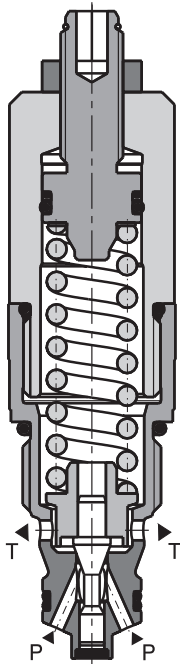


Technical Features

- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop through CFD optimized flow paths
- › Wide pressure range up to 420 bar
- › Hardened precision parts
- › Sharp-edged steel seats for dirt-tolerant performance
- › Leak-free closing, suitable for fast cycling with long life
- › Adjustable by allen key or hand screw
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

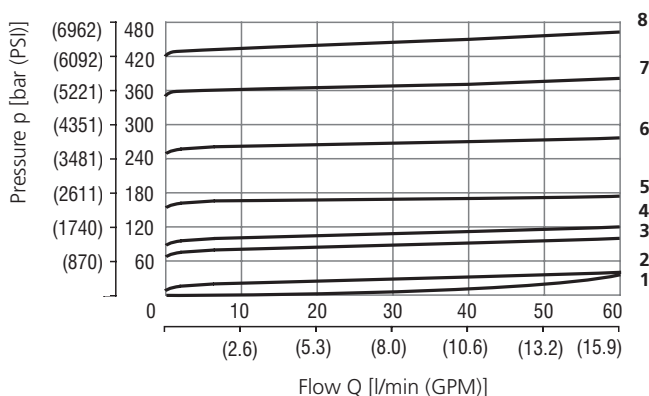
A poppet-type, direct-acting hydraulic relief valve in the form of a screw-in cartridge intended for use as a pressure limiting device for common hydraulic circuit protection. The spring acts on the poppet and presses it onto the valve seat. If the hydraulic pressure is below the pre-set value, the valve is closed. If the hydraulic force exceeds the pre-set value the valve opens and flow passes to the tank port until the system pressure falls below the spring pre-set value and the valve closes again.


Technical Data

| Valve size / Cartridge cavity | | 7/8-14 UNF-2A / B2 |
|-------------------------------|-------------|----------------------------|
| Max. flow | l/min (GPM) | 60 (15.9) |
| Max. operating pressure | bar (PSI) | 420 (6090) |
| Max. pressure (port T) | bar (PSI) | 250 (3630) |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +100 (-22 ... 212) |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +120 (-4 ... 248) |
| Mass | kg (lbs) | 0.25 (0.55) |

| | | Datasheet | Type |
|-----------------------------|------------------|----------------|-------------------------------|
| General information | | GI_0060 | Products operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-B2* |
| | Sandwich mounted | SB-04(06)_0028 | SB-*B2* |
| Cavity details / Form tools | | SMT_0019 | SMT-B2* |
| Spare parts | | SP_8010 | |

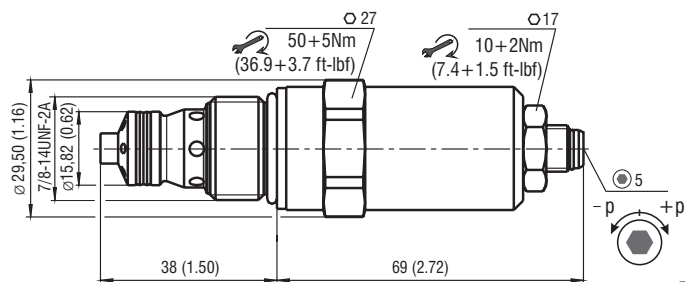
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Relief pressure related to flow rate


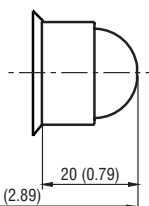
| | Pressure range |
|---|-----------------------|
| 8 | 42 |
| 7 | 35 |
| 6 | 25 |
| 5 | 16 |
| 4 | 10 |
| 3 | 6 |
| 2 | 2 |
| 1 | Min. pressure setting |

Dimensions in millimeters (inches)

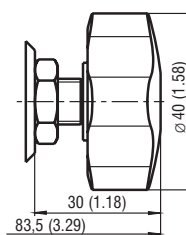
Model S



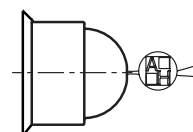
Model T



Model RP



Model L



Ordering Code

SR1A-B2 / -

Pressure relief valve, poppet-type, direct-acting 7/8 -14 UNF

Model High performance

Pressure range
 up to 25 bar (360 PSI) **2**
 up to 63 bar (910 PSI) **6**
 up to 100 bar (1450 PSI) **10**
 up to 160 bar (2320 PSI) **16**
 up to 250 bar (3630 PSI) **25**
 up to 350 bar (5080 PSI) **35**
 up to 420 bar (6090 PSI) **42**

H

Surface treatment
A zinc-coated (ZnCr-3), ISO 9227 (240 h)
B zinc-coated (ZnNi), ISO 9227 (520 h)

No designation
V

Seals
 NBR
 FPM (Viton)

Adjustment option
S allen key (hex. 5), without protective cap
T allen key (hex. 5), with protective cap
RP hand screw, plastic
L allen key (hex. 5), with protective cap, sealable (lockwire holes)