

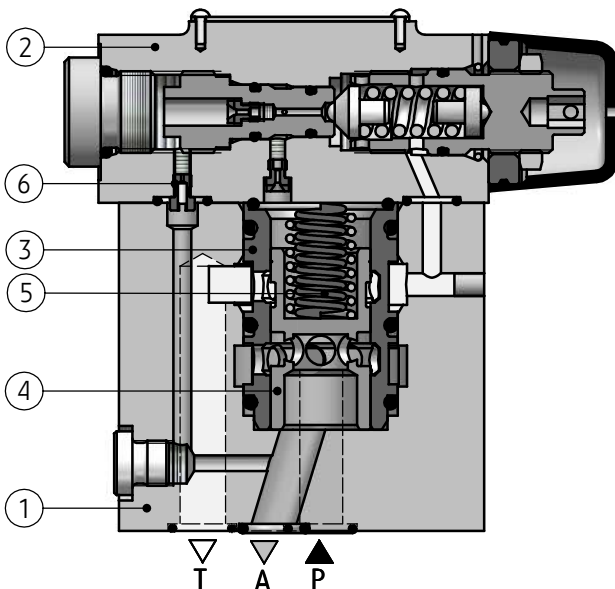
DATA SHEET - OPERATION MANUAL

APPLICATION

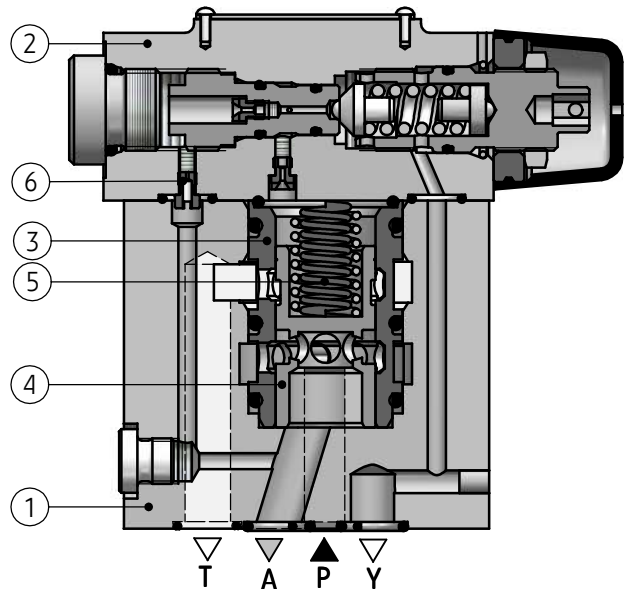
The pressure reducing/relief valve type UZCP10... pilot operated is used to hold constant pressure in the system aside from flow direction. The valve is designed for subplate mounting in any position in hydraulic systems.

DESCRIPTION OF OPERATION

UZCP10 - 52/100 W



UZCP10 - 52/100 Y



The pressure is set by means of the pilot valve (2). If the pilot valve (2) is open then the fluid flows through it. The flow is branched out of the main flow reduced by hydraulic cascade (6) and affects the pilot valve (2) and the spool (4) of the main valve (1) which mates with the cylindrical surface of the sleeve (3). The spool (4) movement is limited by the spring (5). If the pressure in line A exceeds the set pressure at the pilot valve (2), then it opens and allows the fluid flow to drain to the tank through the line Y (external drainage) - version UZCP10-32...Y... or through the line T (internal drainage) - version UZCP10-32/...W....Opening the pilot

valve (2) disturbs the state of equilibrium at the main spool and causes a new throttle dumping is established so that the pressure behind it, is independent on flow rate. If the pressure increase in line A is so high, then the connection P - A is closed and the connection A - T is open, then the valve operates as a pressure relief valve. It prevents the system from excessive pressure increase in line A, and at the same time it stabilizes the pressure at necessary level irrespective of flow direction.

TECHNICAL DATA

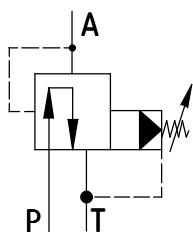
Hydraulic fluid	mineral oil	
Required filtration	up to 16 μm	
Recommended filtration	up to 10 μm	
Nominal fluid viscosity	37 mm ² /s at temperature 55 °C	
Viscosity range	2,8 up to 380 mm ² /s	
Fluid temperature range (in a tank)	recommended	40°C up to 55°C
	max	-20°C up to +70°C
Ambient temperature range	-20°C up to +70°C	
Maximum operating pressure	31,5 MPa	
Average pilot flow	0,55 dm ³ /min	
Weight	4,3 kg	

INSTALLATION AND OPERATION REQUIREMENTS

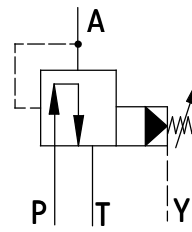
1. During the operation one must maintain the recommended fluid viscosity and provide proper filtration specified in this Data Sheet - Operation Manual.
2. In order to ensure safe and failure-free operation of the valve, the following must be checked:
 - operation of the valve
 - cleanliness of the hydraulic fluid
3. In order to provide proper tightness of the valve connection to a hydraulic system, one should ensure tightening torque and valve operation parameters as specified in this Data Sheet - Operation Manual.
4. A person operating the valve must be familiarized with the content of this Data Sheet - Operation Manual.

SCHEMES

Graphic symbols for the valve type UZCP10...



version UZCP10...W...

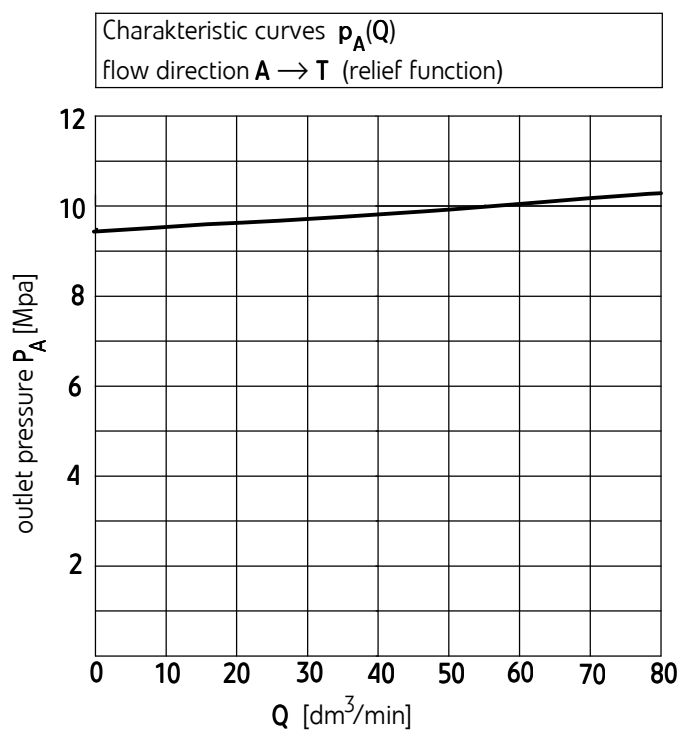
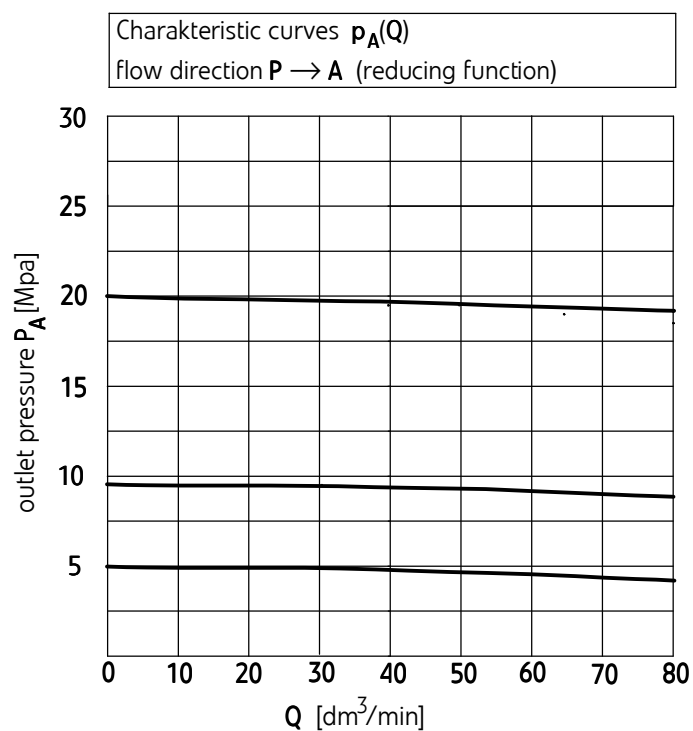


version UZCP10...Y...

PERFORMANCE CURVES

measured at viscosity $\nu = 41 \text{ mm}^2/\text{s}$ and temperature $t = 50^\circ\text{C}$

Flow curves



HOW TO ORDER

UZCP	10	-	/				*
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Nominal size (NS)

NS10 = 10

Series number

(51-59) - connection and installation dimensions unchanged = 5X
series 52 = 52

Settable pressure range

up to 5 MPa = 50
up to 10 MPa = **100**
 up to 20 MPa = 200
up to 31,5 MPa = **315**

Pilot oil drain

internal, along with oil drain to port T = **W**
external, through independent port Y = **Y**

Adjustment element

rotary knob = 1
set screw with internal hexagon = **2**
 lockable rotary knob = 3

Sealing

NBR (for fluids on mineral oil base) = **no code**
 FKM (for fluids on phosphate ester base) = V

Further requirements in clear text
 (to be agreed with the manufacturer)

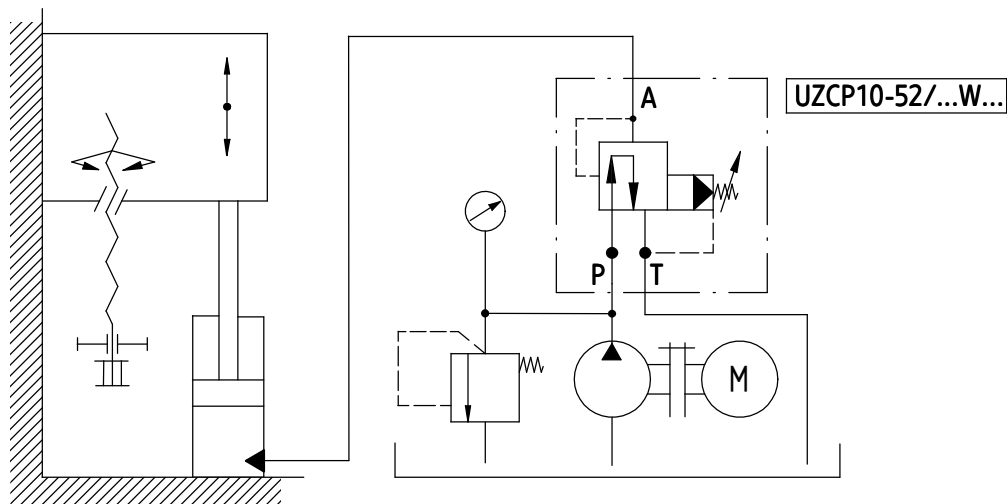
NOTES:

Pressure reducing/relief valve should be ordered according to the above coding.

The symbols in bold are preferred versions available in short delivery time.

Coding example: UZCP10 - 52/315 W 2

EXAMPLE OF APPLICATION IN HYDRAULIC SYSTEM



SUBPLATES AND FIXING BOLTS

Subplates must be ordered according to catalogue sheet **WK 496 520**. Subplate symbols:

G 66/01 - threaded connections G 3/8

G 67/01 - threaded connections **G 1/2**

G 89/01 - threaded connections G1/4

G 67/02 - threaded connections M22 x1,5

Subplates and screws fixing pressure reducing/relief valve **M6 x 40 - 10,9** - 4 pcs/kit in accordance with **PN-EN ISO 4762** must be ordered separately.

Tightening torque **Md = 15 Nm**.

NOTE:

The subplate symbol in bold is the preferred version available in short delivery time.

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