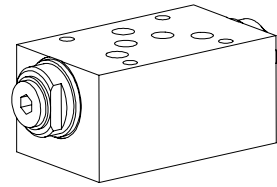


**Non-return valve
hydraulic pilot
Sandwich construction**

- $Q_{max} = 100 \text{ l/min}$
- $p_{max} = 250 \text{ bar}$

NG10
 ISO 4401-05

DESCRIPTION

Sandwich type non-return valve NG10 with hydraulic pilot acc. to ISO 4401-05. The valves allow a free flow in one direction and shut off in the opposite direction. 3 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 valve seat against a spring. The spring helps the valve close in the opposite direction. If pressure builds up in the opposite oil port, this displaces the pilot piston and opens the non-return valve of the closed port. The pilot pressure required is dependent on the pressure held by the valve seat.

APPLICATION

Pilot operated non-return valves are used to shut off pressurised hydraulic cylinders, e.g. in lifting or clamping fixtures, without leaking. The hydraulic cylinder can only be moved in the shut off direction if a directional valve directs the volume flow into the opposite port and releases the valve. Reliability in operation is increased by a directional valve which connects both oil ports to the tank in the neutral position. Sandwich type elements NG10 mean that the system is highly flexible.

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TYPE CODE

International standard interface ISO

Type description for non-return valve hydraulic pilot:

In A + B DERV
 In A ERVA in B ERVB

Nominal size 10

Design-Index (Subject to change)

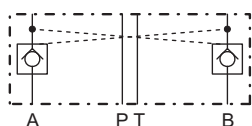
A 10 #

GENERAL SPECIFICATIONS

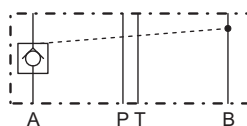
| | |
|---------------------|---|
| Description | Non-return valve hydraulic pilot |
| Nominal size | NG10 acc. to ISO 4401-05 |
| Construction | Sandwich construction |
| Mounting | 4 holes for socket cap screws M6 or studs M6 |
| Connections | Connection plates Multistation flange subplate Longitudinal stacking system |
| Ambient temperature | -20...+50°C |
| Mounting position | any |
| Fastening torque | $M_D = 9,5 \text{ Nm}$ (quality 8.8) |
| Weight | $m = 2,1 \text{ kg}$ |

HYDRAULIC SPECIFICATIONS

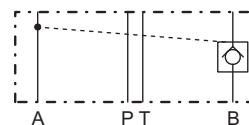
| | |
|--------------------------|---|
| Fluid | Mineral oil, other fluid on request |
| Contamination efficiency | ISO 4406:1999, class 20/18/14 (Required filtration grade $\beta_{10...16} \geq 75$) refer to data sheet 1.0-50/2 |
| Viscosity range | 12 mm ² /s...320 mm ² /s |
| Fluid temperature | -20...+70°C |
| Peak pressure | $p_{max} = 250 \text{ bar}$ |
| Opening pressure | $p_o = 2 \text{ bar}$ |
| Pilot ratio | $i = 1:5$ |
| Max. volume flow | $Q_{max} = 100 \text{ l/min}$ |

SYMBOLS / TYPES


ADERV10



AERVA10



AERVB10

