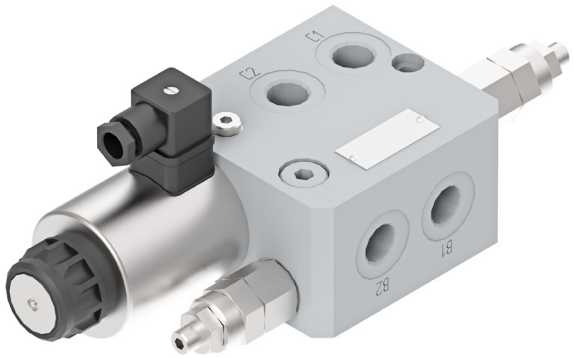
# Directional spool valve electrically operated 6UREE10 type with a cross-over relief valve

**NS 10 | $p_{max}$ 35 MPa | $Q_{max}$ 85 dm³/min | WK 421 980**

PONAR wadowice

## DATA SHEET – OPERATION MANUAL



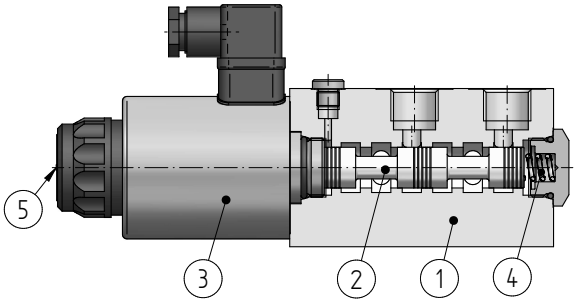
### APPLICATION

Directional spool valves electrically operated **6UREE10** type are designed to change the direction of fluid flow in a system, they are mainly used for supply switching and control between independent parts of a hydraulic system.

The cross-over relief (shock) valves are intended for limiting maximal pressure at two connections. It also provides a protection against a sudden pressure increase.

Directional valves electrically operated **6UREE10** type are adapted for threaded mounting in any position in a hydraulic system.

**The product is compliant with the regulations of directive 2014/35/UE.**




### DESCRIPTION OF OPERATION

Main elements of directional spool valve **6UREE10** type are housing **1**, spool **2**, solenoid **3**, centering spring **4** and a manual override switch **5**.

The spool **2** shifts into one of end positions by direct means of the solenoid **3**. The return to the neutral position is forced by the centering spring **4**.

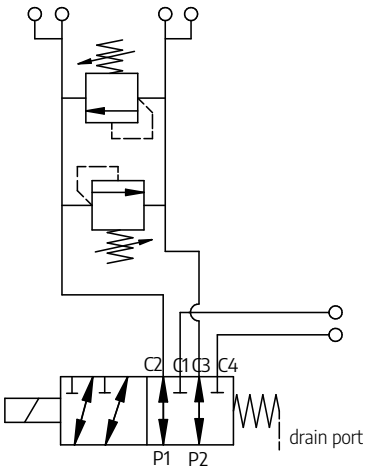
In case of emergency the spool can be shifted manually by the use of the override **5**.

### TECHNICAL PARAMETERS

| | |
|---|---|
| hydraulic fluid | mineral oil |
| required fluid cleanliness class | ISO 4406 class 20/18/15 |
| nominal fluid viscosity | 37 mm²/s at temperature55°C |
| viscosity range | 2,8 ÷ 380 mm²/s |
| ambient temperature range | -30 ÷ 50°C |
| max operating pressure | 21 MPa without a drain port<br>35 MPa with a drain port |
| switching frequency | switching on: up to 60 ms<br>switching off: up to 40 ms |
| max. switching frequency | 15000 on/h |
| weight | max 7 kg |
| nominal supply voltage for solenoids | DC 12V or DC 24V |
| supply voltage tolerance | ±10% |
| insulation class | IP 65 |
| power requirement (direct current) | 45 W |
| solenoid coil temperature | max 150°C |

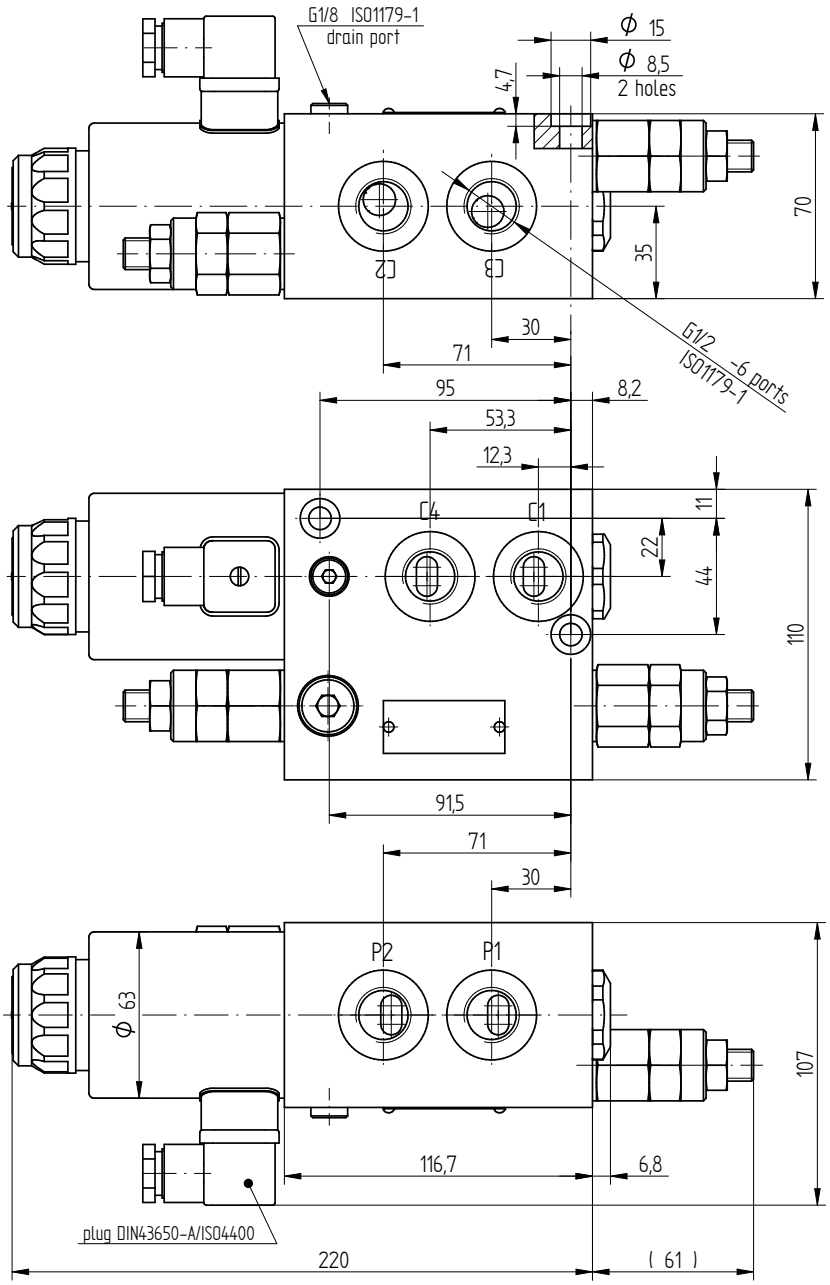
assembly and operation requirements at www.operating-conditions.ponar.pl

### DIAGRAM



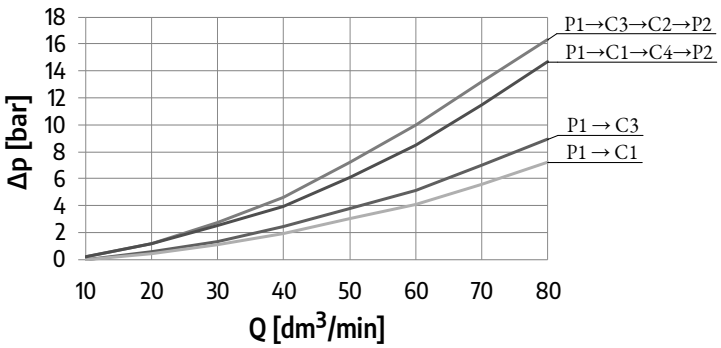
## OVERALL AND CONNECTION DIMENSIONS

**version: 6UREE10.../R-ZK...**




## PERFORMANCE CURVES

measured at viscosity $\nu$ = 41 mm²/s and temperature t = 50°C




**flow resistance curves**

charts of pressure changes **Δp** p in the function of directional valve **6UREE10/R-ZK...** flow Q

## HOW TO ORDER

6UREE10 – [1] / [2] – [3] – [4][5][6] / [7] / [8] / [9]

**1 series number**
series 02 = 02
(01÷09) connection and installation dimensions unchanged

**2 type of connection**
thread G1/2 = R

**3 cross-over relief valve**
with a cross-over relief valve = ZK

**4 supply voltage for solenoid**
12V DC = G12N
24V DC = G24N

**5 solenoid plug**
plug Z4 =Z4
plug Z4L (with a lamp) =Z4L

**6 sealing**
NBR (for fluids on mineral oil base) = Ø
FPM (for fluids on phosphate ester base = V

**7 valve no. 1 setting in bar, if required**
(pressure relief valves protected with caps)

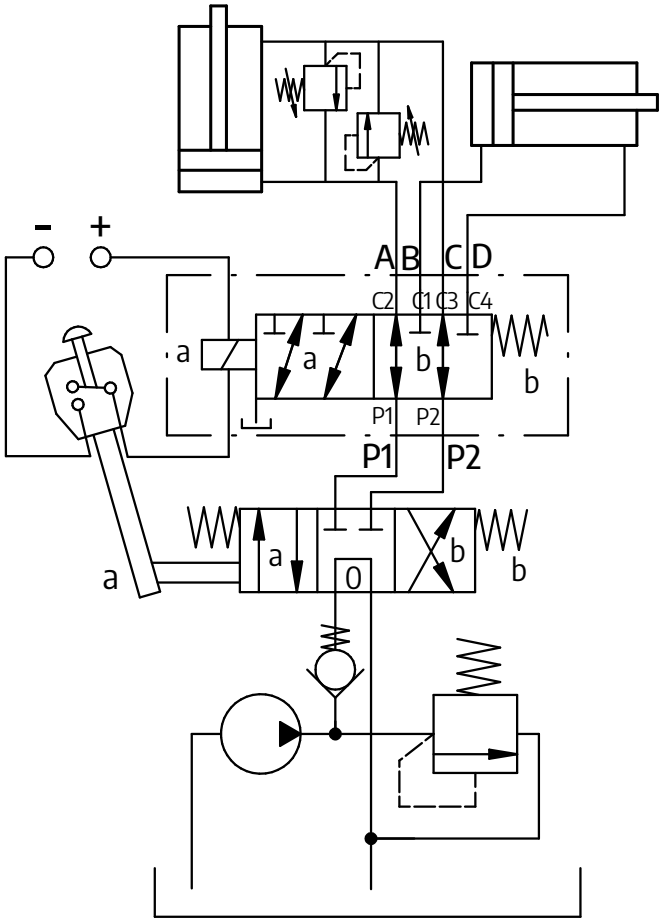
**8 valve no. 2setting in bar, if required**
(pressure relief valves protected with caps)

**9 further requirements = ***
(to be agreed with the manufacturer)

Ø Symbol means the field should be left blank
The symbols in bold are preferred versions available in short delivery time.

Coding example: **6UREE10-02/R-ZKG24NZ4**

## EXAMPLE OF APPLICATION IN HYDRAULIC SYSTEM



## CONTACT

PONAR Wadowice S.A.
ul. Wojska Polskiego 29
34-100 Wadowice

tel. +48 33 488 21 00
www.ponar-wadowice.pl