



# RSP 5-10

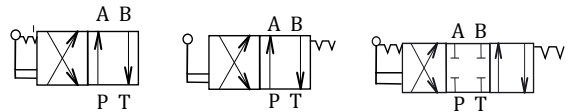
## DIRECTIONAL CONTROL VALVES

| KE 2038 | 07/13 |

**D<sub>n</sub> 10 | p<sub>max</sub> 32 MPa | Q<sub>max</sub> 160 dm<sup>3</sup>/min**

Manually operated directional control valves of type RSP5-10 operated by hand lever are used to control start, stop and direction of fluid in hydraulic systems.

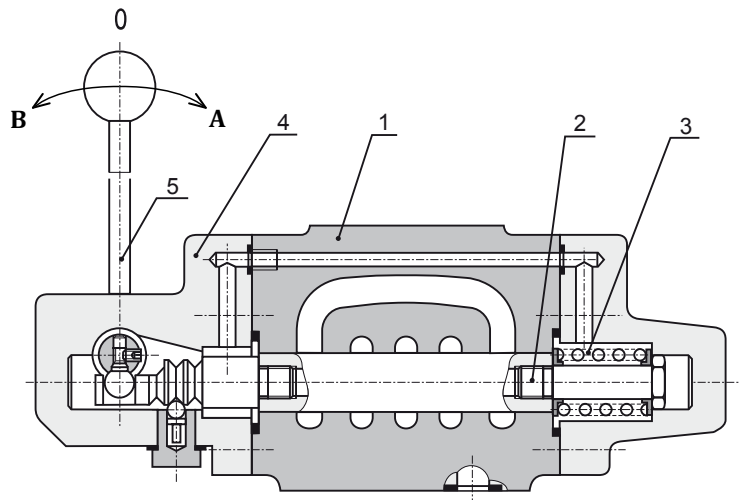
Dn 10, NG 10 | Available with detent assembly | Manually operated | Proven design | Installation dimensions according to: CETOP RP 121H-R05, ISO 4401-05, DIN 24340



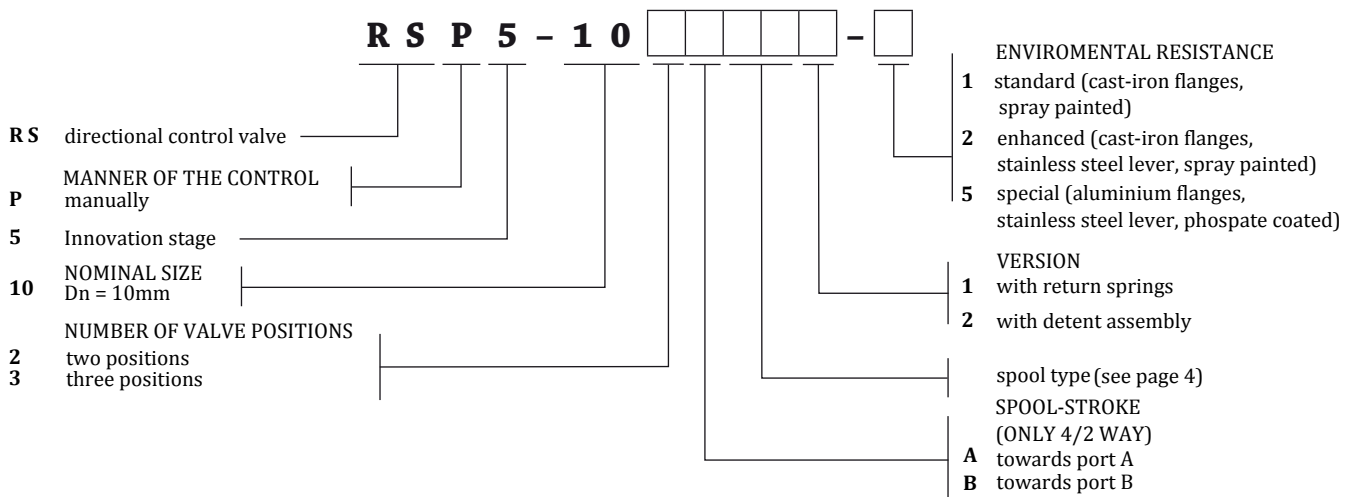
### FUNCTIONAL DESCRIPTION

Hand operated directional control valves of type RSP5-10 are used to control start, stop and direction of fluid in hydraulic systems. Directional control valves are being manufactured as two- or three-position valves (see Spool Symbols and Crossovers) and consist of valve housing **1** with control spool **2**. The actuating section of the valve consists of either cast iron or aluminium flange (see ordering code) **4** with a hand lever **5** and one (for 4/2 way) or two (for 4/3 way) springs **3** returning the control spool to the default position.

Surface of the valve housing is either spray painted or phosphate coated (depending on desired version of environmental resistance - see Ordering code). The hand lever is always made from stainless steel.



### ORDERING CODE



**Note:** Direction control valves RSP5-10 with standard environmental resistance have been replaced by directional control valves RSP5-10 with enhanced environmental resistance. RSP5-10 with standard environmental resistance can no longer be ordered.



## INSTALLATION, SERVICE AND MAINTENANCE

Directional control valves RSP5-10 are designed for panel installation. They are being mounted by four screws M6x50 DIN 912-10.9 with torque 14Nm and can be installed in any working position. The reliability of the valves is conditional upon use of prescribed working fluid, especially its parameters such as cleanness and temperature.

## DELIVERY

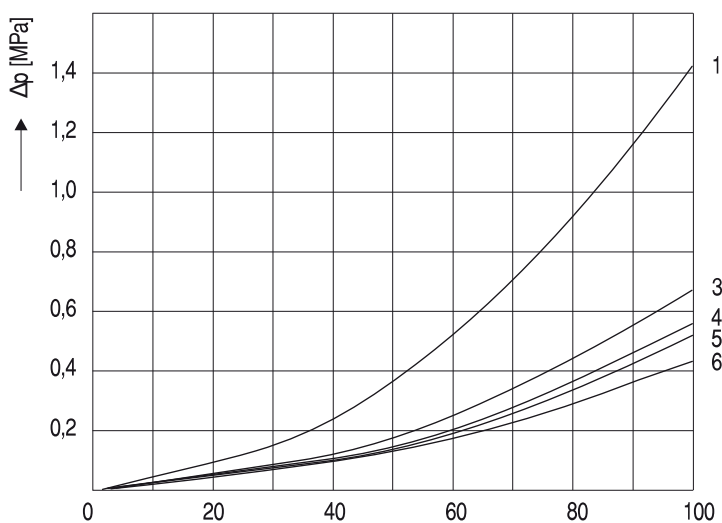
Directional control valves of type RSP5-10 operated by hand lever are delivered assembled. Spare parts and mounting screws are not included in package. These must be ordered separately.

## TECHNICAL DATA

Technical data	Symbol	Unit	Value
Valve size	$D_n$	mm	10
Maximal flow	$Q_{max}$	dm <sup>3</sup> /min	160
Maximal operating pressure in ports P, A, B	$P_{max,a}$	MPa	32
Maximal operating pressure in port T	$P_{max,t}$	MPa	25
Pressure drop	$\Delta p$	MPa	see pressure drop curves
Viscosity range	$\nu$	m <sup>2</sup> /s	$10 \cdot 10^{-6}$ up to $400 \cdot 10^{-6}$
Maximum degree of fluid contamination	class 9 according to NAS 1638, 18/15 according to ISO 4406		
Fluid temperature range	$t_{po}$	°C	-30 up to +80
Ambient temperature range	$t_k$	°C	-30 up to +60
Type of climatic resistance IEC-721-2-1			WT
Hydraulic medium	Hydraulic oils of power class (HL,HLP) according to DIN 51524		
Weight	$m$	kg	6.9 - RSP5-10 xxxxxx - 1 6.9 - RSP5-10 xxxxxx - 2 5.5 - RSP5-10 xxxxxx - 5
Mounting position	as desired		
Service life	10 <sup>6</sup> cycles		
Installation dimensions	according to: DIN 24 340 / ISO 4401 / CETOP RP121-H		

## PRESSURE DROP

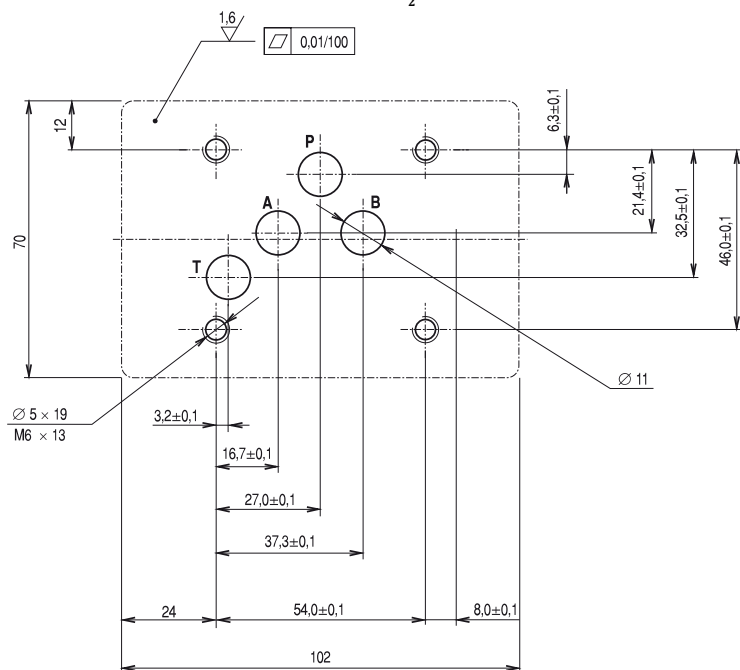
Measured at  $\theta = 50^\circ\text{C}$ ,  $\nu = 35 \text{ mm}^2/\text{s}$



Spool type	Respective pressure drop curve No.:				
	P - A	P - B	A - T	B - T	P - T
C1	5	5	6	6	1
Y1	3	4	5	6	-



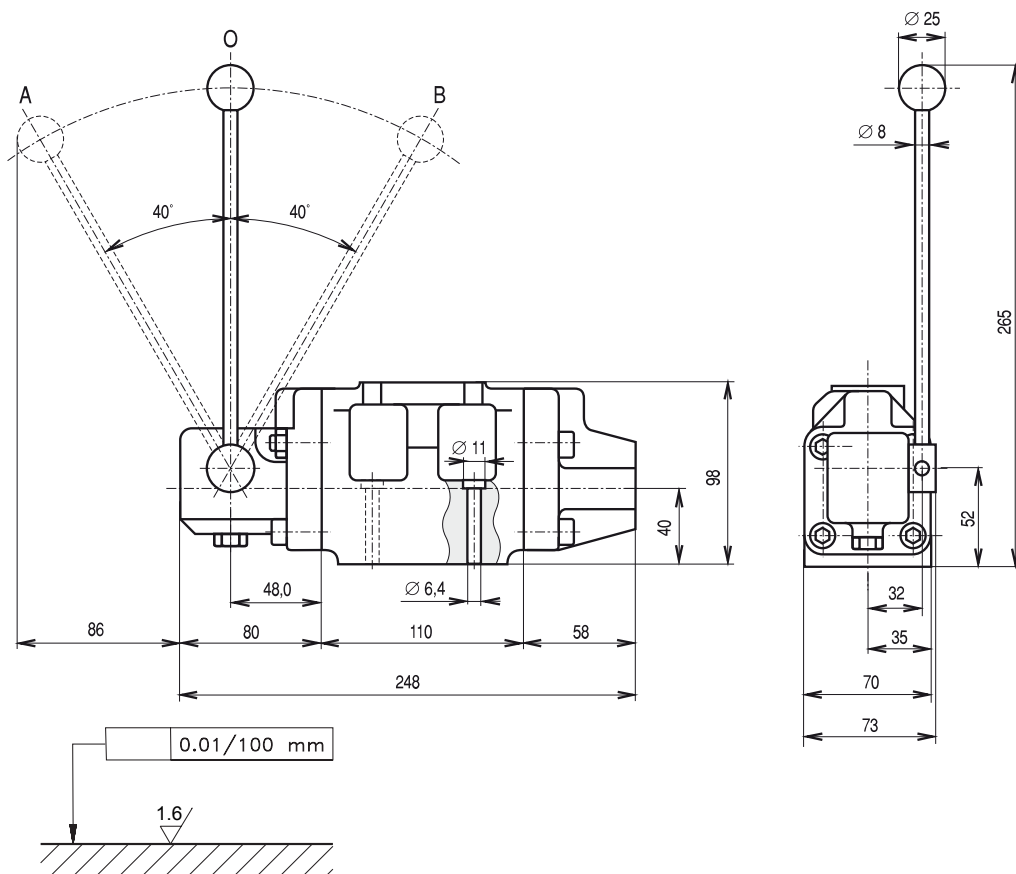
**INSTALLATION DIMENSIONS**



**SPOOL TYPES AND CROSSOVERS**

Type	Symbol	Crossover
Y1		
C1		
H1		
Z1		
B1		
L2		
N1		
P1		
Y2		
Z2		

**VALVE DIMENSIONS**



Required surface finish of subplate.





## SPARE PARTS

### Seal kit

Type	Dimensions and quantity			
	O-ring			
Standard NBR 70	15,3 x 2,4 mm (2pcs)	29,82 x 2,62 mm (2pcs)	6,07 x 1,78 mm (2pcs)	12,42 x 1,78 mm (5pcs)

### Bolt kit

Dimensions and quantity	Torque
M6x50 DIN 912-10.9 (4pcs)	14 [Nm]

## NOTES

Consultancy service is provided by: **PQS Technology, Ltd.**

Sales department: tel.: +420 313 526 236

Technical support: tel.: +420 313 526 378

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