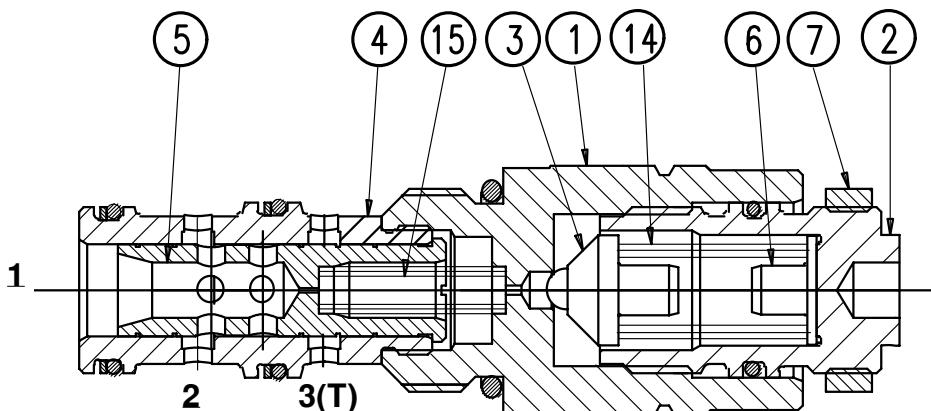


**Size 6**
**29 MPa**
**50 dm<sup>3</sup>/min.**

Pilot operated pressure reducing/relief valves of cartridge design are used in hydraulic systems, in which pressure should be reduced in one line. Moreover, they unload abrupt pressure jumps at the reduction side by allowing free flow to a tank.



### Description of operation

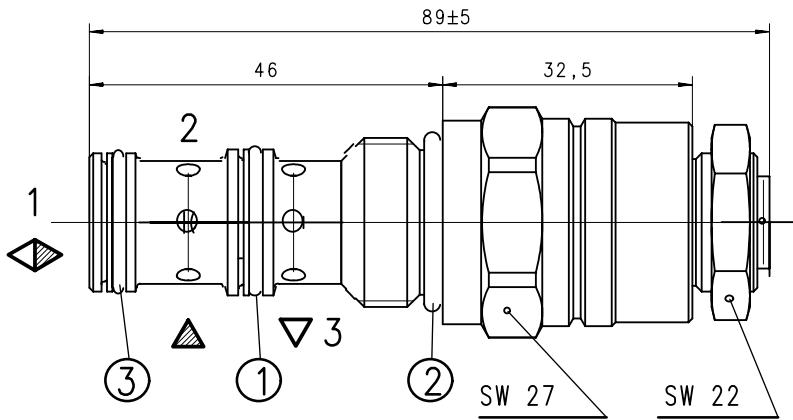
Pilot operated pressure reducing/relief valve type UZCS 6 consist of the main valve (bush 4, spool 5, spring 15) and pilot valve (housing 1, poppet 3, adjustment 2, spring 14). Pressure required is set at the pilot valve by putting the spring 14 under tension. This makes oil flow through the main valve from port 2 to 1 possible.

When pressure at port 1 reaches the set valve the pilot valve opens and the spool 5 moves back closing flow from 2 to 1. Pilot flow from the pilot valve is drained to port 3(T). Pressure reducing/relief valve can unload abrupt pressure rise at port 1 (relief function).

### TECHNICAL DATA

Working fluid	Mineral oil
Nominal fluid viscosity	37 mm <sup>2</sup> /s at temperature 328 K
Viscosity range	2,8 up to 380 mm <sup>2</sup> /s
Optimum working temperature range	313 up to 328 K
Fluid temperature range	243 up to 343 K
Required fluid filtration	16 µm
Recommended fluid filtration	10 µm
Operating pressure - up to	29 MPa
Cracking pressure range	up to 5; 10; 20; 29 MPa
Flow rate - up to	50 dm <sup>3</sup> / min
Weight	0,2 kg

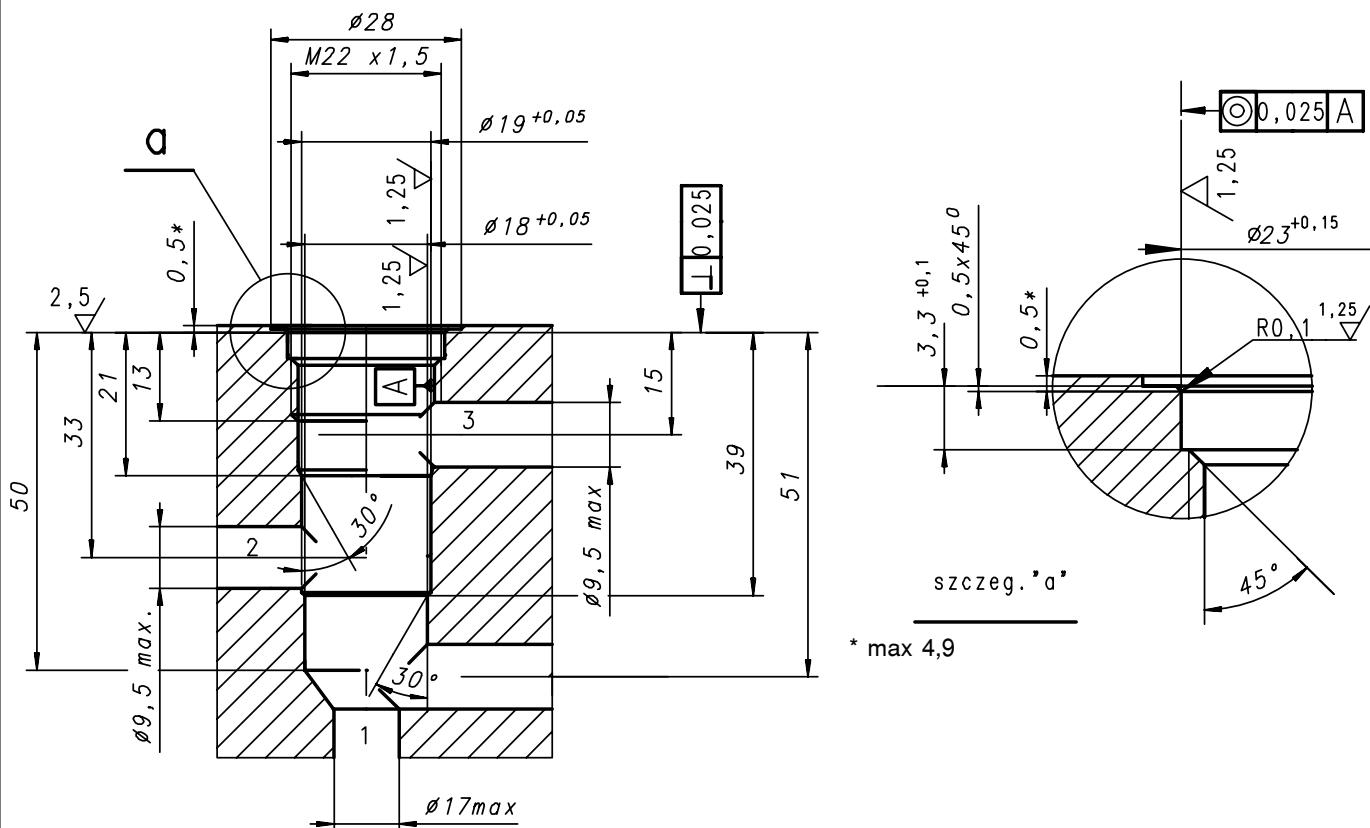
## OVERALL AND CONNECTION DIMENSIONS



item.1 "O-ring" 15,6 x 1,78 - 1 szt.

item.2 "O-ring" 18 x 2,65 - 1 szt.

item.3 "O-ring" 15 x 1,8

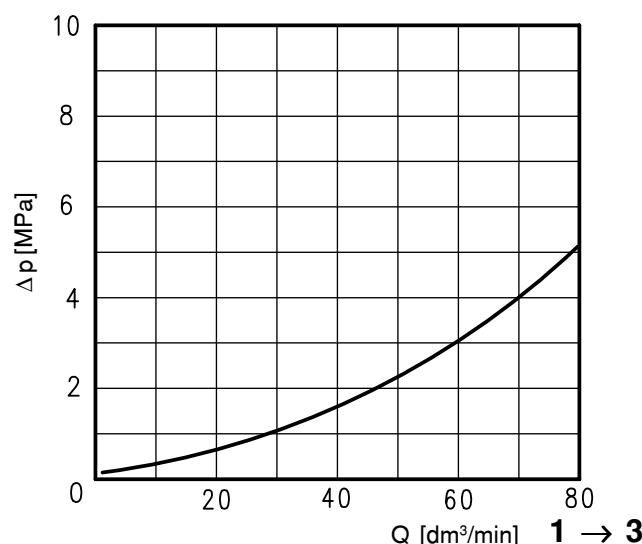
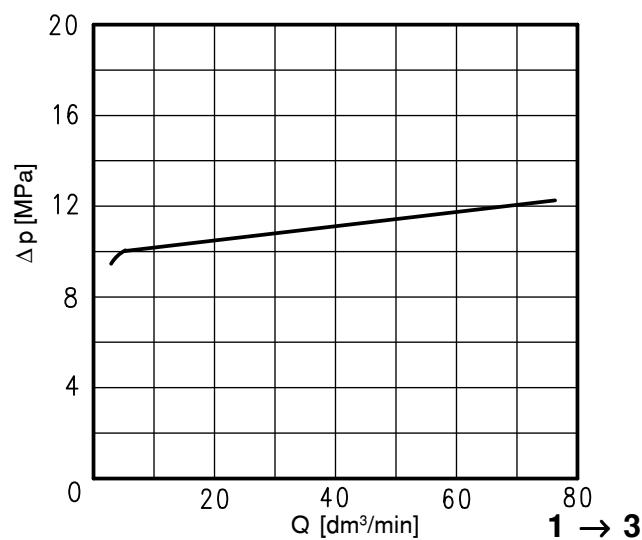
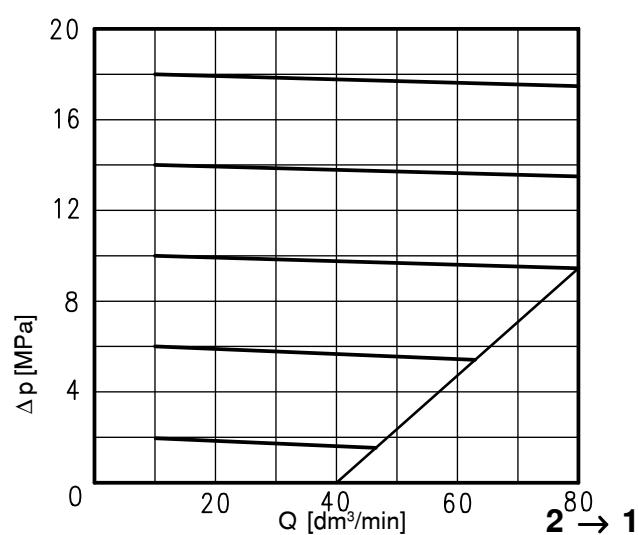


### Dimensions of cavity

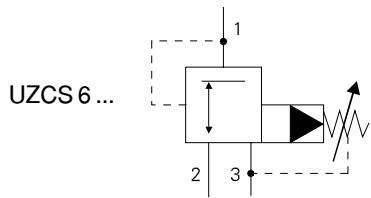
Tightening torque for cartridge valve - 80Nm

**Performance curves** at  $n=41\text{mm}^2/\text{s}$  and temperature 323 K

Flow curve



## SYMBOL



## HOW TO ORDER

Orders coded in the way showed below should be forwarded to the manufacturer

<b>UZCS 6</b>		<b>02 / 50 - 2 - M1 V</b>	<b>*</b>
<b>Series number</b> 02 = 02			
<b>Cracking pressure</b> 5 MPa = 50 10 MPa = 100 20 MPa = 200 29 MPa = 290			
<b>Adjustment</b> Pivot with hexagonal cavity = 2			
<b>Kind of cavity</b> Cavity M22x1,5 = M1			
<b>Sealing</b> for fluids on mineral oil base = no designation for fluid on phosphate ester base = V			
<b>Further requirements to be added in text (to agree with the manufacturer)</b>			

CODING EXAMPLE :  
**UZCS 6 - 02/50-2- M1 V**

PONAR WADOWICE S.A.  
ul. Wojska Polskiego 29  
34-100 Wadowice  
tel. 033/ 823 39 43, 823 30 41  
fax 033/ 873 48 80  
e-mail: ponar@ponar-wadowice.pl

**PONAR**<sup>®</sup>  
**wadowice**