

# Directly Operated Pressure Relief Valves

SR1A-B2

Replaces HA 5064 1/2011

HA 5064

7/2012

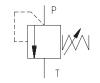
7/8-14 UNF • p<sub>max</sub> 420 bar (6092 PSI) • Q<sub>max</sub> 60 L/min (15.85 GPM)

☐ Screw-in cartridge design

☐ 7 pressure ranges

☐ Pressure setting by

- Hexagon set screw lock
- Adjustable handknob





### **Functional Description**

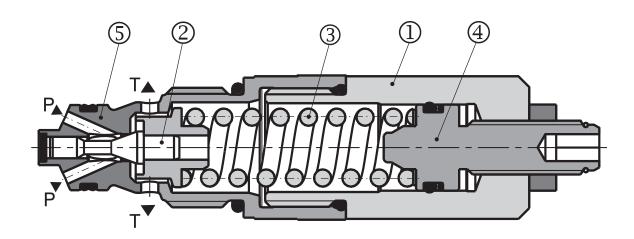
Directly operated pressure relief valves SR1A-B2 were designed for applications requiring a safety valve or a pressure regulating valve working over a wide range of pressures and flow rates.

The valve basically consists of the valve body (1), poppet with damping spool (2), spring (3) and adjusting screw (4). The spring pushes the poppet into the seat (5) and holds the valve in its normally closed position. When the force, caused by the input pressure, exceeds the spring force, the valve opens and and the flow passes from port P to port T.

To optimize the valve performance seven pressure ranges the valve are available. Choosing the closest range is recommended.

The design enables the valve to be used as a screw-in cartridge for manifold mounting, or in a subplate and/or in-line mounted housing.

The valve body and the adjustment screw are zinc coated.



#### **Ordering Code SR1A-B2** / **Directly Operated Pressure Relief Valve** 7/8-14 UNF **Seals** Н High performance without designation NBR (Standard) Pressure range FPM (Viton) 2,5 up to 25 bar (363 PSI) 6,3 up to 63 bar (914 PSI) up to 100 bar (1450 PSI) 10 up to 160 bar (2321 PSI) 16 25 Adjustment option up to 250 bar (3626 PSI) S Hexagon set screw locknut 5 mm 35 up to 350 bar (5076 PSI) R 42 Adjustable handknob up to 420 bar (6092 PSI)

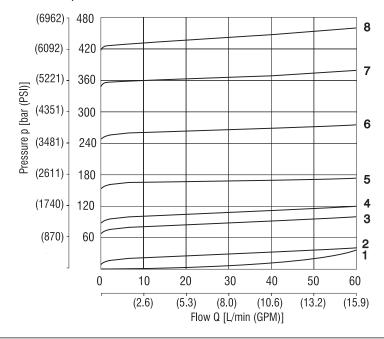
#### **Technical Data**

Valve size		B2	
Cartridge thread		7/8-14UNF-2A	
Maximum flow	L/min (GPM)	60 (15.85)	
Max. input pressure (port P)	bar (PSI)	420 (6092)	
Max. output pressure (port T)	bar (PSI)	250 (3626)	
Pressure drop	bar (PSI)	see ∆p-Q characteristics	
draulic 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)	
Maximum degree of fluid contamination		Class 21/18/15 according to ISO 4406	
Weight	kg (lbs)	0,25(0.55)	
Maximum valve tightening torque	Nm (lbf.ft)	50+5 (36.88+3.68)	
Mounting position		unrestricted	
Valve body ( data sheet HA 0018)		SB-B2	

# p-Q Characteristics

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

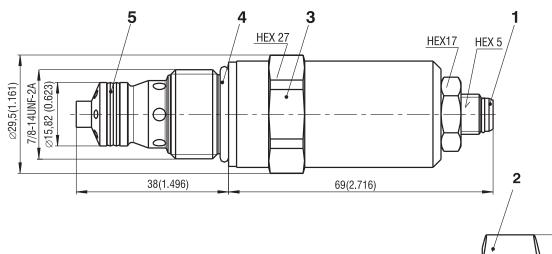
Pressure drops related to flow rate.



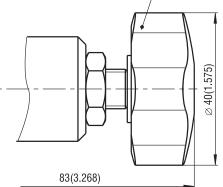
8	Pressure range 42	
7	Pressure range 35	
6	Pressure range 25	
5	Pressure range 16	
4	Pressure range 10	
3	Pressure range 6,3	
2	Pressure range 2,5	
1	Min. pressure setting	

#### **Valve Dimensions**

Dimensions in millimetres (inches)

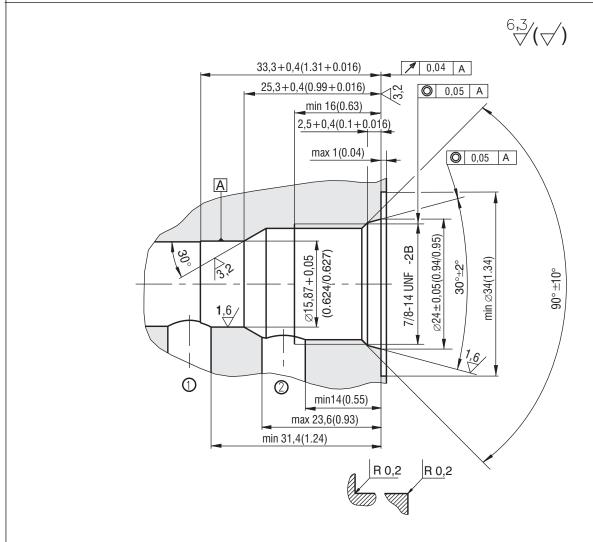


- 1 Adjustment element "S" (inside HEX 5) Clockwise rotation = pressure increase Anticlockwise rotation = pressure decrease
- 2 Adjustable handknob model "R"
- 3 Wrench flats HEX 27 tightening torque 50+5 Nm (36.88+3.68 lbf.ft)
- 4 O-ring 19,4 x 2,1 -supplied with valve
- 5 Combined sealing:
  Dualseal DRYZ000004Z20
  13,47 x 15,87 x 3,1(PU) supplied with valve



# **Cavity**

Dimensions in millimetres (inches)



Spare Parts				
Seal kit		Ordering number		
Dualseal - PU	O-ring - NBR	10775000		
DRYZ000002Z20 13,47 x 15,87 x 3,1 (1pc.)	19,4 x 2,1 (1pc.)	18775600		

## 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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