PONAR wadowice

Proportional directional valve type USAB 6

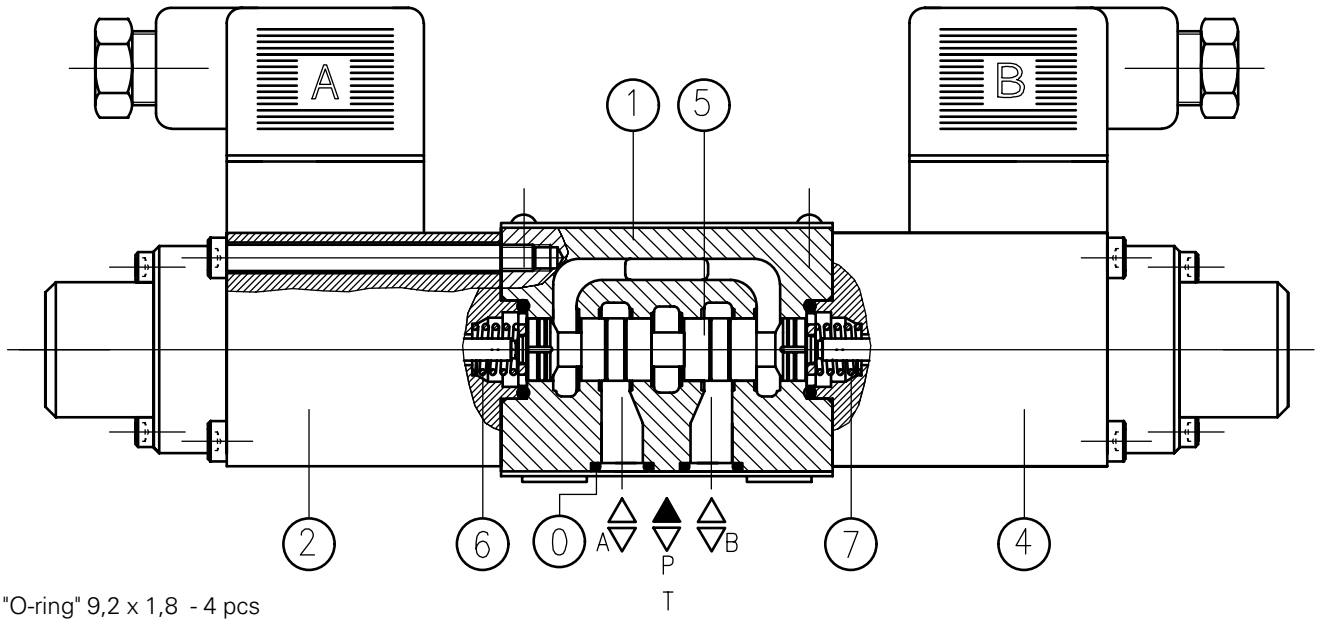
Size 6	31,5 MPa	32 dm³/min.

WK 450 469

04.2001r.

APPLICATION

Proportional directional valves type USAB 6 are used to control the direction and speed of a user movement. The output flow is proportional to electrical input signal.



"O-ring" 9,2 x 1,8 - 4 pcs

DESCRIPTION OF OPERATION

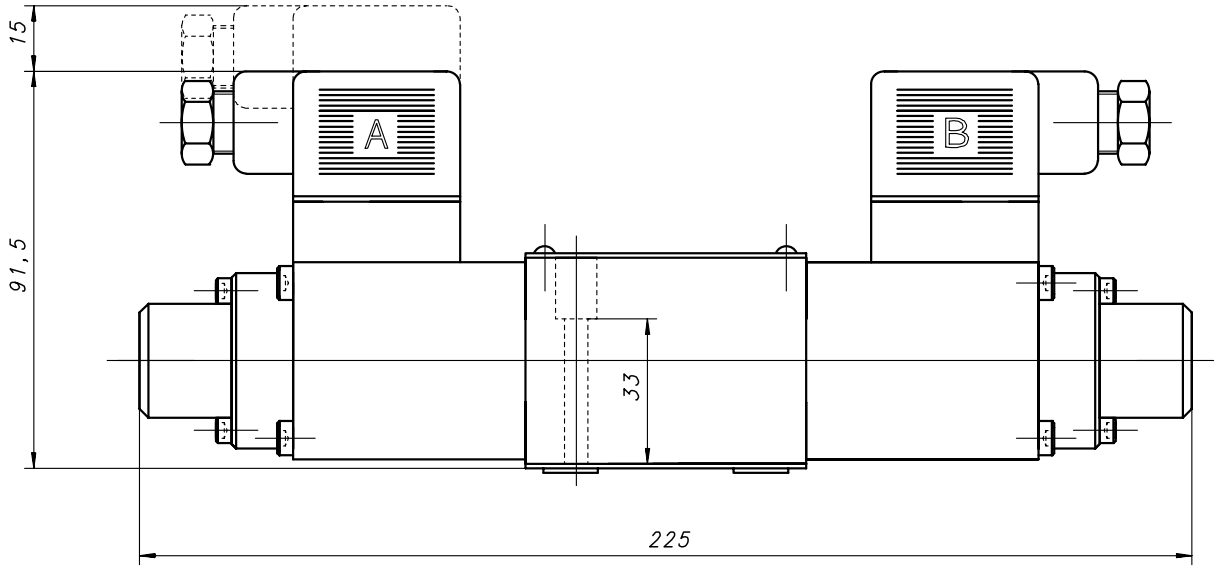
Proportional directional valve type USAB 6 comprises mainly the housing 1, solenoids 2 and 4, spool 5, springs 6 and 7.
Electronic regulator (30 RE ...) can be included with the valve.
It is used to control proportional solenoids of the valve.

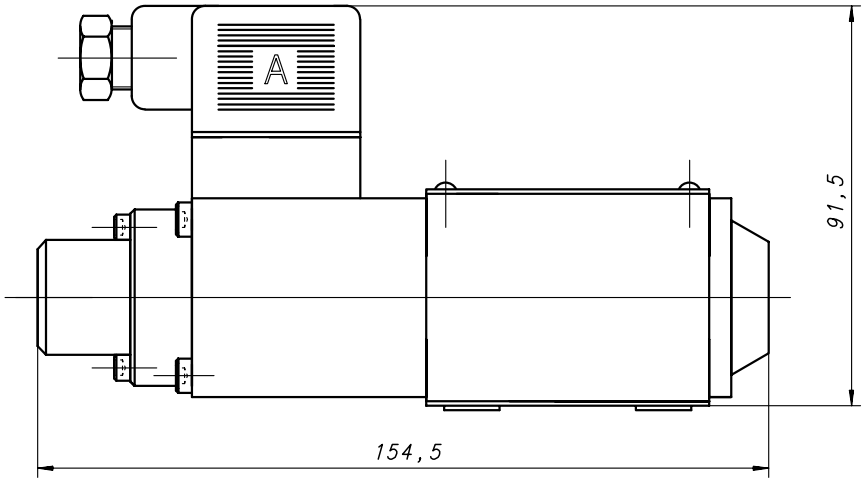
The proportional solenoid 2 or 4 moves the spool 5 from its neutral position. The neutral position is held by means of the springs 6 and 7. Current flowing through the solenoid 2 or 4 produces force pushing the spool 5 against the springs 6 or 7.

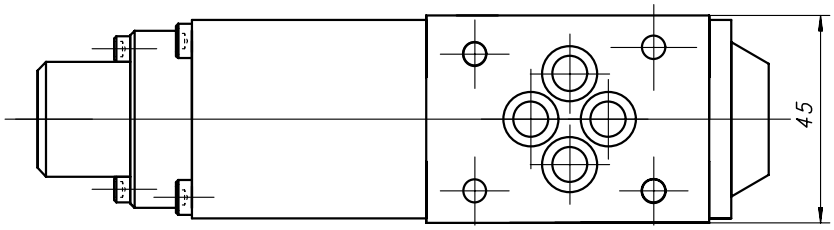
TECHNICAL DATA

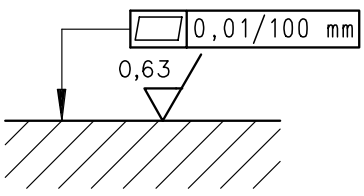
Working medium	Mineral oil
Operating pressure at port P, A, B	up to 31,5 MPa
Operating pressure at port T	up to 16 MPa
Required filtration	16 mm
Recommended filtration	10 mm
Nominal fluid viscosity	37 mm^2/s at temp. 328 K
Viscosity range	2,8 to 380 mm^2/s
Working temperature (in tank)	313 to 328 K
Hysteresis	< 6 %
Repetitation accuracy	< 3 %
Operating position	optional
3-position valve weight	~ 2,5 kg
2-position valve weight	~ 1,8 kg
Electrical characteristics	
Nominal solenoid power	~ 13 W
Resistance of cold solenoid coil (293K)	5,4W
Resistance of max hot solenoid coil	8,1W
Electronic regulators	30 RE 20 - for USE B6 - 3 and 2-position, data card WK 495 773

OVERALL AND CONNECTION DIMENSIONS







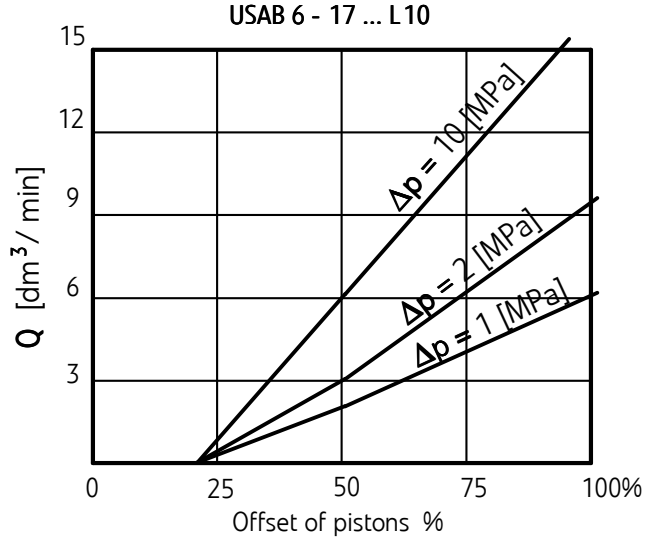


Admissible surface roughness and flatness deviation for a subplate face.

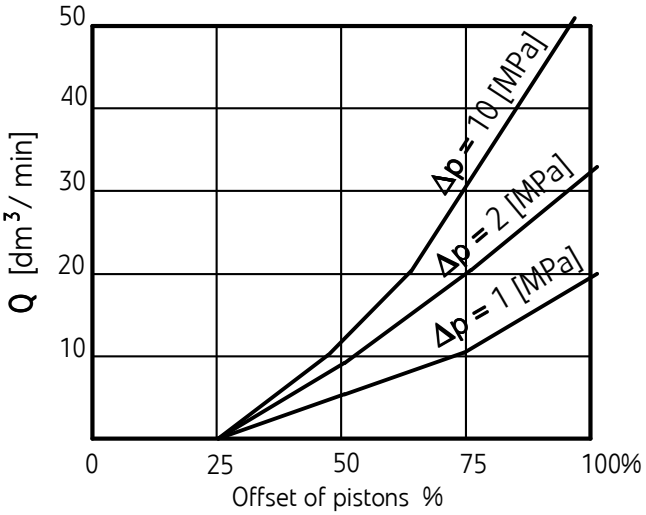
PERFORMANCE CURVES

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

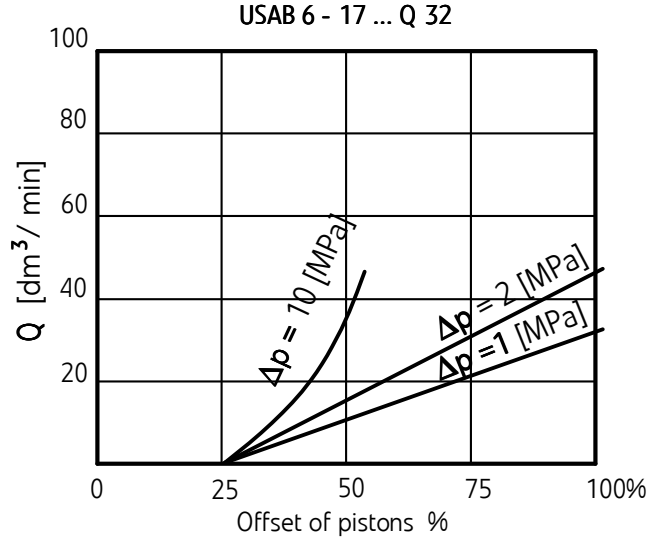
USAB 6 - 17 ... L10



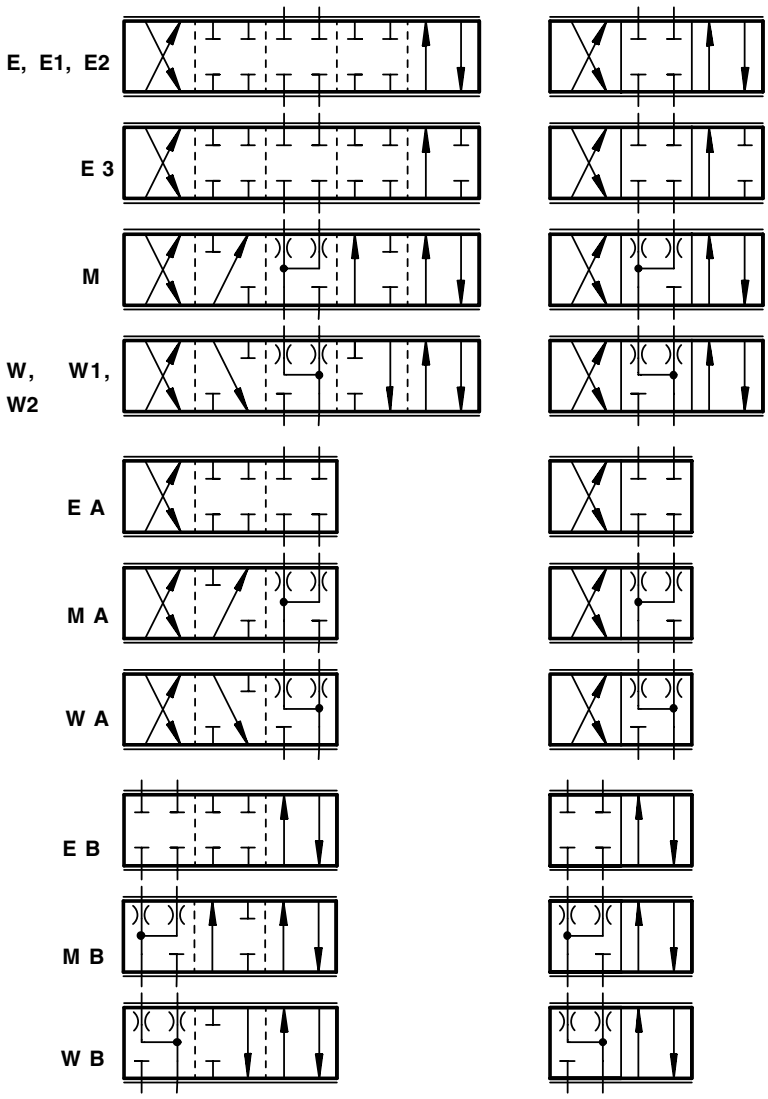
USAB 6 - 17 ... Q 20



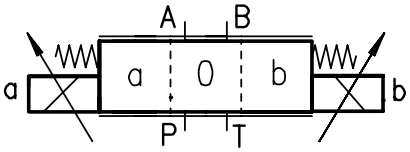
USAB 6 - 17 ... Q 32



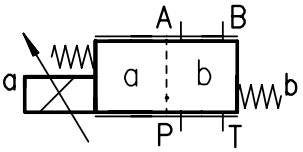
SPOOL SCHEMES



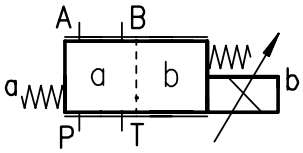
GRAPHICAL SYMBOL



USAB 6/ ...



USAB 6/ ... A



USAB 6/ ... B

For symbol **E1** i **W1**-:
P → A: Q_{max}
P → B: Q/2
B → T: Q/2
A → T: Q_{max}

For symbol **E2** i **W2**-:
P → A: Q/2
P → B: Q_{max}
B → T: Q_{max}
A → T: Q/2

For symbol **E3** i **W3**-:
P → A: Q_{max}
P → B: Q/2
B → T: close
A → T: Q_{max}

HOW TO ORDER

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

USAB 6						*

Series number
15 = 15
(15 - 19) - installation and connection dimensions remain unchanged

Designation of connections to schemes on page 3.

Flow changes
Linear (only for 10 dm³/min) = L
Progressive = Q

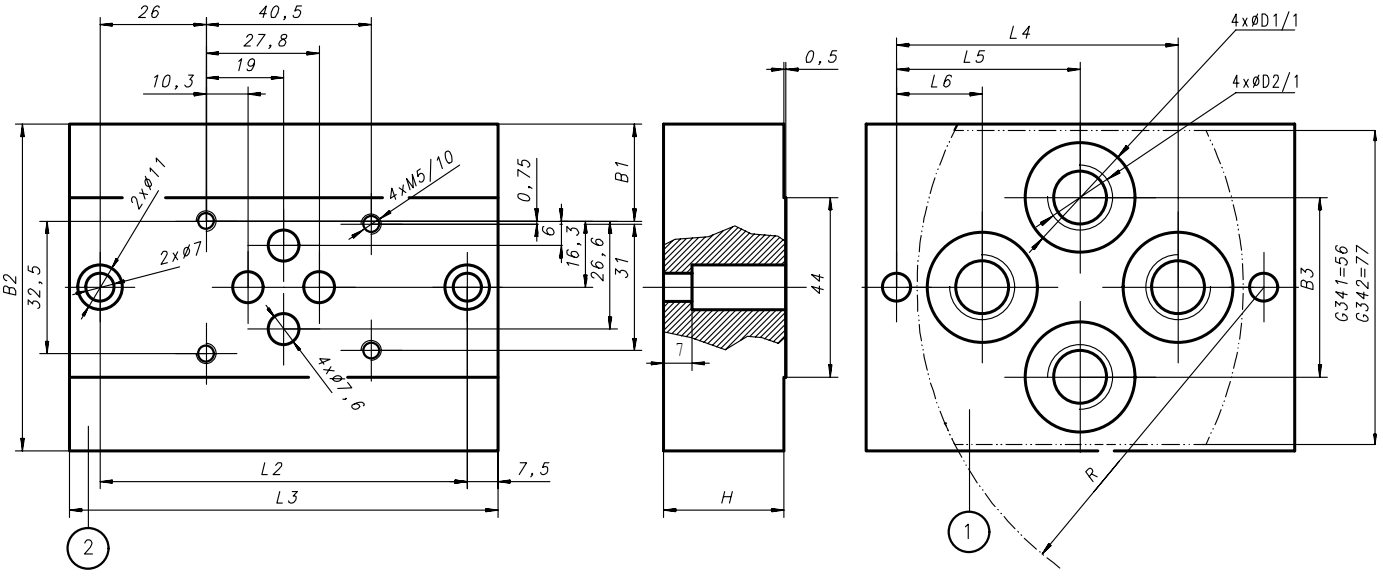
Nominal flow at Δp 1MPa
10dm³/min = 10
20dm³/min = 20
32dm³/min = 32

Sealing
Fluids on mineral oil base = with no code
Fluids on phosphate-ester base = V

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

Coding example : USAB 6 15 E L 10

Connection diamensions for subplate



item 1 - recess in subplate face
item 2 - connecting face

Weight ~ 0,8 kg

Fixing the valve to the subplate by means of 4 bolts
M5 × 45 - 10.9 PN-74/M-82302 (DIN 912)
Tightening torque - 9 Nm.
Bolts and subplates have to be ordered separately.

PONAR WADOWICE S.A.
ul. Wojska Polskiego 29
34-100 Wadowice
tel. 033/ 823 39 43, 823 30 41
fax 033/ 873 48 80
e-mail: ponar@ponar-wadowice.pl

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