



THROTTLE WITH CHECK VALVE VP-NDV

- NG 6, 10
- Up to 350 bar [5 076 PSI]
- Up to 100 L/min [26.4 GPM]
- Connecting dimensions to ISO 4401.
- For flow control in both service lines.
- For throttling in supply - and return lines.
- For vertical stacking - sandwich plate design.
- Height and width of the valves to ISO 7790 norms.



VP-NDV-10-..., VP-NDV-6-..

Throttle with Check valves

Operation

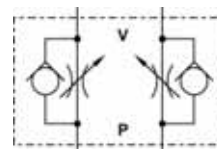
Throttle with check valves type VP-NDV are used for throttling the pilot and main flow of the hydraulic fluid in the line A and B.

These valves consist of two throttling spools with setting screws and two check valves which are built in a housing.

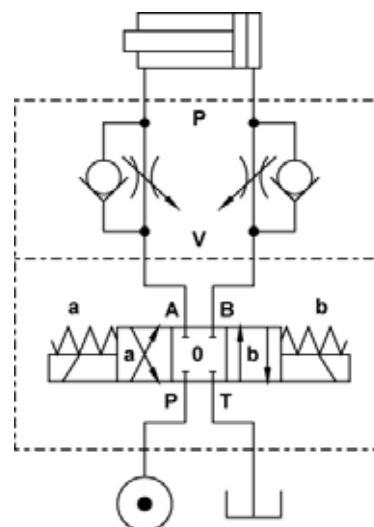
In direction V to P (see the hydraulic symbol) flows the hydraulic fluid with low pressure loss through the check valve.

In direction P to V is the hydraulic fluid flow throttled depending on adjustment of the throttling spool.

Hydraulic symbol



Mounting example



Flow control valves pressure compensated

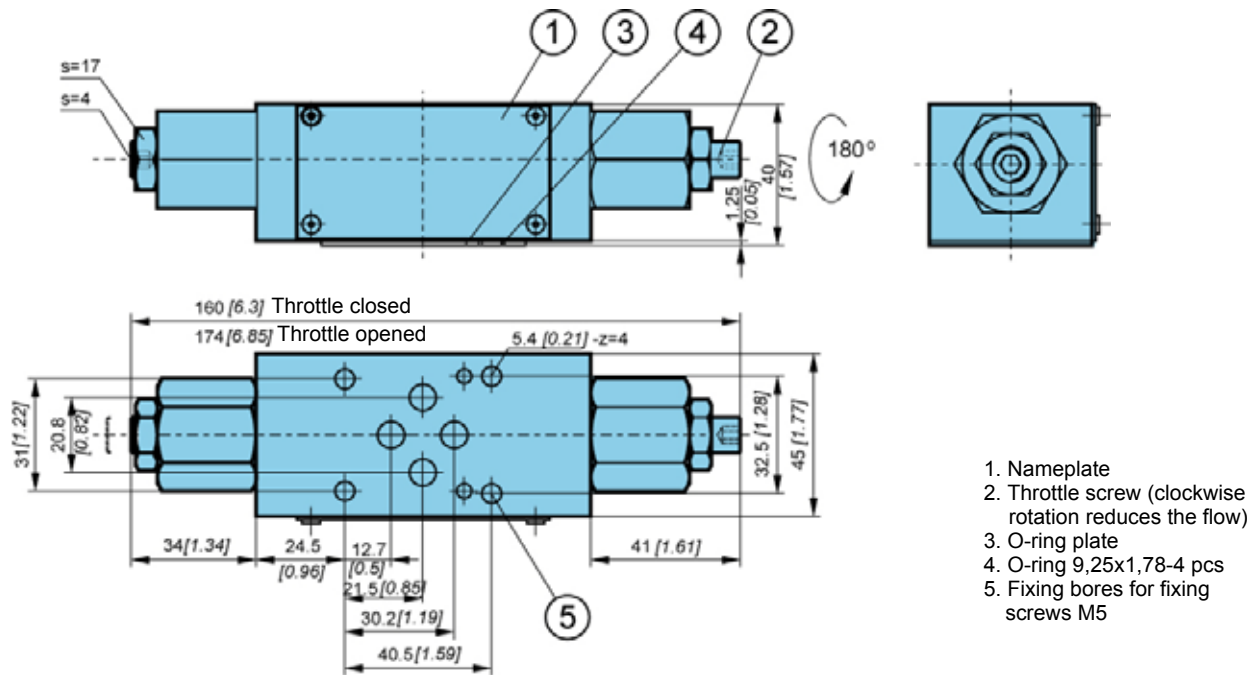
Features

Size		6	10
Flow rate	L/min [GPM]	60 [15.8]	100 [26.4]
Operating pressure	bar [PSI]	350 [5 076]	
Cracking pressure	bar [PSI]	0,4 [5.8]	
Oil temperature range	°C [°F]	-20 to +70 [-4 to +158]	
Viscosity range	mm ² /s [SUS]	15 to 380 [69.5 to 1760]	
Filtration	NAS 1638	8	
Mass	kg [lb]	1,45 [3.20]	3,3 [7.28]

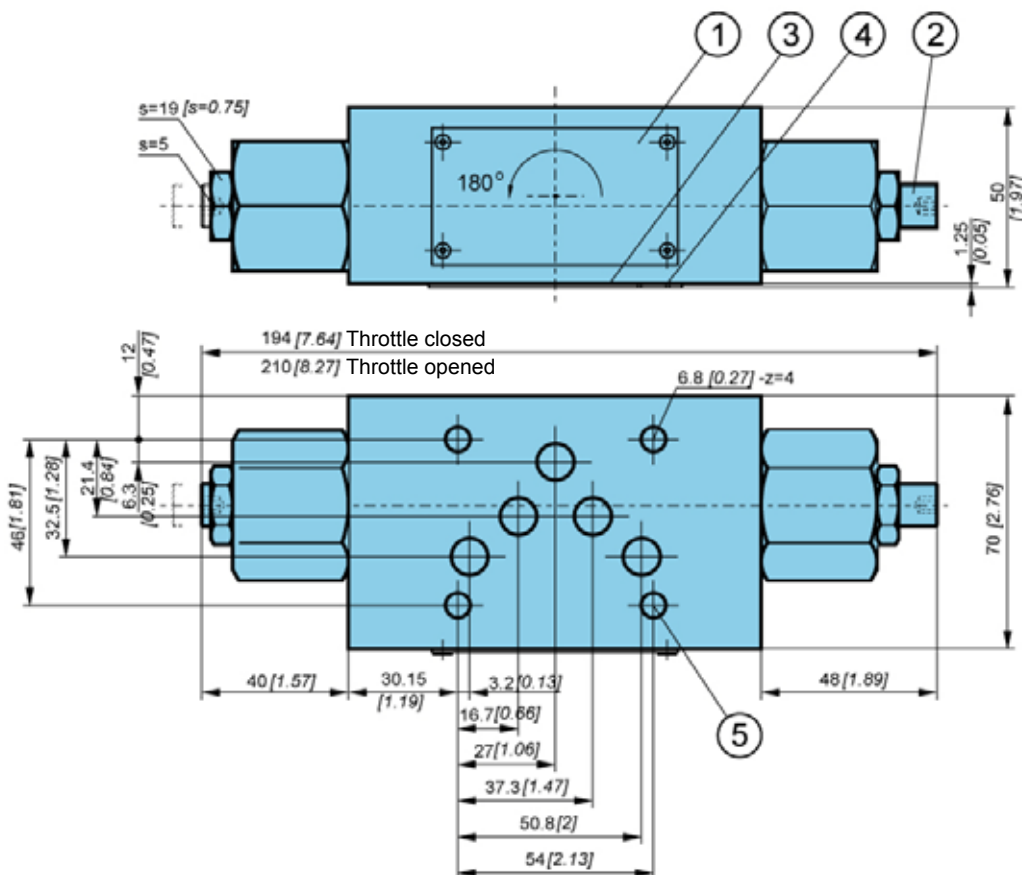
Flow dividers



Dimensions



- 1. Nameplate
- 2. Throttle screw (clockwise rotation reduces the flow)
- 3. O-ring plate
- 4. O-ring 9,25x1,78-4 pcs
- 5. Fixing bores for fixing screws M5

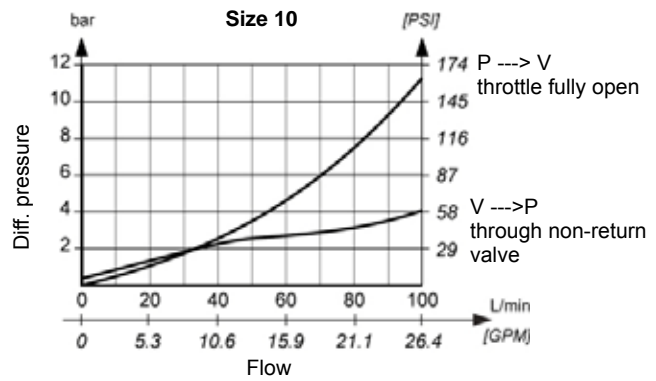
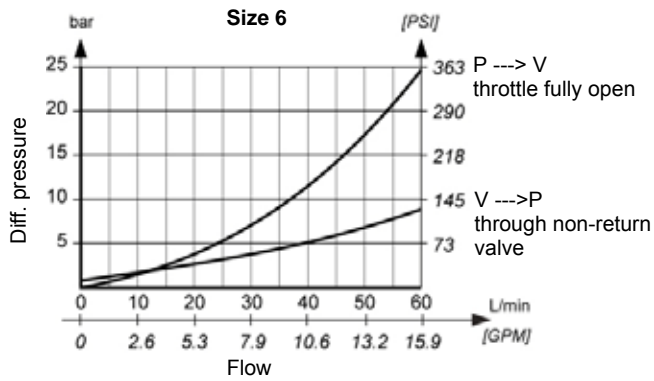


Assembly instructions

Throttle/check valves type VP-NDV are designed for vertical stacking. With these valves there can be throttling of the hydraulic fluid flow in return line or supply line achieved. Direction of throttling can be selected by turning the installation position of the valve i.e. valves size 6 turning 180° around the longitudinal axis; valves size 10 turning 180° around the lateral axis (see drawing above). The O-ring plate is always mounted on the subplate side.



ΔP-Q Performance curves



Throttle with Check valves

Model code

VP - **NDV** - - - *

Size

Size 6	6
Size 10	10

Seals 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

Flow control valves pressure compensated

Flow dividers