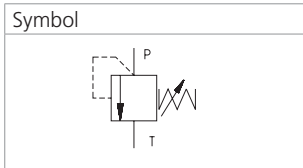
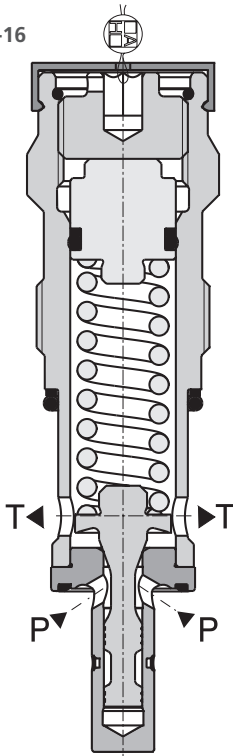


VPP-R-16


**Technical Features**

- › Pressure relief valve, direct-acting, intended for installation in a manifold
- › Wide pressure range up to 350 bar
- › Large flow range
- › Low hysteresis, accurate pressure control and low pressure drop
- › Hardened precision parts
- › Leak-free closing, suitable for fast cycling with long life
- › Adjustment option with sealable allen head and a protective cap
- › In the standard version, the valve is zinc coated for 240 h (for size 25) and 520 h (for size 16) protection acc. to ISO 9227

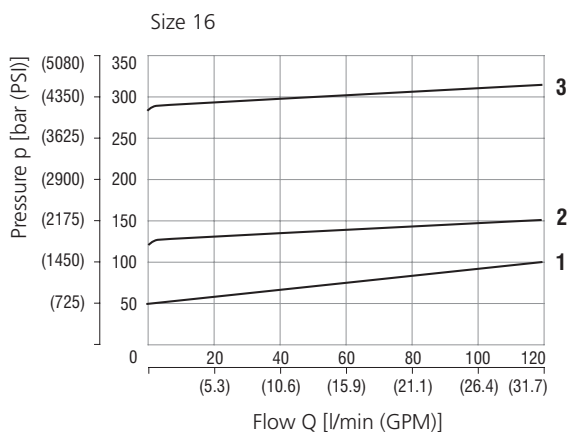
**Functional Description**

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 the tank port until the system pressure falls below the spring pre-set value and the valve closes again.

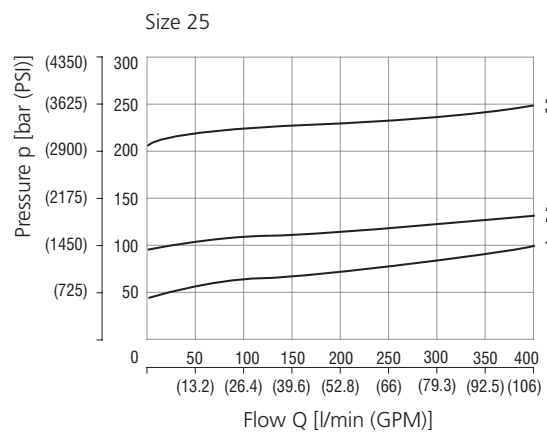
**Technical Data**

Valve size		Size 16	Size 25
Connection thread		M36x2	M42x2
Max. flow	l/min (GPM)	120 (31.7)	400 (106)
Max. inlet pressure (port P)	bar (PSI)	350 (5080)	
Max. outlet 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)	
Kinematic viscosity range	mm <sup>2</sup> /s (SUS)	10 ... 500 (49 ... 2450)	
Weight	valve	0.56 (1.23)	1.03 (2.27)
	valve with body	3.06 (6.75)	5.5 (12.1)
		Datasheet	Type
General information	GI_0060	Products and operating conditions	
Spare parts	SP_8010		

**Characteristics** measured at v = 32 mm<sup>2</sup>/s (156 SUS)

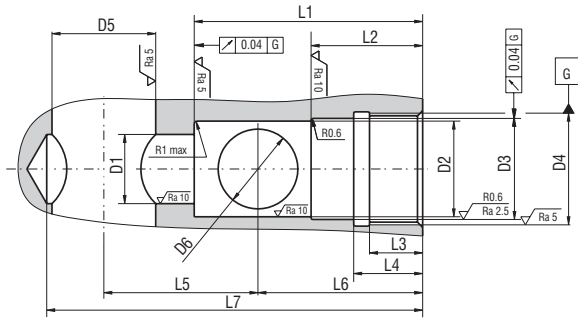
**Relief pressure related to flow rate**


	Pressure stage	Pressure range bar (PSI)
3	28	280 - 350 (4060 - 5080 PSI)
2	13	130 - 280 (1890 - 4060 PSI)
1	5	50 - 130 (730 - 1890 PSI)



	Pressure stage	Pressure range bar (PSI)
3	20	200 - 350 (2900 - 5080 PSI)
2	10	100 - 200 (1450 - 2900 PSI)
1	5	50 - 100 (730 - 1450 PSI)

**Cavity dimensions in millimeters (inches)**

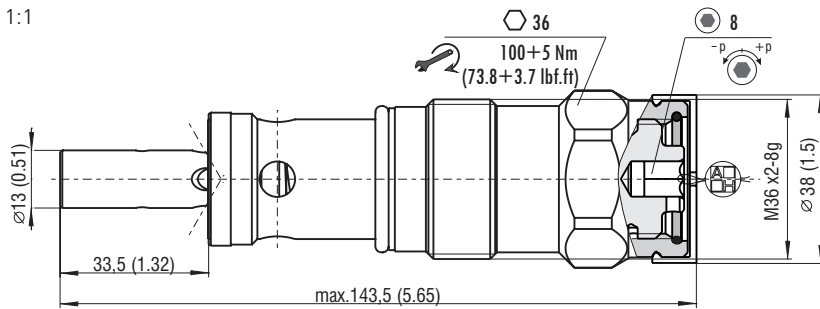


Size	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	Ø D6	Dimensions in mm (in)
16	20 H14 (0.79)	30 H11 (1.18)	32.6 H10 (1.28)	M36x2-7H	30 (1.18)	25 (0.98)	
25	26 H14 (1.02)	36 H11 (1.42)	38 H10 (1.50)	M42x2-7H	34 (1.34)	31 (1.22)	
Size	L1	L2	L3	L4	L5	L6	L7
16	66 (2.6 / 2.61)	31 (1.22 / 1.22)	18 (0.71 / 0.73)	21 (0.83 / 0.85)	46 (1.81)	44 (1.73 / 1.75)	105 (4.13)
25	86 (3.4)	44 (1.73)	20 (0.79)	26 (1.02)	58 (2.29)	62 (2.44)	135 (5.32)

**Dimensions in millimeters (inches)**

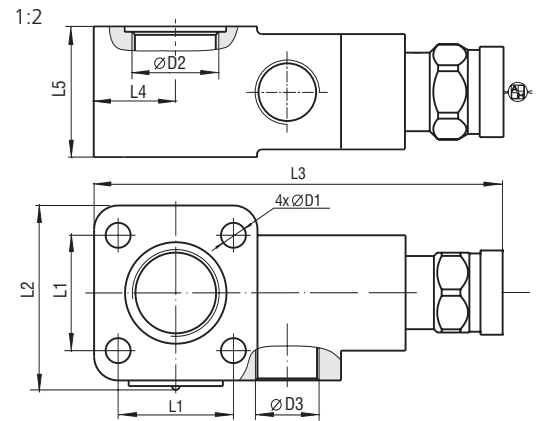
**VPP-R-16**

1:1



**VPPB-R**

1:2



Size	Ø D1	Ø D2	Ø D3	L1	L2	L3	L4	L5
16	10.5 (0.41)	M33x2	M27x2	48 (1.89)	66 (2.60)	168 (6.61)	33 (1.30)	57 (2.24)
25	13 (0.51)	M42x2	M33x2	60 (2.36)	85 (3.35)	218 (8.58)	42.5 (1.67)	68 (2.68)

**Ordering Code**

VPP    -R-    -    -    -    -   

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

**Design of valve**  
screw-in cartridge valve with a body

**no designation**  
B

**Valve size**  
size 16  
size 25

**16**  
**25**

**Range of adjustable pressure - pressure stage size 16**  
50 - 130 bar (730 - 1890 PSI)  
130 - 280 bar (1890 - 4060 PSI)  
280 - 350 bar (4060 - 5080 PSI)

**5**  
**13**  
**28**

**Range of adjustable pressure - pressure stage size 25**  
50 - 100 bar (730 - 1450 PSI)  
100 - 200 bar (1450 - 2900 PSI)  
200 - 350 bar (2900 - 5080 PSI)

**5**  
**10**  
**20**

**Surface treatment**  
A zinc-coated (ZnCr-3), ISO 9227 (240 h) (only for size 25)  
B zinc-coated (ZnNi), ISO 9227 (520 h) (only for size 16)

**No designation**  
V

**Seals**  
NBR  
FPM (Viton)

**Adjustment option**  
S allen key (hex. 8), without protective cap  
T allen key (hex. 8), with protective cap  
L allen key (hex. 8), with protective cap, sealable (lockwire holes)