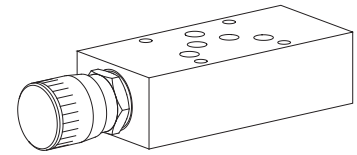


**Throttle valve  
Sandwich construction**

- $Q_{max} = 100$  l/min
- $Q_N = 60$  l/min
- $p_{max} = 350$  bar

**NG10**  
 ISO 4401-05

**DESCRIPTION**

Throttle valve sandwich type NG10 with interface acc. to ISO 4401-05. The turning knob is made from aluminium, the sandwich plate made of steel is zinc-nickel coated.

**FUNCTION**

Using the precision thread adjusting spindle, the restriction of the volume flow can be continuously adjusted. With the spindle fully screwed home, the volume flow is zero, and a metallic edge makes a leak-tight closure. The throttle effect is produced by an annular gap which can be varied in size. The valve flow is bidirectional. Because of the nature of the design, there is only a small amount of leakage.

**APPLICATION**

Sandwich type throttle valves can be used anywhere where volume flows have to be infinitely controlled in both directions without taking pressure fluctuations into account. These sandwich valves are ideal for machine tools and also all types of handling operation.

**TYPE CODE**

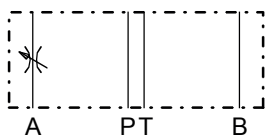
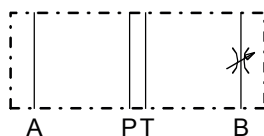
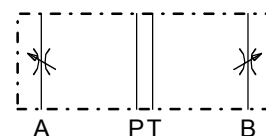
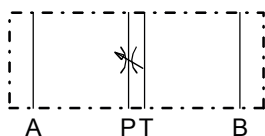
International standard interface ISO	A	DR	<input type="text"/>	10	<input type="text"/>	#	<input type="text"/>
Throttle valve							
Type list / function							
in A	<input type="text" value="A"/>	in B	<input type="text" value="B"/>				
in A and B	<input type="text" value="AB"/>						
in P	<input type="text" value="P"/>						
Nominal size 10							
Standard	<input type="text"/>						
Design-Index (Subject to change)							

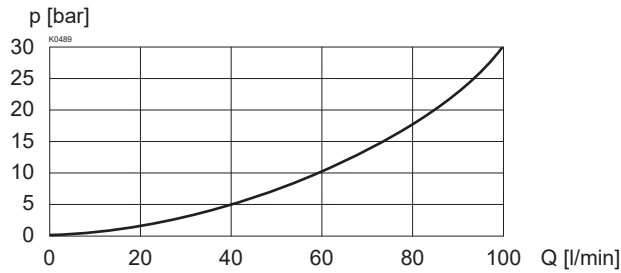
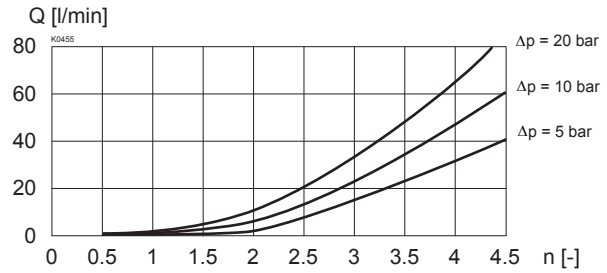
**GENERAL SPECIFICATIONS**

Description	Throttle valve
Nominal size	NG10 acc. to ISO 4401-05
Construction	Sandwich construction
Mounting	4 mounting holes for socket head cap screws M6 or studs screws M6
Connections	Threaded connection plates, Multi-flange subplates, Longitudinal stacking system
Ambient temperature	-20...+50 °C
Mounting position	any
Fastening torque	$M_D = 9,5$ Nm (Quality. 8.8)
Weight	$m = 2,1$ kg

**HYDRAULIC SPECIFICATIONS**

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 20/18/14...21/19/15 (Required filtration grade $\beta_{10...25} \geq 75$ ) 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	$Q_N = 60$ l/min $Q_N$ at 10 bar valve pressure loss
Max. Volume flow	$Q_{max} = 100$ l/min
Leakage volume flow	Almost leak free with closed restrictor

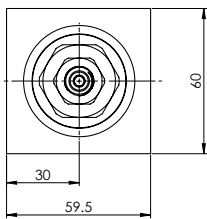
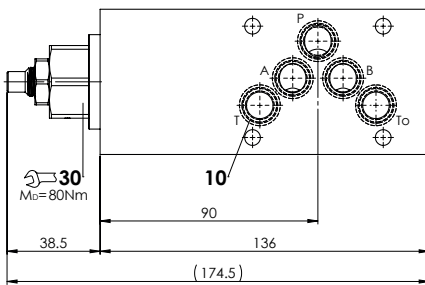
**TYPE LIST / FUNCTION**
**ADRA10**

**ADRB10**

**ADRAB10**

**ADRP10 #1**


**CHARACTERISTICS** Oil viscosity  $\nu = 30 \text{ mm}^2/\text{s}$ 
 $\Delta p = f(Q)$  Pressure loss/flow characteristics  
 Restriction in A, B

 $Q = f(n)$  Volume flow adjustment characteristics  
 (Standard ADRA, B, AB)


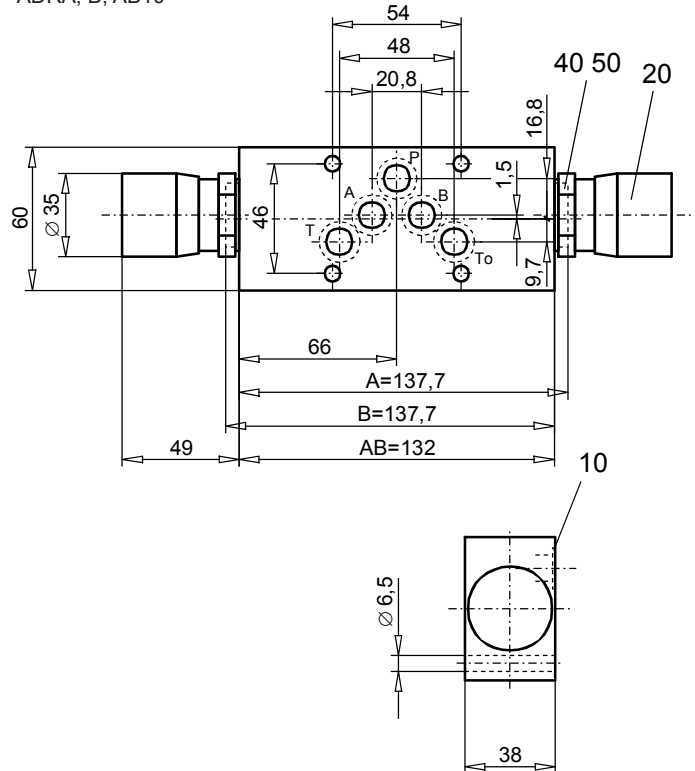
Characteristics ADRPT10 can be found on data sheet 2.4-552 (throttle cartridge DNIPM33).

**DIMENSIONS**

ADRP10 #1



ADRA, B, AB10


**PARTS LIST**

Position	Article	Description
30	623.8009	DNIPM33
10	160.2140	O-ring ID 14,00 x 1,78 (NBR)

**PARTS LIST**

Position	Article	Description
10	160.2140	O-ring ID 14,00 x 1,78 (NBR)
20	114.1201	Turning knob
40	049.2222	Bounded seal ID 22.7 x 30 x 2
50	238.5201	Plug DIN 908 M 22 x 1,5

Technical explanation see data sheet 1.0-100