

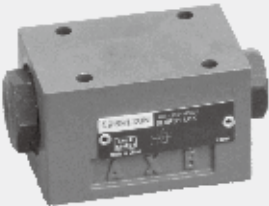


1.7

Pilot operated check valve

Type SV / SL6...L6X

Size 6
Up to 315 bar
Up to 60 L/min



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Features

- For sub-plate mounting, porting pattern conforms to DIN 24 340 form A, ISO 4401 and CETOP 121 H
- With or without drain port
- 4 cracking pressures

Function and configurations

Valves of types SV and SL are pilot operated check valves of poppet design that can be opened in the checked direction. These valves are used to isolate pressurised working circuits, to prevent a load from lowering in the event of a pipe rupture or to protect hydraulically isolated actuators from creeping down.

They basically consist of the housing (1), the poppet (2), a compression spring (3) and the pilot piston (4).

Type SV ... (without drain port)

Fluid may flow freely from A to B. In the reverse direction, the poppet (2) is held firmly on to its seat both by the compression spring and the system pressure.

By applying pressure to pilot connection X, the pilot piston (4) is moved to the right. This lifts poppet (2) off its seat, then fluid flows from B to A.

In order to ensure that the valve opens due to pressure applied to the pilot piston, a certain minimum pilot pressure is required (see next page).

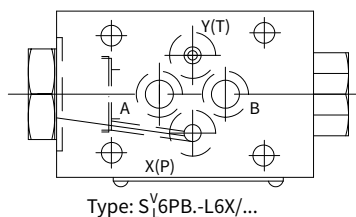
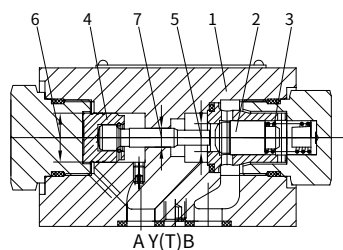
The drain port Y is plugged.

Type SL... (with drain port)

In principle, the function of this valve corresponds to that of type SV.

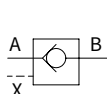
The difference lies in the additional drain port Y for type SL, the annular area of the pilot piston (4) is separated from the port A. Pressure present in port A acts only on area A3 (7) of the pilot.

It is used in the situation having load on port A when valve opens, while type SV is used in that unloading on port A when this valve opens.

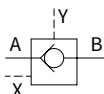


- 1 Housing
- 2 Poppet
- 3 Compression spring
- 4 Pilot piston
- 5 Area A1
- 6 Area A2
- 7 Area A3

Symbols

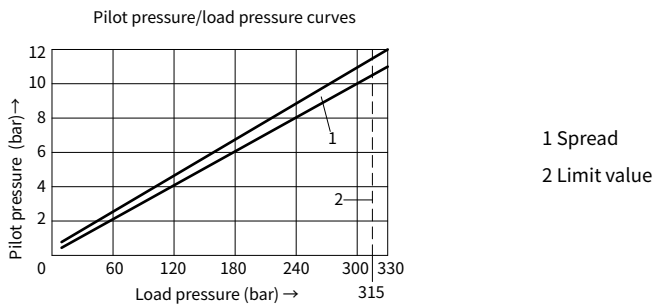
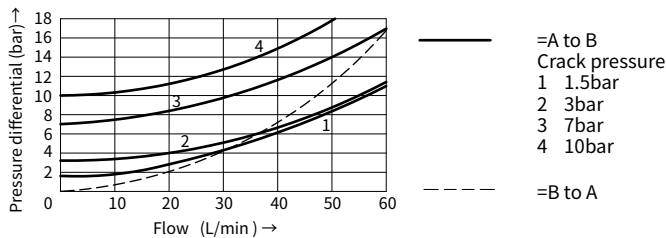


SV6PB.-L6X/...



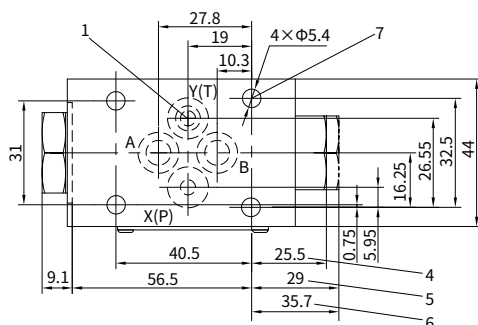
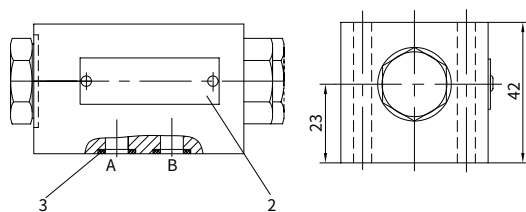
SL6PB.-L6X/... (with drain port)

Characteristic curves (Measured at $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)



Unit dimensions

(Dimensions in mm)



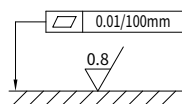
It must be ordered separately
if connection plate is needed.

Type:

G341/01(G1/4), G341/02 (M14×1.5)

G342/01(G3/8), G342/02(M18×1.5)

G502/01(G1/2), G502/02(M22×1.5)



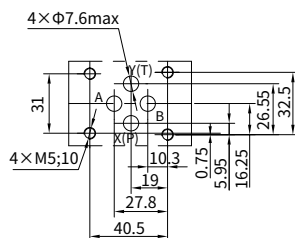
Requirement for
mounting surface

Valve mounting screws:

Internal hexagon screw GB/T 70.1-10.9

M5×50, tightening torque $M_A=8.9\text{Nm}$

- 1 Port Y with valve type "SL"
(in valve type "SV" this port is
plugged)
- 2 Nameplate
- 3 O-Ring 9.25 x 1.78
(Ports A, B, X, Y)
- 4 For valve with cracking
pressure version "1", "2", "3" PB
- 5 For valve with cracking
pressure version "4" PB
- 6 For valve with PA
- 7 Through-hole for valve
mounting screws



Dimensions of
mounting surface