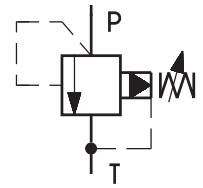


- Screw-in cartridge design
- 5 pressure ranges
- Pressure setting by
  - Hexagon set screw lock
  - Adjustable handknob

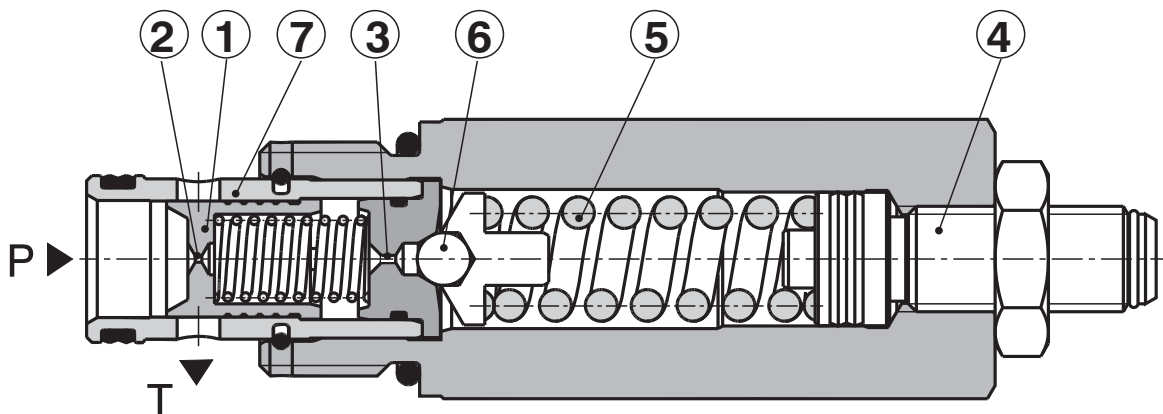


## Functional Description

Pressure relief valves SR4A-B2 are pilot operated pressure valves designed for system pressure limitation. The pressure adjustment provides the adjustment screw (4). In its basic state, the valve is closed. The pressure acts on the face area of the control spool (1) and at the same time through orifice (2) on the control spool rear side, which is preloaded by a spring and further on through orifice (3) on the pilot valve ball (6). When the increasing system pressure reaches the value, which is preset by spring (5), the valve opens and the

control flow passes through the pilot valves. The spool area which is preloaded by the spring becomes relieved, the spool control edge opens the radial bores in bushing (7) and the fluid passes from port P to T. The control flow is routed through groove to channel T.

The valve body and the adjustment screw are zinc coated.



# Ordering Code

**SR4A-B2** /

**Pilot Operated Pressure Relief Valve**

Standard

**S**

**Pressure range**

- up to 63 bar (914 PSI)
- up to 100 bar (1450 PSI)
- up to 160 bar (2320 PSI)
- up to 250 bar (3626 PSI)
- up to 350 bar (5076 PSI)

- 6,3**
- 10**
- 16**
- 25**
- 35**

without designation

**V**

**Seals**

- NBR
- FPM (Viton)

**Adjustment option**

- Hexagon set screw locknut 5mm
- Adjustable handknob

- S**
- R**

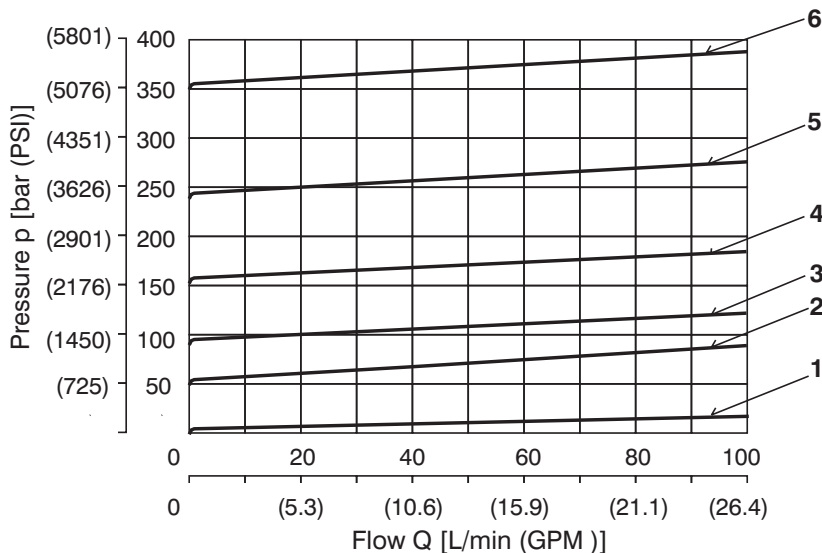
## Technical Data

Cartridge thread	7/8 - 14 UNF - 2B				
Max. flow rate	L/min (GPM)	100 (26.4)			
Max. input pressure (port P)	bar (PSI)	6.3 (914)	100 (1450)	160 (2320)	250 (3626) 350 (5076)
Max. output pressure (port T)	bar (PSI)	100 (1450)			
Working pressure related to flow	bar (PSI)	see p-Q characteristics			
Hydraulic fluid	Hydraulic oils of power classes (HL, HLP) to DIN 51524				
Fluid temperature range for standard sealing (NBR)	°C (°F)	-30 ... +100 (-22 ... 212)			
Fluid temperature range for Viton sealing (FPM)	°C (°F)	-20 ... +120 (-4 ... 248)			
Viscosity range	mm <sup>2</sup> /s (SUS)	10 ... 500 (49 ... 2450)			
Max. degree of fluid contamination	Class 21/18/15 according to ISO 4406 (1999)				
Weight	kg (lbs)	0.24 (0.53)			
Maximum valve tightening torque	Nm ( lbf.ft)	35+5 (25.8+3.7 lbf.ft)			
Mounting position	optional				

## p-Q Characteristics

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

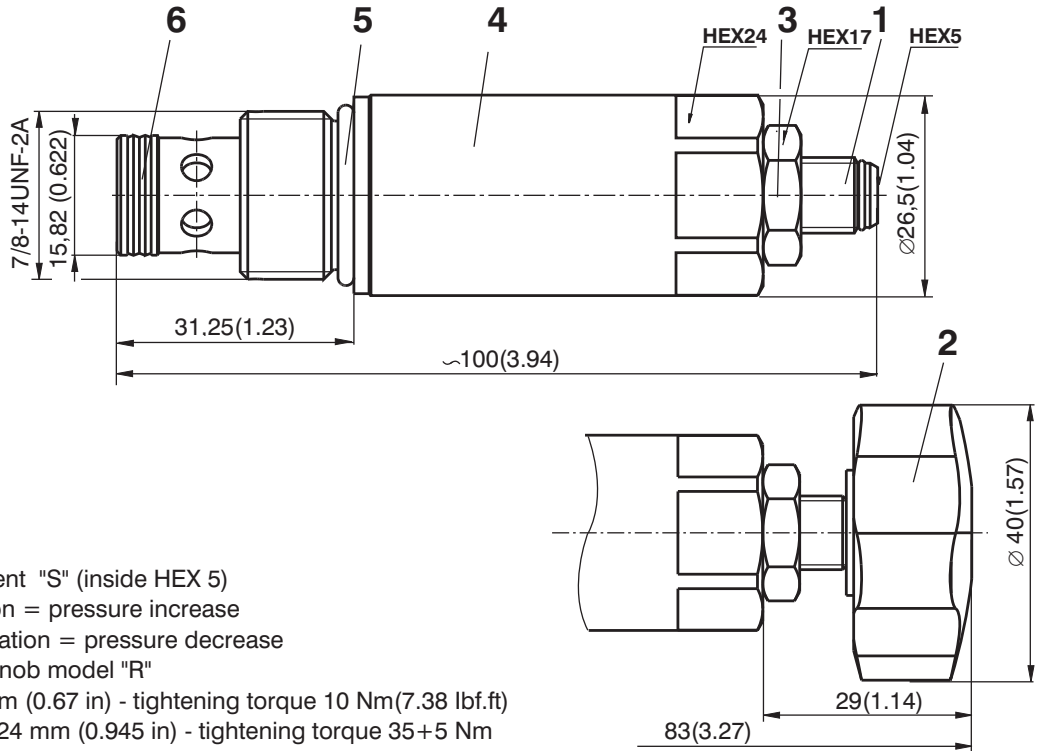
Pressure drops related to flow rate.



<b>6</b>	Pressure range 35
<b>5</b>	Pressure range 25
<b>4</b>	Pressure range 16
<b>3</b>	Pressure range 10
<b>2</b>	Pressure range 6,3
<b>1</b>	Min. pressure setting

# Valve Dimensions

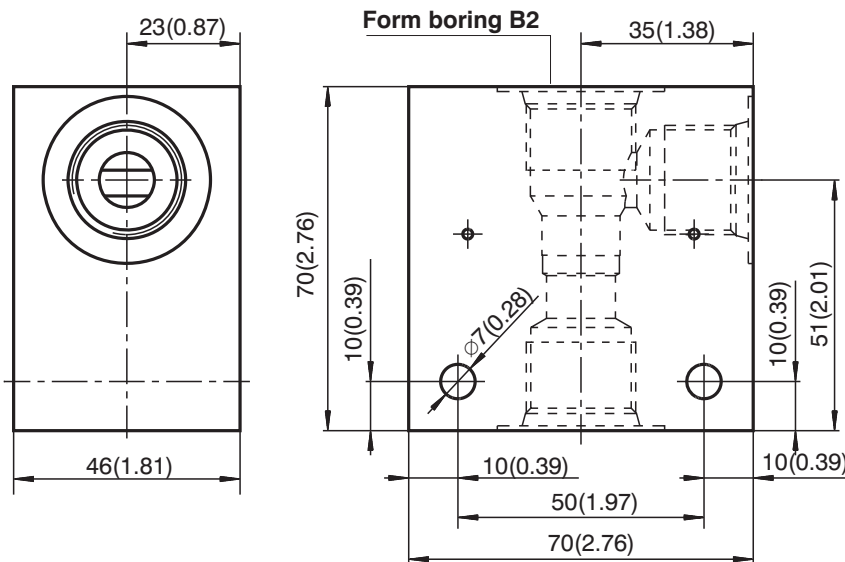
Dimensions in millimetres (inches)



- 1 Adjustment element "S" (inside HEX 5)  
Clockwise rotation = pressure increase  
Anticlockwise rotation = pressure decrease
- 2 Adjustable handknob model "R"
- 3 Locknut s = 17mm (0.67 in) - tightening torque 10 Nm (7.38 lbf.ft)
- 4 Wrench flats s = 24 mm (0.945 in) - tightening torque 35+5 Nm (25.8+3.7 lbf.ft)
- 5 O-ring 19,4 x 2,1 (supplied with valve)
- 6 Combined sealing:  
Dualseal DRYZ000002Z20 13,47x15,87x3,1 (supplied with valve)

# Valve Body

Dimensions in millimetres (inches)



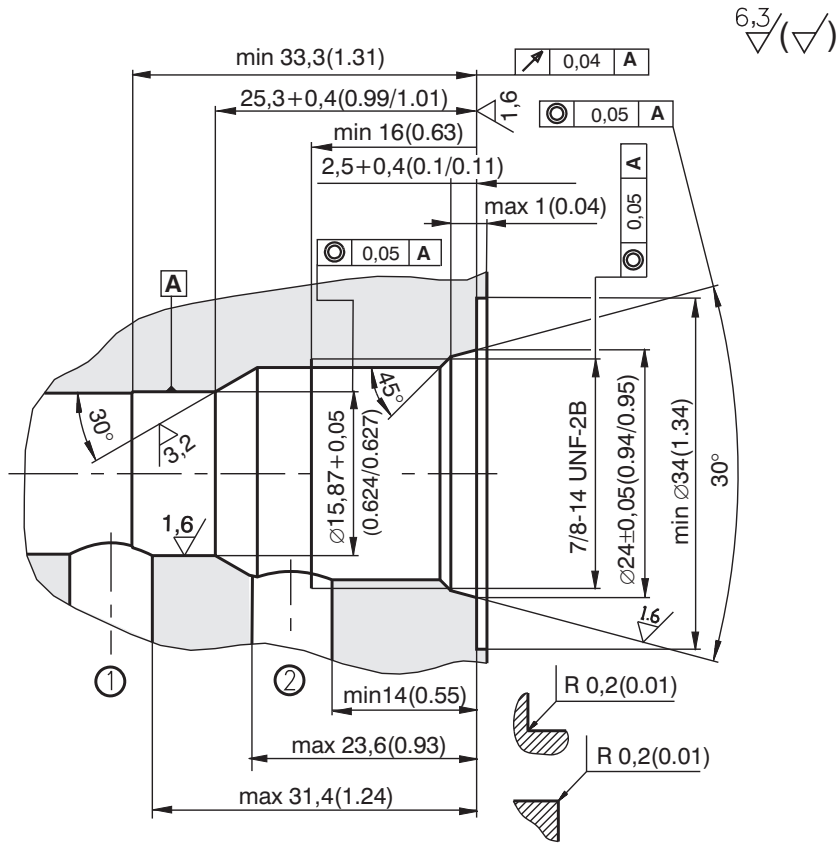
Body material	Connecting size	Type code	Operating pressures
Steel	G3/8	SB-B2-0103ST	420 bar (6091 PSI)
Steel	SAE 8	SB-B2-0104ST	420 bar (6091 PSI)
Aluminium	G3/8	SB-B2-0103AL	250 bar (3626 PSI)
Aluminium	SAE 8	SB-B2-0104AL	250 bar (3626 PSI)

**Note:**

- For detailed valve body ordering code refer to data sheet HA 0018

**Cavity**

Dimensions in millimetres (inches)



**Spare Parts**

<b>Seal kit</b>	<b>Order number - 18775600</b>
<b>Dualseal - PU</b>	20159100
DRYZ000002Z20 13,47 x 15,87 x 3,1 (1pc.)	
<b>O-ring - NBR</b>	20143900
19,4 x 2,1 (1pc.)	

**Caution!**

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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