

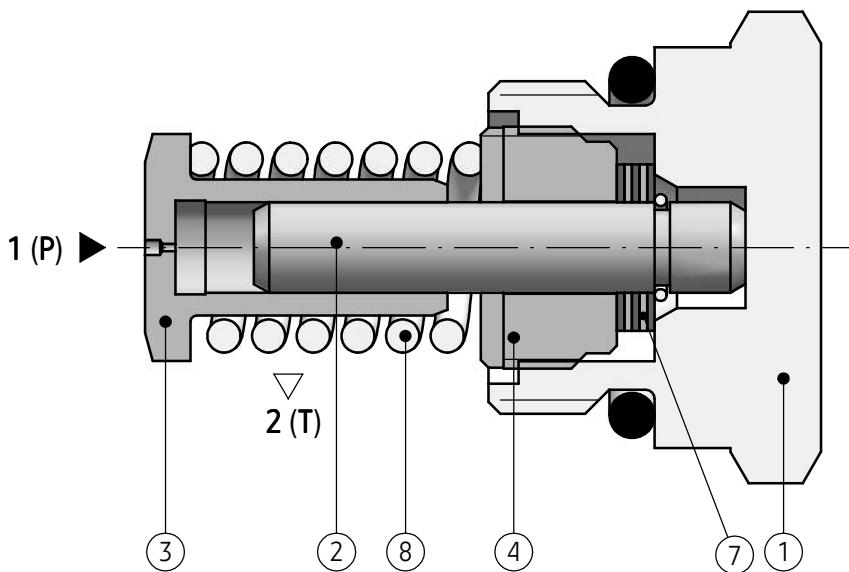
## APPLICATION

The constant pressure drop valve type **UZMD6...** is used in hydraulic systems where selected value of pressure differential between inlet port **1** and outlet port **2** at constant level is to be kept. Generally the valve is used to provide minimum control pressure for directional valves pilot operated (e. g. 6-way section directional valve type **6URRE6** according to catalogue sheet **WK 420 010**). The valve type **UZMD6...** can also be applied both in hydraulic control and drive systems or lubrication systems as a low pressure relief valve. The valve is designed for cartridge mounting in specially made installation cavity in optional operating position.



## DESCRIPTION OF OPERATION

**UZMD6 - 02/15 M1**



There is the spindle (2) fitted in the valve body (1) by means of the nut (4). The spindle (2) is the lead for the poppet (3). The pressure at the valve is set by means of the spring (8), which tension can be adjusted by putting

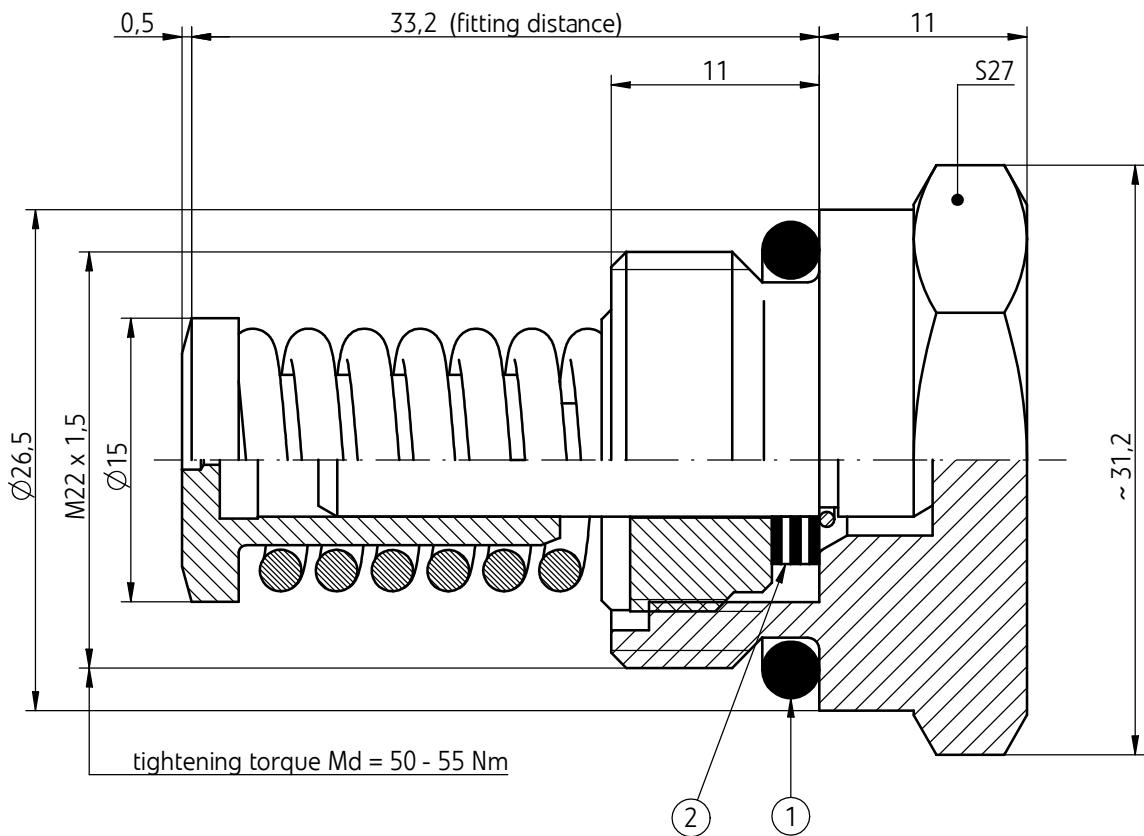
or removing the setting washers (7) to achieve required pressure range. The valve is designed to make impossible to change the set pressure when the valve is fitted in its installation cavity.

## TECHNICAL DATA

Hydraulic fluid	mineral oil				
<b>Required filtration</b>	<b>up to 16 <math>\mu\text{m}</math></b>				
Recommended filtration	up to 10 $\mu\text{m}$				
Nominal fluid viscosity	37 $\text{mm}^2/\text{s}$ at temperature 55 $^{\circ}\text{C}$				
Viscosity range	2,8 up to 380 $\text{mm}^2/\text{s}$				
Fluid temperature range (in a tank)	<table border="1"> <tr> <td>recommended</td> <td>40 <math>^{\circ}\text{C}</math> up to 55 <math>^{\circ}\text{C}</math></td> </tr> <tr> <td>max</td> <td>-20 <math>^{\circ}\text{C}</math> up to +70 <math>^{\circ}\text{C}</math></td> </tr> </table>	recommended	40 $^{\circ}\text{C}$ up to 55 $^{\circ}\text{C}$	max	-20 $^{\circ}\text{C}$ up to +70 $^{\circ}\text{C}$
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max	-20 $^{\circ}\text{C}$ up to +70 $^{\circ}\text{C}$				
Ambient temperature range	-20 $^{\circ}\text{C}$ up to +70 $^{\circ}\text{C}$				
<b>Maximum inlet pressure (port 1)</b>	<b>31,5 MPa</b>				
<b>Maximum flow</b>	<b>80 <math>\text{dm}^3/\text{min}</math></b>				
<b>Minimum flow</b>	<b>1 <math>\text{dm}^3/\text{min}</math></b>				
Weight	0,1 kg				

## OVERALL AND CONNECTION DIMENSIONS

valve type UZMD6...

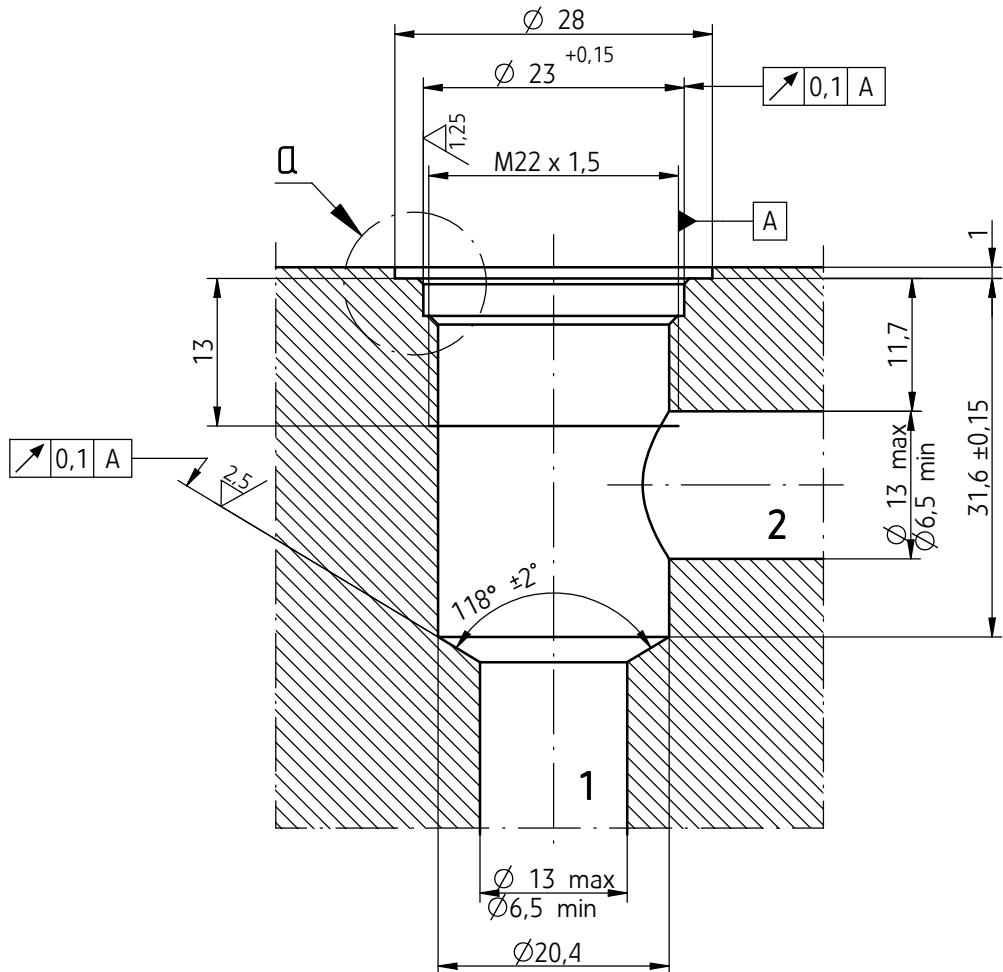


1 - Seal o-ring 19,2 x 3  
 2 - Setting washer of maintaining pressure range  
 (5 washers for maximum pressure range is factory-installed)

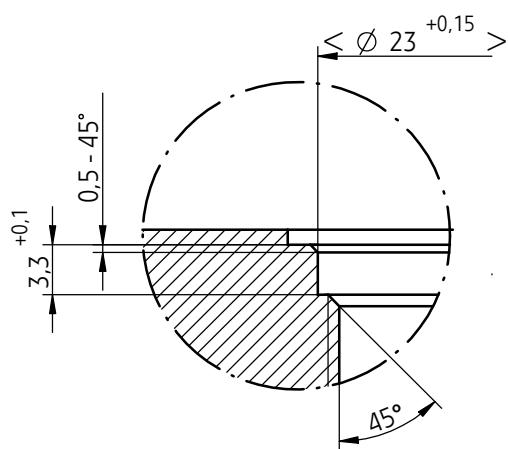
## OVERALL AND CONNECTION DIMENSIONS

special installation cavity\* M22 x 1,5 (size M - 6 - 2 - S1)

tightening torque  $M_d = 50 - 55 \text{ Nm}$



detail A

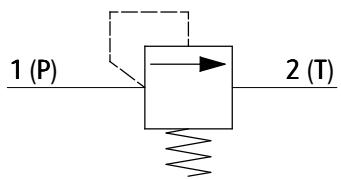


### NOTE:

(\*) - This valve is also allowed to be fitted in typical 2-way cavity M22 x 1,5 (size M - 6 - 2) designed to installation Ponar Wadowice cartridge valves.

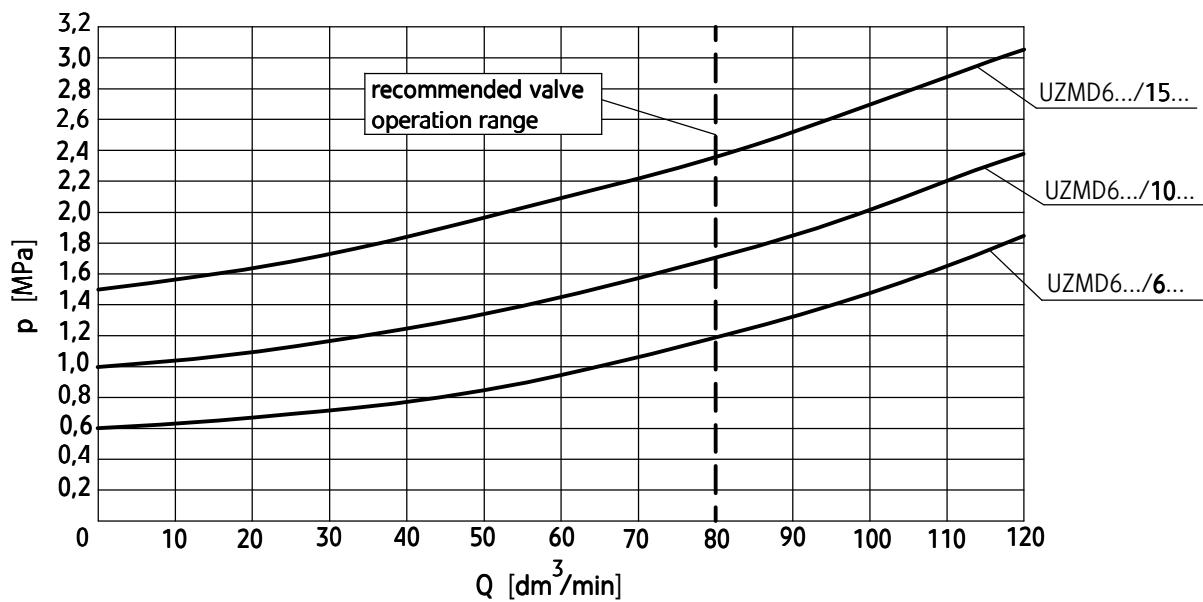
## SCHEMES

Graphic symbol of the valve type **UZMD6...**



## PERFORMANCE CURVES

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



## HOW TO ORDER



### Series number

(00-09) - connection and installation dimensions unchanged = 0X  
**series 02** = 02

### Maintained pressure range

<b>~1,28 up to ~1,92 MPa by step 0,13 MPa</b>	= 15
~ 0,73 up to ~1,23 MPa by step 0,10 MPa	= 10
~ 0,40 up to ~ 0,75 MPa by step 0,07 MPa	= 6

### Installation connection

**cavity M22 x 1,5** = M1

### Sealing

<b>NBR</b> (for fluids on mineral oil base)	= <b>no code</b>
FKM (for fluids on phosphate ester base)	= V

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

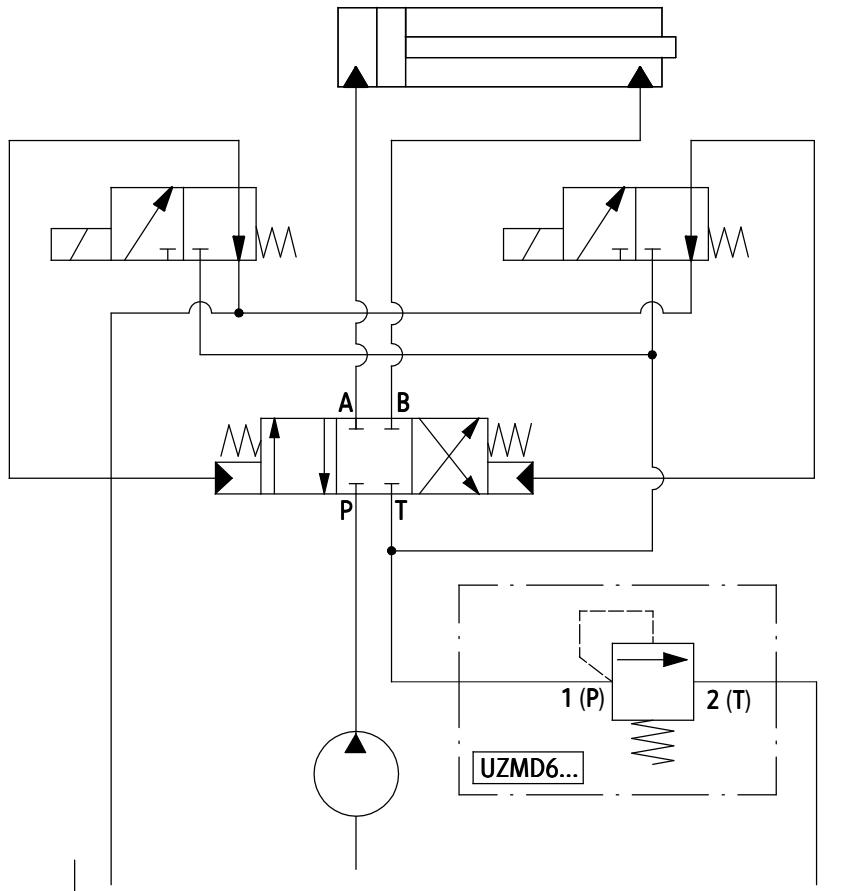
### NOTES:

The constant pressure drop valve should be ordered according to the above coding.

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

Coding example: UZMD6 - 02/15 M1

## EXAMPLES OF APPLICATION IN HYDRAULIC SYSTEM



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