PRESSURE RELIEF VALVE VVP

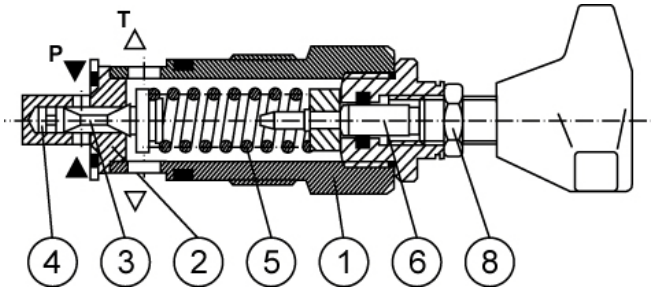
- NG 6, 10
- Up to 400 bar *[3,045 PSI]*
- Up to 60 L/min *[31.7 GPM]*

- For fitting into a block.
- For independent mounting.
- Two pressure setting elements (set screw, rotary knob).

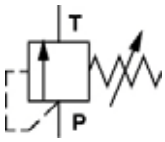
VVP-6, VVP-10

Operation

These valves consist of a housing (1), a hardened seat (2), a poppet (3), with a damping spool (4), a spring (5), and a pressure setting element (6).
The P-line of this pressure relief valve is connected with the hydraulic system. The pressure of the hydraulic fluid acts on the front side of the pilot poppet (3), and the force of the spring (5) set by the pressure setting element (6) is applied to the poppet from the opposite side. When the system pressure exceeds the valve of the spring set by the pressure setting element (6) the pilot poppet moves off the seat (2), and frees the flow of the hydraulic fluid in the direction from P towards T.
The damping spol (4) prevents vibrations of the pilot poppet when opening or closing the flow way of the hydraulic flow. Loosening of the pressure setting element is prevented by a counternut (8).



Hydraulic symbol



Direct operated pressure relief valves type VVP are used to maintain and limit the pressure in a hydraulic system.

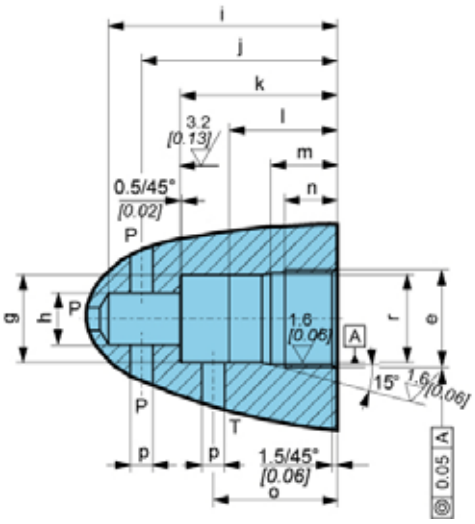
Features

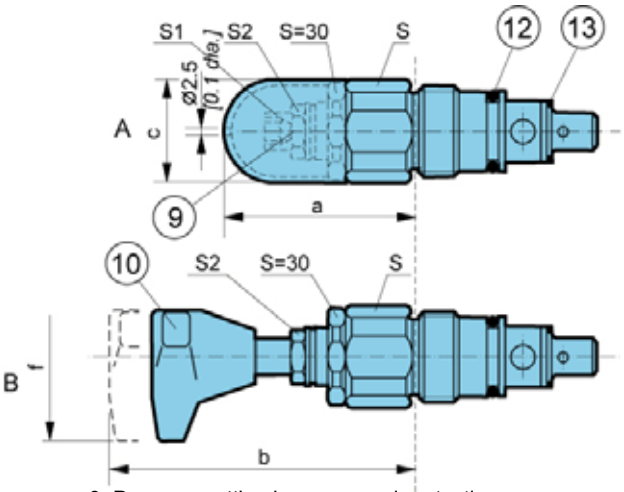
Size			6	10
Flow rate		L/min *[GPM]*	50 *[13.2]*	120 *[31.7]*
Pressure setting range		bar *[PSI]*	400 *[5 801]*	
Oil temperature range		°C *[°F]*	-30 to +70 *[-22 to + 158]*	
Viscosity range		mm^2/s *[SUS]*	2,8 to 380 *[12.9 to 1760]*	
Filtration		NAS 1638	8	
Mass	Execution A	kg *[lbs]*	0,4 *[0.88]*	0,5 *[1.10]*
	Execution BExecution B		0,5 *[1.10]*	0,6 *[1.32]*

Dimensions

Tightening torque for fixing:
Nominal size 6 Md=80 Nm *[708 in.lbf]*.
Nominal size 10 Md=140 Nm *[1 239 in.lbf]*.

Customer specified setting can be secured by means of a stamp and a wire.





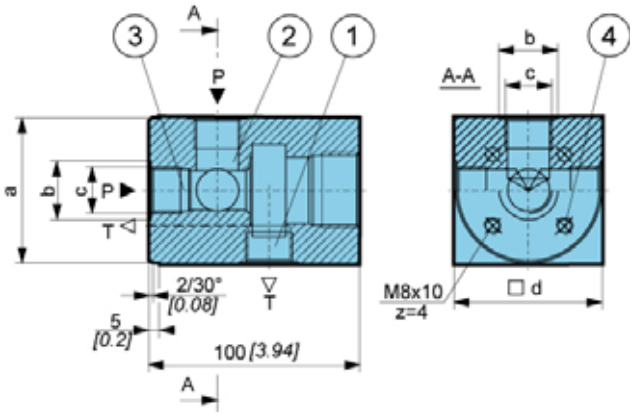
9. Pressure setting by screw and protective cap.
10. Pressure setting by rotary knob.
12. O-ring, nominal size 6, 19,2 x 3.
    O-ring, nominal size 10, 26 x 3.
13. Usit ring, nominal size 6, 17,4 x 24 x 1,5.
    Usit ring, nominal size 10, 24,7 x 31 x 2.

Type	a	b	Øc	e	Øf	Øg	Øh	i	j	k	l	m	n	o	Øp	Ør	s	s1	s2
VVP-6	72	94	34	M28x		24,9	15	65	56,5	45	30	19	15	35	6	25H9	32		
	[2.83]	*[3.70]*	*[1.34]*	1,5	60	*[0.98]*	*[0.59]*	*[2.56]*	*[2.22]*	*[1.77]*	*[1.18]*	*[0.75]*	*[0.59]*	*[1.38]*	*[0.24]*		*[1.26]*	6	19
VVP-10	68	90	38	M35x	*[2.36]*	31,9	18,5	80	67,5	52	35	23	18	41	10	32H9	36	*[0.24]*	*[0.75]*
	[2.67]	*[3.54]*	*[1.50]*	1,5		*[1.25]*	*[0.73]*	*[3.15]*	*[2.66]*	*[2.05]*	*[1.38]*	*[0.90]*	*[0.71]*	*[1.61]*	*[0.39]*		*[1.42]*		

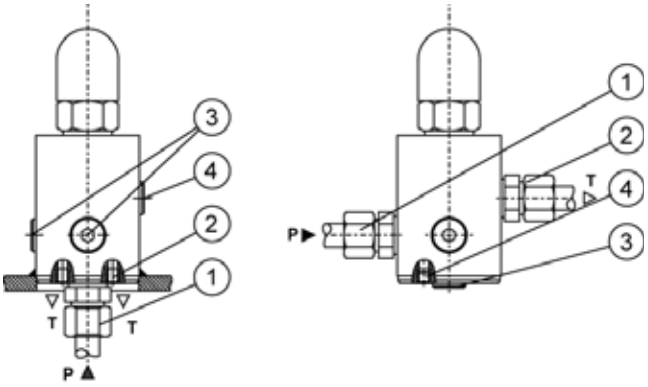
Connecting dimensions / connection P-VVP-6, P-VVP-10

When fitting, the excess ports for oil supply and discharge must be closed by means of suitable screw.

1. Oil discharge when fitted independently.
2. Oil supply when fitted independently.
3. Oil supply when fitted on a tank cover.
4. Oil discharge when fitted on a tank cover.



Size	Øa	Øb	c	□d	Masse kg *[lb]*
6	59 d9	24	M18x1,5	60	2,5
	[2.32]	*[0.94]*		*[2.36]*	*[5.51]*
10	69 d9	28	M22x1,5	70	2,9
	[2.72]	*[1.10]*		*[2.76]*	*[6.39]*

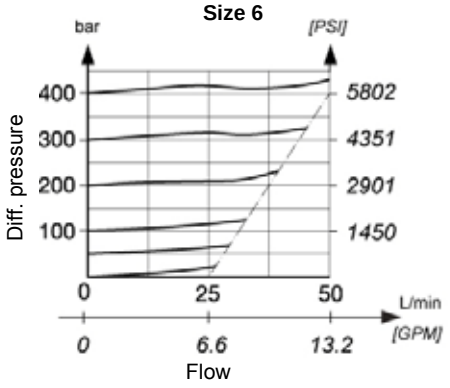


1. Port "P".
2. Return line "T".
3. Locking screws - P line.
4. Locking screws - T line.

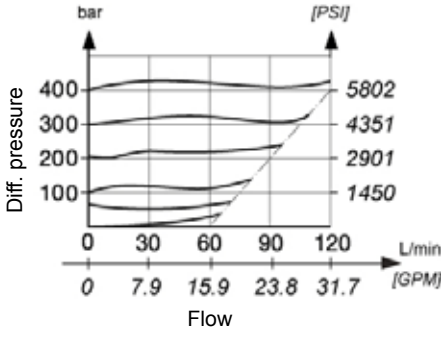
ΔP-Q Performance curves

Measured at 50°C *[122°F]* and viscosity of 32 mm^2/s *[148 SUS]*.

Size 6



Size 10



Model code

V V P - □ - □ - □ - □ - *

Size

Size 6	**6**
Size 10	**10**

Pressure setting range *[PSI]*

To 50 *[725]*	**50**
To 100 *[1,450]*	**100**
To 200 *[2,900]*	**200**
To 315 *[4,568]*	**315**
To 400 *[5,801]*	**400**

Pressure setting element

Set screw with protective cap	**A**
Rotary knob	**B**

Seal type

NBR seals for mineral oil HL,HLP to DIN 51524	**No designation**
FPM seals for HETG, HEES, HEPG to VDMA 24568 and ISO 15380	**E**

Special requirements to be briefly specified