

# Pressure relief valve, pilot operated, sandwich plate type UZPR10

NS 10 |  $p_{max}$  35 MPa |  $Q_{max}$  100 dm<sup>3</sup>/min | WK 497 100



## DATA SHEET - OPERATION MANUAL

### APPLICATION

Pressure relief valve, pilot operated, sandwich plate design type UZPR10... is used to limit pressure in hydraulic systems.

### OPERATION DESCRIPTION

Pressure relief valve sandwich plate type **UZPR10...** consists of a main body **1** and screwed-in relief cartridge valve pilot operated **2** type **UZPS6** (WK 492 860). Proper drilling of the body allows connections as per hydraulic diagrams of available versions. When the pressure in the system exceeds the setting of the valve **2**, it opens, causing relief flow to port **T** (for version ... **ABBA...** to port **A** or **B**).

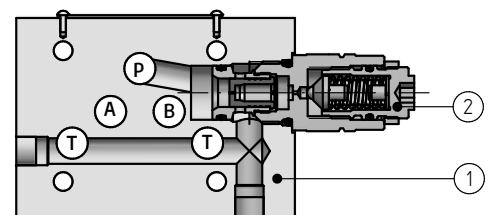
### TECHNICAL PARAMETERS

hydraulic fluid	mineral oil
required cleanliness class of oil	ISO 4406, class 20/18/15
nominal fluid viscosity	37 mm <sup>2</sup> /s in temperature 55 °C
viscosity range	2,8 ÷ 380 mm <sup>2</sup> /s
fluid temp. range (in a tank)	recommended 40 ÷ 55 °C; max. -20 ÷ 70 °C
ambient temp. range	-20 ÷ 70 °C
max. operating pressure	35 MPa
pressure ranges	5 MPa; 10 MPa; 20 MPa; 35 MPa;
max. pressure ranges	35 MPa
max. flow	100 dm <sup>3</sup> /min
type of cartridge relief valve	UZPS6 according to data sheet WK 492 860
weight (according version)	...AT...; ...PT...; ...BT... - 1,6 kg ...ATBT...; ...ABBA... - 2 kg

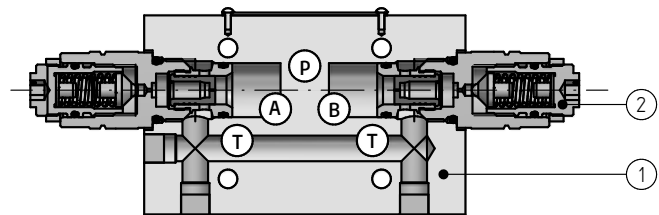
assembly and operation requirements at [www.operating-conditions.ponar.pl](http://www.operating-conditions.ponar.pl)



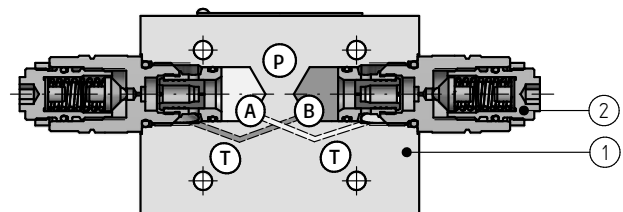
UZPR10S - 02/100 - 2 PT



UZPR10S - 02/100 - 2 ATBT

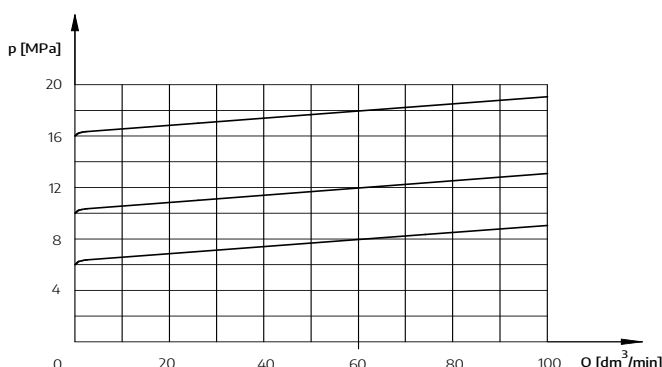


UZPR10S - 02/100 - 2 ABBA

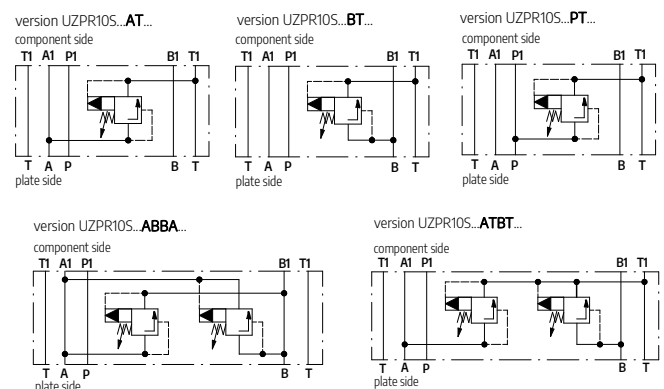


### CHARACTERISTIC

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

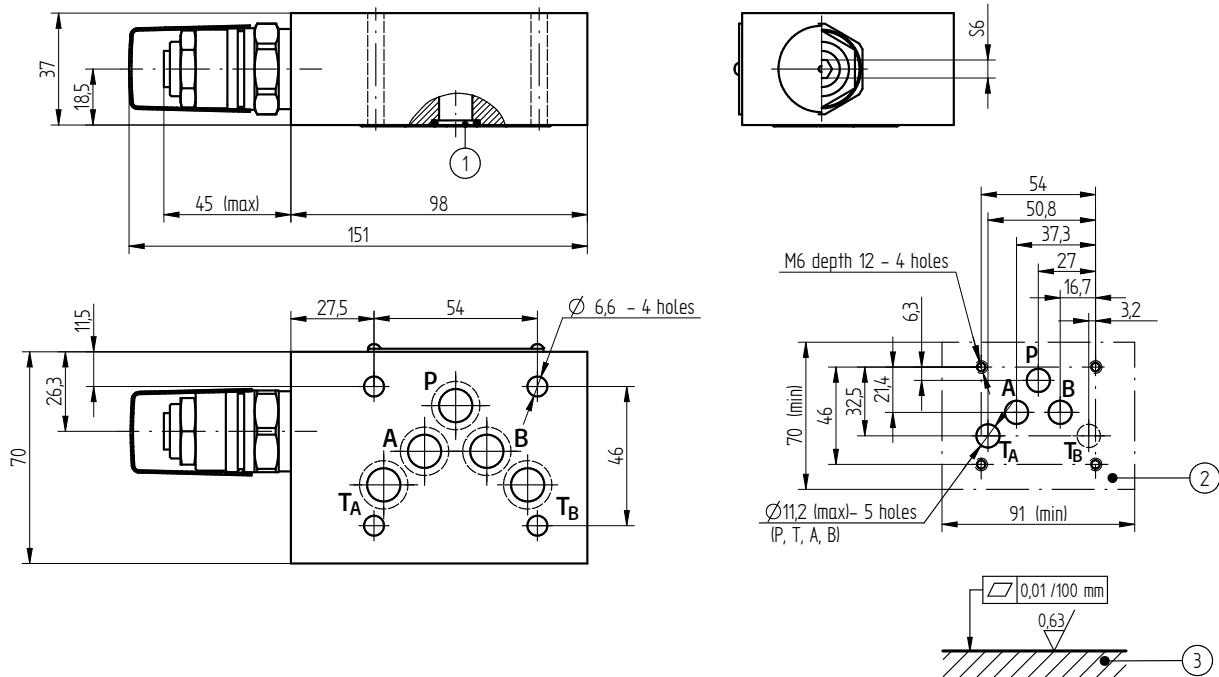


### HYDRAULIC SYMBOLS

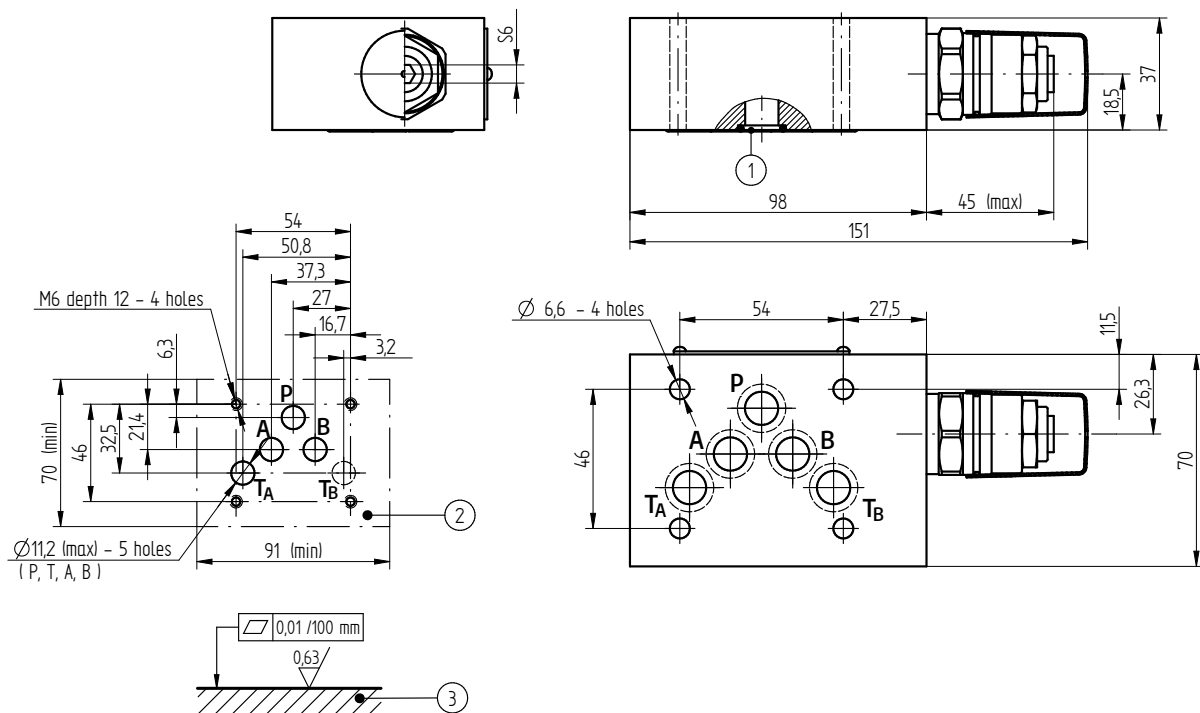


## OVERALL AND CONNECTION DIMENSIONS

version: UZPR10...AT...



version: UZPR10...BT...; ...PT...



1. o-ring 12 x 2 - 5 pcs/kit (P, T<sub>A</sub>, T<sub>B</sub>, A, B)
2. mounting holes configuration of a subplate in accordance with the standards listed below: CETOP RP 121H symbol CETOP 4.2-4-05 (nominal size CETOP05); ISO4401 symbol ISO4401-05-04-0-94 fixing screws M6 x L\* - 10.9 4 pcs/kit according with PN-EN ISO 4762; tightening torque **Md = 15 Nm**
3. required surface quality of the valve contact surface

**NOTE:**

(\* ) – required length of the screws L is related to type and the number of hydraulic components in the stack



## HOW TO ORDER

UZPR 10 S   /   - 2      

1      2      3      4      5      6      7      8

### 1 nominal size

NS10 = 10

### 2 type of cartridge relief valve

valve UZPS6 = S

### 3 series number

series 02= 02

(00÷09) connection and installation dimensions unchanged

### 4 pressure range

up to 5 MPa = 50

**up to 10 MPa = 100**

up to 20 MPa = 200

up to 35 MPa = 350

### 5 adjustment type

set screw with internal hexagon = 2

### 6 relief function form - to

A - T = AT

B - T = BT

**P - T = PT**

A - T and B - T = ATBT

A - B and B - A = ABBA

### 7 sealing

NBR (for fluids on mineral oil base) = ∅

FKM (for fluids on phosphate ester base) = V

### 8 further requirements = \*

(to be agreed with the manufacturer)

∅ indicates that the box should be left blank

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

## SUBPLATES AND FIXING SCREWS

Subplates must be ordered according to the data sheet WK 496 520.

Subplate symbols:

**G67/01** – threaded connection G $\frac{1}{2}$

G534/01 – threaded connection G $\frac{3}{4}$

Subplates and fixing screws of the valve M6 × L\*–10.9 - 4 pcs/kit in accordance with PN – EN ISO 4762 must be ordered separately. Tightening torque Md = 15 Nm.

### NOTES:

The subplate symbol in bold is the preferred version available in the short delivery time.

(\*) – required length of the screws L is related to type and the number of hydraulic components in the stack.

## CONTACT

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