PONAR wadowice

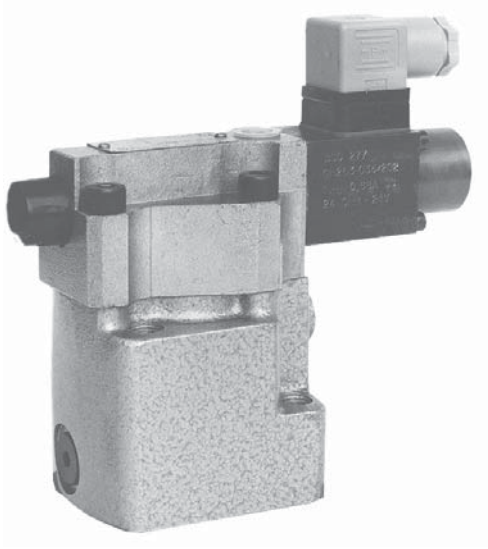
Pressure relief/reducing proportional valve type WZCPE 10

Size 10	31,5 MPa	80 dm³/min.

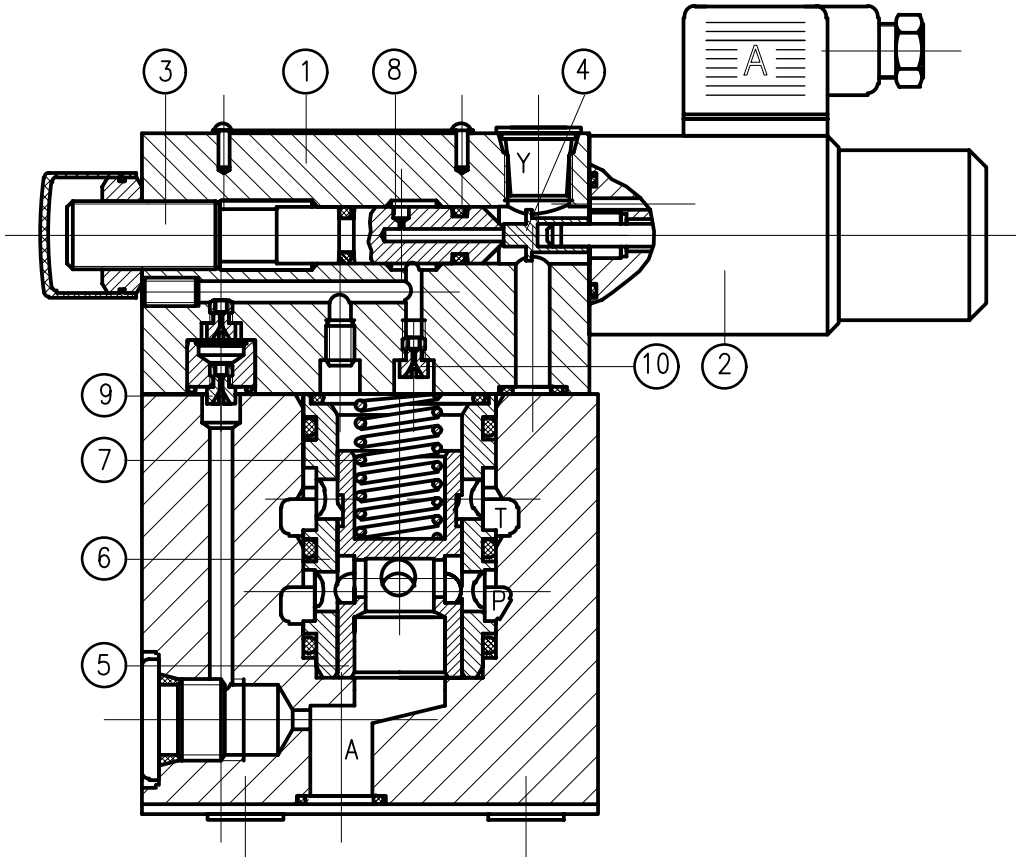
WK 480 730
04.1999r.

APPLICATION

Proportional pressure relief/reducing pilot operated valves are used to hold constant pressure independently of flow direction.
The pressure is setting in hydraulic the solenoid current.
Electronic device is used to supply the valve WZCPE 10.
The valves can be installed into hydraulic system in any position together with a subplate .
Sealing rings (o-rings) are applied in order to seal mating surfaces.



DESCRIPTION OF OPERATION

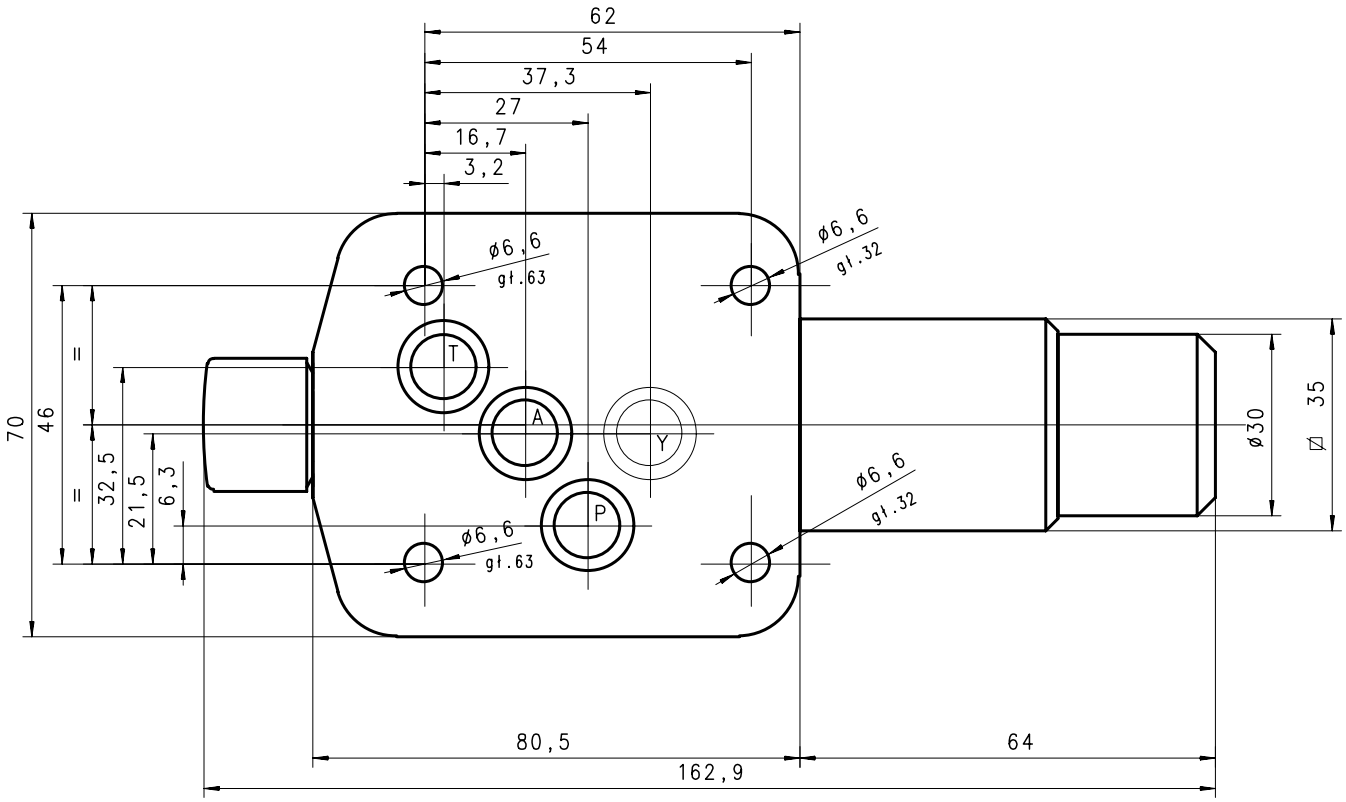


Pressure reducing/relief valves consist basically of the housing, pilot valve WZEP 1, proportional solenoid 2, adjusting jets 3 and blind 4.
Pressure reduced at port A acts through the system of jets on the bottom and top sides of the spool 5 and blind 4 connected with the proportional solenoid care. Push force of the blind 4 to jet 3 is proportional to the strength of current following through the solenoid 2. If pressure at point A, that is pilot pressure exceeds setting at the pilot valve, the valve opens and fluid drains via ling Y to a tank. Opening of the pilot valve disturbs the state of equilibrium at the main spool and causes automatic fixing of new throttling clearance, so as pressure behind it is independent of the flow rate. If at port A pressure increase is so high to cause line P-A closed and ports A-T connected, the valve operates as pressure-relief. Thus the system is protected against excessive pressure in crease at port A, at the same time pressure is held independently of flow direction.

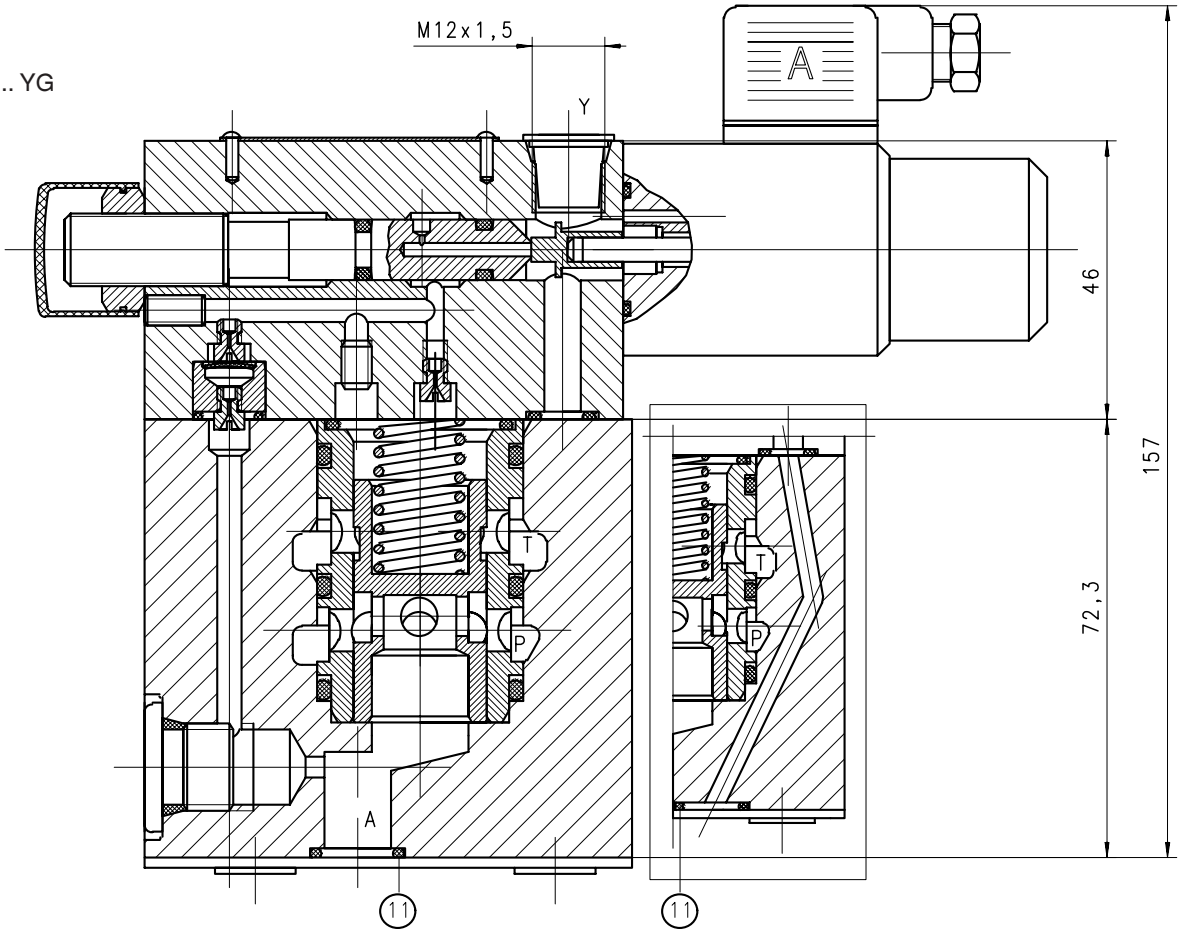
TECHNICAL DATA

Working medium	Mineral oil
Nominal viscosity	37 mm^2/s at temp. 328 K (55 ^oC)
Viscosity range	2,8 to 380 mm^2/s
Working temperature (in tank)	313 to 328 K
Fluid temperature range	243 to 343 K
Max overload pressure	31,5 MPa
Required filtratiom	16 mm
Recommended filtration	10 mm
Medium flow of control fluid	0,55 $dm^3/min.$
Control power	0 do 0,7 A
Resistance of solenoid coil	19,5 W for 283^OK
Resistance of max. hot solenoid coil	28,8 W
Electronic regulator	2ORE10- catalog card WK 495 771

OVERALL AND CONNECTION DIMENSIONS

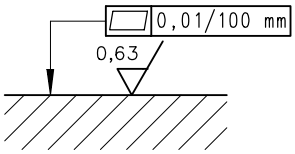


WZCPE 10/ ... YG



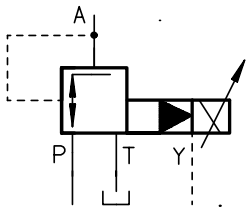
WZCPE 10/ ... YP

item 11 - O-ring 12 × 2
- 3 pcs for varsoin WZCPE 10/...YG
- 4 pcs for version WZCPE 10/...YP



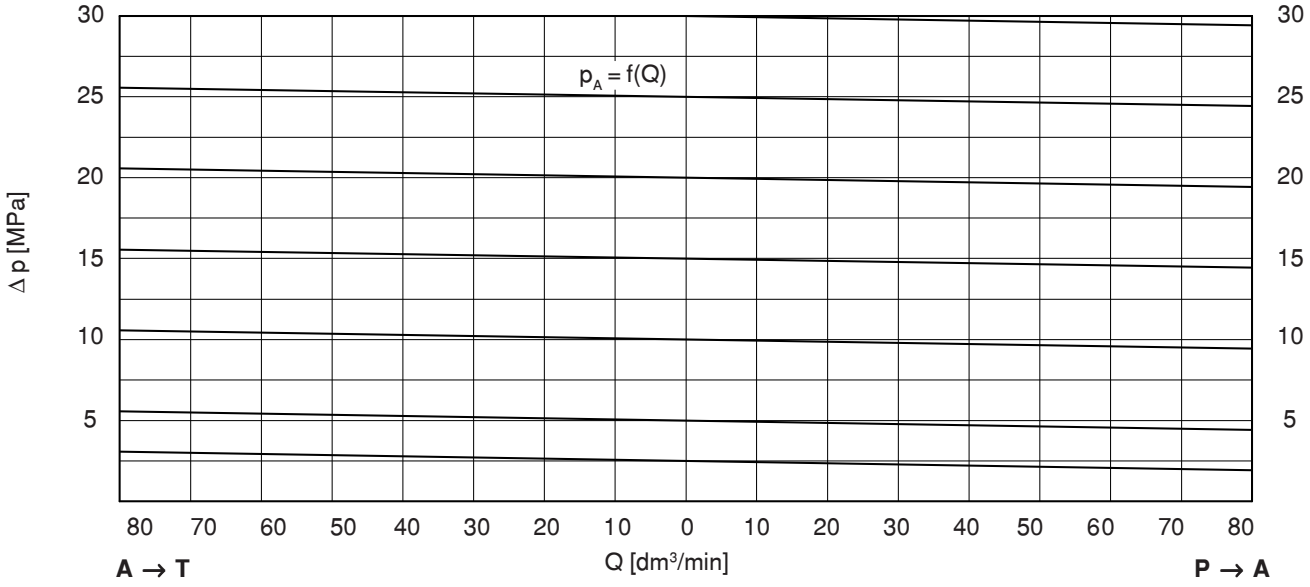
Admissible surface roughness and flatness deviation for a subplate face.

GRAPHICAL SYMBOL

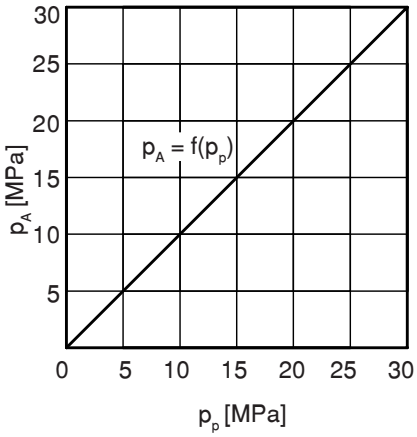


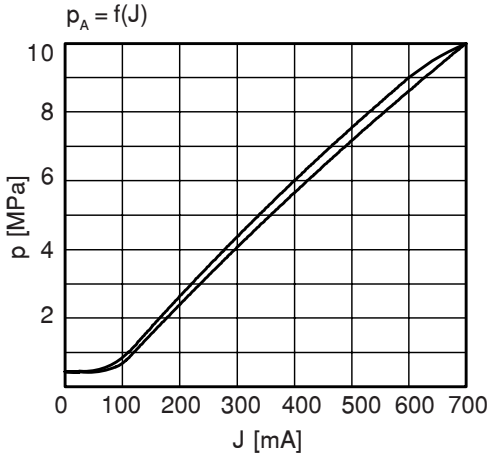
PERFORMANCE CURVES, measured at ν = 41 mm²/s and T = 323 K

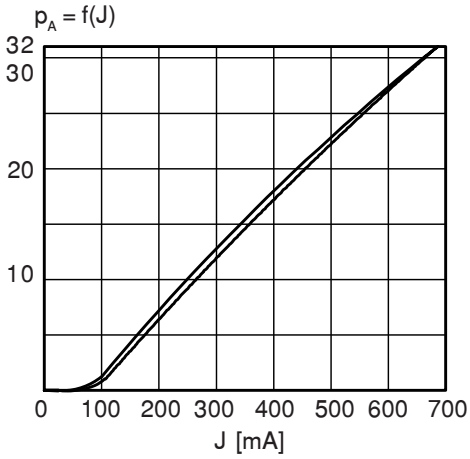
Flow curve



Pressure curve







P_A - output pressure
P_P - input pressure

HOW TO ORDER

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

WZCPE 10/ | | | | *

Series number
10 = 10
(10 - 19) - installation and connection dimensions remain unchanged

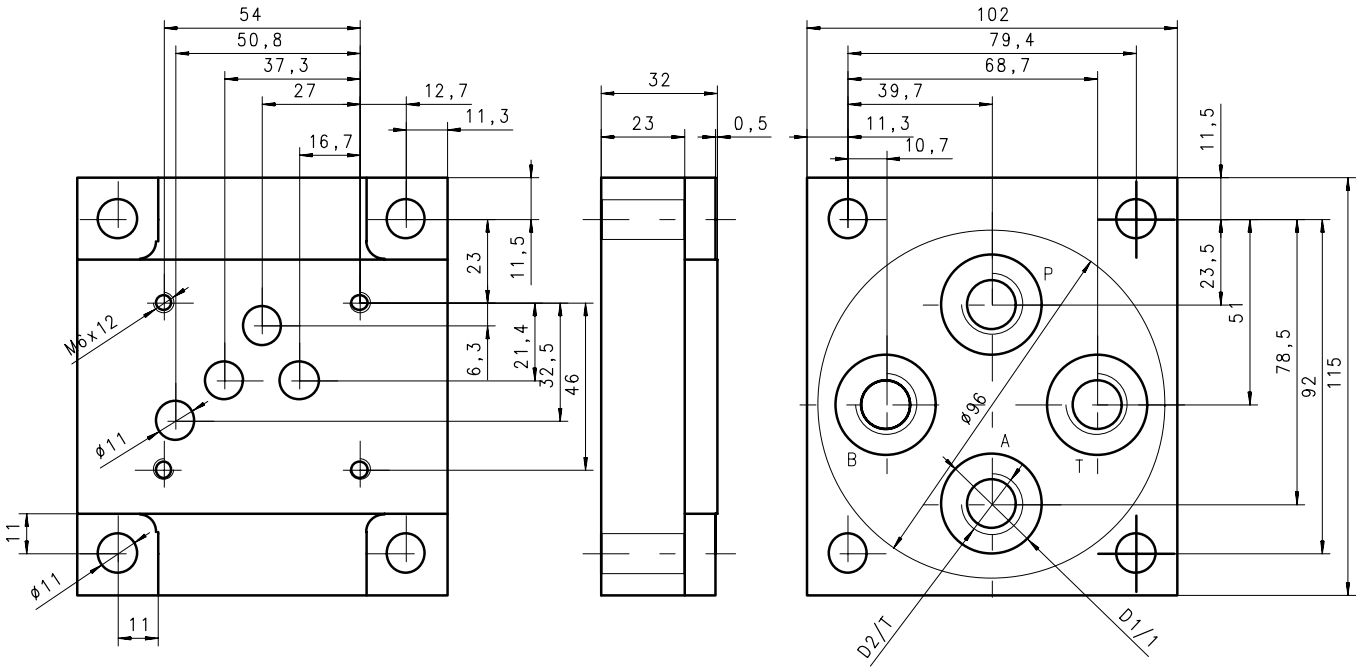
Set pressure range
up to 5 MPa = 50
up to 10 MPa = 100
up to 32 MPa = 320

Piloting
Internal pilot supply, external pilot drain - Y
Subplate mounting = YP
Threaded connections = YG

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

Coding example: **WZCPE 10/320 Y P**

Connection diamensions for subplate



G 89/01, G 66/01, G 67/01, G 67/02

Subplate	D1	D2	T	Weight	Bolts mounting the valve to subplate	Torque
G 89/01	25	G 1/4	12	2,3 kg	2 x M6x70-10.9 2 x M6X40-10.9 PN-87/M-82302(DIN 312)	15 Nm
G 66/01	28	G 3/8	12			
G 67/01	34	G 1/2	14			
G 67/02	36	M22 x 1,5	17			
G 534/01	42	G 3/4	16	2,5 kg		

G 534/01

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