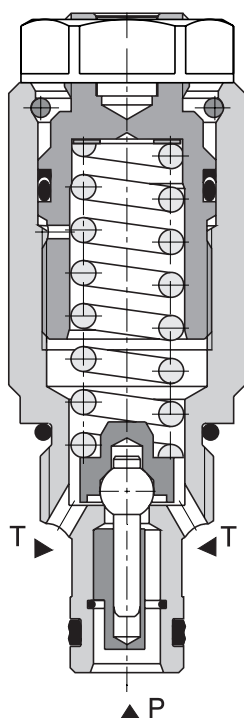


# Pressure Relief Valve, Poppet Type, Direct Acting

## SR1A-A2

3/4-16 UNF •  $Q_{max}$  30 l/min (8 GPM) •  $p_{max}$  350 bar (5100 PSI)



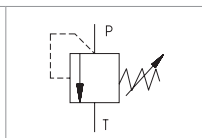
### Technical Features

- › 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 350 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. Enhanced surface protection for mobile sector available for the steel parts (ISO 9227, 520 h salt spray)

### 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

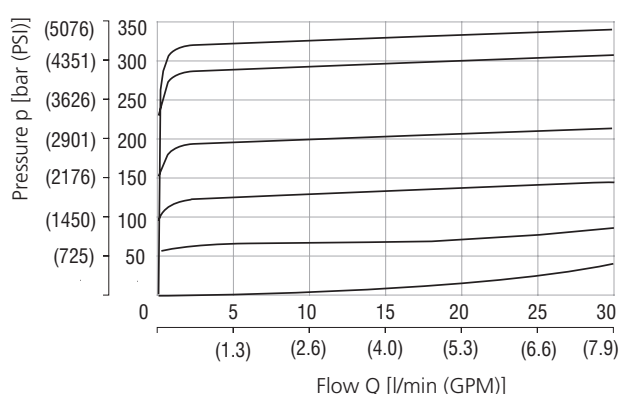


### Technical Data

| Valve size / Cartridge cavity |                  | 3/4-16 UNF-2A / A2 (C-8-2)        |
|-------------------------------|------------------|-----------------------------------|
| Max. flow                     | l/min (GPM)      | 30 (7.9)                          |
| Max. operating pressure       | bar (PSI)        | 350 (5100)                        |
| Max. pressure (port T)        | bar (PSI)        | 160 (2320)                        |
| Fluid temperature range (NBR) | °C (°F)          | -30 ... +100 (-22 ... 212)        |
| Fluid temperature range (FPM) | °C (°F)          | -20 ... +120 (-4 ... 248)         |
| Weight                        | kg (lbs)         | 0.13 (0.29)                       |
| 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 and operating conditions |
|                               |                  | SB-A2*                            |
|                               |                  | SB-*A2*                           |
|                               |                  | SMT-A2*                           |

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

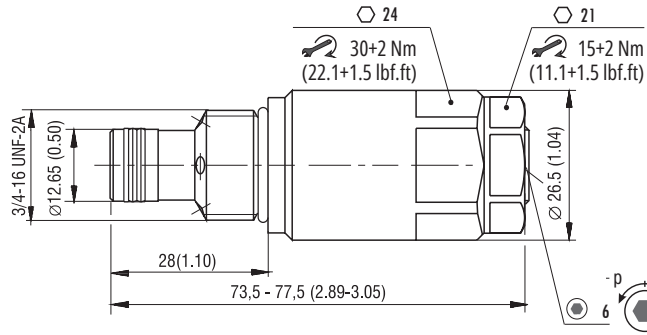
#### Relief pressure related to flow rate



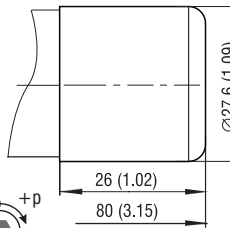
|   | Pressure range        |
|---|-----------------------|
| 6 | 35                    |
| 5 | 25                    |
| 4 | 16                    |
| 3 | 10                    |
| 2 | 6                     |
| 1 | Min. pressure setting |

**Dimensions** in millimeters (inches)

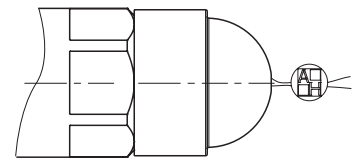
**Model S**



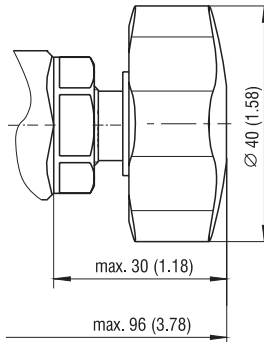
**Model T**



**Model L**



**Typ RP**



**Ordering Code**

**SR1A-A2 / L** ☐ ☐ ☐ - ☐

**Pressure relief valve, poppet type, direct acting**

**Valve cavity**  
3/4-16 UNF (C-8-2)

**Model**  
Lightline

**Pressure range**  
up to 63 bar (914 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)

**6**  
**10**  
**16**  
**25**  
**35**

**Surface treatment**

**A** zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**B** zinc-coated (ZnNi), ISO 9227 (520 h)

**Seals**

**NBR**  
**FPM (Viton)**

**No designation**  
**V**

**Adjustment option**

**S** allen key (hex. 6), without protective cap  
**T** allen key (hex. 6), with protective cap  
**L** allen key (hex. 6), with protective cap, sealable (lockwire holes)  
**RP** hand screw, plastic