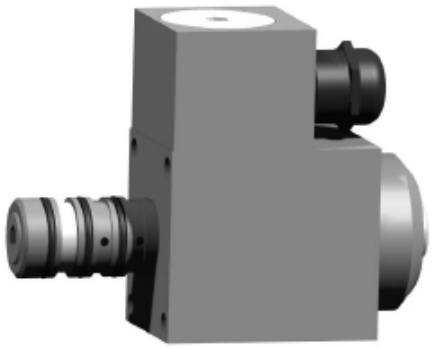
PONAR wadowice	Three-way explosion proof directional control valve type 3 IREH 2			WK 499 415
	NS2	32 MPa	1,3 dm³/min	09.2007

CATALOGUE - SERVICING ISTRUCTION

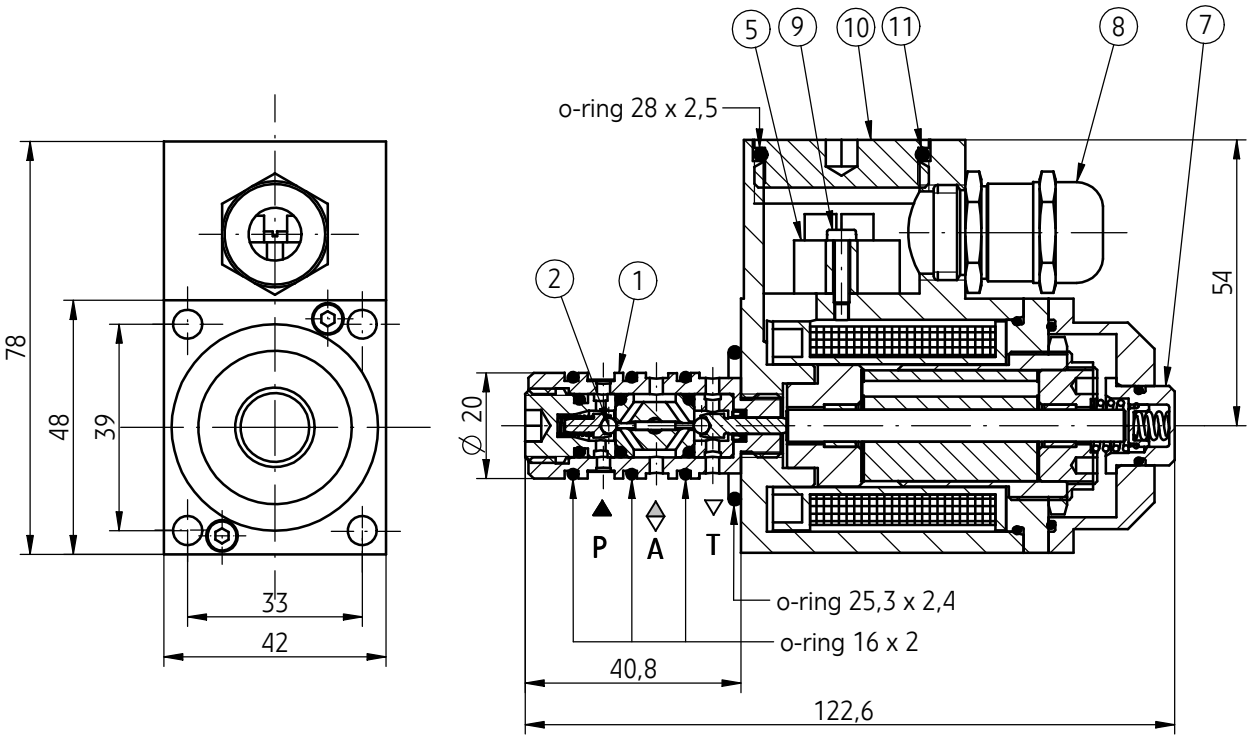
APPLICATION

The three-way directional control valves are used to control the direction of flow in hydraulic. These valves are mainly used in hazardous areas especially in mining industry. It is certified with ⟨Ex⟩I M1 Ex ia I, and can work with outlet explosion proof circuit "a" or "b" of the power pack permitted for group I gas explosion at maximum parameter Ui=15V, Ii-1,6A.



DESCRIPTION OF OPERATION

The directional valve is switched by changing position of the ball (balls) (2) which moving along its axis separates or connects ports P with A or port A with T in the sleeve (1). The change of direction flow is secured by the putting voltage on coil (3). An optional emergency button (7) permits movement of the spool without solenoid. The valve is equipped with explosion proof solenoid type EMSGI – 45. Solenoid is assembled with sleeve (4) and armature of the solenoid. There is a coil (3) on the sleeve (4). Inside the coil are diodes. Power lead must be sealed and immobilized by using gland (8). Terminal strip is fixed to the housing by using bolt (9). After installing the chamber must be closed by using the cork (10) with sealing rings (11).



TECHNICAL DATA

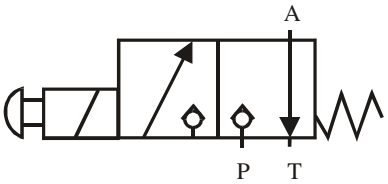
Hydraulic Fluid	Mineral Oil
Relative humidity of air	To 95%
Viscosity range	From 2,8 to 328 mm^2/s
Optimum working temperature	From 40 to 55°C
Working temperature range	From -20 to 60°C
Required filtration	**25 µm**
Recommended Filtration	10 µm
Maximum pressure	**32 MPa**
Maximum flow	**1,3 dm^3/min**
Supply voltage	**12 V**
Supply current	110 mA
Weight	1,2 kg
Scope of insulation	**IP 54**
Characteristic of explosion proof	**⟨Ex⟩ I M 1 Ex ia I**

ASSEMBLY AND OPERATION REQUIREMENTS

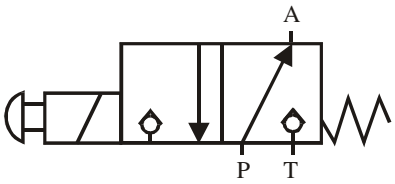
1. Electric connection of the valve must be made according to electric scheme.
2. Conductors of valve must be meet requirements applied in the mining machinery.
3. Only skilled workers can direct connect valve to a electrical system.
4. The plug must be supported by retains screw M5 x 50 - 8.8 – PN - EN ISO 4762.2001; tightening torque 5 Nm
5. During the period of operation must be kept the fluid viscosity and filtration according to requirements defined in Servicing instruction
6. In order to ensure the failure free and safe operation must be check:
   a. Condition of the electrical connection,
   b. The verity proper working of the valve,
   c. Cleanness of the hydraulics fluid.
7. Repairing of the broken valve must be done by service workshop.
8. A person that operates the valve has to acquaint with Servicing Instruction.

SCHEMES

Graphical symbol

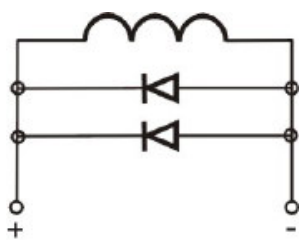


3 IREH 2 D1...

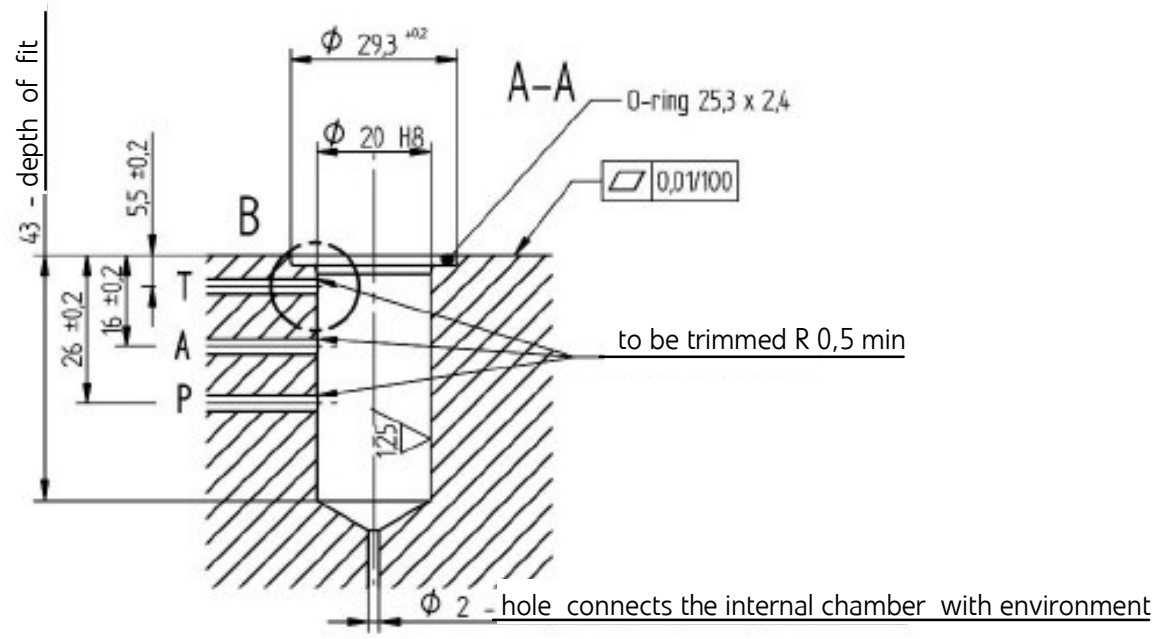


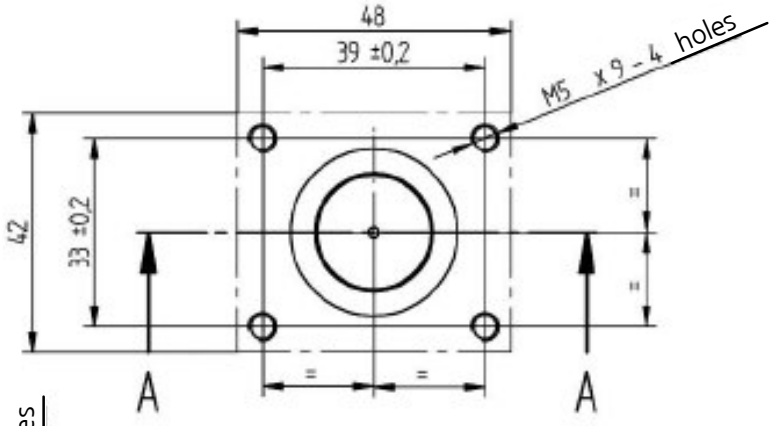
3 IREH 2 D2...

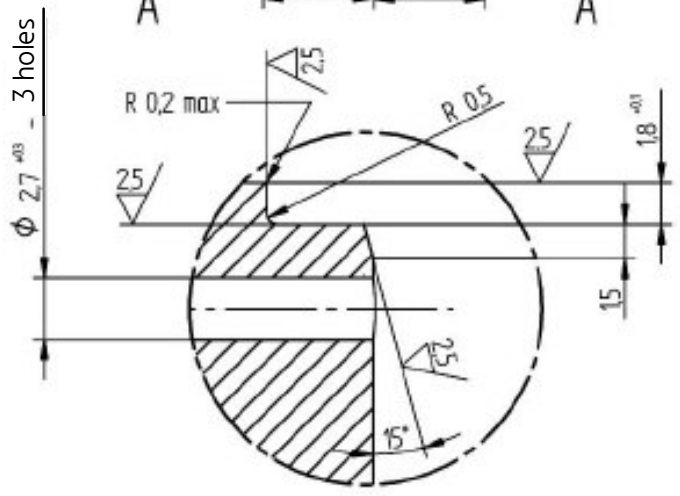
electrical scheme



DIMENSION OF CAVITY



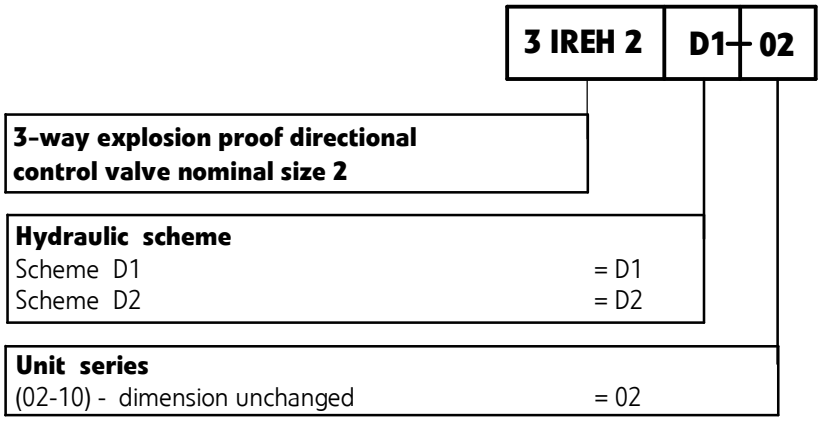




DETAIL B

HOW TO ORDER

Order coded in the way showed below should be forwarded to the manufacturer.



Coding example:

3 IREH 2 D1 - 02

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