

## Shut-off valves type LV and ALZ

These shut-off valves automatically switch the pump delivery flow into idle circulation as soon as the adjusted pressure is achieved. There is a check valve upstream of the consumer port A preventing any return flow via the port R. The idle circulation switching position is interrupted as soon as the pressure in the consumer port drops approx. 13% under the set pressure figure. The self controlled valves type LV do not require any flow pulsation whereas type ALZ is a piloting valve. Both types are mostly used as accumulator charge valves, and should be installed as near to the pump as possible.

### Features and benefits:

- Various means of adjustment
- Various additional functions

### Intended applications:

- General hydraulics
- Test benches



<b>Nomenclature:</b>	Shut-off valve (idle circulation valve, direct controlled or piloted)
<b>Design:</b>	Individual valve for pipe connection Individual valve Manifold mounting
<b>Adjustment:</b>	Tool adjustable manually adjustable
<b>p<sub>max</sub>:</b>	350 bar
<b>Q<sub>max</sub>:</b>	120 lpm

### Design and order coding example

LV 10 P	D	- 180
ALZ 3 G	CR	- 250

#### Pressure setting [bar]

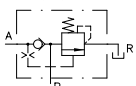
- Pressure range**
- Tool adjustable (-)
  - Manually adjustable (R)

- Basic type, size, design**
- Type LV, size 10, 20, 25
    - Pipe connection (-)
    - Manifold mounting (P)
    - Design with low switching hysteresis (type LV 25)
  - Type ALZ, size 3 to 5
    - Pipe connection (G)
    - Manifold mounting (P)
    - Arbitrary idle pump circulation via 2/2-way solenoid valve

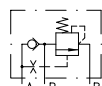
### Function

#### LV, ALZ

For pipe connection:

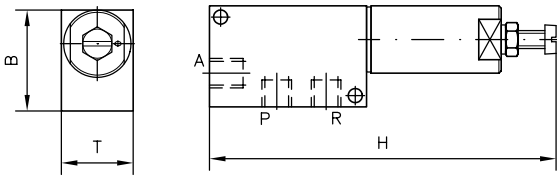


Manifold mounting valve:

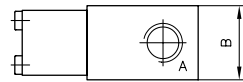


## General parameters and dimensions

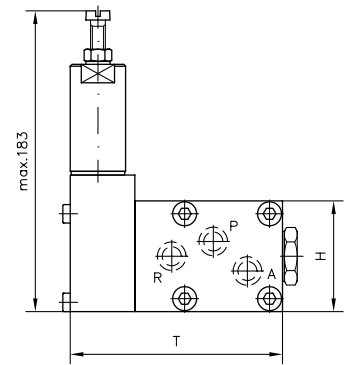
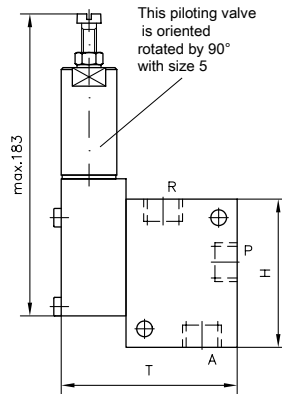
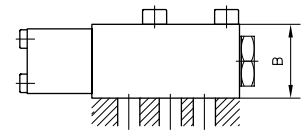
LV..



ALZ..G..



ALZ..P..



	Control	Q <sub>max</sub> [lpm]	Pressure range: p <sub>max</sub> [bar]	Ports (BSPP) <sup>1)</sup>	Dimensions [mm]			m [kg]
					H	B	T	
LV 10	Direct	12	F: 60 E: 140 D: 240 C: 350	G 1/4	155	45	32	0.9
LV 20, LV 25		25	F: 80 E: 140 D: 220 C: 350	G 3/8	205	50	32	1.2
ALZ 3 G	Piloted	50	F: 60 E: 140 D: 240 C: 350	G 1/2	80	40	99	2.0
ALZ 4 G		80		G 3/4	94	40	109	2.4
ALZ 5 G		120		G 1	105	63	135	4.3
ALZ 4 P		80		G 3/4	60	40	119	2.1
ALZ 5 P		120		G 1	80	40	133	4.3

1) For pipe connection versions only

### Associated technical data sheets:

- Shut-off valves type LV: [D 7529](#)
- Shut-off valves type ALZ: [D 6170-ALZ](#)
- Shut-off valves type AL: [D 6170](#)

### Similar products:

- Release valves type AE: [D 6170](#)
- Connection blocks type AL: [D 6905 A/1](#)