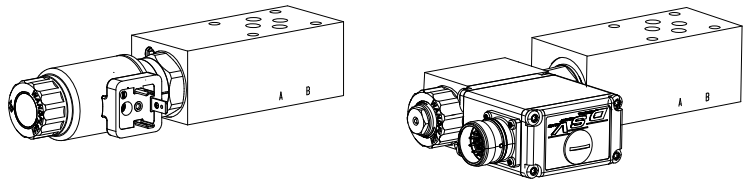


Proportional throttle valve
Flange and sandwich construction

- Direct operated, not pressure compensated
- $p_{max} = 350 \text{ bar}$

NG6
 ISO 4401-03

DESCRIPTION

Directly operated proportional throttle valve in sandwich construction. Screw-in cartridge M22x1,5 in accordance with ISO 7789. In sandwich types for A and B line, a by-pass check valve for reversed free flow is incorporated. Three flow ranges are available. The volume flow is adjusted by a proportional solenoid (VDE standard 0580). The flange body is painted, the sandwich plates are phosphatised.

FUNCTION

The force controlled proportional solenoid running in the fluid acts directly on the control spool which opens or closes the triangular shaped throttling notches in the cartridge body. The throttle opening, and therefore the flow volume, changes proportionally to the current absorption of the proportional solenoid. When the solenoid is without current, the control spool is held in the closed position by a spring. To control the valve proportional amplifiers are available from Wandfluh (see register 1.13).

APPLICATION

Proportional throttle valves are suitable for precise feed control systems. An extremely sensitive opening and closing response allows a smooth control of movements in stationary or mobile installations, e.g. machine tools, public vehicles.

TYPE CODE

| | | | | | | | | | | | | | |
|---|------------------------------|------|----------------------------|------------|-----------------------------|--------------------------|-----|---|--------------------------|---|--------------------------|---|--------------------------|
| Throttle valve | | | D | N | P | <input type="checkbox"/> | A06 | - | <input type="checkbox"/> | - | <input type="checkbox"/> | # | <input type="checkbox"/> |
| Normally closed | | | | | | | | | | | | | |
| Proportional | | | | | | | | | | | | | |
| Flange construction | | | F | | | | | | | | | | |
| Sandwich construction | | | S | | | | | | | | | | |
| International standard interface ISO, NG6 | | | | | | | | | | | | | |
| Type list / Function | | | | | | | | | | | | | |
| Flange construction | Sandwich construction | | | | | | | | | | | | |
| A → B | <input type="checkbox"/> A/B | in P | <input type="checkbox"/> P | in A | <input type="checkbox"/> A | | | | | | | | |
| | | in T | <input type="checkbox"/> T | in B | <input type="checkbox"/> B | | | | | | | | |
| | | | | in A and B | <input type="checkbox"/> AB | | | | | | | | |
| Nominal volume flow level, nominal voltage, etc. of the built-in screw-in cartridge | | | | | | | | | | | | | |
| Examples: DNPFA06 - A/B - <input type="checkbox"/> 10 - G24/WD - HB0 | | | | | | | | | | | | | |
| DNPSA06 - P - <input type="checkbox"/> 25 - G12/ME-A1D1 | | | | | | | | | | | | | |
| Design-Index (Subject to change) | | | | | | | | | | | | | |

GENERAL SPECIFICATIONS

| | |
|--------------|--|
| Description | Proportional throttle valve |
| Nominal size | NG6 acc. to ISO 4401-03 |
| Construction | Flange and sandwich |
| Operations | Proportional solenoid |
| Mounting | 4 mounting holes for. cyl. screws M5 or double ended screws M5 |
| Connection | Threaded connection plates Multi-flange subplates Longitudinal stacking system |
| Weight | Depending on the type m = 1,05...1,65 kg |

SCREW-IN CARTRIDGES INSTALLED

The following screw-in cartridges are used in either the flange body or the sandwich body:

| Type | Designation | Data sheet no. | Q_{max}^* |
|---------------|---|----------------|-------------|
| DNPPM22 | normally closed | 2.6-531 | 32 l/min |
| DNPPM22-../ME | normally closed, with integrated electronics | 2.6-541 | 32 l/min |

* Can deviate from the values on the data sheets of the screw-in cartridges..


REMARK!

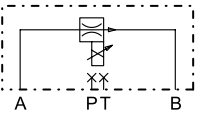
Detailed performance data and additional hydraulic and electric specifications may be drawn from the data sheets of the corresponding installed screw-in cartridge.


CAUTION!

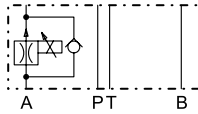
The performance data, especially the „**pressure-flow-characteristic**„, on the data sheets of the screw-in cartridges, refer to the screw-in cartridges only. The additional pressure drop of the flange body, resp. sandwich body must be taken into consideration.

SYMBOLS / DIMENSIONS

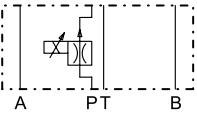
DN.FA06-A/B



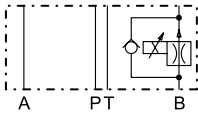
DN.SA06-A



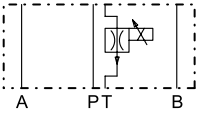
DN.SA06-P



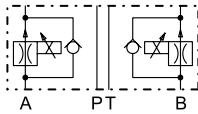
DN.SA06-B



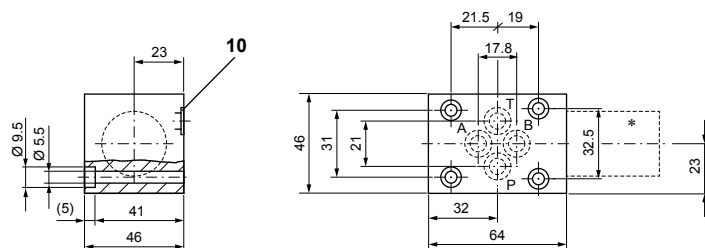
DN.SA06-T



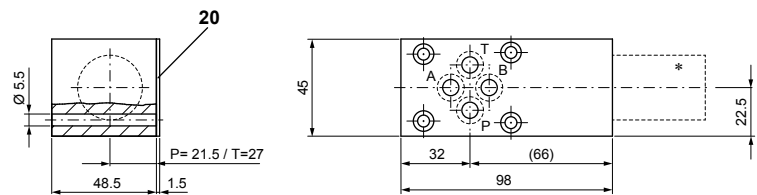
DN.SA06-AB



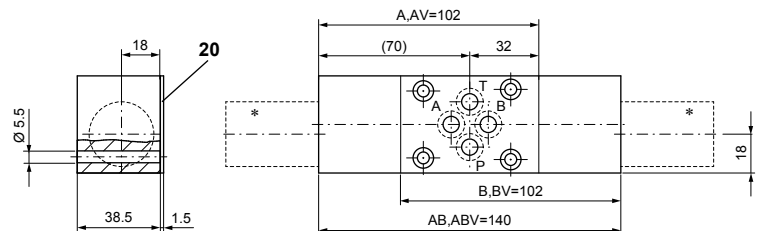
Flange construction DN.FA06-A/B



Sandwich construction DN.SA06-P, T



Sandwich construction DN.SA06-A, B, AB


PARTS LIST

| Position | Article | Description |
|----------|----------|---------------------|
| 10 | 160.2093 | O-ring ID 9,25x1,78 |
| 20 | 173.3650 | Sealing plate ADB6 |

* The envelop dimensions of the screw-in cartridge are shown on their corresponding data sheets.

ACCESSORIES

Proportional amplifier

Register 1.13

Technical explanation see data sheet 1.0-100