

# DIRECT OPERATED PRESSURE RELIEF VALVE TYPE UZPD30



Q-HYDRAULIKA

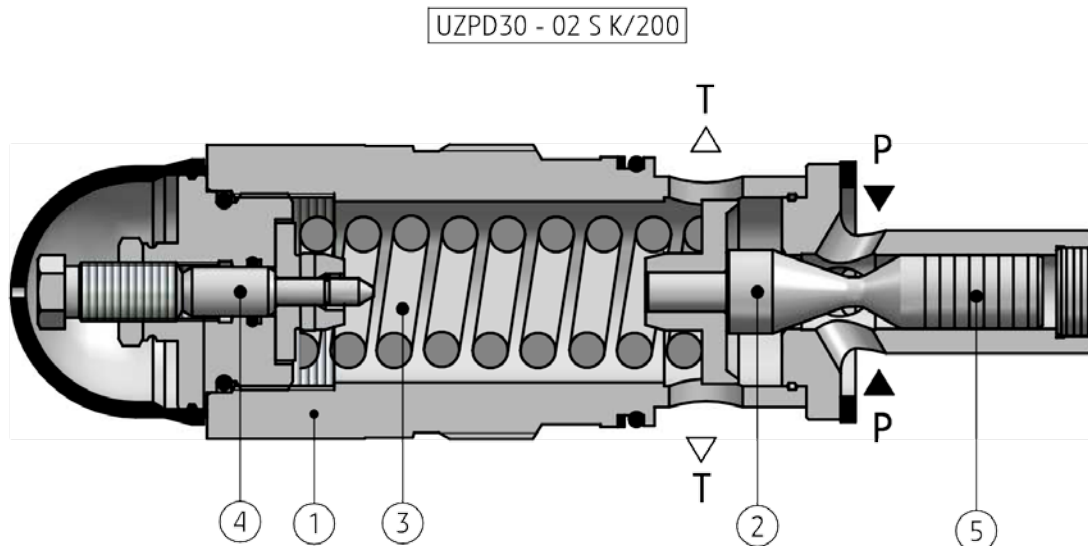
NS 30 | up to 31,5 MPa | up to 330 dm<sup>3</sup>/min

WK 499 840

Pressure relief valves are designed to limit maximum pressure in the entire hydraulic system or in its part. Depending on the type of mounting in the system, direct operated pressure relief valves type **UZPD...** can be screwed (cartridge version), mounted into threaded connections (version for threaded connection) or mounted to subplate (version for subplate mounting).



## DESCRIPTION OF OPERATION



Direct operated pressure relief valve type mainly consists of body (1), poppet (2), spring (3), set screw (4). Movable poppet (2) is a working element. Cracking pressure setting is made by variation of spring

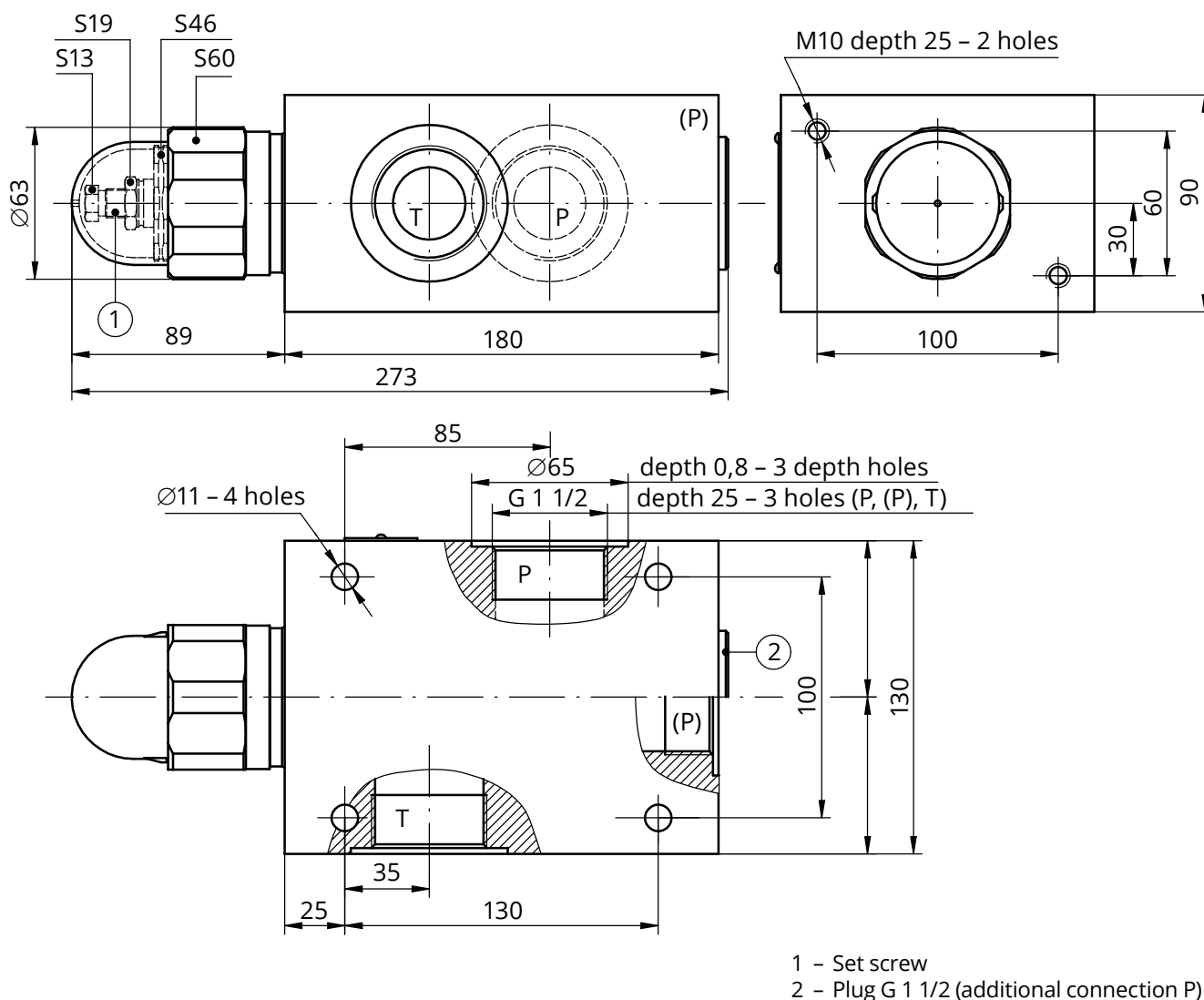
tension (3) by means of set screw (4). Various springs (2) (exchangeable) correspond to various ranges of cracking pressure adjustment. A dumping element (5) is used to eliminate vibrations of the valve.

### TECHNICAL DATA

Hydraulic fluid	mineral oil		
<b>Required filtration</b>	<b>up to 16 µm</b>		
Recommended filtration	up to 10 µm		
Nominal fluid viscosity	37 mm <sup>2</sup> /s at temperature 55°C		
Viscosity range	2,8 up to 380 mm <sup>2</sup> /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		
<b>Max operating pressure</b>	<b>31,5 MPa</b>		
<b>Maximum pressure in T port</b>	<b>31,5 MPa</b>		
Weight	cartridge design	for threaded connection	for subplate mounting
	2,2 kg	13,9 kg	13,9 kg

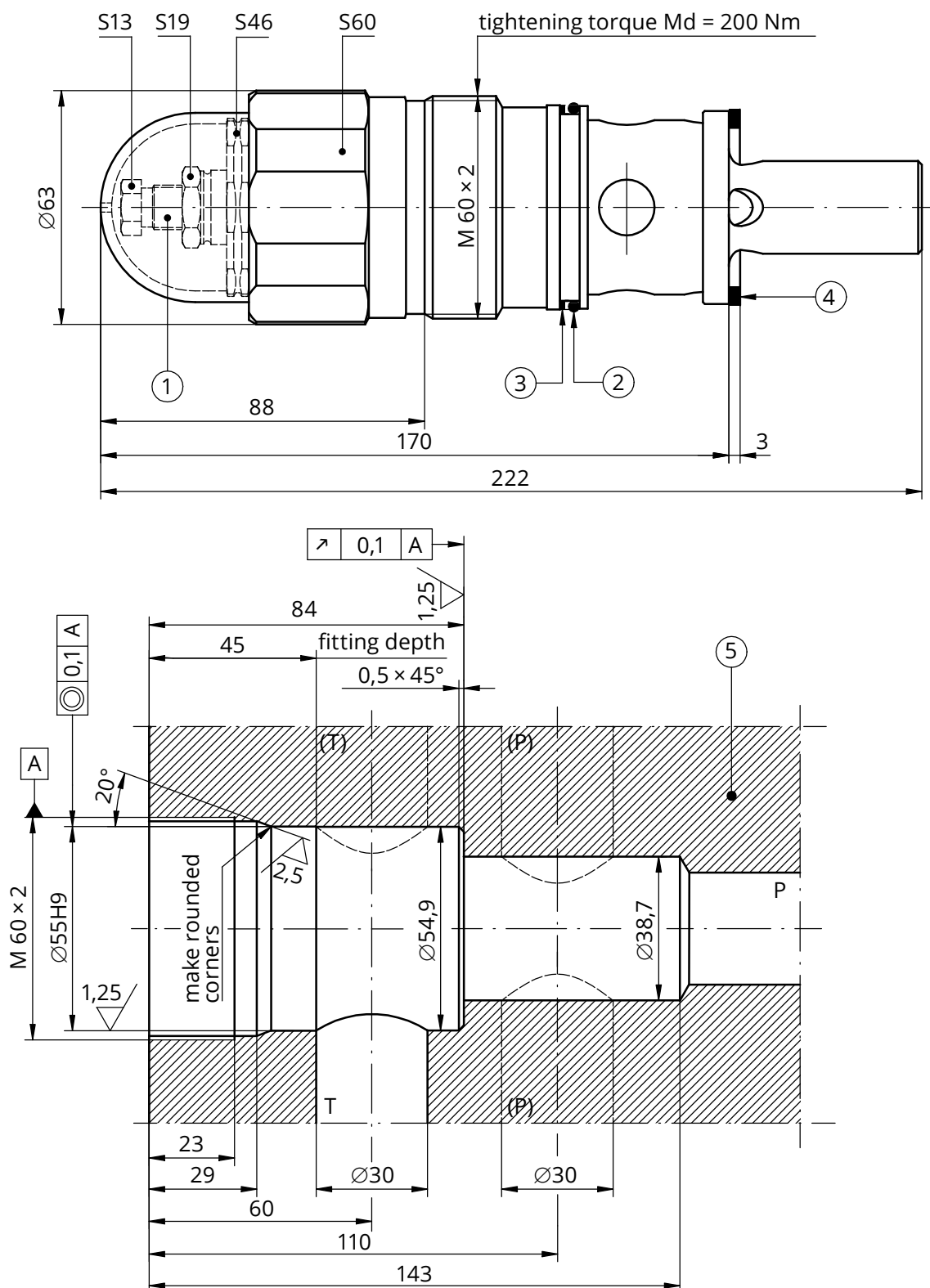
### OVERALL AND CONNECTION DIMENSIONS

version for threaded connection UZPD30...G...



## OVERALL AND CONNECTION DIMENSIONS

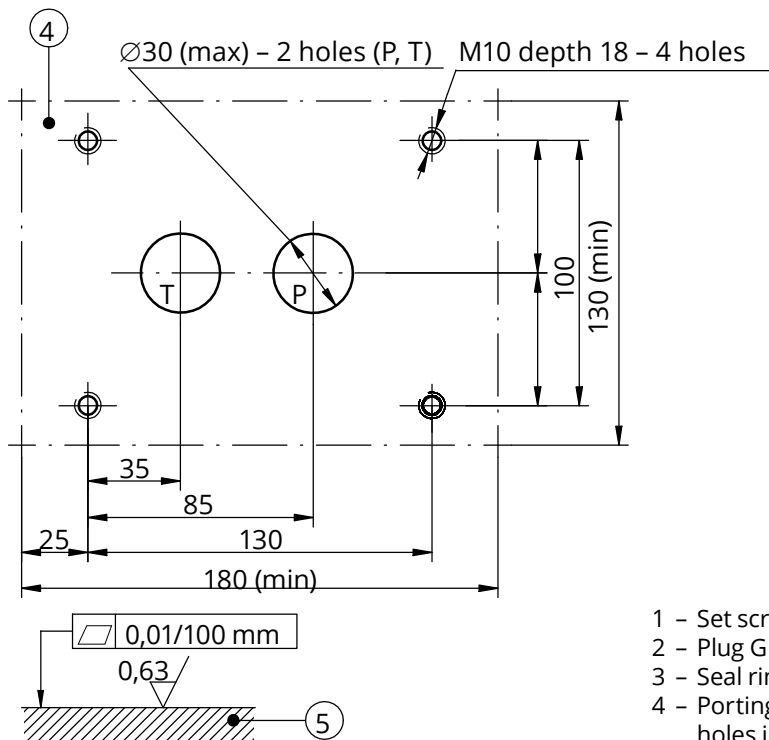
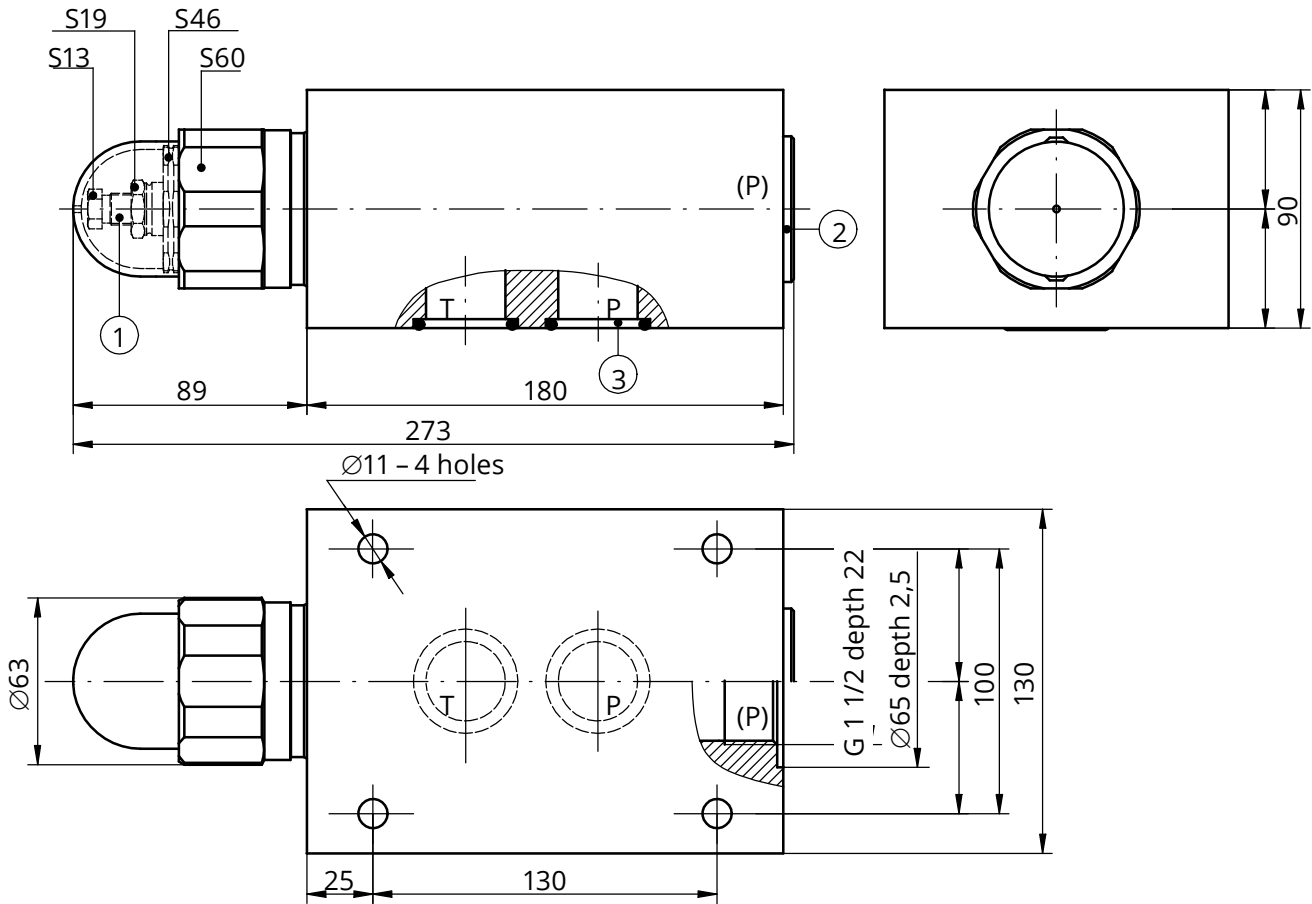
version for cartridge mounting UZPD30...K...



- 1 - Set screw
- 2 - Seal o-ring  $49 \times 3$  - 1 pc
- 3 - Back up ring  $55 \times 50,4 \times 1,4$  - 1 pc
- 4 - Seal ring  $53 \times 42,7 \times 3$  - 1 pc
- 5 - Valve cavity

## OVERALL AND CONNECTION DIMENSIONS

version for subplate mounting UZPD30...P...  
overall and connection dimensions for a valve

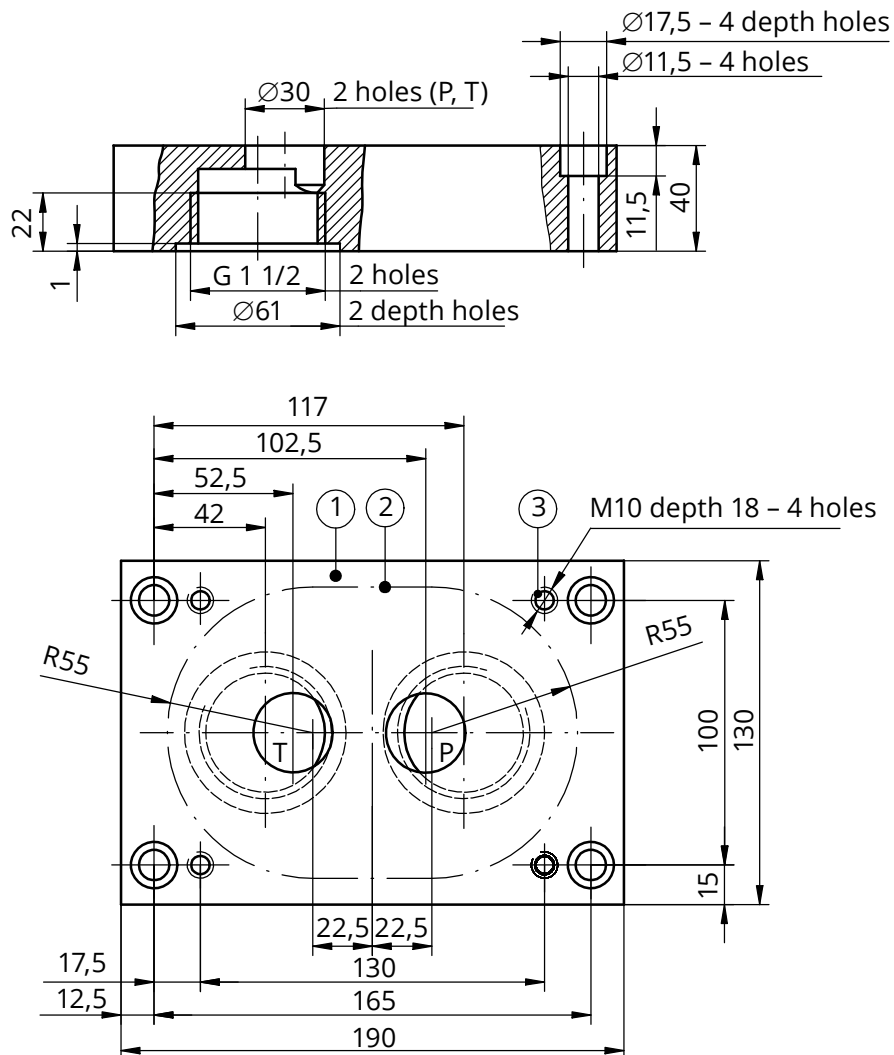


- 1 - Set screw
- 2 - Plug G 1 1/2 (additional connection P)
- 3 - Seal ring o-ring **34 × 3** - 2 pcs
- 4 - Porting pattern - configuration of connection holes in subplate mounting bolts **M10 × 110 -10.9** in accordance with **PN-EN ISO 4762** (PN-87/M-82302) - 4 pcs/kit tightenin torque **Md = 68 Nm**.
- 5 - Admissible surface roughness and flatness deviation for a subplate face

## OVERALL AND CONNECTION DIMENSIONS

### version for subplate mounting UZPD30...P...

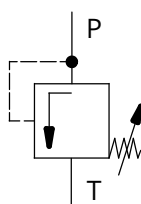
overall and connection dimensions for subplate type G 499 944



- 1 - Mounting face of valve
- 2 - Recess in subplate for coupling fittings for threaded pipes
- 3 - Holes for bolts mounting the valve mounting bolts **M10 × 110 -10.9** in accordance with **PN-EN ISO 4762** (PN-87/M-82302) - 4 pcs/kit tightening torque **Md = 68 Nm** subplates and mounting bolts must be ordered separately

## SCHEMES

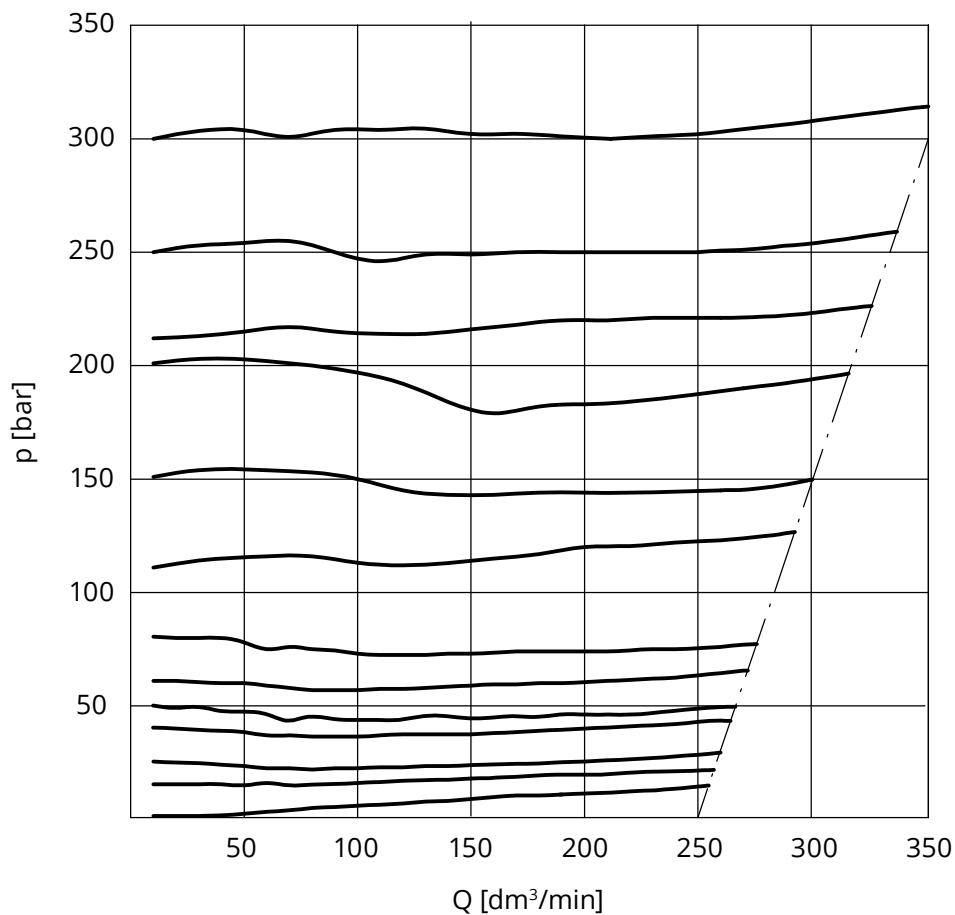
Graphical symbol of the valve type **UZPD30...**



## PERFORMANCE CURVES

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

Characteristics for working pressure during flow



## HOW TO ORDER

UZPD: 30 - / \*

**Nominal size (NS)**  
**NS30 = 30**

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

**Adjustment method**  
**Hexagon socket set screw = S**

**Type of connection**  
**cartridge mounting = K**  
 for threaded connection = G  
 for subplate mounting = P

**Pressure setting**  
 up to 2,5 MPa = 25  
 up to 5 MPa = 50  
 up to 10 MPa = 100  
 up to 20 MPa = 200  
 up to 31,5 MPa = 315

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

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

## 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: UZPD30 - 02 S K /315