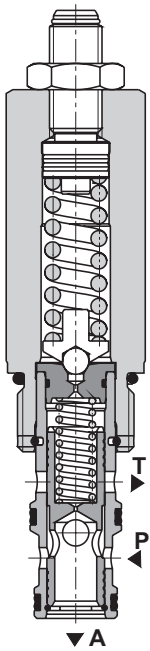


Pressure Reducing Valve, Spool Type, Pilot Operated

SP4A-B3

7/8-14 UNF • Q_{max} 60 l/min (16 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 by CFD optimized flow path
- › Reverse relief protection
- › Wide pressure range up to 350 bar
- › High flow capacity
- › 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.
Enhanced surface protection for mobile sector available for the steel parts (ISO 9227, 520 h salt spray)

Functional Description

This 3 way pilot operated pressure reducing valve is designed to reduce the system pressure at the consumer port. Due to its 3 way design the valve provides reverse relief protection of the secondary circuit to the tank port. The pressure can be set by an adjustment screw (by allen key or by hand screw).



Technical Data

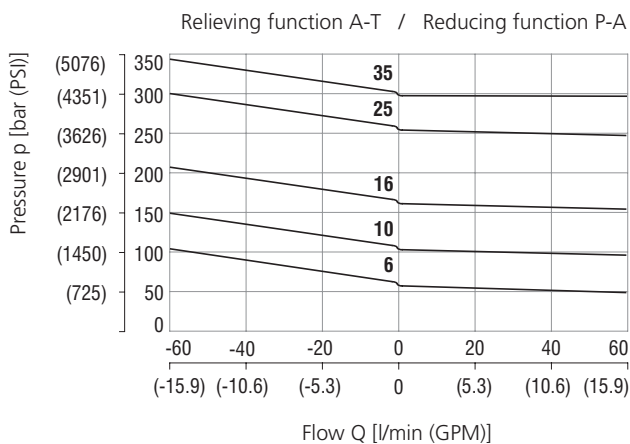
Valve size / Cartridge cavity		7/8-14 UNF-2A / B3 (C-10-3)	
Max. flow	l/min (GPM)	60 (15.9)	
Max. control flow	l/min (GPM)	0.34 (0.09)	
Max. operating pressure	bar (PSI)	350 (5080)	
Max. pressure (port T)	bar (PSI)	100 (1450)	
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... 212)	
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... 248)	
Weight	kg (lbs)	0.24 (0.53)	
		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	



The volume flow, which is needed for control of output pressure and maintaining the adjusted value of reducing pressure, flows permanently through the pilot stage of valve.

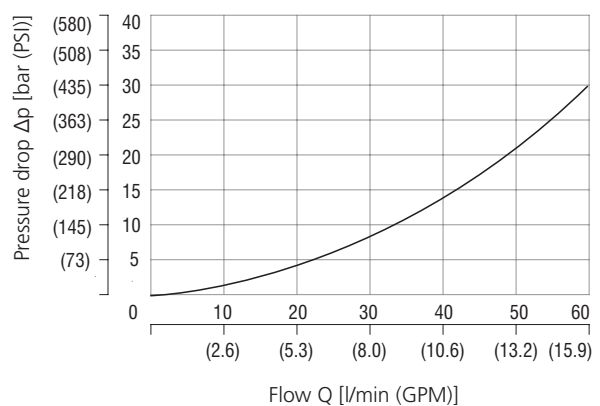
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Reducing - relieving pressure related to flow rate



Pressure drop related to flow rate

Flow direction P - A
Fully open valve cross section

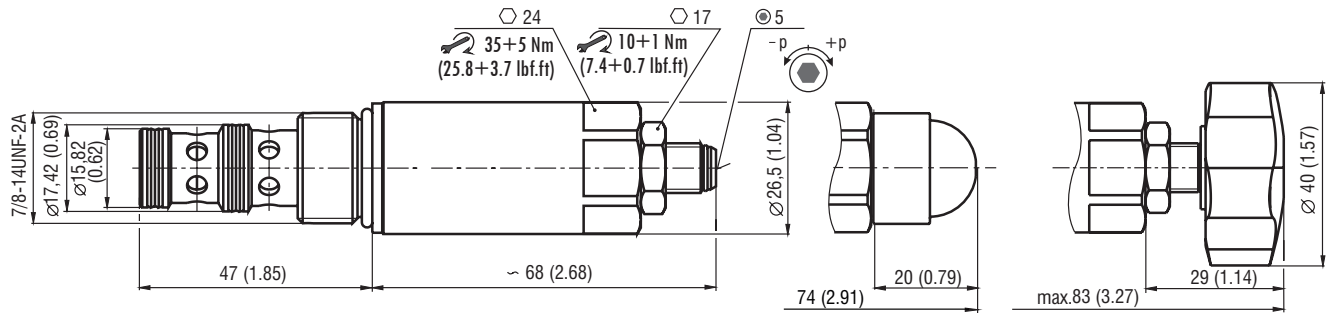


Dimensions in millimeters (inches)

Model S

Model T

Model RP



Ordering Code

SP4A-B3 / H -

Pressure reducing - relieving valve, spool type, pilot operated

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

Model
High performance

Adjustable range of reduced pressure

10 ... 63 bar (145 ... 910 PSI)	6
10 ... 100 bar (145 ... 1450 PSI)	10
10 ... 160 bar (145 ... 2320 PSI)	16
10 ... 250 bar (145 ... 3630 PSI)	25
10 ... 350 bar (145 ... 5080 PSI)	35

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