

Technical Features

- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop
- › Wide pressure range up to 420 bar
- › Hardened precision parts
- › 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

The valve provides an adjustable regulated pressure level below supply pressure. This direct acting model is suitable for applications with lower flow rates and lower regulated pressures. In cases of shock or surge pressures in the downstream line the valve acts as a relief valve, directing excessive pressure and flow to the tank.



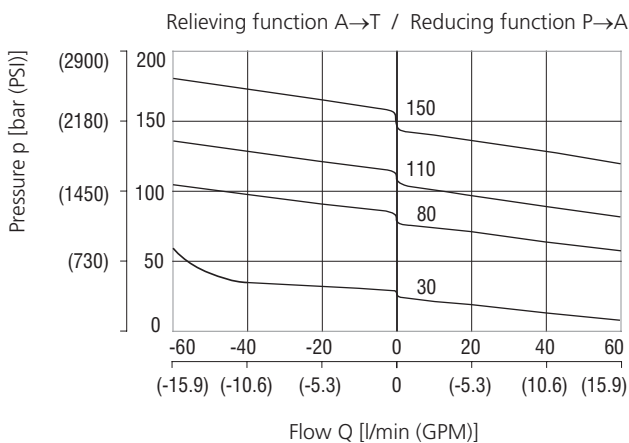
Technical Data

| Valve size / Cartridge cavity | | 7/8-14 UNF-2A / B3 (C-10-3) | | | |
|---|-------------|-----------------------------|------------------|-------------------|-------------------|
| Max. flow | l/min (GPM) | 60 (15.9) | | | |
| Pressure range | | 3 | 8 | 11 | 15 |
| Max. operating pressure | bar (PSI) | 420 (6090) | | | |
| Reduced pressure range (at Q = 5 l/min) | bar (PSI) | 10-30 (150-440) | 20-80 (290-1160) | 30-110 (440-1600) | 40-150 (580-2180) |
| Max. back pressure (port T) | bar (PSI) | 200 (3626) | | | |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +100 (-22 ... 212) | | | |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +120 (-4 ... 248) | | | |
| Weight | kg (lbs) | 0.26 (0.57) | | | |

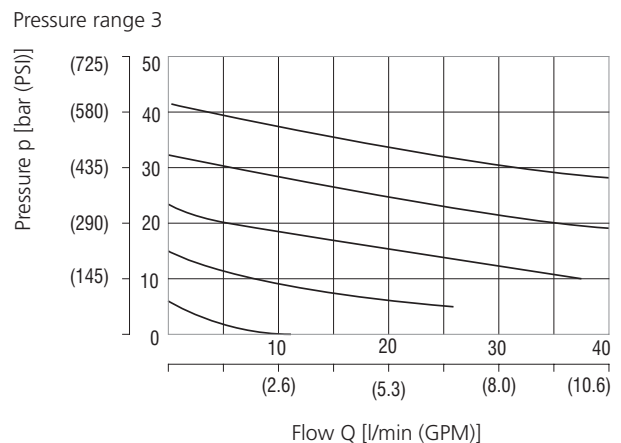
| | | Datasheet | Type |
|-----------------------------|------------------|----------------|-----------------------------------|
| General information | | GI_0060 | Products and operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-B3* |
| | Sandwich mounted | SB-04(06)_0028 | SB-*-B3* |
| Cavity details / Form tools | | SMT_0019 | SMT-B3* |
| Spare parts | | SP_8010 | |

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

Reducing - relieving pressure related to flow rate

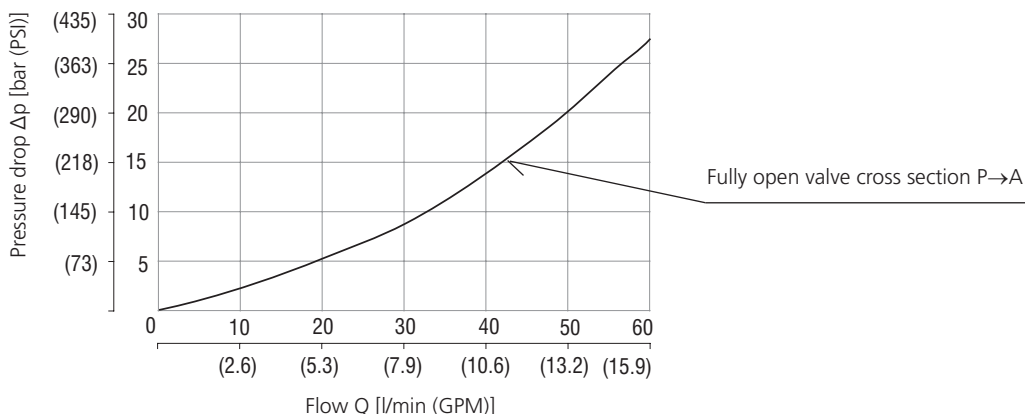


Minimum reducing pressure related to flow rate



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

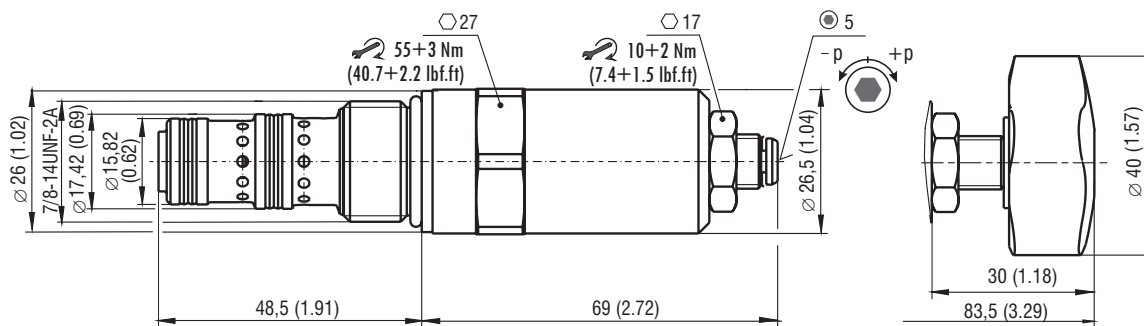
Pressure drop related to flow rate



Dimensions in millimeters (inches)

Model S

Model RP



Ordering Code

SP2A-B3 / H -

Pressure reducing - relieving valve, spool type, direct acting

Valve cavity
7/8-14 UNF (C-10-3)

Model
High performance

Reduced pressure range (at Q = 5 l/min)

| | |
|-------------------------------|-----------|
| 10 - 30 bar (150 - 440 PSI) | 3 |
| 20 - 80 bar (290 - 1160 PSI) | 8 |
| 30 - 110 bar (440 - 1600 PSI) | 11 |
| 40 - 150 bar (580 - 2180 PSI) | 15 |

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. 5), without protective cap
RP hand screw, plastic