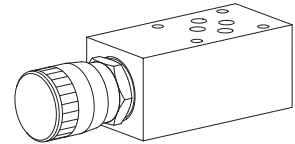


**Throttle valve  
Sandwich construction**

- $Q_{max} = 80$  l/min
- $Q_N = 50$  l/min
- $p_{max} = 350$  bar

**NG6**  
 ISO 4401-03

**DESCRIPTION**

Throttle valve in sandwich construction NG6 with interface according to ISO 4401-03. The throttle valve is available in two different variants, the standard and the precision throttle (FD). The FD execution is available for restriction in A, B or AB only. The turning knob is made from aluminium, the sandwich plate made of steel is zinc-nickel coated.

**FUNCTION**

By means of the adjusting spindle (fine thread), the restriction of the volume flow can be continuously adjusted. With the spindle fully screwed in, the volume flow is zero, and a metallic edge seals leakfree. The throttle effect is produced by an annular gap which can be varied in size, or by means of a triangular edge. The flow through of throttle valves is possible in both directions. The precision throttle (FD) has an even finer resolution in the lowest volume flow range.

Due to the type of construction, there is a very low leakage.

**APPLICATION**

Sandwich construction throttle valves are used where volume flows can be continuously adjusted in both flow directions without consideration of the pressure fluctuations. These sandwich valves are perfectly suitable for machine tools as well as all types of handling operation.

**TYPE CODE**

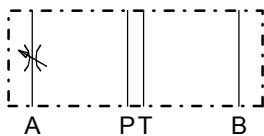
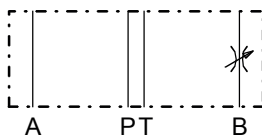
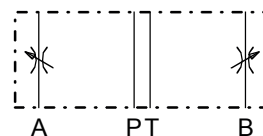
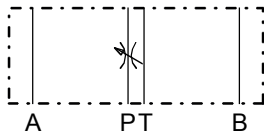
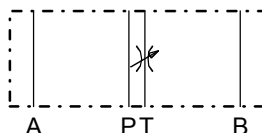
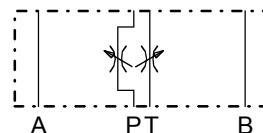
|                                      |   |      |                            |   |                          |   |                          |
|--------------------------------------|---|------|----------------------------|---|--------------------------|---|--------------------------|
| International standard interface ISO | A   | DR   | <input type="checkbox"/>   | 6 | <input type="checkbox"/> | # | <input type="checkbox"/> |
| Throttle valve                       |   |      |                            |   |                          |   |                          |
| Type list / function                 |   |      |                            |   |                          |   |                          |
| in A                                 | <input type="checkbox"/> A                      | in B | <input type="checkbox"/> B |   |                          |   |                          |
| in A and B                           | <input type="checkbox"/> AB                     | in T | <input type="checkbox"/> T |   |                          |   |                          |
| in P                                 | <input type="checkbox"/> P                      |      |                            |   |                          |   |                          |
| in P and T                           | <input type="checkbox"/> PT                     |      |                            |   |                          |   |                          |
| Nominal size 6                       |   |      |                            |   |                          |   |                          |
| Standard                             | <input type="checkbox"/>                        |      |                            |   |                          |   |                          |
| Precision throttle                   | <input type="checkbox"/> - FD (A, B or AB only) |      |                            |   |                          |   |                          |
| Design-Index (Subject to change)     |   |      |                            |   |                          |   |                          |

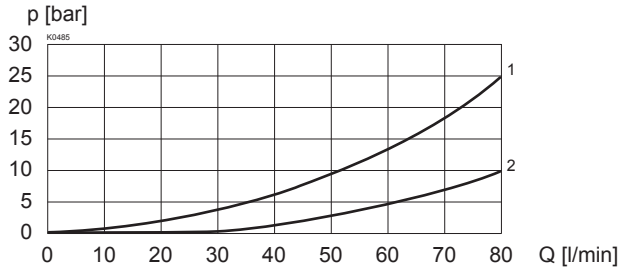
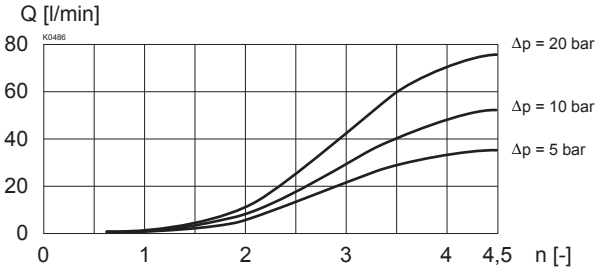
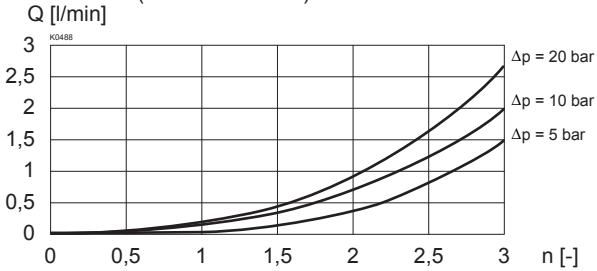
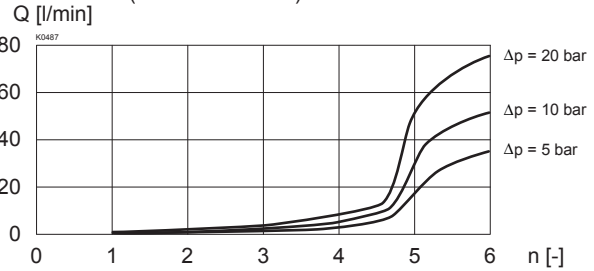
**GENERAL SPECIFICATIONS**

|                     |  |
|---------------------|--|
| Description         | Throttle valve   |
| Nominal size        | NG6 acc. to ISO 4401-03  |
| Construction        | Sandwich construction  |
| Mounting            | 4 fixing holes for socket cap screws<br>M5 or studs screws M5                    |
| Connections         | Threaded connection plates, Multi-flange subplates, Longitudinal stacking system |
| Ambient temperature | -20...+50 °C   |
| Mounting position   | any  |
| Fastening torque    | $M_D = 5,5$ Nm (Quality 8.8)   |
| Weight              | $m = 1,9$ kg   |

**HYDRAULIC SPECIFICATIONS**

|                          |   |
|--------------------------|---|
| Fluid                    | Mineral oil, other fluid on request   |
| Contamination efficiency | ISO 4406:1999,<br>class 20/18/14...21/19/15<br>(Required filtration grade $\beta_{10...25} \geq 75$ )<br>refer to data sheet 1.0-50/2 |
| Viscosity range          | 12 mm <sup>2</sup> /s...320 mm <sup>2</sup> /s  |
| Fluid temperature        | -20...+70 °C  |
| Peak pressure            | $p_{max} = 350$ bar   |
| Nominal volume flow rate | $Q_N = 50$ l/min (throttle at A or B)<br>$Q_N$ at 10 bar valve pressure loss  |
| Max. Volume flow         | $Q_{max} = 80$ l/min  |
| Leakage volume flow      | Almost leak free with closed restrictor   |

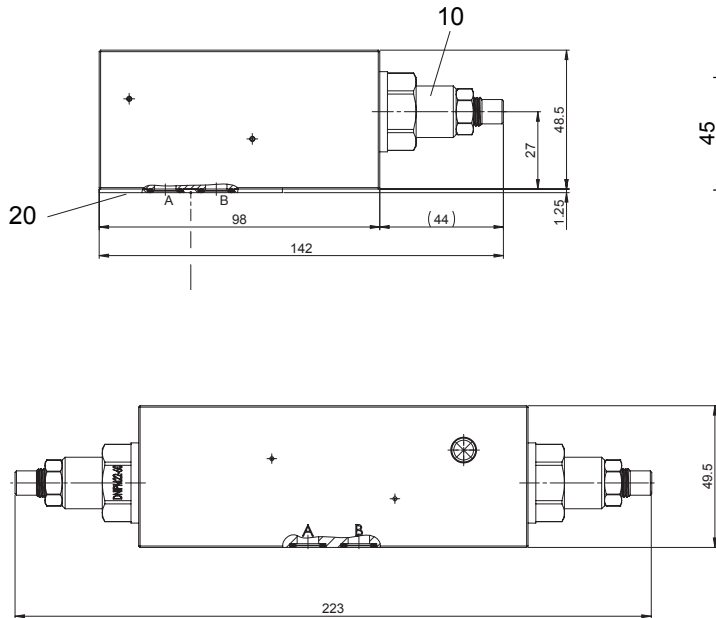
**TYPE LIST / FUNCTION**
**ADRA6**

**ADRB6**

**ADRAB6**

**ADRP6 #1**

**ADRT6 #1**

**ADRPT6 #1**


**CHARACTERISTICS ADRA, B, AB6** Oil viscosity  $\nu = 30 \text{ mm}^2/\text{s}$ 
 $\Delta p = f(Q)$  Pressure drop/volume flow characteristics

 $Q = f(n)$  Volume flow adjustment characteristics

 $Q = f(n)$  Volume flow adjustment characteristics (Precision throttle)

 $Q = f(n)$  Volume flow adjustment characteristics (Precision throttle)


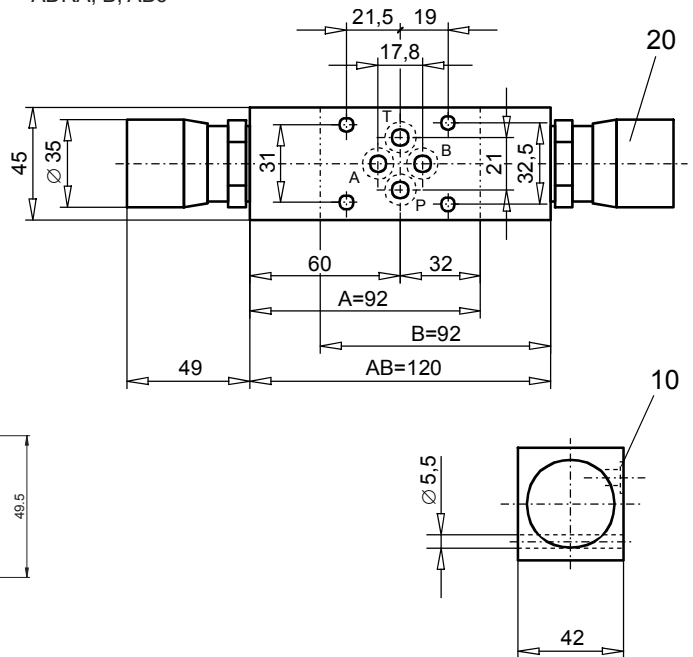
Characteristics ADRP, T and PT can be found on data sheet 2.4-532 (throttle cartridge DNIPM22).

**DIMENSIONS**

00ADRP6, ADRT6, ADRPT6



ADRA, B, AB6


**PARTS LIST**

| Position | Article  | Description        |
|----------|----------|--------------------|
| 10       | 623.3002 | DNIPM22-60         |
| 20       | 173.3650 | ADB6 Sealing plate |

**PARTS LIST**

| Position | Article  | Description           |
|----------|----------|-----------------------|
| 20       | 114.1201 | Turning knob          |
| 30       | 160.2093 | O-ring ID 9,25 x 1,78 |

Technical explanation see data sheet 1.0-100