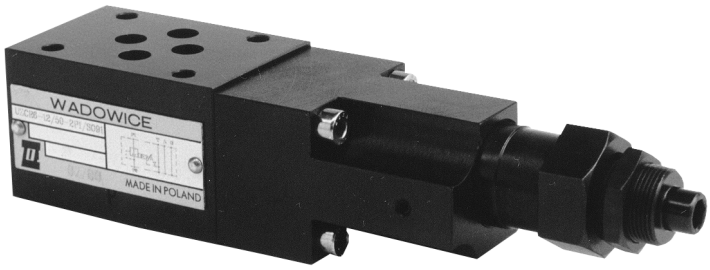
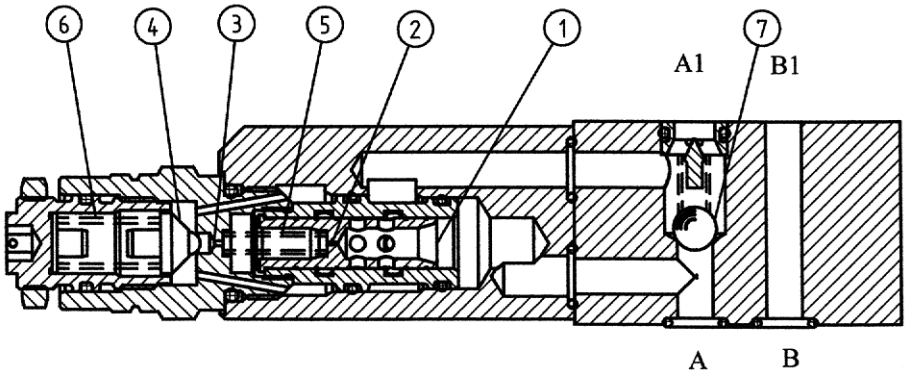
PONAR wadowice	Reducing - relief valve type UZCR 6			WK 495 740
	NG 6	29 MPa	50 dm³/min	04. 2000r.

APPLICATION

UZCR 6 type reducing valve is used for reducing pressure in hydraulic systems



DESCRIPTION OF OPERATION

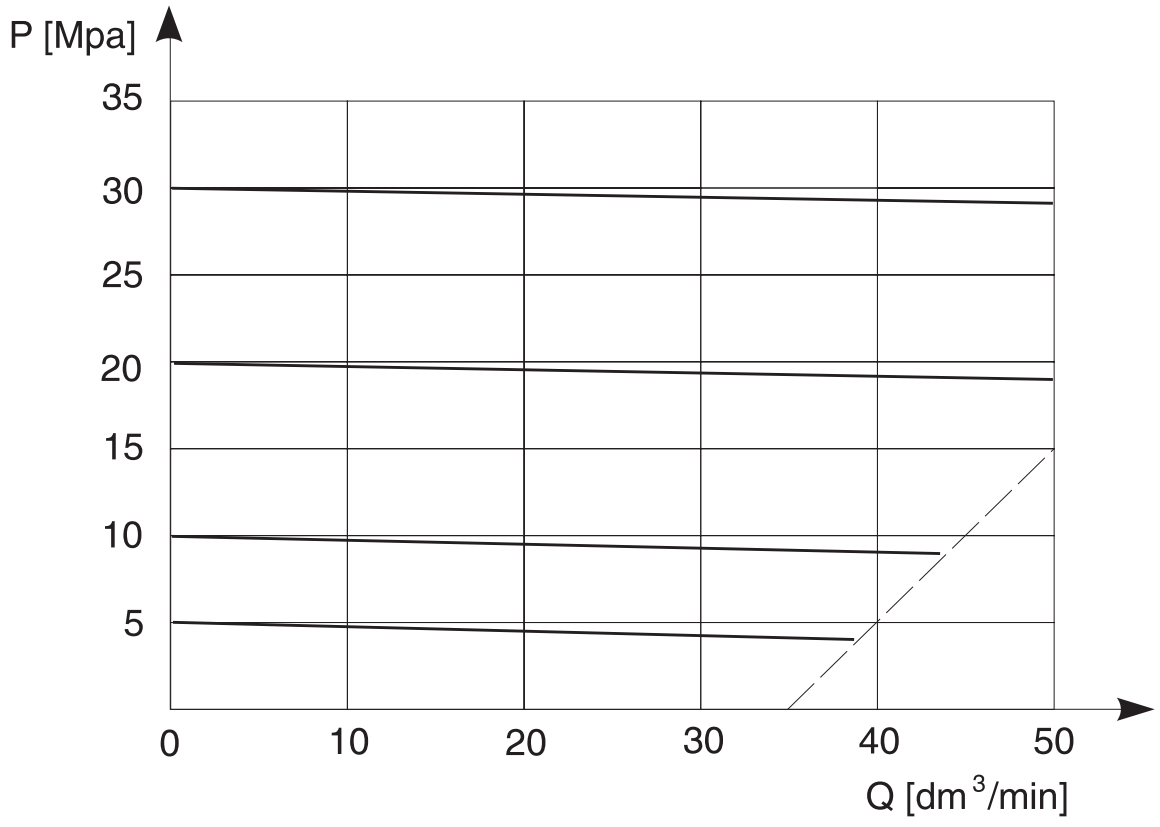


The valve consists of pilot valve and main valve. The reduced pressure acts on the lower face of main spool 1, and through nozzle 2 also on the upper face and through nozzle 3 on pilot valve poppet 4. In rest position the pressure on both sides of the main spool 1 is identical. Spring 5 maintains the spool in initial (open) position. Lines P and P1 (A1 to A, B1 to B) are interconnected. When the pressure attains the value determined by the tension of spool 6, the pilot valve 4 opens and oil flows through nozzle 2. A pressure drop is created across the nozzle, which acts on the upper and lower faces of spool 1 and moves it causing throttling of flow from P to P1 (A1 to A, B1 to B). When there is further increase of pressure, the flow is stopped completely, and further movement of spool 1 opens the T line overflow and restricts pressure rise. Unrestricted flow from A to A1 (B to B1) is effected through non-return valve 7 (design with non-return valve AZ; BZ).

TECHNICAL DATA

Hydraulic fluid	Mineral oil or phosphate ester
Nominal viscosity	37 mm^2 / s at temp. 328 K
Viscosity range	up 2,8 to 380 mm^2 / s
Optimum working temperature (fluid in a tank)	up 313 to 328 K
Temperature range	up 253 to 343 K
Maximum pressure at working	29 MPa
Pressure range set	up 5; up 10; up 20; up to 29 { MPa }
Input pressure	up 29 MPa
Output pressure	0,3 - 29 MPa
Maximum pressure set	29 MPa
Maximum flow (dm^3/ min)	50 dm^3/ min
Required oil filtration	up 16 µm
Recommended filtration	up 10 µm
Weight	~1,7 kg

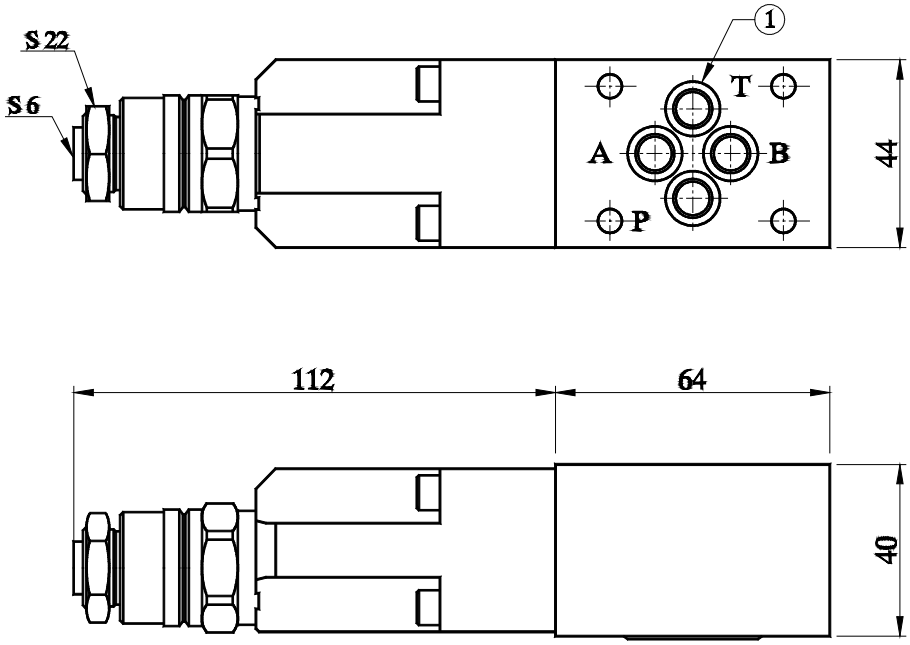
OPERATING CURVES, at ν = 41 mm^2/s, temp. = 323 K



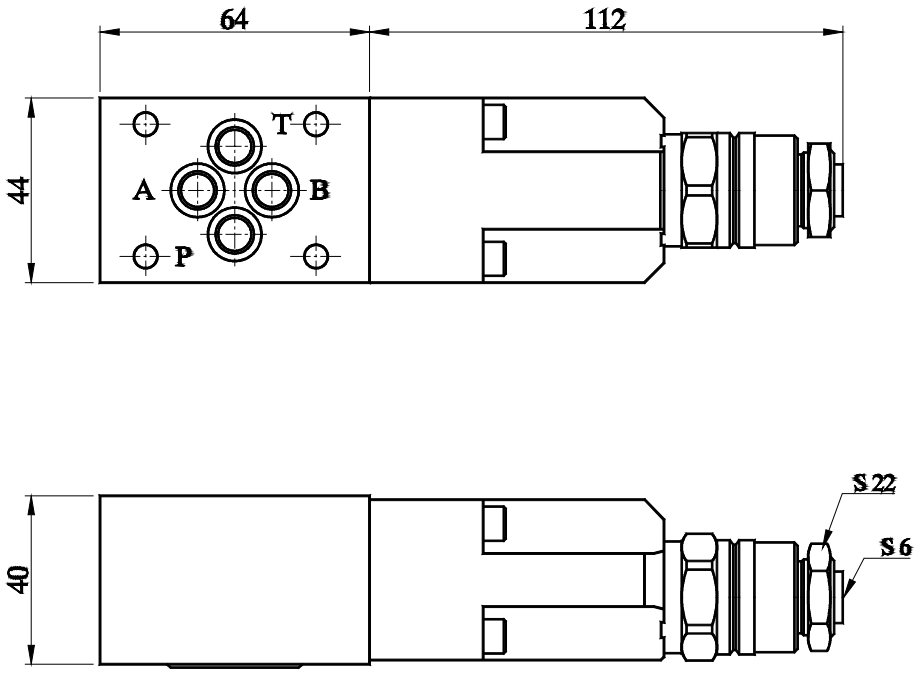
Pressure set in relation to flow.

OVERALL AND MOUNTING DIMENSIONS:

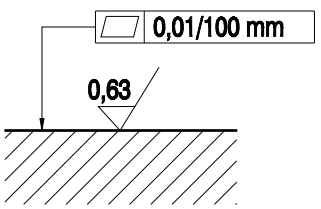
Version P; A; AZ



Version B; BZ



1 - O-ring 9.2 × 1.8 - 4 pcs



Admissible surface roughness and flatness deviation for a subplate.

HYDRAULIC DIAGRAMS:

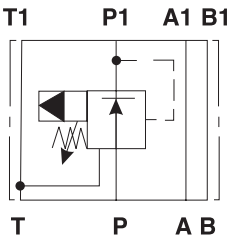


diagram P

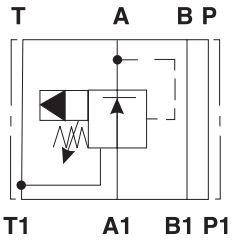


diagram A

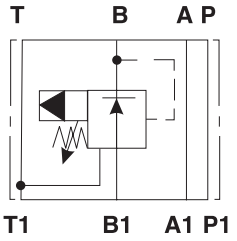


diagram B

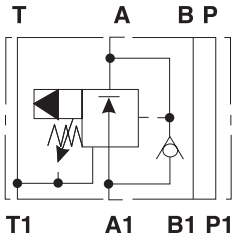


diagram AZ

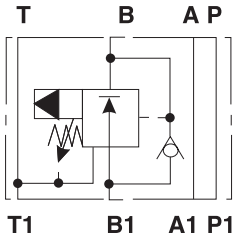


diagram BZ

HOW TO ORDER

Orders coded as below should be forwarded to the manufacturer.

UZCR 6	/	— 2			*

Series number

22	= 22

(22 - 29) - installation and connection diamensions remain unchanged

Set pressure range

up to 5 MPa	= 50
up to 10 MPa	= 100
up to 20 MPa	= 200
up to 29 MPa	= 290

Adjustment

Internal hexagon bolt	= 2

Connections to diagram

Reduction in line P	= P
Reduction in line A	= A
Reduction in line B	= B
Reduction in line A + non-return valve	= AZ
Reduction in line B + non-return valve	= BZ

Sealing

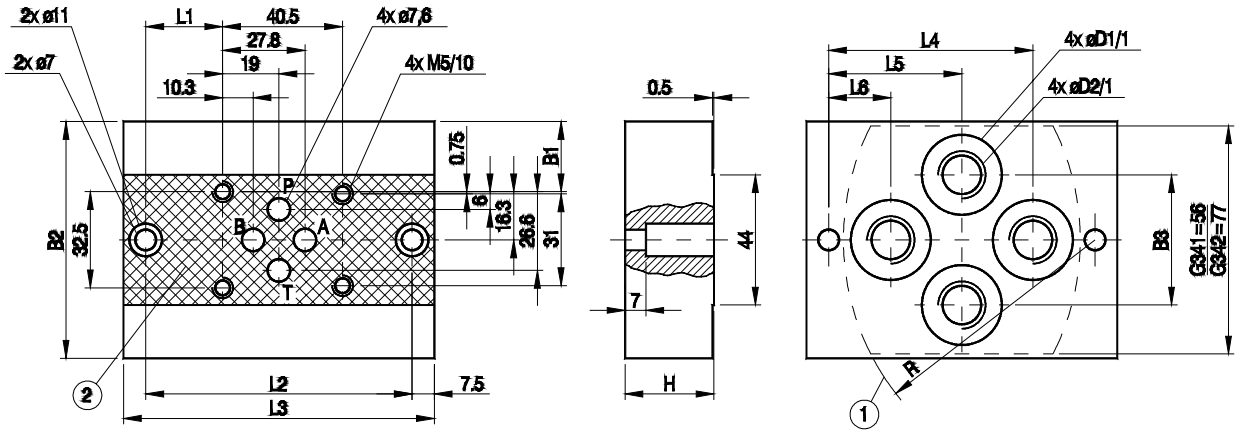
Rubber	= no code
Viton	= V

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

Coding example:

UZCR6 - 22/ 200 - 2 AZ

CONNECTION DIMENSIONS FOR SUBPLATE



1 - Recess in subplate

Type	B1	B2	B3	L1	L2	L3	L4	L5	L6	H	D1	D2	R	T
G341/01	12.7	58	34	21	80	95	55	40	25	25	22	G 1/4	70	13
G342/01	23.7	80	44	26	90	105	69	45	21	30	28	G 3/8	85	13
G341/02	12.7	58	34	21	80	95	55	40	25	25	22	M14x1.5	70	15
G342/02	23.7	80	44	26	90	105	69	45	21	30	27	M16x1.5	85	15

Weight of subplate G 341 ... ~ 1 kg
Weight of subplate G 342 ... ~ 1.9 kg

Subplate must be ordered separately.

Fixing the valve to the subplate should be done by means of 4 bolts M5 x .... - 10.9 PN-74/M-82302 (DIN 912 - 10.9)
Tightening torque - 8,8 Nm.

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