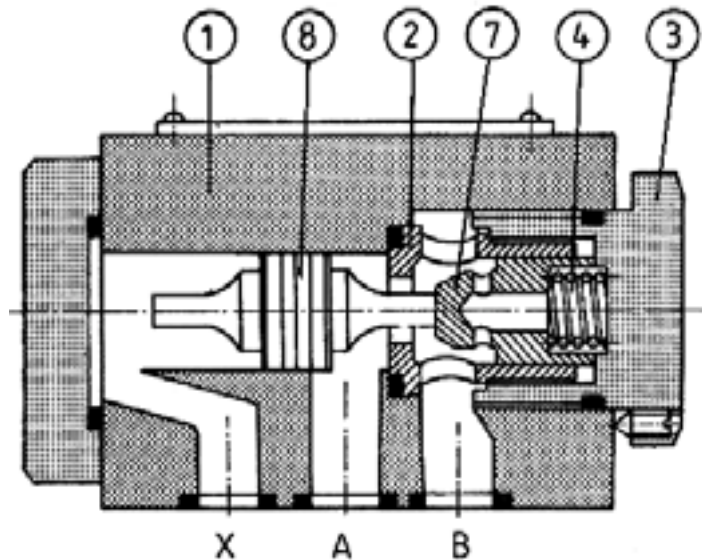


Pilot operated check valves for subplate mounting are used in the hydraulic systems when free flow in one direction and automatic closure in the opposite direction are required. There is a possibility of opening in the direction of closure. The valves can be mounted in any desired position together with a subplate. Sealing is achieved by fitting O-rings, which are included with the valve.



### DESCRIPTION OF FUNCTION



The plug 3 being the seat for the spring 4 is fitted in the housing 1. The main poppet 7 is held seated by the spring. If pressure difference at port A exceeds the cracking pressure determined by the spring, the poppet is pushed from its seat and connection A to B is open.

When pressure is applied to port X oil can also flow through the valve from B to A. When pressure affects control port X, the pilot spool 8 and then the main poppet are pushed from their seats. Fluid can flow from B to A as long as pilot pressure affects port X.

## TECHNICAL DATA

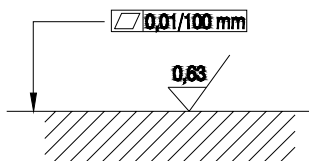
Hydraulic fluid	Mineral oil or phosphate ester
Nominal fluid viscosity	37 mm <sup>2</sup> /s at the temperature of 328 K
Viscosity range	2.8 to 380 mm <sup>2</sup> /s
Optimum working temperature( fluid in a tank )	313 - 328 K
Fluid temperature range	243 - 343 K
Required fluid filtration	16 μm
Recomended fluid filtration	10 μm
Maximum working pressure	32 MPa
Cracking pressure	0.11 MPa
Maximum pilot pressure	32 MPa
Weight	0.9 kg

$F_1$  - main poppet surface area  
 $F_2$  - control spool surface area  
 $C$  - pressure affecting area  $F_2$  , required for exceeding the spring force.

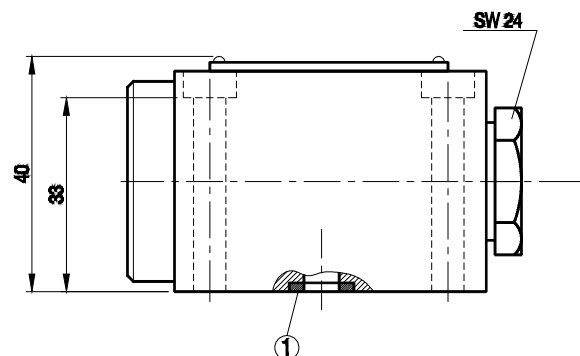
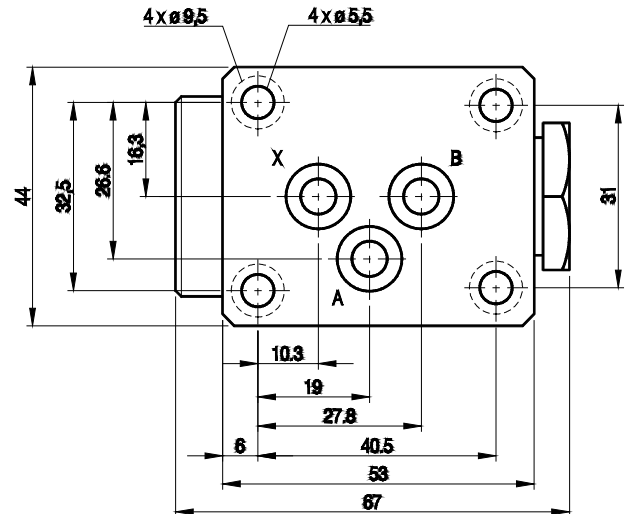
## CONTROL AREAS

$F_1$ (cm <sup>2</sup> )	$F_2$ (cm <sup>2</sup> )	$C$ (MPa)
0,38	1,13	0,07

## OVERALL DIMENSIONS

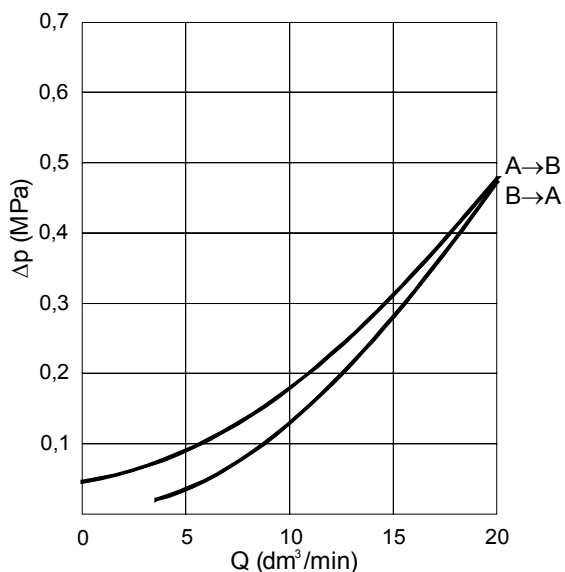


Admissible surface roughness and flatness deviation for a subplate face.



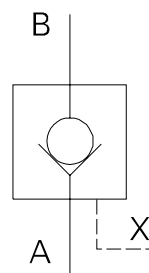
Item 1 - O-ring 9.2 × 1.8 - 3 pieces

**PERFORMANCE CURVES**, measured at  $v = 41 \text{ mm}^2/\text{s}$  and  $T = 323 \text{ K}$

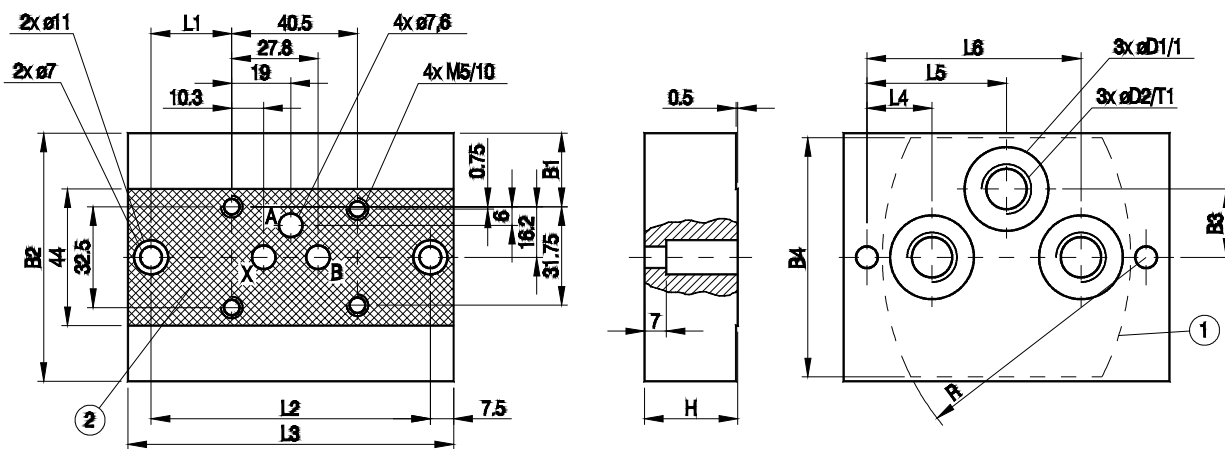


**SCHEMES**

Hydraulic scheme



**CONNECTION DIMENSIONS FOR SUBPLATE**



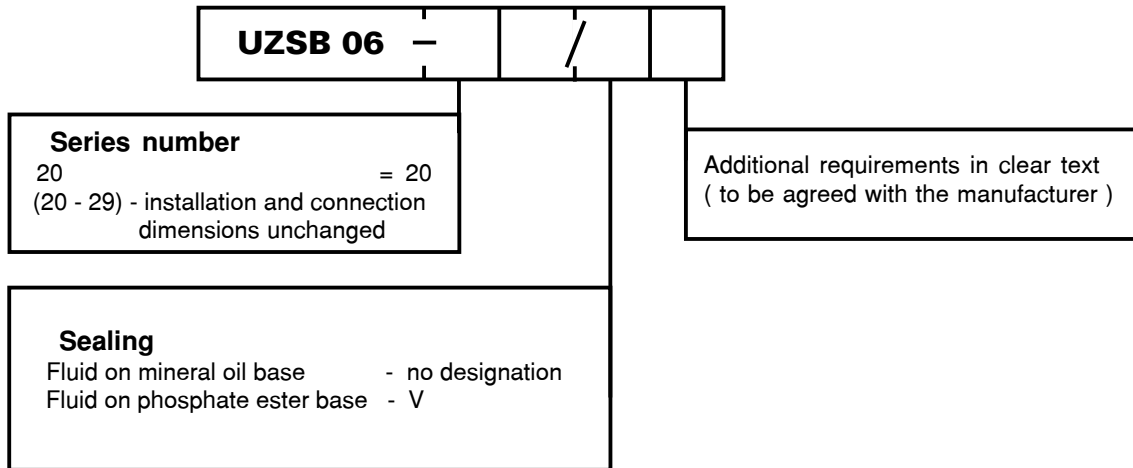
item 1 - recess in subplate  
item 2 - interface

Type	L1	L2	L3	L4	L5	L6	B1	B2	B3	B4	H1	D1	D2	T1	R
G342/01	26	90	105	21	45	69	23.7	80	22	77	30	28	G3/8	13	85
G341/01	21	80	95	25	40	55	12.7	58	17	55	25	22	G1/4	13	70
G341/02	21	80	95	25	40	55	12.7	58	17	55	25	22	M14 × 1.5	15	70
G342/02	26	90	105	21	45	69	23.7	80	22	77	30	28	M16 × 1.5	16	85

Mounting the valve to the subplate by means of 4 bolts M5 x 40 - 10.9 PN - 74 / M - 82302 ( DIN 912 ).  
Tightening torque - 10 Nm. Subplate and mounting bolts must be ordered separately.

## HOW TO ORDER

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



Coding example : UZSB 06 - 20/X

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

