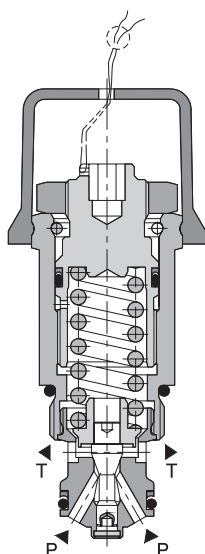


# Pressure Relief Valve, Poppet Type, Direct Acting

**VPP2-04/S**

M22x1.5 •  $Q_{max}$  40 l/min (11 GPM) •  $p_{max}$  320 bar (4600 PSI)



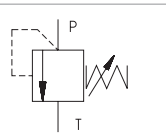
## Technical Features

- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop
- › Wide pressure range up to 320 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



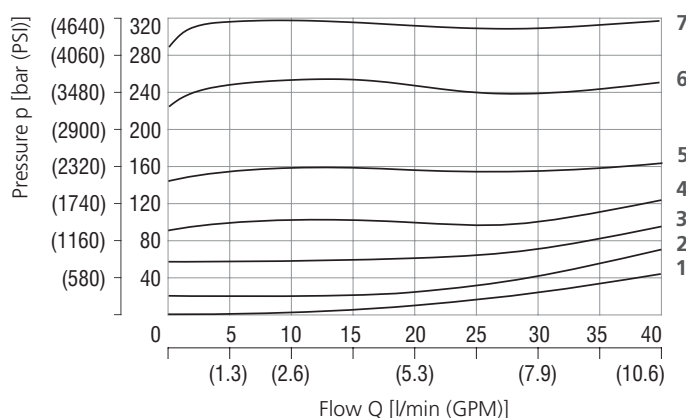
## Technical Data

Valve size / Cartridge cavity		M22x1.5 / QG2
Max. flow	l/min (GPM)	40 (10.6)
Max. operating pressure	bar (PSI)	320 (4640)
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... 212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... 248)
Weight	kg (lbs)	0.17 (0.37)

		Datasheet	Type
General information		GI_0060	Products and operating conditions
Valve bodies	In-line mounted	SB_0018	SB-QG2*
	Sandwich mounted	SB-04(06)_0028	SB-*QG2*
Cavity details		SMT_0019	SMT-QG2*
Spare parts		SP_8010	SMT-B2*

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

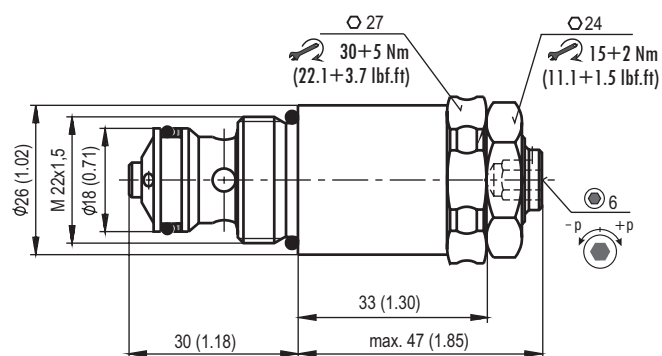
### Relief pressure related to flow rate



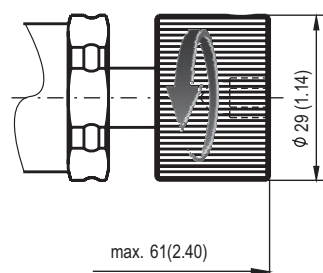
	Pressure range
7	32
6	25
5	16
4	10
3	6
2	2
1	Min. pressure setting

**Dimensions** in millimeters (inches)

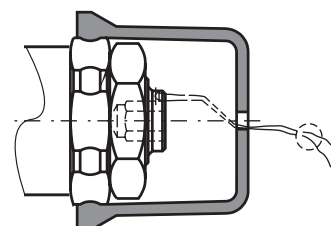
**Model S**



**Model RS**



**Model L**



**Ordering Code**

**VPP2-04 / S**

**Pressure relief valve, poppet type,  
direct acting** **M22x1.5**

**Model**  
screw-in cartridge

**Pressure range**  
up to 25 bar (360 PSI) **2**  
up to 63 bar (910 PSI) **6**  
up to 100 bar (1450 PSI) **10**  
up to 160 bar (2320 PSI) **16**  
up to 250 bar (3630 PSI) **25**  
up to 320 bar (4600 PSI) **32**

**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)**

**Adjustment option**  
**S** allen key (hex. 6), without protective cap  
**RS** hand screw, metal  
**L** allen key (hex. 6), with protective cap, sealable (lockwire holes)