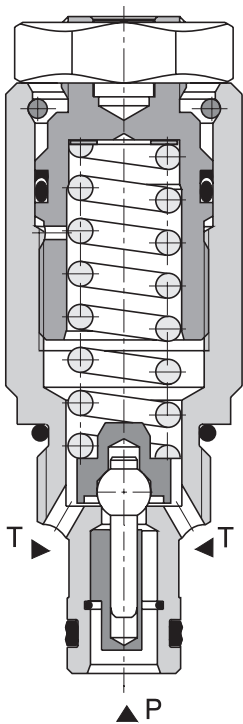


Pressure Relief Valve, Poppet Type, Direct Acting

SR1A-A2

3/4-16 UNF • Q_{max} 30 l/min (8 GPM) • p_{max} 350 bar (5100 PSI)



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 350 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.

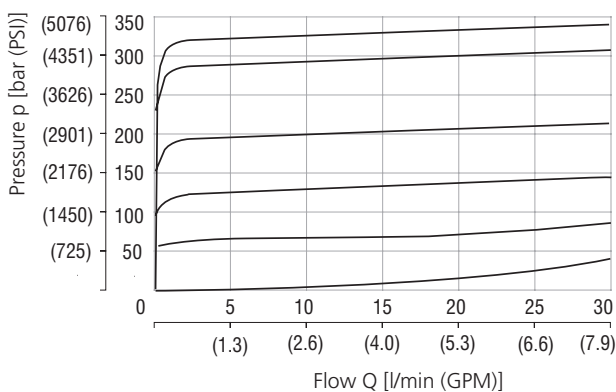


Technical Data

| | | | |
|-------------------------------|------------------|----------------------------|-----------------------------------|
| Valve size / Cartridge cavity | | 3/4-16 UNF-2A / A2 | |
| Max. flow | l/min (GPM) | 30 (7.9) | |
| Max. operating pressure | bar (PSI) | 350 (5080) | |
| Max. pressure (port T) | bar (PSI) | 160 (2320) | |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +100 (-22 ... 212) | |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +120 (-4 ... 248) | |
| Weight | kg (lbs) | 0.13 (0.29) | |
| | | Datasheet | Type |
| General information | | GI_0060 | Products and operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-A2* |
| | Sandwich mounted | SB-04(06)_0028 | SB-*A2* |
| Cavity details / Form tools | | SMT_0019 | SMT-A2* |
| Spare parts | | SP_8010 | |

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

Relief pressure related to flow rate



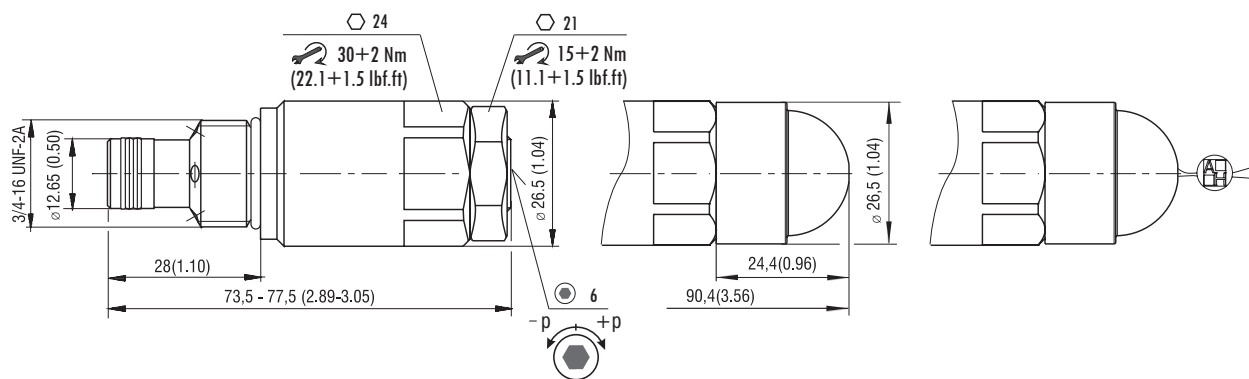
| | Pressure range |
|---|-----------------------|
| 6 | 35 |
| 5 | 25 |
| 4 | 16 |
| 3 | 10 |
| 2 | 6 |
| 1 | Min. pressure setting |

Dimensions in millimeters (inches)

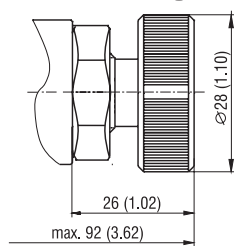
Model S

Model T

Model L



Model RS



Ordering Code

SR1A-A2 / -

Pressure relief valve, poppet type,
direct acting
3/4-16 UNF

Model
Lightline

Pressure range
up to 63 bar (914 PSI)
up to 100 bar (1450 PSI)
up to 160 bar (2320 PSI)
up to 250 bar (3630 PSI)
up to 350 bar (5080 PSI)

L

6
10
16
25
35

No designation
V

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

Seals
NBR
FPM (Viton)

Adjustment option
S allen key (hex. 6), without protective cap
T allen key (hex. 6), with protective cap
L allen key (hex. 6), with protective cap, sealable (lockwire holes)
RS hand screw, metal