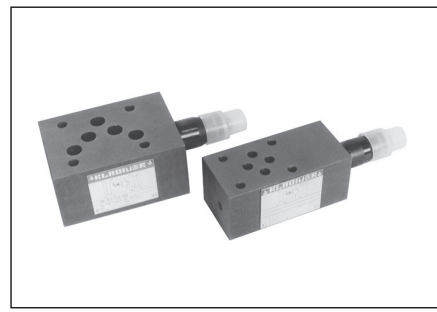


PRESSURE RELIEF VALVE

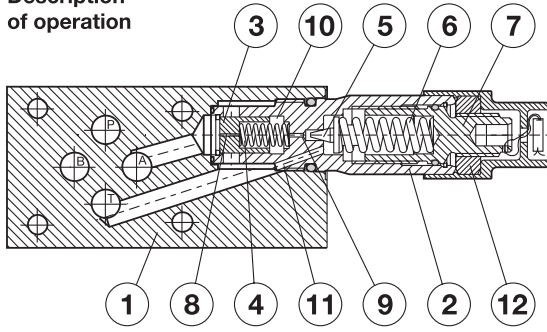
type VP-RT

- NS 6,10
- to 350 bar
- to 100 l/min
- Pilot operated
- Connecting dimensions to ISO 4401
- For vertical stacking - sandwich plate design
- Two pressure setting ranges



VP-RT-10, VP-RT-6

Description of operation



Pilot operated pressure relief valves type VP-RT of sandwich plate design, for vertical stacking, are used for maintaining and limiting the maximum pressure in a hydraulic system.

These valves consist of a stack plate (1), pressure relief valve housing (2), main spool insert (3) with a spring (4), pilot poppet (5), spring (6) and pressure setting element (7). 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 (3). The bores (8,9) permit the introduction of pilot oil into the pressure chamber (10) and the application of pressure to the opposite side of the main spool insert.

This pressure relief valve remains in closed position till the system pressure exceeds the valve set at the spring (6). A pressure rise in the system above the value set by the pressure setting element (7), provokes the movement of the pilot poppet (5) of the seat, freeing the pilot oil discharge through the bores (9) and (11). A pressure drop in the pressure chamber (10) rises the main spool insert (3), thus clearing the hydraulic medium flow in the direction from port P towards port T.

Loosening of the pressure setting element is prevented by a counter nut (12).

Ordering code

VP-RT- - - - -*

Nominal size

Relief function from - to

Pressure setting range

Seal type

Special requirements to be briefly specified

Relief function from - to:

- A → T = EA
- B → T = EB
- P → T = EP
- A → T and B → T (for size 6 only) = D
- A → B and B → A (for size 6 only) = DAB

Pressure setting range

- to 100 bar = 100
- to 315 bar = 315

Seal type

- NBR seals for mineral oil HL, HLP, to DIN 51524 = no desig.
- FPM seals for HETG, HEES, HEPG to VDMA 24568 = E
- and ISO 15380

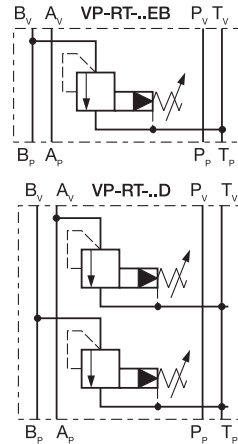
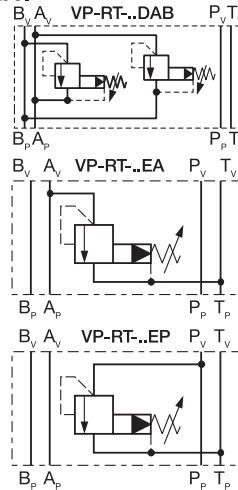
Nominal size

- Size 6 = 6
- Size 10 = 10

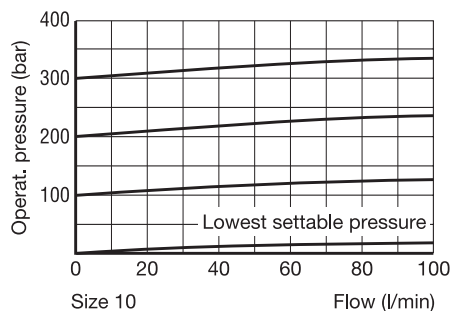
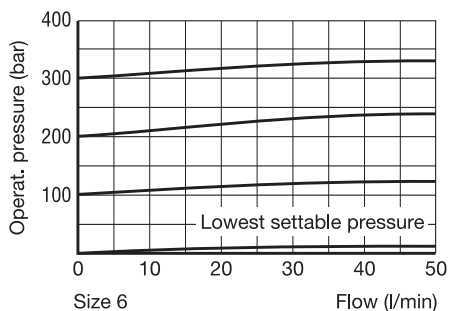
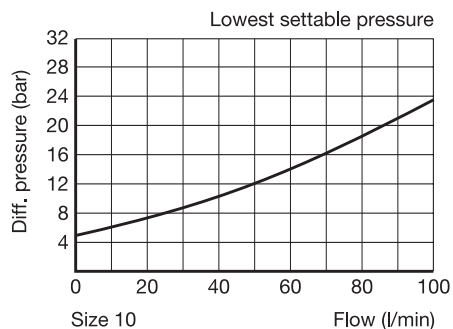
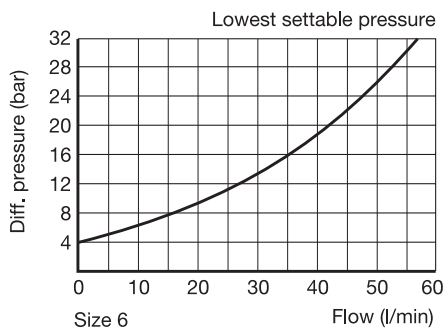
Technical data

Size		6	10
Flow rate	l/min	50	100
Pressure setting range	bar	to 315	to 315
Oil temperature range	°C	-20 to +70	-20 bis +70
Viscosity range	mm ² /s	15 to 380	15 to 380
Mass	kg	1,2-1,7(D)	2,6
Filtration	NAS 1638	8	8

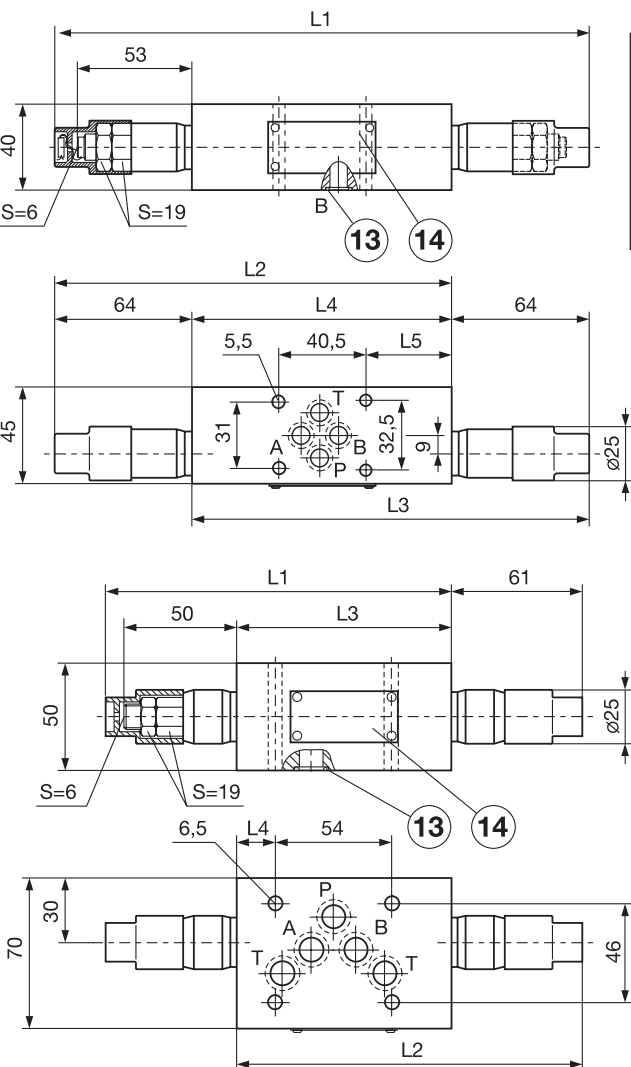
Symbol



$\Delta p - Q$ Performance curves (measured at $t = 50\text{ }^{\circ}\text{C}$ and $\nu = 32\text{ mm}^2/\text{s}$)



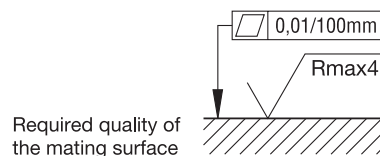
Dimensions (mm)



	VP-RT-6-EA	VP-RT-6-EB	VP-RT-6-EP	VP-RT-6-D	VP-RT-6-DAB
L1	-	-	-	249	245
L2	154	-	-	-	-
L3	-	154	154	-	-
L4	90	90	90	121	116,5
L5	9	40,5	40,5	40	38

13. O-ring 9,25 x 1,78
14. Nameplate

The value set on the pressure setting element is protected by means of a lead stamp $\varnothing 11$ and a wire $\varnothing 1,1\text{ mm}$.



	VP-RT-10-EP	VP-RT-10-EA	VP-RT-10-EB
L1	156	161	-
L2	-	-	161
L3	95,5	100,5	100,5
L4	28,5	28,5	18

13. O-ring 12x2
14. Nameplate

The value set on the pressure setting element is protected by means of a lead stamp $\varnothing 11$ and a wire $\varnothing 1,1\text{ mm}$.