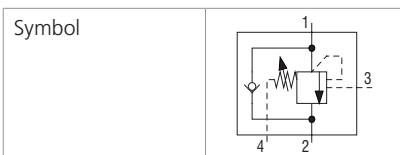


Technical Features

- › The valve prevents runaway ahead of the pump in the event of a negative load
- › Load-holding with leak-free closing poppet when directional valve is in neutral position
- › Pressure relief function protecting the actuator against overload and pressure peaks
- › Integrated check valve acting as an anti-cavitation valve
- › When installed into an actuator the valve can be used as a hose burst valve
- › Back pressure neither affects the relief setting nor the required pilot pressure
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

Poppet type, screw-in motion control valve designed to control the runaway of a negative load. The built-in check valve allows reverse flow into the actuator, which is protected by the internal pressure relief function. Back pressure at port 2 does neither affect the pressure relief setting nor the required pilot pressure. The spring chamber is drained to port 4.



Technical Data

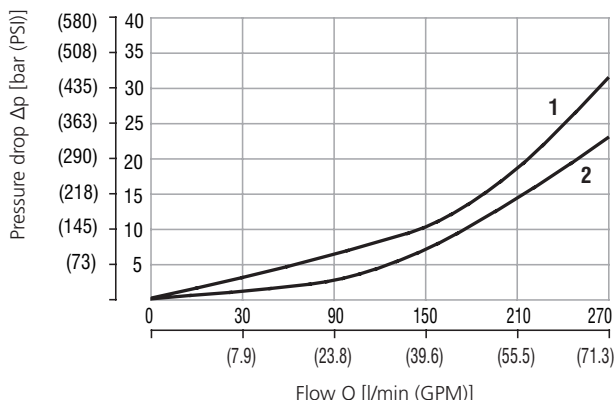
| Valve size / Cartridge cavity | | 1-5/16-12 UNF-2A / S4 |
|------------------------------------|-------------|-------------------------------|
| Max. flow | l/min (GPM) | 180 (47.6) |
| Max. load induced pressure | bar (PSI) | 270 (3920) |
| Max. relief pressure | bar (PSI) | 350 (5080) |
| Fluid temperature range | °C (°F) | -20 +90 (-4 ... +194) |
| Pilot ratio | | 8:1 |
| Internal Leakage | mil/min | 0.3 nominal (5 drops per min) |
| Max. degree of fluid contamination | ISO 4406 | Class 21/18/13 |
| Mass | kg (lbs) | 0.56 (1.23) |

| | | Datasheet | Type |
|---------------------|-----------------|-----------|-----------------------------------|
| General information | | GI_0060 | Products and operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-S4* |
| Cavity details | | SMT_0019 | SMT-S4* |
| Spare parts | | SP_8010 | |

Characteristics measured at $v = 40 \text{ mm}^2/\text{s}$ (195 SUS)

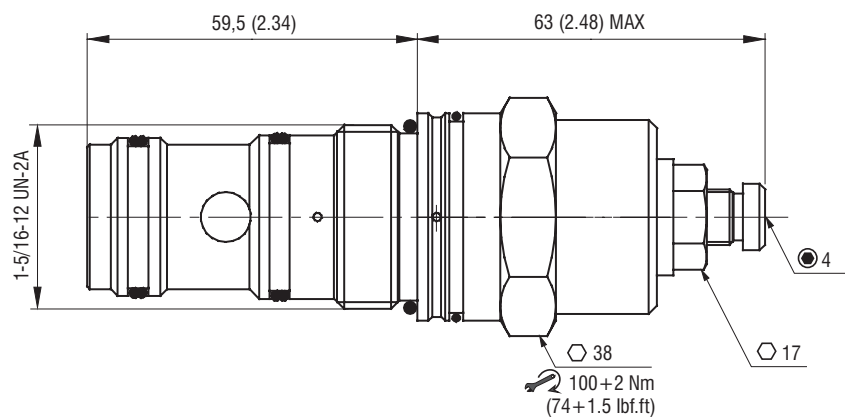
Pressure drop related to flow rate

Pilot ratio 8:1



| Flow | |
|------|------------------|
| 1 | free flow (2→1) |
| 2 | pilot open (1→2) |

Dimensions in millimeters (inches)



Ordering Code

SOBD5A-S4 / I - - -

**Overcentre valve, fully balanced,
internal drain** 1-5/16-12 UNF

Pilot ratio
standard 8:1 **8**

Relief pressure range
70 - 350 bar (1015 - 5080 PSI)

35

Factory setting [bar @ l/min]
210/4,8 210 bar at 4.8 l/min

A **Surface treatment**
zinc-coated (ZnCr-3), ISO 9227 (240 h)

No designation
V

Seals
NBR
FPM (Viton)