

**Technical Features**

- › Hydraulic safety relief valve suitable for use as a safety device in Category IV Group 2 applications acc.to European Commission (EC) Pressure Equipment Directive (PED) 2014/68/EU
- › CE marked valves are supplied with "Declaration of Conformity", "Operating Instructions" and the list of residual risks. Always follow the operating instructions supplied with the valve!
- › 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 and suitable for fast cycling with long life
- › In the standard version, the valve is zinc-coated for 1000 h protection acc. to ISO 9227

**Functional Description**

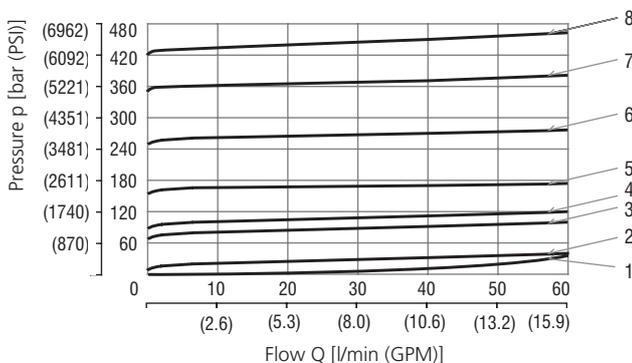
A poppet type, direct acting hydraulic relief valve in the form of a screw-in cartridge intended for use as a pressure limiting device for common hydraulic circuit protection. The spring acts on the poppet and presses it onto the valve seat. If the hydraulic pressure is below the pre-set value, the valve is closed. If the hydraulic force exceeds the pre-set value the valve opens and flow passes to tank port until the system pressure falls below the spring pre-set value and the valve closes back again.

**Technical Data**

Valve size / Cartridge cavity		7/8-14 UNF-2A / B2 (C-10-2)
Max. flow	l/min (GPM)	60 (15.9)
Max. operating pressure	bar (PSI)	420 (6100)
Max. pressure (T port)	bar (PSI)	250 (3630)
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... 212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... 248)
Max. leakage of closed valve at 80% cracking pressure	cm <sup>3</sup> /min	0.1
Viscosity range	mm <sup>2</sup> /s (SUS)	10 ... 500 (49 ... 2450)
Weight	kg (lbs)	0.27 (0.60)
Datasheet		Type
General information		HA 0060
Valve bodies		In-line mounted HA 0018
		Sandwich mounted HA 0028
Cavity details / Form tools		HA 0019
Spare parts		HA 8010
Products operating conditions		SB-B2*
		SB-*B2*
		SMT-B2*

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

**Relief pressure related to flow rate**



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

**Valves Adjusted by the Manufacturer**

- › The valves are adjusted for the specified pressure at the relevant flow rate and they are fitted with tamper-indicating seals
- › The pressure and flow rate values are indicated in the valve description on the product [pressure: in bar, flow rate in l/min]
- › The seals bear the company logo

**Valves NOT Adjusted by the Manufacturer**

- › Valves have no tamper-indicating seals
- › No pressure and no flow rate indicated - SR1A-B2/HxLx-CE1017-B1
- › After the completion of the functional test, the adjusting screw is completely loosened and the pressure is set to p=0 bar
- › To adjust the required valve pressure proceed as follows:
  - turn the adjusting screw to the right (clockwise) to increase the pressure
  - turn the adjusting screw to the left (counter-clockwise) to decrease the pressure
- › The manufacturer accepts no responsibility for the adjustment, securing, and sealing of the valve

**Residual Risks**

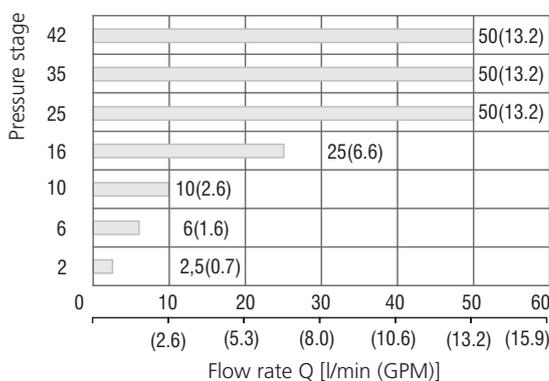
Residual risks are listed and preventive measures against the occurrence of residual risk are described in the document „Operating instructions for pressure relief valve SR1A-B2/HxLx-CE1017“ which is delivered with each valve.

**Application area**

The diagram shows the operating region where the valve meets the requirements of Directive 2014/68/EU and Standard ISO 4126-1 on maximum short-time overshoot of system pressure by 10 % above the set cracking pressure when the valve opens.

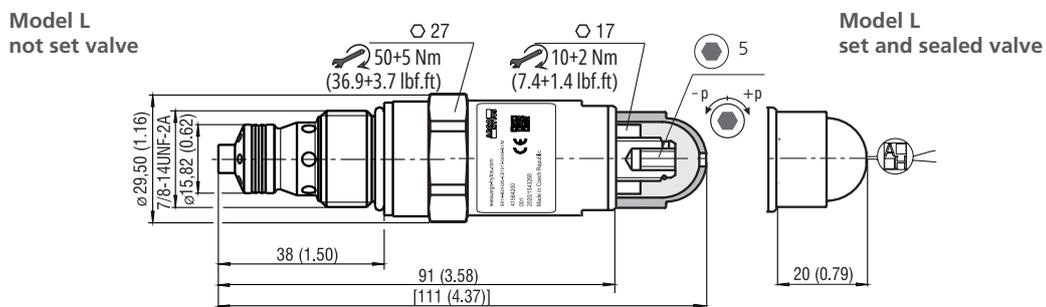
The dynamics of the valve depend on the kinematic viscosity of working fluid.

Measurement conditions: oil Renolin VG 32, T = 40 °C (104 °F), V = 0.5 l (0.132 gal US)



Application area characteristics from certification of SR1A-B2/HxLx-CE1017\*

**Dimensions** in millimeters (inches)



**Ordering Code**

<b>SR1A-B2 / H</b>		<b>L</b>	<b>- CE1017 -</b>	<b>/</b>	<b>- B1</b>	<b>Surface treatment</b> zinc-coated (ZnNi), ISO 9227 (1000 h)
<b>Pressure Relief Valve, PED Certified, Poppet Type, Direct Acting</b>						<b>Pressure setting at flow rate [l/min]*</b> Std. pressure setting made at flow 6 litres/min (example) <b>6</b>
<b>Valve cavity</b> 7/8-14 UNF (C-10-2)					<b>Adjusted pressure [bar]*</b> (example) <b>120</b>	<b>Certification PED</b> notified body number CE1017
<b>Model</b> High performance			<b>No designation</b> <b>V</b>			<b>Seals</b> NBR FPM (Viton)
<b>Pressure range</b> adjustable pressure 25 bar (360 PSI) <b>2</b> adjustable pressure 63 bar (910 PSI) <b>6</b> adjustable pressure 100 bar (1450 PSI) <b>10</b> adjustable pressure 160 bar (2320 PSI) <b>16</b> adjustable pressure 250 bar (3630 PSI) <b>25</b> adjustable pressure 350 bar (5080 PSI) <b>35</b> adjustable pressure 420 bar (6090 PSI) <b>42</b>						<b>Adjustment option</b> allen head (hex. 5), with protective cap, sealable (lockwire holes)

\*If not preset valves are ordered, pressure and flow rate information is not shown.