



## SR1A-B2

### Pressure Relief Valve, Poppet-Type, Direct-Acting



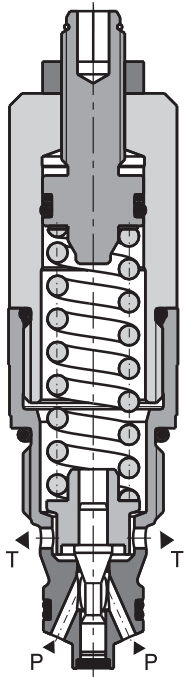
- 7/8-14 UNF
- $Q_{\max}$  60 l/min (16 GPM)
- $p_{\max}$  420 bar (6100 PSI)

## Technical Features

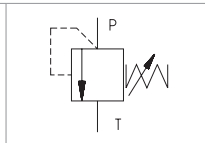
- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop through CFD optimized flow paths
- › Wide pressure range up to 420 bar
- › Hardened precision parts
- › Sharp-edged steel seats for dirt-tolerant 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.



Symbol



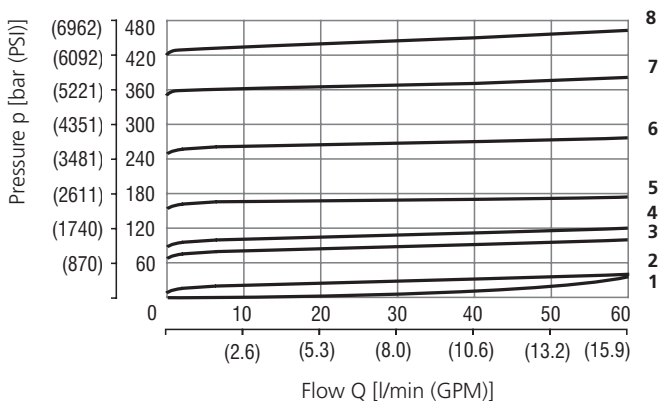
## Technical Data

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)

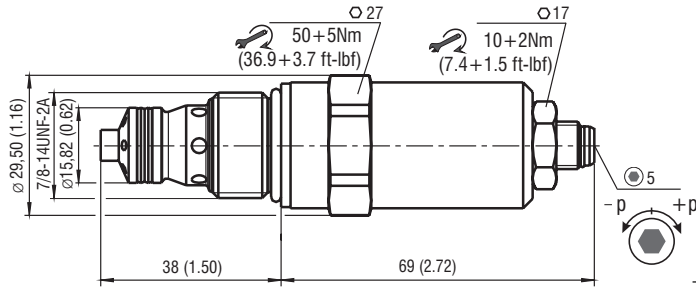
### Relief pressure related to flow rate



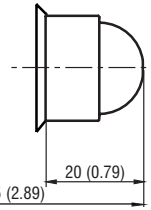
	Pressure range
8	42
7	35
6	25
5	16
4	10
3	6
2	2
1	Min. pressure setting

**Dimensions** in millimeters (inches)

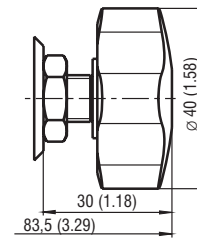
**Model S**



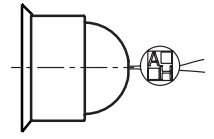
**Model T**



**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)  
up to 63 bar (910 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)  
up to 420 bar (6090 PSI)

2  
6  
10  
16  
25  
35  
42

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)

S  
T  
RP  
L

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