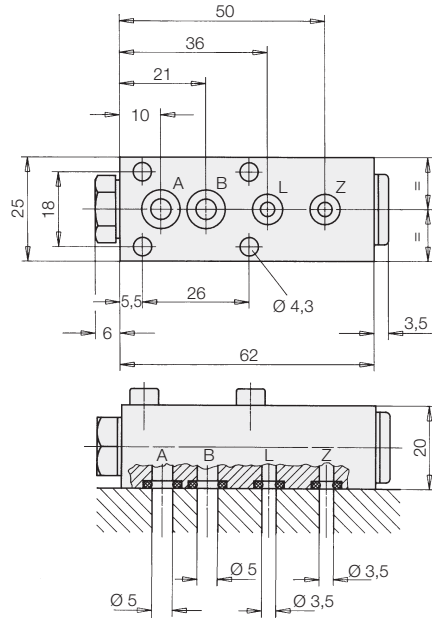


Check Valve

pilot-operated, manifold-mounting type
max. operating pressure 500 bar



Connections

- A, B = Main passage
- Z = Control port
- L = Leakage port (piston area relief)

Technical characteristics

Type	Spring-loaded ball-type poppet valve, leakage-free
Type of mounting	4 screws M 4
Seating torque	2.6 Nm
Max. operating pressure	A, B, Z: 500 bar L: without pressure to oil reservoir
Max. flow rate	20 l/min
Control volume	0.2 cm ³
Weight	0.25 kg

Part-no. 2951-416
O-rings are included in delivery

Spare O-rings

Port	Dimensions	Part-no.
A, B	6.07 x 1.78	3000-942
L, Z	4.47 x 1.78	3000-968

General characteristics

These check valves are designed in accordance with DIN ISO 1219. According to this definition this type of valve is a locking valve. The flow B → A is free. The flow from A → B is locked, but it can be hydraulically unlocked by pressurising control port Z.

Application

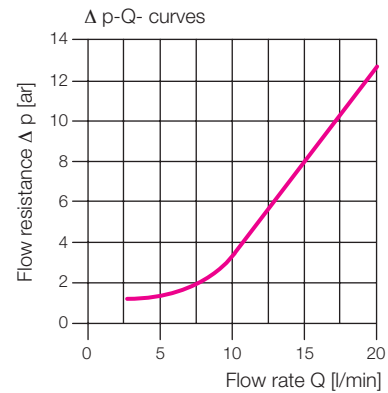
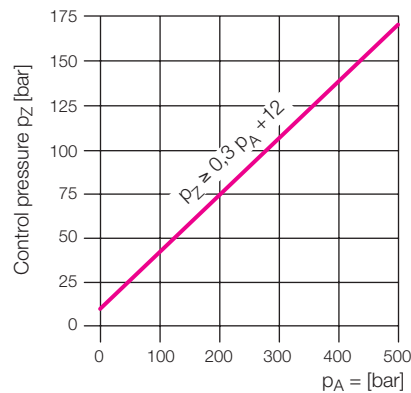
Locking of leakage-free hydraulic cylinders, i.e. for maintaining the pressure and (or) the position, can also be used in combination with non-leakage free directional control valves.

In fixtures these check valves are combined with manifold-mounted or threaded clamping elements and thus enable oil supply without pipes.

Important note

This pilot-operated check valve is not suitable for locking of double-acting swing clamps (pull-type cylinders). Due to the unfavourable surface ratio of these elements, the control pressure is not sufficient for unlocking and dangerous pressure intensification's occur. Please contact us.

Control pressure p_Z for unlocking at $p_B = 0$ bar

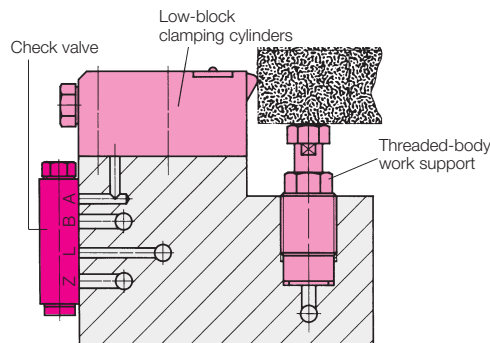


Oil viscosity during measurements 60 mm²/s

Application example

Clamping bar for multiple clamping device. In each clamping bar there are 10 low-block clamping cylinders and threaded work supports arranged in a row.

On the opposite side there is a similar bar. This is called "floating clamping".



In order to avoid the cylinders giving way under the effect of the operating forces one pilot-controlled check valve for each cylinder is installed, which is facilitated because the valves are manifold-mounted.

