

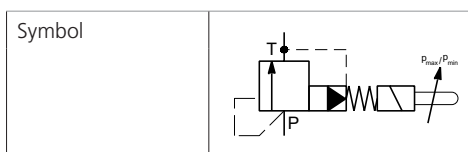
**Technical Features**

- › Solenoid operated remote switching between minimum and maximum set pressure in the circuit
- › Combines the functionality of a pressure release valve and a pressure relief valve
- › Three-stage pressure, with a maximum settable pressure of 350 bar
- › Excellent stability throughout the flow volume range to 60l/min
- › Low hysteresis and accurate pressure control while switching
- › Easily interchangeable solenoid coil and plug positioning
- › In the standard version, the valve is zinc-coated for 240 h corrosion protection acc. to ISO 9227

**Functional Description**

The valve enables solenoid operated switching between two set system pressure values. Minimum and maximum values are set manually using two setting bolts located on the solenoid control system. When the solenoid is switched on the valve is set to maximum pressure. The maximum pressure is set by the pressure level of the valve and can be adjusted in the range of 7 - 120 / 210 / 350 bar. Minimum circuit pressure can be set from 7 bar to the set maximum pressure. Depending on the setting of minimum and maximum pressure values in the circuit the valve may combine functions of a pressure release and relief valve (eg 350 / 7 bar) or switch between two working pressure values (eg 250 / 100 bar).

CAUTION: A pressure change in T channel will cause a change of the set value of 1:1.

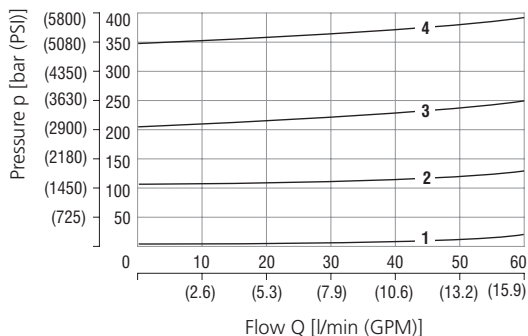


**Technical Data**

Valve size / Cartridge cavity	7/8-14 UNF-2A / B2	
Max. flow	l/min (GPM)	60 (15.9)
Max. operating pressure	bar (PSI)	350 (5080)
Max. pressure (port T)	bar (PSI)	100 (1450)
Min. adjustable pressure	bar (PSI)	7 (102)
Fluid temperature range (FPM)	°C (°F)	-20 ... +80 (-4 ... 176)
Ambient temperature range	°C (°F)	-20 ... +50 (-4 ... 122)
Supply voltage tolerance	%	AC, DC ± 10
Max. switching frequency	1/h	5 000
Weight	kg (lbs)	0.57 (1.23)
Mounting position: If possible, the valve should be mounted with the coil vertically downward.		
General information	Datasheet	Type
	GI_0060	Products and operating conditions
Coil types	C_8007	C 19B*
Valve bodies	In-line mounted	SB_0018
	Sandwich mounted	SB-04(06)_0028
Cavity details / Form tools	SMT_0019	SB-*B2*
Spare parts	SP_8010	SMT-B2*

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

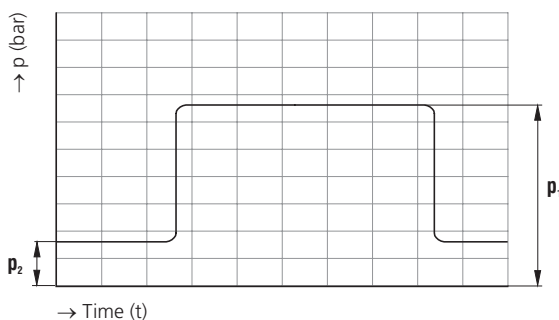
**Relief pressure related to flow rate**



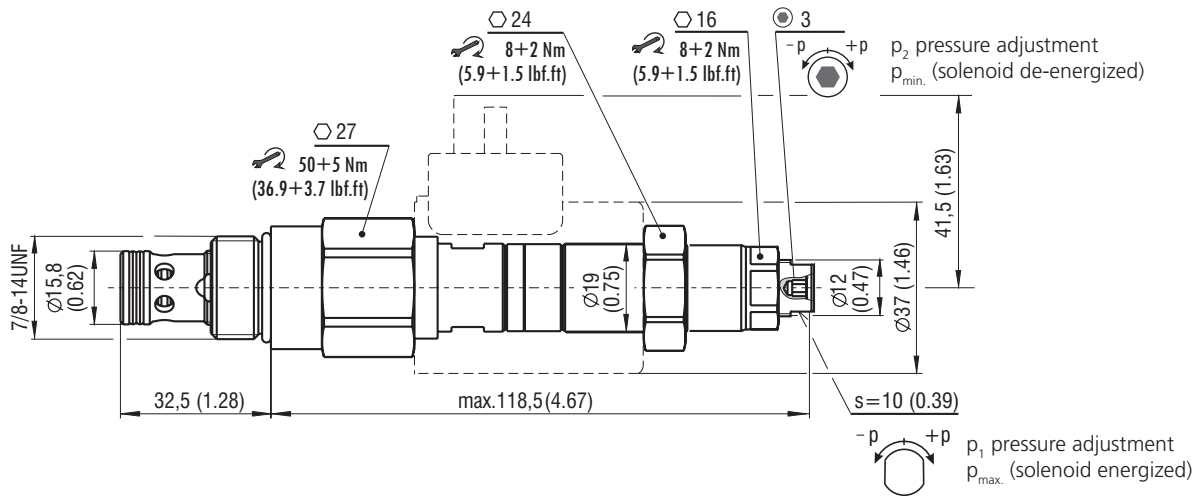
Pressure range	Typical performance
4 35	Solenoid de-energized
3 21	
2 12	
1 Min. pressure setting	

**Example showing the adjustable pressures  $p_1$  and  $p_2$  ( $p_1 \geq p_2$ )**

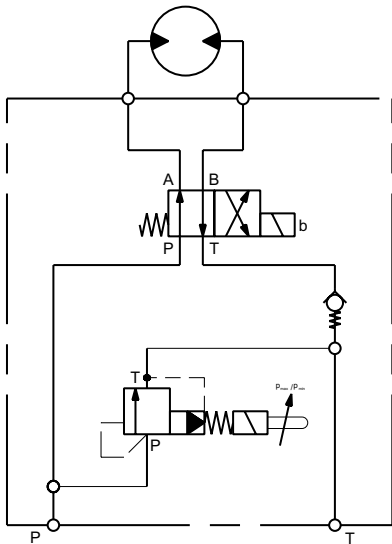
$p_1$  ( $p_{max}$ , relief pressure) is set as the higher working pressure (solenoid energized)  
 $p_2$  ( $p_{min}$ , vented pressure) is set as a lower working pressure (solenoid de-energized)



**Dimensions** in millimeters (inches)



**Application example**



The valve is used to unload a pump to tank with a very low pressure drop. This results in less heating of the oil and therefore lower energy costs for the user.

$p_1$  ( $p_{\max}$ ) must be set before  $p_2$  ( $p_{\min}$ ). To set  $p_1$ , the solenoid is energized and the pressure adjusted with a flat wrench (size 10). The solenoid is then de-energized and the lower pressure adjusted with an allen key (hex. 3).

**Ordering Code**

SR4E2 - B2 / H   -

Pressure relief valve, solenoid operated, spool type, piloted

Valve cavity  
7/8-14 UNF

Model  
High performance

Pressure ranges  
up to 120 bar (1740 PSI)  
up to 210 bar (3050 PSI)  
up to 350 bar (5080 PSI)

12  
21  
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)

**Factory setting:**

If the valve does not have a specific setting in accordance with the customer's order, standard valves are set to a minimum value of approx 7 bar after function tests.