

# THROTTLE/CHECK VALVE type VP-NDV

- NS-6, 10
- to 315 bar
- to 100 l/min
- 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-...

## Description of operating

Throttle/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.

## Ordering code

VP-NDV- - - \*

Size

Seal type

Special requirements to be briefly specified

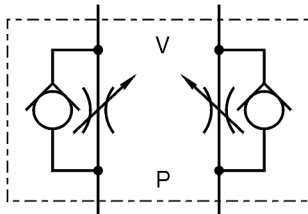
### Size

Size 6 = 6  
Size 10 = 10

### Seal type

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

## Symbol

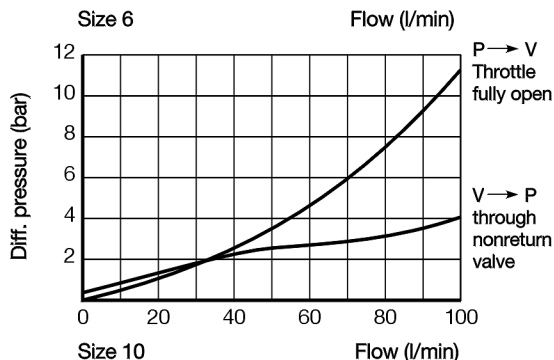
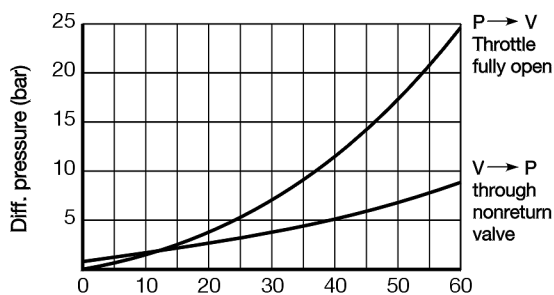


## Technical data

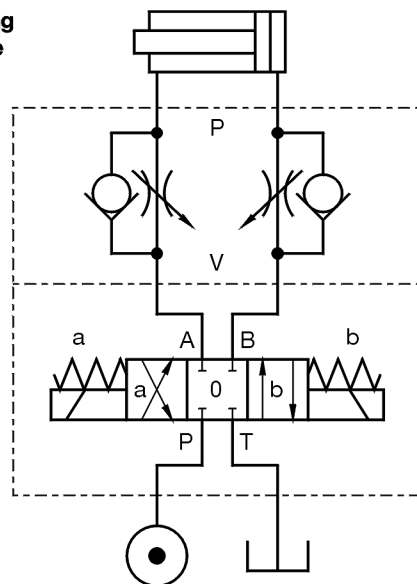
Size		6	10
Flow rate	l/min	60	100
Operating pressure	bar	315	315
Cracking pressure	bar	0,4	0,4
Oil temperature range	°C	-20 to +70	-20 to +70
Viscosity range	mm <sup>2</sup> /s	15 to 380	15 to 380
Filtration	NAS 1638	9	9
Mass	kg	1,45	3,3

## Performance curves

$\Delta p - Q$  Performance curves of the flow in direction V to P (through the nonreturn valve with throttle closed) and in direction P to V (throttle in fully open position). Measured at  $t = 50\text{ °C}$  and  $\nu = 32\text{ mm}^2/\text{s}$



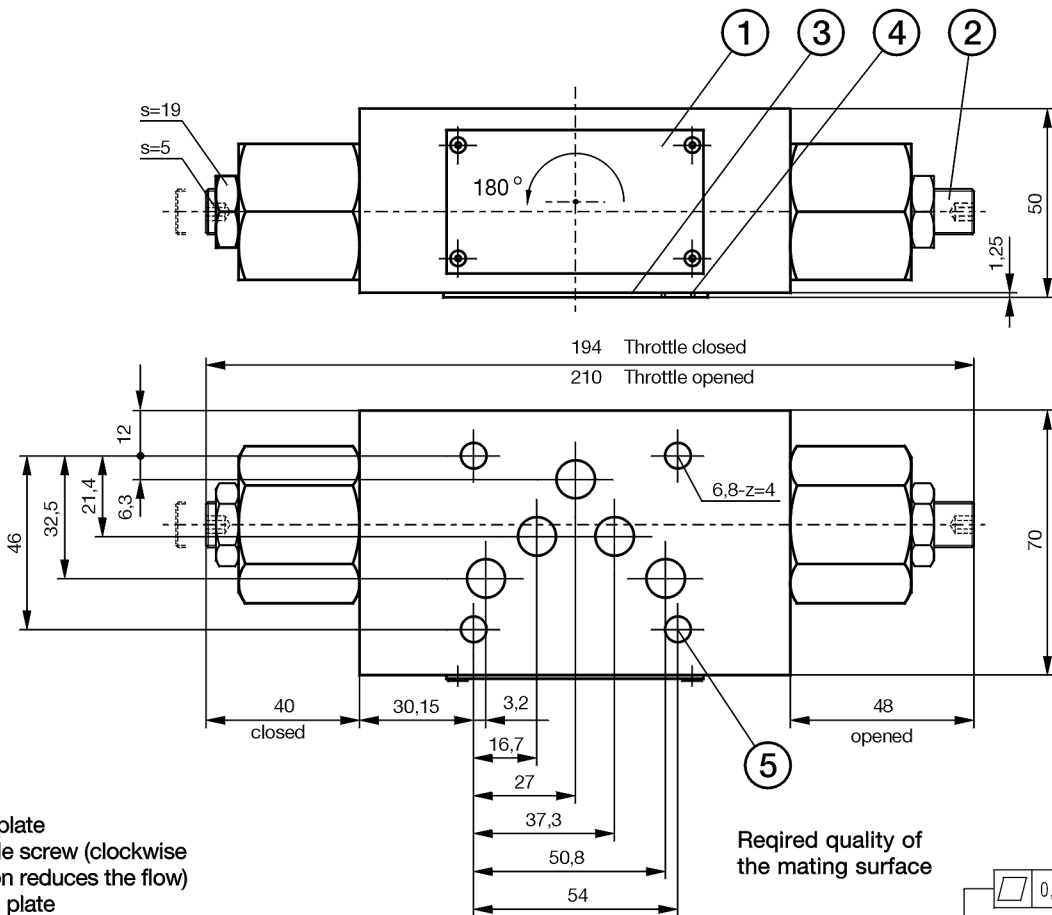
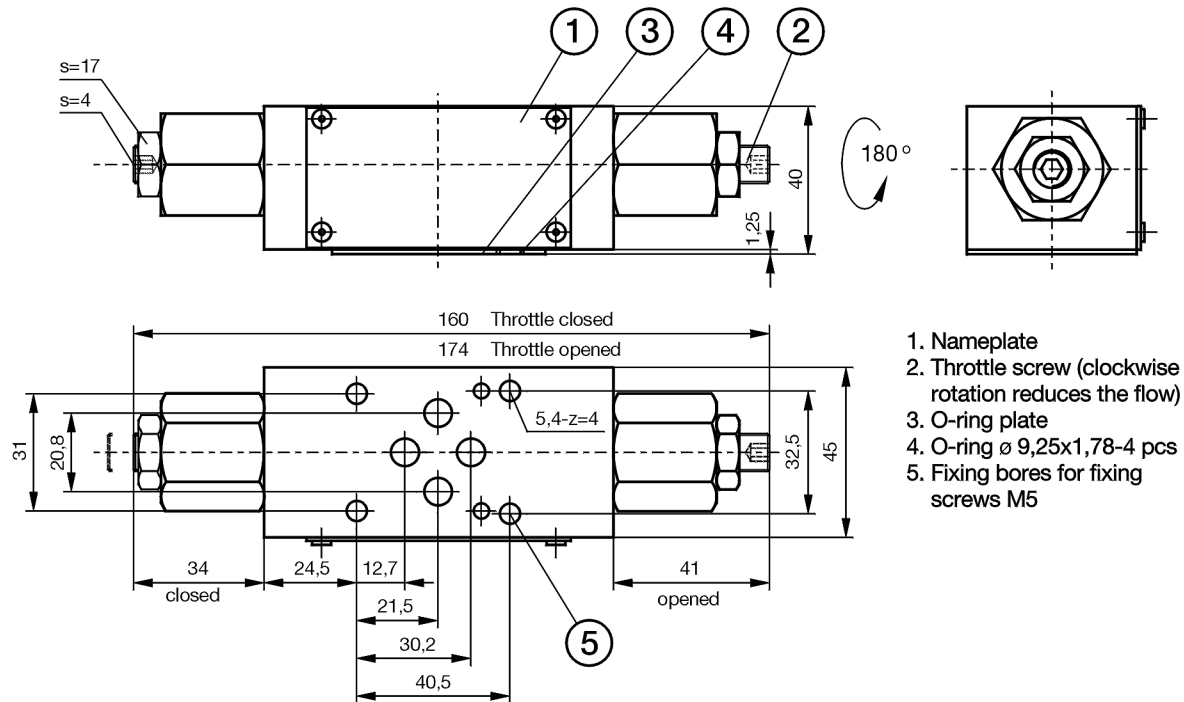
## Mounting example



## 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 below). The O-ring plate is always mounted on the subplate side.

### Dimensions (mm)



Required quality of the mating surface

