Directional spool valve electrically operated 6UREE10 type with pressure-relief/check valves

NS 10 | p_{max} 35 MPa | Q_{max} 85 dm³/min | WK 421 020

DATA SHEET - OPERATION MANUAL

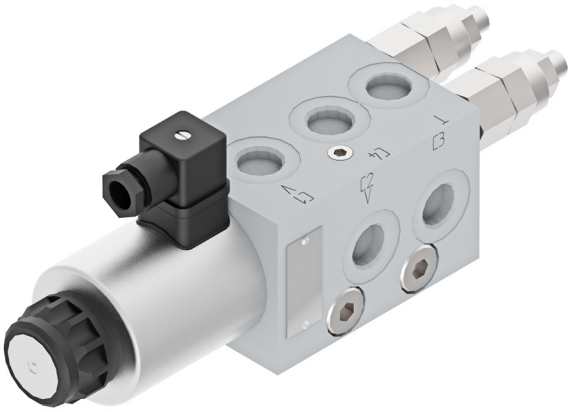
APPLICATION

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 pressure relief valves are intended for limiting maximal pressure at two connections. Check valves are used for maintaining the pressure in the system with a presence of an optional accumulator loaded by drains.

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.

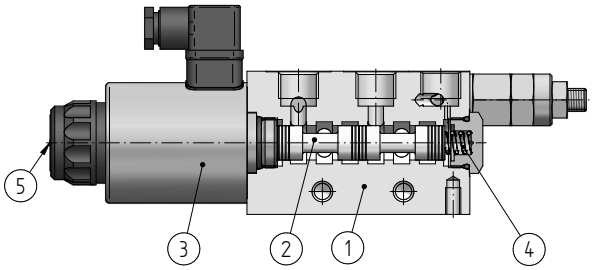


DESCRIPTION OF OPERATION

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

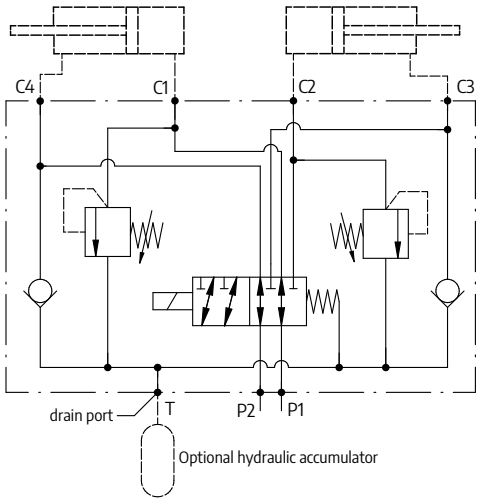


TECHNICAL PARAMETERS

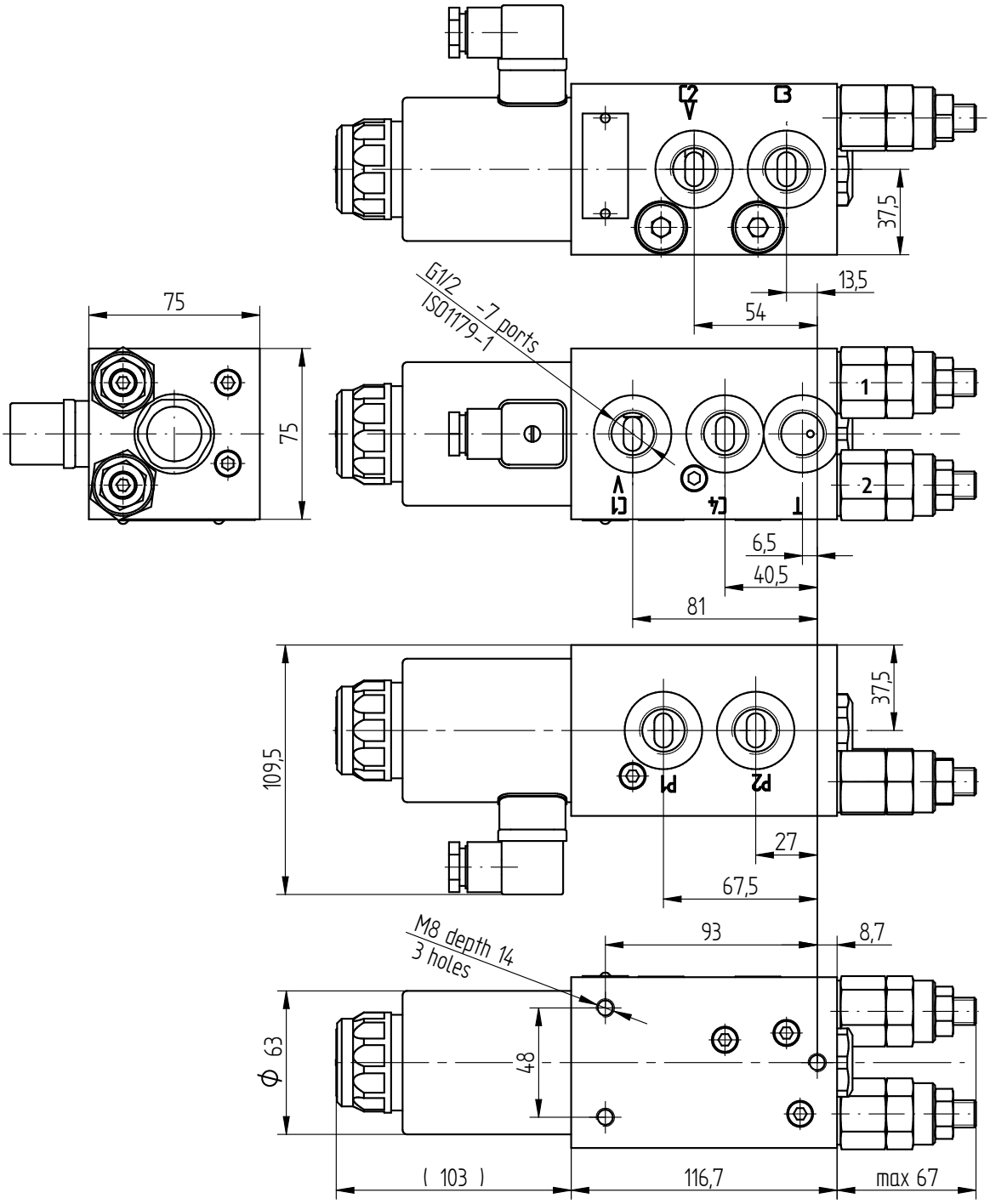
hydraulic fluid	mineral oil
required fluid cleanliness class	ISO 4406 class 20/18/15
nominal fluid viscosity	37 mm²/s at temperature 55°C
viscosity range	2,8 ÷ 380 mm²/s
ambient temperature range	-30 ÷ 50°C
max. operating pressure	21 MPa without a drain port 35 MPa with a drain port
pressure relief valves setting range	2 ÷ 25 MPa
switching frequency	switching on: up to 60 ms switching off: up to 40 ms
max. switching frequency	15000 on/h
weight	max 7 kg
nominal supply voltage for solenoids	DC 12V; 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

HYDRAULIC DIAGRAM

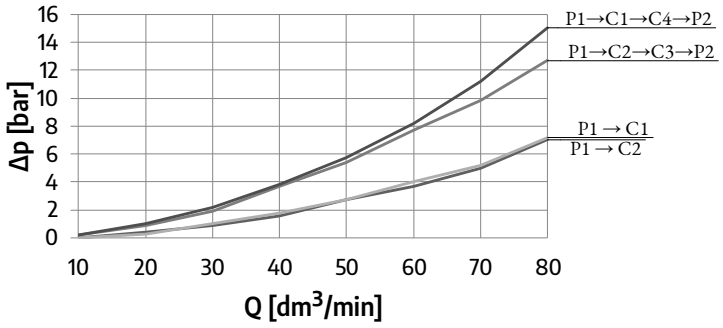


OVERALL AND CONNECTION DIMENSIONS



PERFORMANCE CURVES

measured at viscosity ν = 41 mm²/s and temperature t = 50°C



flow resistance curves
charts of pressure changes **Δp** in the function of directional valve **6UREE10/R-P-Z...** flow Q

HOW TO ORDER

6UREE10 – [1] / [2] – [3] – [4] – [5][6][7] / [8] / [9] / [10]

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

2 type of connection
thread G1/2 = R

3 pressure relief valve
in line C1 and C2 = P

4 check valve
in line C3 and C4 = Z

5 supply voltage for solenoid
12V DC = G12N
24V DC = G24N

6 solenoid plug
plug Z4 = Z4
plug Z4L (plug with a light) = Z4L

7 sealing
NBR (for fluids on mineral oil base) = ∅
FPM (for fluids on phosphate ester base) = V

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

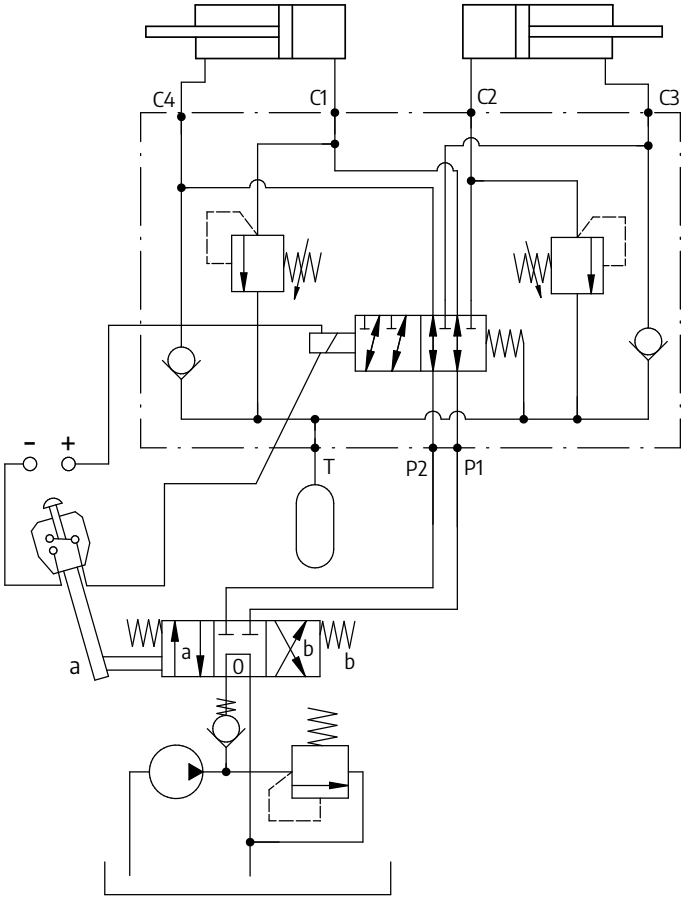
9 valve no. 2 setting in bar, if required
(pressure relief valves protected with caps)

10 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-P-Z-G24NZ4**

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