The pressure relief valve, pilot operated, sandwich plate design type UZPR 6... is used to limit pressure in hydraulic systems.

**DESCRIPTION OF OPERATION**

The pressure relief valve type UZPR 6... consists of the housing (1) in which the cartridge relief valves (2), pilot operated are installed. Due to appropriate combination of connection lines in the housing (1) different versions of the valve according to hydraulic schemes shown on page 2 can be obtained.

**UZPR6 - 32/50 - 2 ABBA**
- Pressure setting at port B
- Drain to port A

**UZPR6 - 32/50 - 2 ATBT**
- Pressure setting at port B
- Drain to port T

**UZPR6 - 32/50 - 2 PT**
- Pressure setting at port P
- Drain to port T
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Hydraulic fluid</th>
<th>mineral oil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required filtration</strong></td>
<td>up to 16 µm</td>
</tr>
<tr>
<td>Recommended filtration</td>
<td>up to 10 µm</td>
</tr>
<tr>
<td>Nominal fluid viscosity</td>
<td>37 mm²/s at temperature 55°C</td>
</tr>
<tr>
<td>Viscosity range</td>
<td>2,8 up to 380 mm²/s</td>
</tr>
<tr>
<td>Fluid temperature range (in a tank)</td>
<td>recommended 40°C up to 55°C max 40°C up to 55°C</td>
</tr>
<tr>
<td>Ambient temperature range</td>
<td>−20°C up to +70°C</td>
</tr>
<tr>
<td>Max operating pressure</td>
<td>31,5 MPa</td>
</tr>
<tr>
<td>Settable pressure ranges</td>
<td>5 MPa; 10 MPa; 20 MPa; 31,5 MPa</td>
</tr>
<tr>
<td>Maximum set pressure</td>
<td>31,5 MPa</td>
</tr>
<tr>
<td>Maximum flow</td>
<td>60 dm³ / min</td>
</tr>
<tr>
<td>Weight</td>
<td>1,2 or 1,5 kg (in relation to valve version)</td>
</tr>
</tbody>
</table>

## SCHEMES

Hydraulic schemes of valves type **UZPR6**...

### version UZPR6...**AT**...
- **Outlet connection (receiver)**
- **Inlet connection (subplate)**

### version UZPR6...**ATBT**...
- **Outlet connection (receiver)**
- **Inlet connection (subplate)**

### version UZPR6...**BT**...
- **Outlet connection (receiver)**
- **Inlet connection (subplate)**

### version UZPR6...**PT**...
- **Outlet connection (receiver)**
- **Inlet connection (subplate)**
OVERALL AND CONNECTION DIMENSIONS

versions: UZPR6...ABBA...; ...ATBT...

1 – Seal o-ring 9,2 × 1,8 – 4 pcs/kit (P, T, A, B)

2 – Mounting holes configuration of a subplate in accordance with the standards listed below:
   - CETOP RP 121H – symbol CETOP 4.2-4-03 (nominal size CETOP 03)
   - ISO 4401 – symbol ISO 4401-03-02-0-94 fixing screws M5 × 10.9 – 4 pcs/kit in accordance with PN - EN ISO 4762 tightening torque Md = 9 Nm

3 – Required surface finish of a subplate

NOTE:
(*) – Required length of the screws L is related to type and the number of hydraulic components sandwich fitted
OVERALL AND CONNECTION DIMENSIONS

versions: UZPR6...AT...; ...BT...; ...PT...

1 – Overall dimension for the valve version UZPR6...AT...
2 – Overall dimension for the valve versions:
   UZPR6...PT...; UZPR6...BT...
3 – Seal o-ring 9,2 × 1,8 – 4 pcs/kit (P, T, A, B)
4 – Mounting holes configuration of a subplate in accordance with the standards listed below:
   · CETOP RP 121H – symbol CETOP 4.2-4-03 (nominal size CETOP 03)
   · ISO 4401 – symbol ISO 4401-03-02-0-94 fixing screws M5 × L* – 10,9 – 4 pcs/kit in accordance with
     PN - EN ISO 4762 tightening torque Md = 9 Nm
5 – Required surface finish of a subplate

NOTE:
(*) – Required length of the screws L is related to type and the number of hydraulic components sandwich fitted
NOTES:
The pressure relief valve should be ordered according to the above coding.

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

Coding example: UZPR6 - 32/315 - 2 PT

### HOW TO ORDER

- **UZPR**: 6 – / – [*]

#### Nominal size (NS)
- **NS6** = 6

#### Series number
- (30 – 39) – connection and installation dimensions
  - unchanged = 3X
  - series 32 = 32

#### Settable pressure range
- up to 5 MPa = 50
- up to 10 MPa = 100
- up to 20 MPa = 200
- up to 31.5 MPa = 315

#### Adjustment element
- set screw with internal hexagon = 2

#### Relief function for flow direction
- (hydraulic schemes according to page 2)
  - from A to T = AT
  - from B to T = BT
  - from P to T = PT
  - from A to T and from B to T = ATBT
  - from A to B and from B to A = ABBA

#### 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)
PERFORMANCE CURVES

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

Characteristic diagrams of operating pressure in relation to flow $p(Q)$

SUBPLATES AND FIXING SCREWS

Subplates must be ordered according to catalogue sheet WK 496 480. Subplate symbols:
- G 341/01 – threaded connections G 1/4
- G 342/01 – threaded connections G 3/8
- G 502/01 – threaded connections G 1/2
- G 341/02 – threaded connections M14 × 1,5
- G 342/02 – threaded connections M16 × 1,5

Subplates and screws fixing the relief valve
- M5 × L* – 10,9 – 4 pcs/kit in accordance with PN - EN ISO 4762 must be ordered separately.
- Tightening torque $M_d = 9 \text{Nm}$

NOTES:

(* – Required length of the screws L is related to type and the number of hydraulic components sandwich fitted.
The subplate symbol in bold is the preferred version available in short delivery time.

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