

- 4/2 way spool type directional control valves
- Roller operated
- Actuating section can be rotated in four positions 90° apart
- Installation dimensions to DIN 24 340 / ISO 4401 / CETOP RP121-H

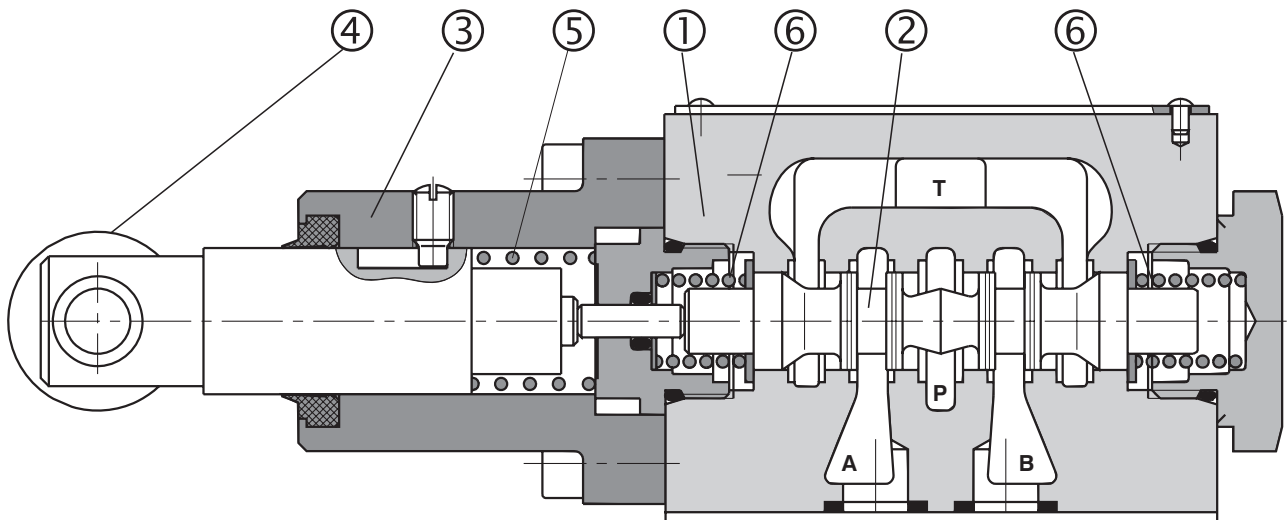


Functional Description

The roller operated directional control valves are used mainly to control start, stop and direction of fluid. The valves consist of housing (1) with control spool (2) with two centering springs (6) and the actuating section (3). The actuating section consists of the roller-pin (4)

and of one return spring (5). The directional control valves are being manufactured as two-position (see table with functional symbols).

The valve housing (1) is phosphate coated.



Ordering Code

RPK1-06 -

Roller Operated Directional Control Valve

no designation
V

Seals
NBR
FPM (Viton)

Valve size

Number of valve positions
two positions

2

Spool symbols
see the table Spool symbols

Technical Data

Valve size	mm	06
Maximum flow	L/min	80
Maximum operating pressure at ports P, A, B	bar	320
Maximum operating pressure at port T	bar	20
Pressure drop	bar	see Δp -Q characteristics
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524
Fluid temperature range - NBR	°C	-30 ... +100
Fluid temperature range - Viton	°C	-20 ... +120
Viscosity range	mm ² /s	20 ... 400
Maximum degree of fluid contamination		Class 21/18/15 to ISO 4406 (1999)
Service life	cycles	10 ⁶
Weight	kg	1,6

Spool Symbols

Type	Symbol	Crossover	Type	Symbol	Crossover
R11			Z51		
R21			H51		
A51			Z11		
P51			X11		
Y51			C11		
C51			H11		

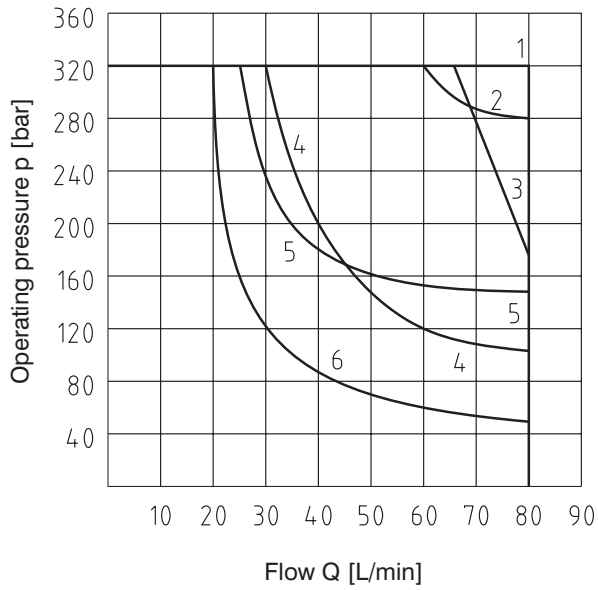
Operating Power

Operating press.	for 0 bar pressure in T port			for 20 bar pressure in T port		
	Stroke begg.	Oper. stroke	Total stroke	Stroke begg.	Oper. stroke	Total stroke
100 bar	35 N	135 N	195 N	60 N	160 N	220 N
200 bar	35 N	135 N	195 N	60 N	160 N	220 N
300 bar	35 N	135 N	195 N	60 N	160 N	220 N

p-Q Characteristics

Measured at $v = 32 \text{ mm}^2/\text{s}$

Operating limits for maximum hydraulic power transferred by the directional valve.

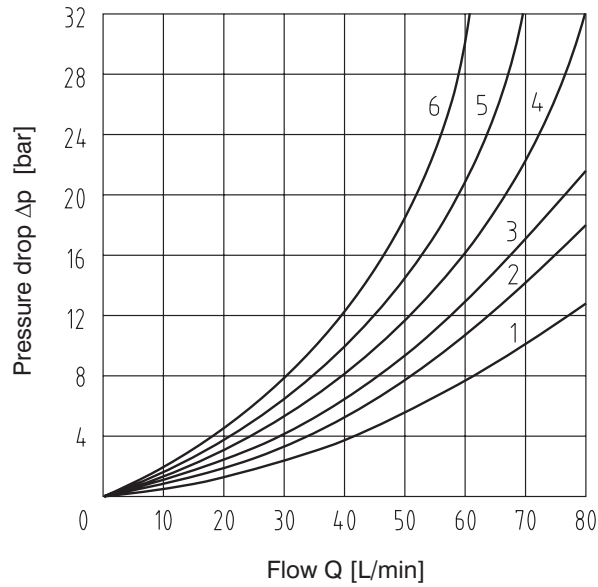


Y11	1
Y51	1
R11	2
Z11	3
Z51	3
C11	4
C51	4
R21	5
H11	6
H51	6

Δp -Q Characteristics

Measured at $v = 32 \text{ mm}^2/\text{s}$

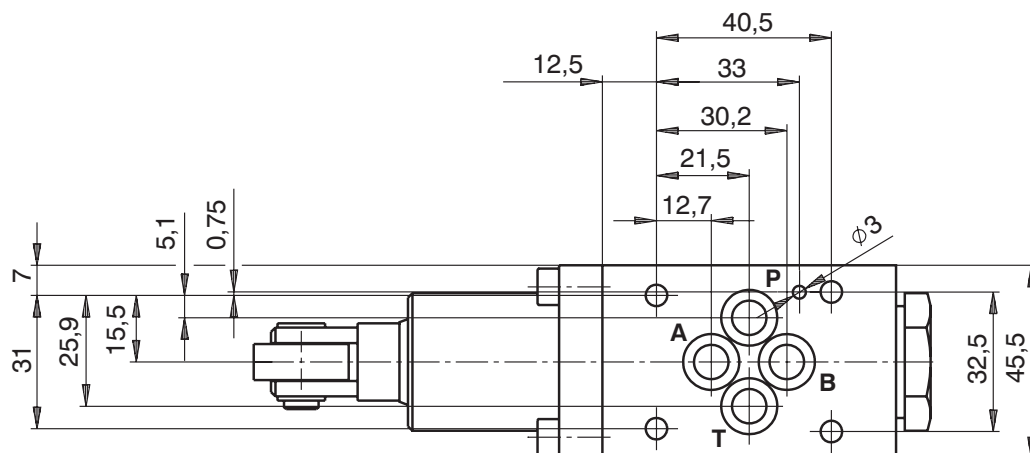
Pressure drop Δp related to flow rate.



	P-A	P-B	A-T	B-T	P-T
Z11	2	2	3	3	
C11	5	5	5	6	3
H11	2	2	2	2	3
R11	2	2	3	3	
R21	2	2	3	3	
A51	2	2			
P51		1	3		
Y51		2	2		
C51	2			3	4
Z51		2	3		
H51		2	3		
X11	2	2	3	3	

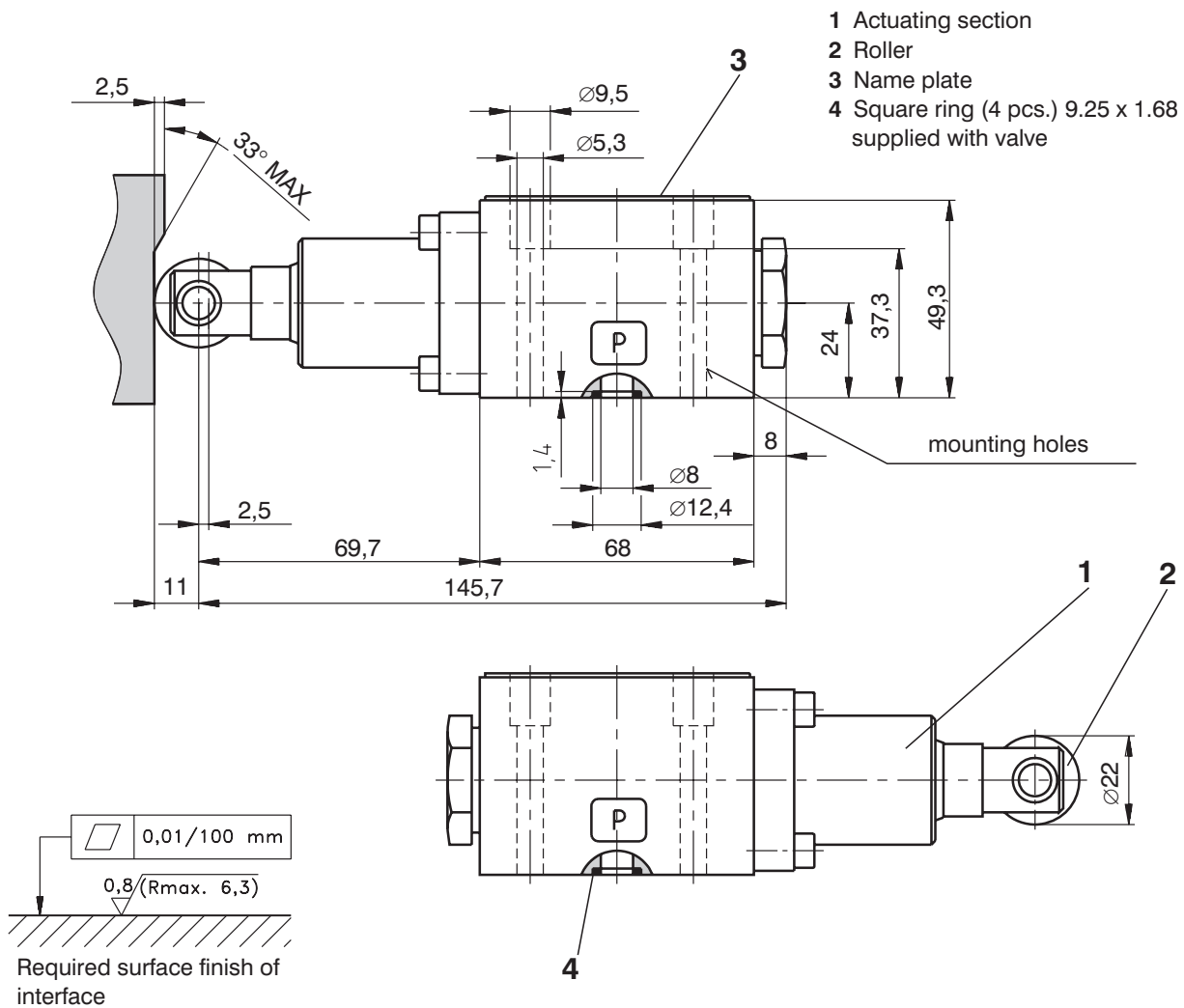
Valve Dimensions

Dimensions in millimeters



Valve Dimensions

Dimensions in millimeters



Spare Parts

Seal kit

Type	Dimensions, quantity	Ordering number
O-ring - NBR90	17 x 1,8 (2 Pcs.)	482-9004
Square ring - NBR70	9,25 x 1,68 (4 Pcs.)	
O-ring - NBR70	3,68 x 1,78 (1 Pc.)	
Wiper ring	WSW 000180 ASW (1 Pc.)	

Bolt kit (for Studs see HA 0030)

Dimensions, quantity	Bolt torque	Ordering number
M5 x 45 DIN 912-10,9 (4 pcs.)	8,9 Nm	484-9958

Caution!

- Directional valves with other functional symbols as those shown in the table above can be delivered on request.
- The packing foil is recyclable.
- The protective plate can be returned to manufacturer.
- Mounting bolts M5x45 DIN 912-10,9 or studs must be ordered separately. Tightening torque is 8,9 Nm.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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