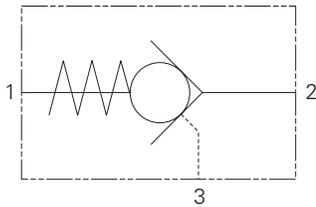


4SK90 - Check Valve

Pilot-to-open, poppet type

90 L/min (24 USgpm) • 350 Bar (5000 psi)



Operation

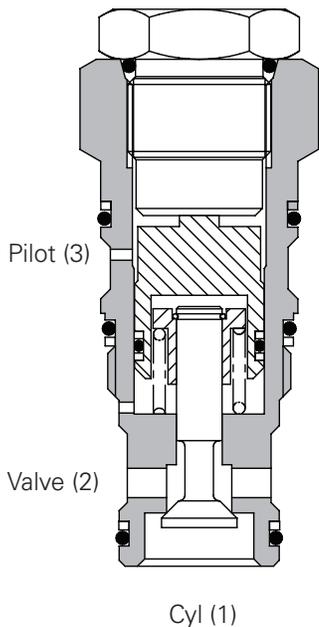
Pressure on the valve port 2 causes the poppet to lift against the spring force, allowing the flow to the cylinder port 1. Reverse flow is prevented by the poppet reseating. Pressure applied

to the pilot port 3 will overcome the cylinder port pressure and lift the poppet from its seat, allowing flow from the cylinder to valve port.

Features

Hardened and ground poppet gives excellent flow capability for valve size, positive sealing and long working life. Cartridge construction allows installation in actuators, manifold blocks and Hydraulic Integrated Circuits. Fits the same cavity as the overcenter valves of a similar size.

Sectional View



Performance Data

Ratings and Specifications

Figures based on oil temperature of 40° C and viscosity of 32 cSt (150 SUS)

| | |
|------------------------------|--|
| Rated flow | 90 L/min (24 USgpm) |
| Maximum pressure | 350 bar (5000 psi) |
| Pilot ratio | 4:1 |
| Cartridge material | Working parts hardened and ground steel. Zinc plated body |
| Mounting position | Unrestricted |
| Cavity number | A20092-T2A |
| Torque cartridge into cavity | 60 Nm (44 lbs. ft.) |
| Weight | 0.39 kg (0.86 lbs.) |
| Seal kit number | SK1093 (Nitrile) SK1093V (Viton®) |
| Recommended Filtration level | BS5540/4 Class 18/13 (25 micron nominal) |
| Operating temperature | -30°C to +90°C (-22° to +194°F) |
| Leakage | 0.3 ml/min nominal (5 dpm) |
| Nominal viscosity range | 5 to 500 cSt |

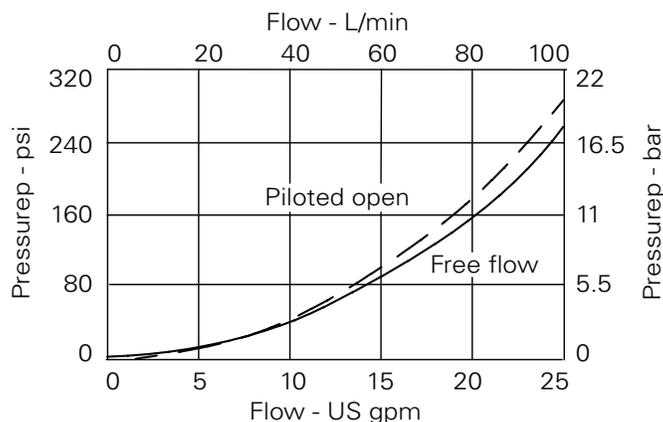
Viton is a registered trademark of E. I. DuPont

Description

Pilot check valves allow flow to pass in one direction, with a low pressure drop, then prevent reverse flow until pilot pressure is applied. There are many applications for this valve type, the most common being to lock and hold a cylinder, or another hydraulic actuator, in position.

These valves are ideally suited for fitting directly into a cylinder, giving economy of installation, direct control of cylinder movement and ease of servicing.

Pressure Drop

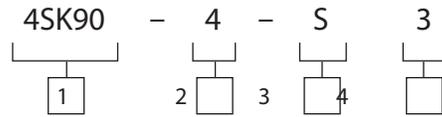


4SK90 - Check Valve

Pilot-to-open, poppet type

90 L/min (24 USgpm) • 350 Bar (5000 psi)

Model Code



1 Basic Code
4SK90 - Complete valve

2 Pilot Ratio
4 - 4:1

3 Seals
S - Nitrile (for use with most industrial hydraulic oils)

4 Optional Pilot Seal
Omit if not required

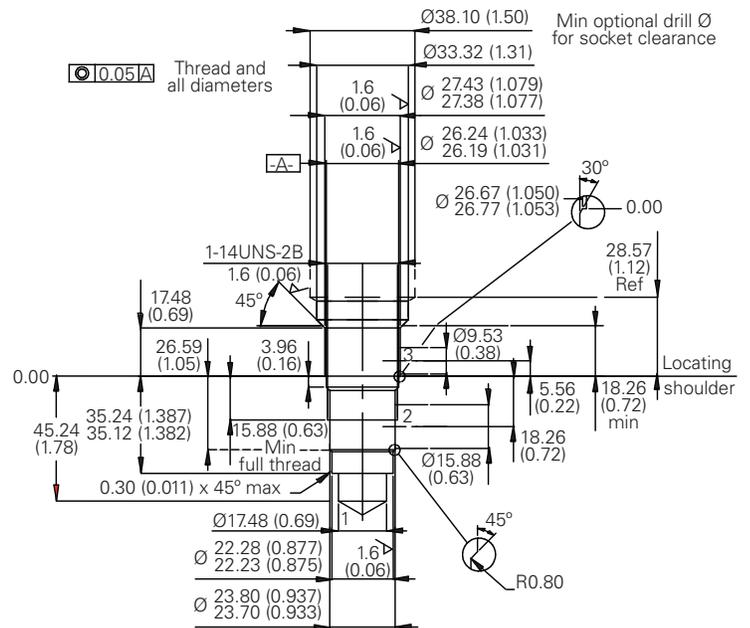
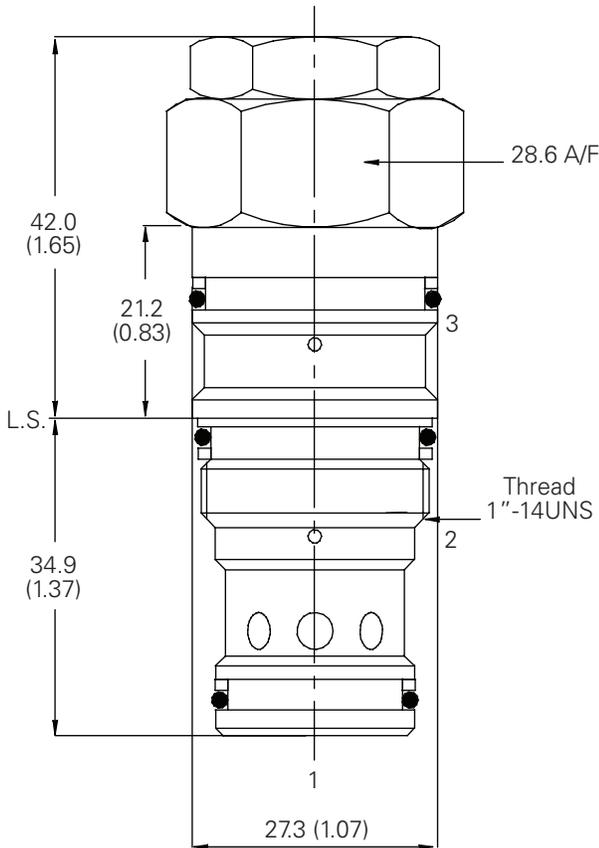
SV - Viton (for high temperature and most special fluid applications)

Dimensions

mm (inch)

Cartridge Only
Basic Code
4SK90

Cavity
Basic Code A20092-T2A
Form drill TD-2A
Form reamer TR-2A



Note: For applications above 210 bar (3000 psi) please consult our technical department or use the steel body.