

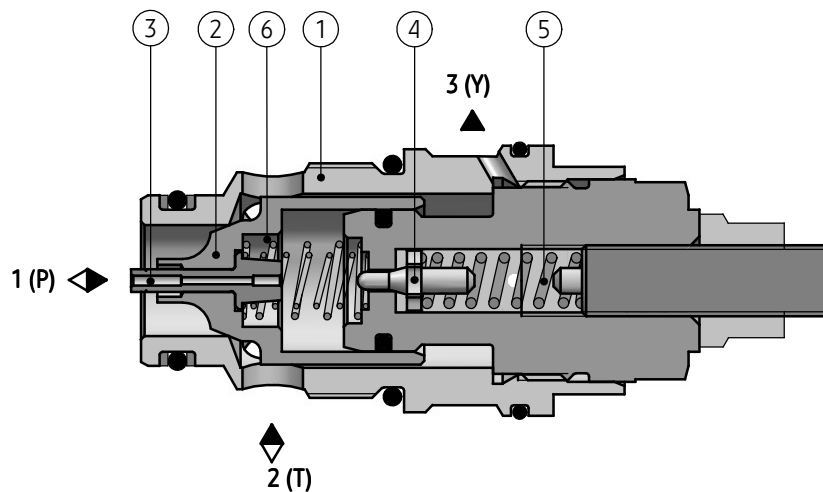
**APPLICATION**

Pressure relief valves UZPS 16... serve to limit and maintain a pressure in a hydraulic system. Valve is mounted by screwing into thread connection. Flow from port T to port P is possible and the valve works as shut off valve



**DESCRIPTION OF OPERATION**

UZPS 16-12/400-Y-M1



Pilot operated pressure relief valve UZPS16... consists of a pilot valve and main valve.

Flow from port T to port P is possible and the valve works as shut off valve. Regulated pressure of the system affects the lower surface of the main spool (2) at the same time via jet (3) affects the upper surface of the main spool (2). Pressure affects as well the pilot poppet (4). When the pressure of

spring (5) is exceeded, the poppet (4) is lifted and then fluid flows to port T.

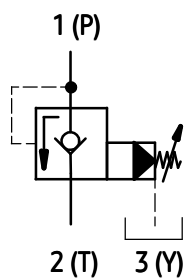
Opening of main valve and flow from port P to port T is possible when flow through the jet (3) results in pressure decrease over the upper spool (2) surface. Flow from port T to port P is possible. The pressure affects the surface of poppet (2) from port side and lifts it and opens the connections from ports T to P.

## TECHNICAL DATA

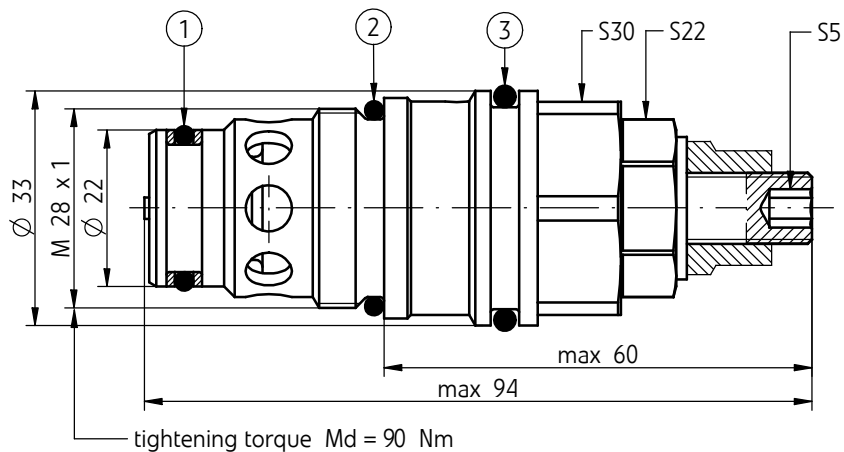
Hydraulic fluid	Mineral oil
Nominal fluid viscosity	37 mm <sup>2</sup> /s temperature 55 C
Viscosity range	2,8 up to 328 mm <sup>2</sup> /s
Optimum working temperature (fluid in a tank)	40 do 55 C
Working temperature range	- 20 do 70 C
Required fluid filtration	16 μm
Recommended fluid filtration	10 μm
<b>Maximum set pressure</b>	<b>40 MPa</b>
<b>Maximum flow rate</b>	<b>200 dm<sup>3</sup>/min</b>
Weight	0,3 kg

## SYMBOL

Graphic symbol of valve type UZPS 16...



## OVERALL AND CONNECTION DIMENSIONS

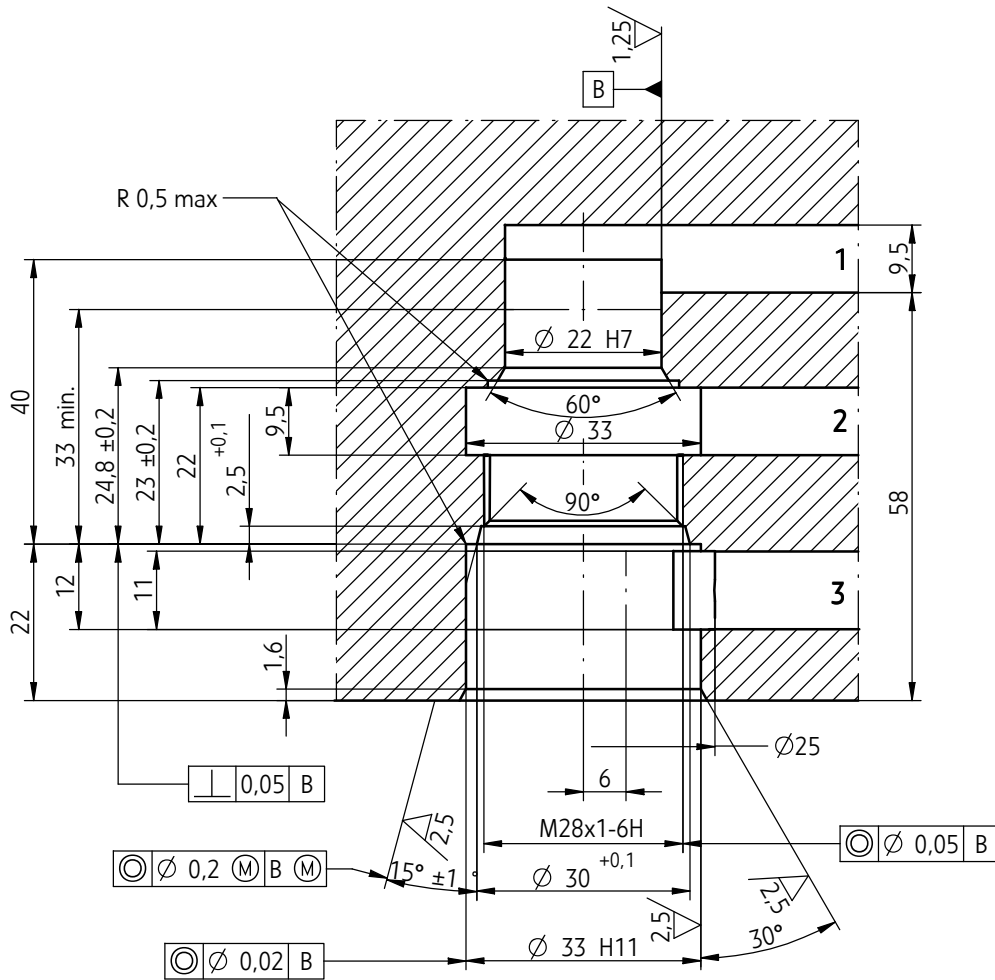


### DESCRIPTION

- |                               |
|-------------------------------|
| 1 - sealing ring 17,12 x 2,62 |
| 2 - sealing ring 25 x 2,5     |
| 3 - sealing ring 28 x 3       |

# DIMENSION OF CAVITY

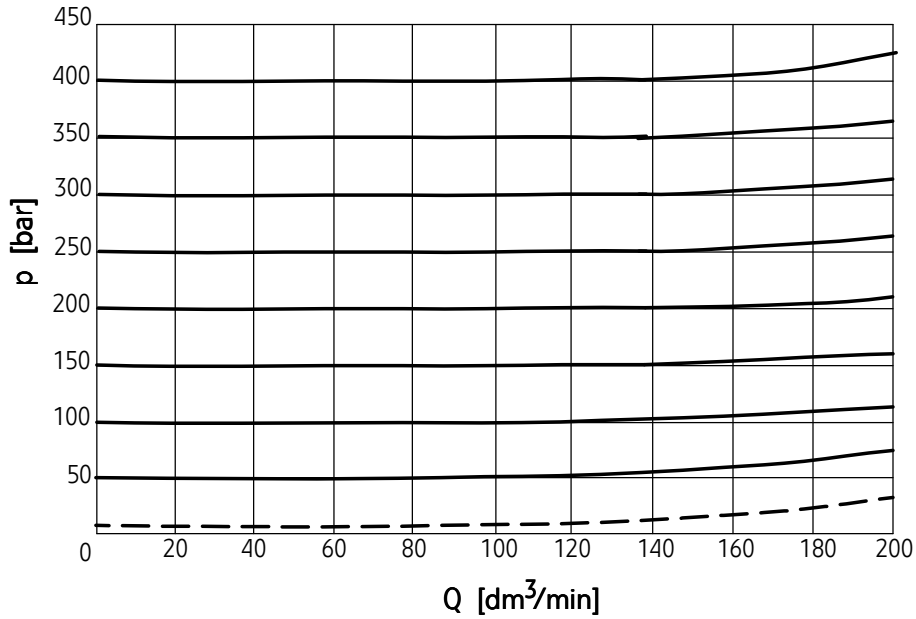
Tightening torque **Md = 90 Nm**



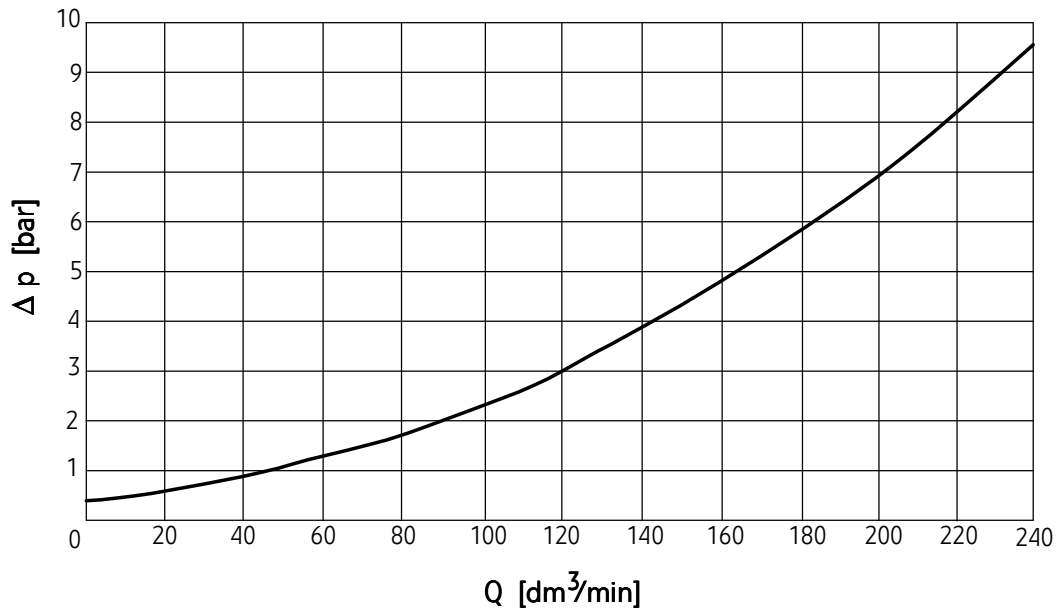
## PERFORMANCE CURVES

(at  $v = 41 \text{ mm}^2/\text{s}$  and temperature  $t = 50 \text{ C}$ )

Working pressure in relation to flow



Flow resistance curve



## HOW TO ORDER

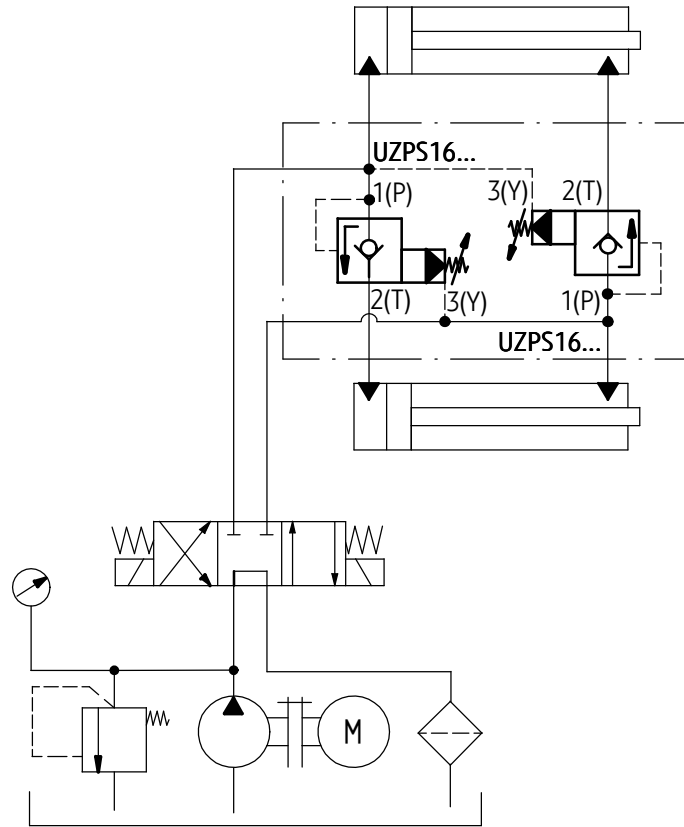
UZPS	16	12	/400	Y	M1		★
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<b>Nominal size (NS)</b> <b>NS16</b>	= 16
<b>Series number</b> (10-19) - unchanged	= 1X = 12
<b>Working temperature range</b> <b>up to 40 MPa</b>	= 400
<b>Pilot fluid supply and drain</b> <b>external drain</b>	= Y
<b>Connection type</b> <b>seat M28 x 1</b>	= M1
<b>Sealing</b> <b>fluids on mineral oil base</b> fluids on phosphate-ester base	= no code = V
Further requirements in clear text (to be agreed with the manufacturer)	

### Note:

Orders coded in the way showed above should be forwarded to the manufacture.  
Shorter terms of delivery for valves with parameters in bold are possible.

**EXAMPLE OF APPLICATION  
IN HYDRAULIC SYSTEM**



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