

Air driven hydraulic pumps type LP

The hydraulic pumps type LP are reciprocating, valve-controlled plunger pumps that are available in three sizes. They are basically oscillating pneumatic/hydraulic pressure intensifiers. Stroke reversal is controlled automatically. The stroke frequency is dependent on the air pressure set and the current hydraulic counter pressure, and comes to a complete stop when the pressure limit is reached. As an air-driven hydraulic power pack, the tank version of this type of pump can be combined with directional seated valves for use in different applications. This type of pump is used in laboratory presses, jig construction and lubrication technology, for example. Since they are supplied with energy by means of compressed air, they can be used in potentially explosive atmospheres.

Features and benefits:

- High operating pressures
- Suitable for explosion-proof systems and equipment
No electrical energy
- Hydraulic power packs with direct valve mounting

Intended applications:

- Construction and construction materials machinery
- Jig construction
- Testing and laboratory equipment



Nomenclature:	Air driven hydraulic pumps
Design:	Individual pump Hydraulic power pack
$p_{\text{hydraulicmax}}$:	160...1500 bar
p_{airmax}:	10 bar
Q_{max}:	0.9...12 lpm

Design and order coding example

LP 125 - 16 E /S 81

Additional elements

- Suction parts for hydraulic pumps
- Tanks for hydraulic pumps

Design **Hydraulic pump**

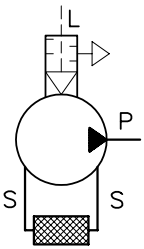
- Ready-to-connect version
- Individual version for self-installation

Hydraulic power pack (with type VB, BWH, BWN valve banks)

- Tank version, usable volume V_{usable} 5 l to 28 l
- Cover plate version (for installation in self-manufactured oil tanks)

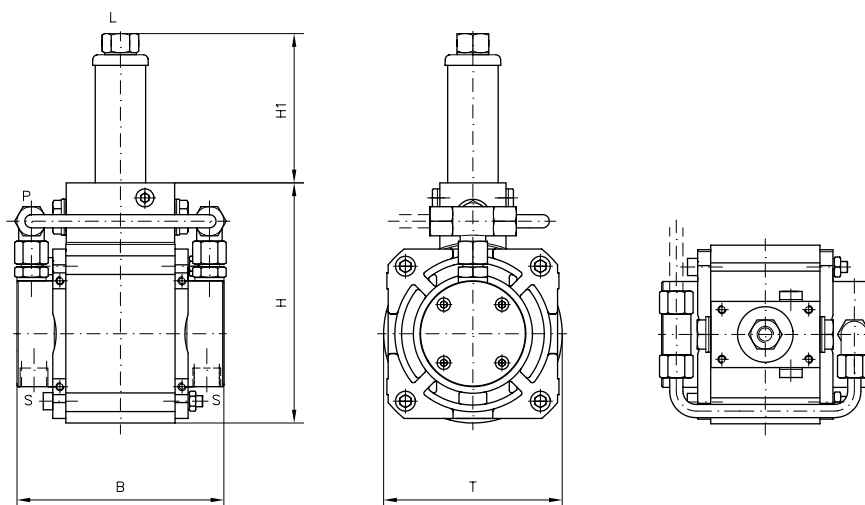
Basic type, size Type LP, size 80, 125, 160

Function



General parameters and dimensions

LP

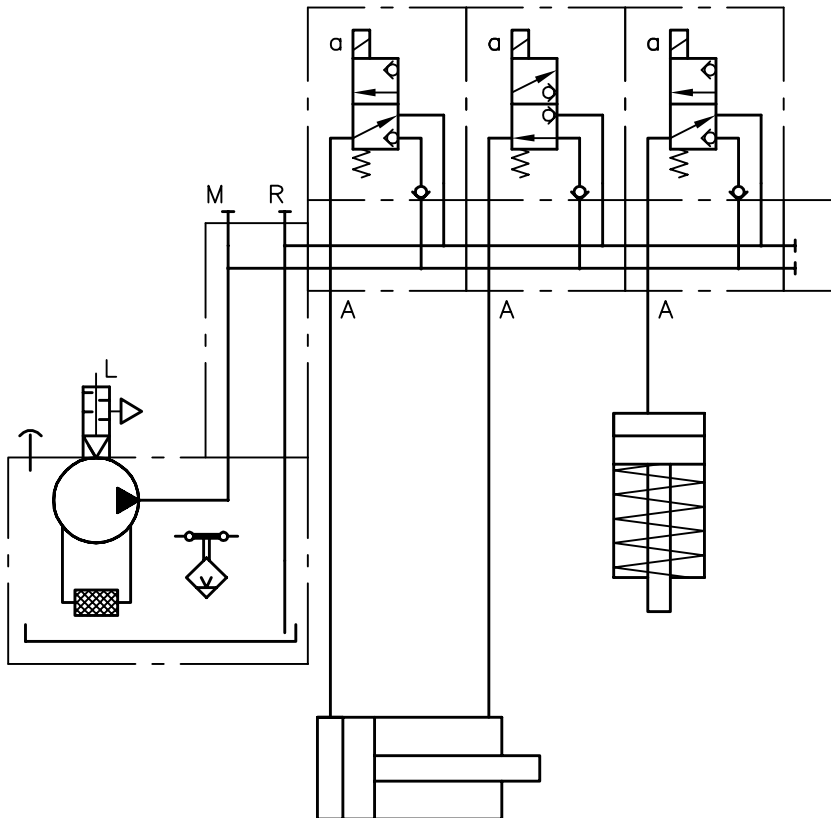


No piping for type LP...-..

Basic type and size	p _{max} [bar]	Pressure ratio	Geom. volume per double stroke V _{hydr} [cm ³]	Tapped port (air) Pipe diameter for pressure connection (hydr)	Dimensions [mm]				m [kg]
					H	H1	B	T	
LP80-	8	700	1 : 200	G 1/4 Ø6 mm	119	94	121	85	5
	10	630	1 : 63						
	12	430	1 : 43						
	16	240	1 : 24						
LP125-	8	1500	1 : 243	G 3/8 Ø8 mm, Ø10 mm	159	114	156	135	8.5
	10	1500	1 : 155						
	12	700	1 : 108						
	16	600	1 : 60						
	18	470	1 : 47						
	20	380	1 : 38						
	25	240	1 : 24						
	30	160	1 : 16						
LP160-	8	1500	1 : 400	G 1/2 Ø8 mm, Ø10 mm	228	136	156	175	11.5
	10	1500	1 : 255						
	12	700	1 : 177						
	16	700	1 : 100						
	18	700	1 : 78						
	20	620	1 : 63						
	25	390	1 : 40						
	30	265	1 : 24						

Example circuit:

LP 125-10/B 10 D
-VB 11 LM-NRN-1-G 24



Associated technical data sheets:

- Hydraulic pumps type LP: [D 7280](#)
- Hydraulic power packs type LP: [D 7280 H](#)

Valve banks :

- Type VB: [D 7302](#)
- Type BWH(N): [D 7470 B/1](#)