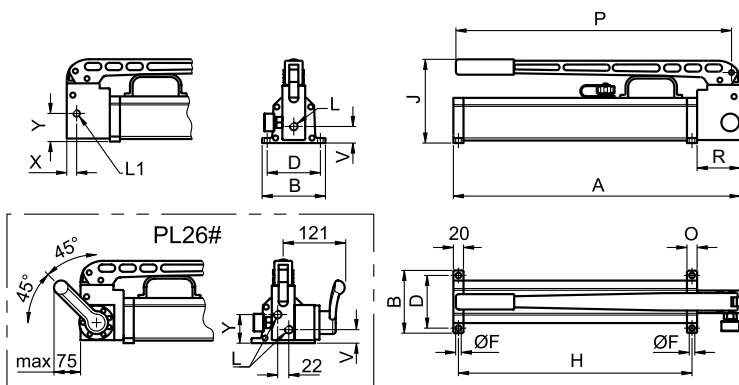
Please refer to the paragraph "How to choose a pump" for a better pump-cylinder matching.

p. 44



On request versions to be used with fluids other than mineral oil can be supplied.

LIGHTWEIGHT HAND PUMPS 700 - 1000 - 1600 - 2800 BAR



- Reservoir capacity **0,7 - 7,8 l**
- Oil delivery **0,9 - 3,4 cm³**
per stroke in HP
- Max working pressure **700 - 1000 - 1600 - 2800 bar**

SELECTION CHART

Pressure 1 st stage bar	Pressure 2 nd stage bar	Oil delivery per stroke 1 st stage cm ³	Oil delivery per stroke 2 nd stage cm ³	Handle effort N	For use with cylinders	Reservoir capacity litres	Usable oil volume litres	MODEL	Dimensions mm											weight kg					
									A	B	D	H	F	J	L	L1	O	P	R		V	X	Y		
-	-	-	-	426	Single acting	0,7	0,5	PL130	342	110	90	275	11	135	3/8"-18 NPT	1/4"-18 NPT	67	330	-	30	14	44	3,4		
						1,3	1,1	PL131	563					147										20	544
						2,3	1,9	PL132	563	125	105	461	167	54	19,5	67	6,4								
						0,7	0,5	PL140	342	110	90	275	11	135	3/8"-18 NPT	1/4"-18 NPT	67	330	-	30	14	44	3,4		
						1,3	1,1	PL141	563					147										20	544
						2,3	1,9	PL142	563	125	105	461	167	54	19,5	67	6,4								
		2,3	1,9	PL162	566	125	105	461	11	167	3/8"-18 NPT	1/4"-18 NPT	20	544	85	33	19,5	56	6,8						
		4,3	3,8	PL164	576	190	176	471	9	177										10,0					
		7,8	7,2	PL168	656	270	256	551	9	177	3/8"-18 NPT	1/4"-18 NPT	20	544	85	33	19,5	56	14,7						
		70	32	3,0	363	Double acting	2,3	1,9	PL262	566	125	105	461	11	167	3/8"-18 NPT	1/4"-18 NPT	20	544	85	27	-	57	7,6	
							4,3	3,8	PL264	576	190	176	471	9	177										10,8
							7,8	7,2	PL268	656	270	256	551	9	177										15,5
70	32	3,0	363	Double acting	2,3	1,9	PL262	566	125	105	461	11	167	3/8"-18 NPT	1/4"-18 NPT	20	544	85	27	-	57	7,6			
					4,3	3,8	PL264	576	190	176	471	9	177										10,8		
					7,8	7,2	PL268	656	270	256	551	9	177										15,5		
20	1000	32	1,6	385	Not suitable for lifting	2,3	1,9	PL16210	566	125	105	461	11	167	1/4" BSP 120°	1/4"-18 NPT	20	544	85	33	-	-	6,8		
						4,3	3,8	PL16410	576	190	176	471	9	177										10,0	
						7,8	7,2	PL16810	656	270	256	551	9	177										14,7	
15	1600	32	1,6	522	Not suitable for lifting	2,3	1,9	PL16216	566	125	105	461	11	167	1/4" BSP 120°	1/4"-18 NPT	20	544	85	33	-	-	6,8		
						4,3	3,8	PL16416	576	190	176	471	9	177										10,0	
						7,8	7,2	PL16816	656	270	256	551	9	177										14,7	
15	2800	32	0,9	515	Not suitable for lifting	2,3	1,9	PL16228	566	125	105	461	11	167	3/4"-16 UNF	3/4"-16 UNF	20	544	85	47	26,5	47	7,0		
						4,3	3,8	PL16428	576	190	176	471	9	177										10,2	
						7,8	7,2	PL16828	656	270	256	551	9	177										14,9	

MODEL CODING

PL	13	#	-		G
SERIES	Pump type	Reservoir capacity - litres	- Max pressure 700 bar 16 Max pressure 1600 bar	10 Max pressure 1000 bar 28 Max pressure 2800 bar	Gauge (only for 700 bar pumps)

LIGHTWEIGHT HAND PUMPS 700 – 1000 – 1600 – 2800 BAR



ACCESSORIES 700 bar

- ZPS12** Adapter for **G10** gauge with screw connection.
- ZPF12** Adapter for **G10** gauge with flange connection.
- ZPF121** Adapter for **G10** with plate connection.



ACCESSORIES 1000 - 1600 - 2800 bar

- ZPS53** Adapter for gauge with screw connection.
- ZPF14** Adapter for gauge with flange connection.
- ZPF73** Adapter for gauge with flange connection.
- ZPD16** Flanges double needle valve to split the flow in two ways.
- ZPD28** Flanges double needle valve to split the flow in two ways.

ACCESSORIES: ZPS - ZPF GAUGE ADAPTORS - 700 BAR

	MODEL	For pumps	a	b	c	d	e	kg
	ZPS12 (screw connection)	SERIES PL13# PL14# PL16#	50	30	48	3/8" NPT	1/2" BSP	0,25
	ZPF12 (flange connection)	SERIES PL16#	45	45	60	3/8" NPT	1/2" BSP	0,90
	ZPF121 (plate connection)	SERIES PL26#	83	30	70	-	1/2" BSP	0,37

ACCESSORIES: ZPS - ZPF GAUGE ADAPTORS - ZPD VALVES - 1000/1600/2800 BAR

	MODEL	For pumps	For gauge	Max. press.	a	b	c	d	e	kg
	ZPS53 (screw connection gauge adapter)	SERIES PL16#10 PL16#16	G10	1000	50	30	48	3/8" NPT	1/2" BSP	0,9
	ZPF14 (Flanged gauge adapter)	SERIES PL16#10 PL16#16	G10 G16	1600	45	45	60	1/4" BSP 120°	1/2" BSP	0,9
	ZPF73 (Flanged gauge adapter)	SERIES PL16#28	G30 / G40+RN28	2800	40	45	85	3/4" -16UNF	1/2" BSP swivelling	1,0
	ZPD16 (Double needle flanged valve)	SERIES PL16#10 PL16#16	G10 G16	1600	40	155	112	1/4" BSP 120°	1/2" BSP swivelling	1,0
	ZPD28 (Double needle flanged valve)	SERIES PL16#28	G30 / G40+RN28	2800						