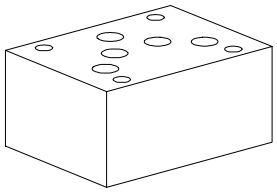
Non-return valve
Sandwich construction
- **Q_{max} = 100 l/min**
- **p_{max} = 315 bar**

NG10
ISO 4401-05



DESCRIPTION
Sandwich type pilot operated non-return valve NG10 with interface according to ISO 4401-05. The valves allow a free flow in one direction and shut off in the opposite direction. 6 different standard versions are available. The steel sandwich body is phosphatised. Good performance data and attractive design are the hall marks of this quality product.

FUNCTION
In the free flow direction, the volume flow opens the spring loaded valve seat. The spring keeps the valve closed in the opposite direction. The opening pressure required depends on the spring force.

APPLICATION
Non-return valves allow the volume flow in one direction and shuts off in the opposite direction, preventing the pressurised fluid from flowing back. Non-return valves in the P port prevents backward rotation of the pump. When installed in the T port, the spring controlled opening pressure prevents a hydraulic system from draining to the tank. Sandwich type elements NG10 make this a highly flexible system.

CONTENT
GENERAL SPECIFICATIONS 1
HYDRAULIC SPECIFICATIONS 1
SYMBOLS / TYPES 1
CHARACTERISTICS 2
DIMENSIONS 2
PARTS LIST 2

TYPE CODE
A RV [ ] 10 # [ ]

- A: International Interface ISO
- RV: Type description for non-return valve
- [ ]: Non-return valve in:

P	P	T	T	P and T	PT
A	A	B	B	A and B	AB

- 10: Nominal size 10
- [ ]: Design-Index (Subject to change)

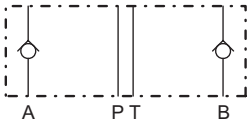
GENERAL SPECIFICATIONS

Description	Non-return valve
Nominal size	NG10 acc. to ISO 4401-05
Construction	Sandwich construction
Mounting	4 holes for hexagon socket screw M6 or studs M6
Connections	Connection plates Multi-station flange subplate Longitudinal stacking system
Ambient temperature	-20…+50°C
Mounting position	any
Fastening torque	M_D = 9,5 Nm (Quality 8.8)
Weight	m = 1,2 kg

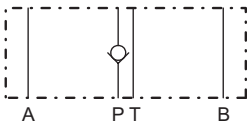
HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 20/18/14 (Required filtration grade ß 10…16≥75) refer to data sheet 1.0-50/2
Viscosity range	12 mm²/s…320 mm²/s
Fluid temperature	-20…+70°C
Peak pressure	p_{max} = 315 bar
Opening pressure	$p_ö$ = 0,8 bar
Max. volume flow	Q_{max} = 100 l/min

SYMBOLS / TYPES

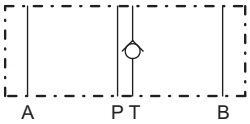


ARVAB10

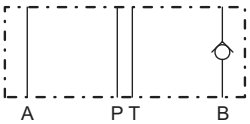


ARVP10

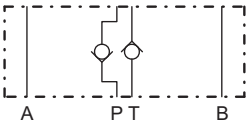
ARVA10



ARVT10



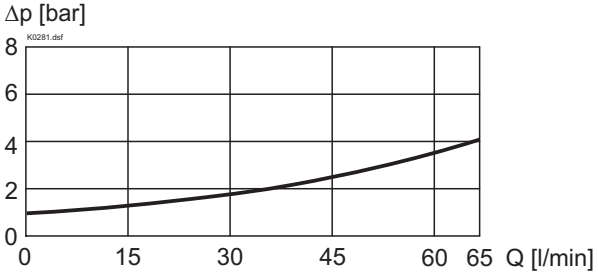
ARVB10



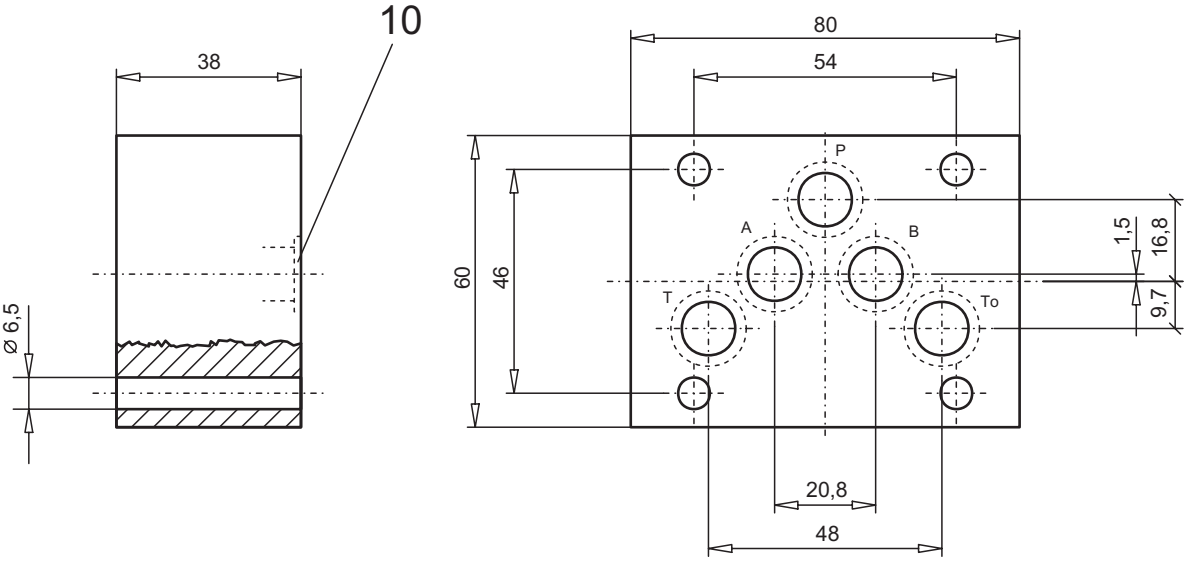
ARVPT10

CHARACTERISTICS Oil viscosity υ = 30 mm²/s

Δp = f (Q) Performance limit



DIMENSIONS



PARTS LIST

Position	Article	Description
10	160.2120 160.2132 160.2140	O-ring ID 12,42x1,78 O-ring ID 13,10x2,62 (in A, B and T when RV in A, B, AB, T or PT) O-ring ID 14,00x1,78 (only by ARVP10)

Technical explanation see data sheet 1.0-100E