PRESSURE RELIEF VALVE RT

- NG 4, 6, 10
- Up to 350 bar *[3,045 PSI]*
- Up to 60 L/min *[26.4 GPM]*

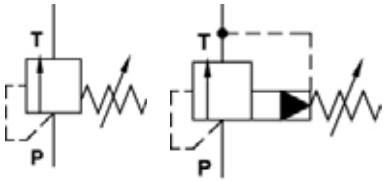
- For independent fitting into a block.
- Two pressure setting ranges.

RT-4, RT-6, RT-10

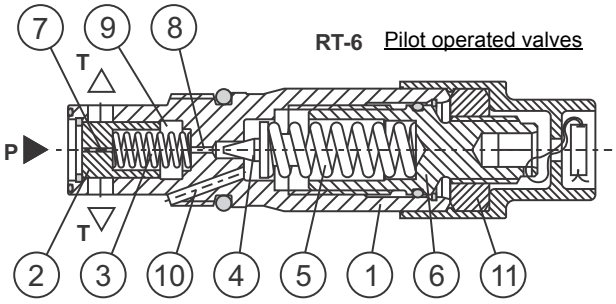
Operation

Pilot operated pressure relief valves type RT are used for maintaining and limiting the pressure in a hydraulic system.
These valves consist of a housing of cartridge design (1), main spool insert (2) with a spring (3), pilot poppet (4), spring (5) and pressure setting element (6).
The P-line of this pressure relief valve is connected with the hydraulic system. The hydraulic medium pressure acts on the front side of the main spool insert. The bores (7,8) permit the introduction of pilot oil into the pressure chamber (9) and the application of pressure to the opposite side of the main spool insert and the front side of the pilot poppet. The pressure balance in the system and pressure chamber holds this pressure relief valve in closed position till the pressure in system exceeds this value the pilot poppet moves off the valve seat, freeing the pilot oil discharge through the bore (10). A pressure drop in the pressure chamber rises the main spool insert, thus clearing the hydraulic medium flow way in the direction from P towards port T.
Loosening of the pressure setting element (6) is prevented by a counternut (11).

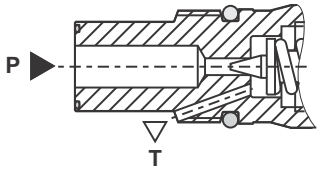
Hydraulic symbol



RT-4 RT-6, RT-10



RT-6 Pilot operated valves

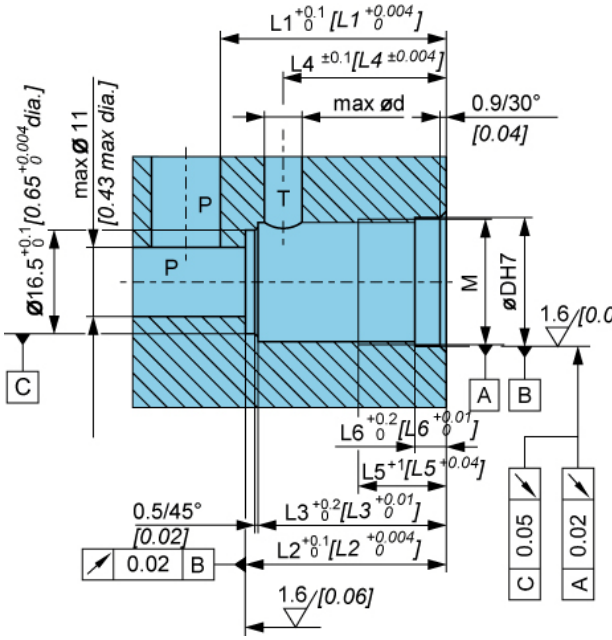


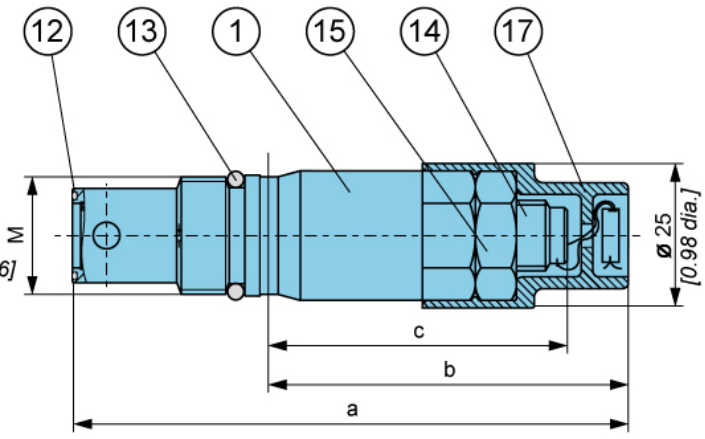
RT-4 Direct operated valves

Features

Size		**4**	**6**	**10**
Flow rate	L/min *[GPM]*	4 *[1.1]*	60 *[15.8]*	100 *[26.4]*
Pressure setting range	bar *[PSI]*		315 *[4 568]*	
Oil temperature range	°C *[°F]*		-20 to +70 *[-4 to + 158]*	
Viscosity range	mm^2/s *[SUS]*		15 to 380 *[69.5 to + 1,760]*	
Filtration	NAS 1638		8	
Mass	kg *[lbs]*	0,15 *[0.33]*		0,18 *[0.40]*

Dimensions





1. Housing.
12. O-ring 13x1.
13. O-ring, size 4,6 16.3x2,4.
size 10 20x2,5.
14. Pressure setting element.
15. Counternut.
17. PE cover.

Tightening torque for fixing Md=30 Nm.

The value set on the pressure setting element is protected by means of a lead stamp Ø11 and a wire Ø1,1 mm.

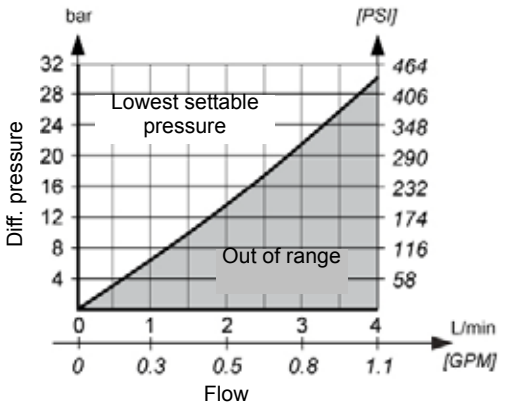
Note: Ports P and T can be located optionally at any place on the circumference.

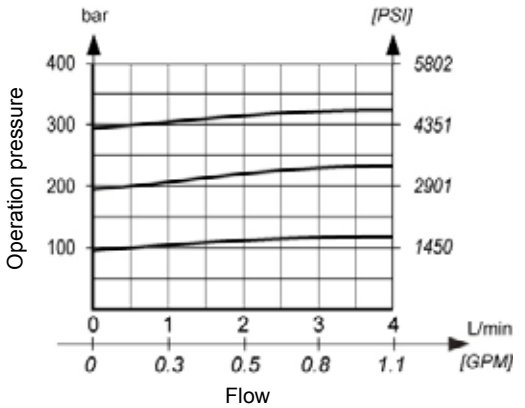
Size	a	b	c	d	D	L1	L2	L3	L4	L5	L6	M
4, 6	96 *[3.78]*	64 *[2.52]*	53 *[2.09]*	6 *[0.24]*	20,5 *[0.81]*	36 *[1.42]*	32 *[1.26]*	30 *[1.18]*	26 *[1.02]*	14 *[0.55]*	4,8 *[0.19]*	M20x1
10	97 *[3.82]*	61 *[2.40]*	50 *[1.97]*	10,5 *[0.41]*	24,5 *[0.96]*	40 *[1.57]*	36 *[1.42]*	34 *[1.34]*	29,7 *[1.17]*	15 *[0.59]*	5,2 *[0.20]*	M24x1

ΔP-Q Performance curves

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

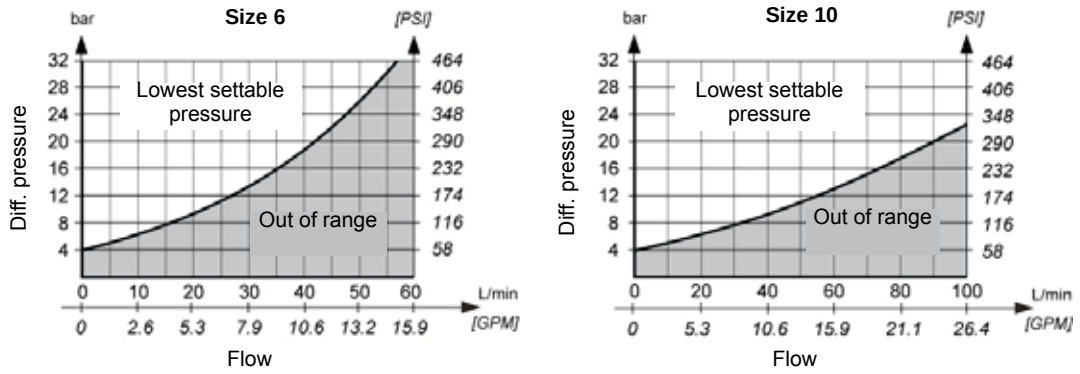
Size 4

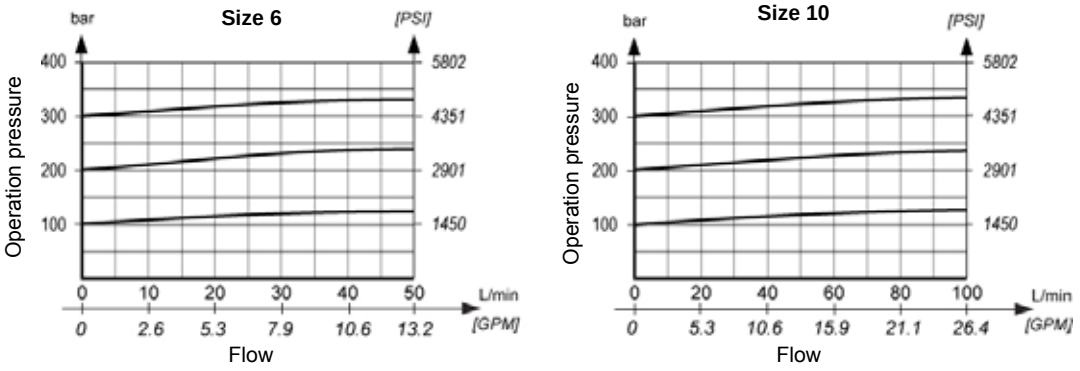




ΔP-Q Performance curves

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





Model code

R T - □ - □ - □ - *

Size

Size 4	**4**
Size 6	**6**
Size 10	**10**

Pressure setting range *[PSI]*

To 100 *[1 450]*	**100**
To 315 *[4 568]*	**315**

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