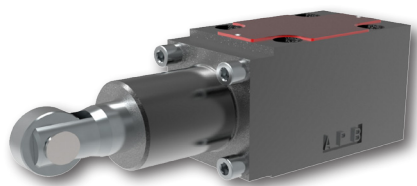


## 4/2 Directional Control Valve, Roller Cam Operated

### RPK1-06

Size 06 (D03) •  $Q_{max}$  80 l/min (21 GPM) •  $p_{max}$  350 bar (5100 PSI)

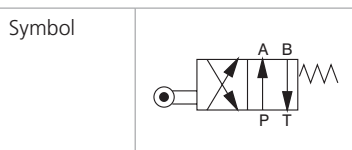


#### Technical Features

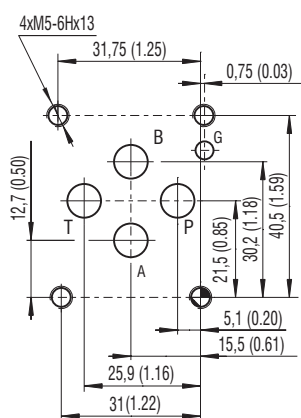
- › Direct acting roller cam operated directional control valve with subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 03)
- › High transmitted hydraulic power up to 350 bar, optimized design for minimized pressure drop
- › Five chamber housing design with reduced dependence on fluid viscosity
- › Actuation element rotatable in 90° increments
- › Wide range of interchangeable spools available
- › In the standard version, the valve housing is phosphated and steel parts zinc-coated for 240 h salt spray protection acc. to ISO 9227
- › Enhanced surface protection for mobile sector available (ISO 9227, 520 h salt spray)

#### Functional Description

These roller cam operated 4/2 directional control valves are mainly used to control start, stop and direction of fluid. The valves consist of the housing, the spool, an integrated return spring, and the actuation element.



#### ISO 4401-03-02-0-05



Ports P, A, B, T - max  $\varnothing$ 7.5 mm (0.29 in)

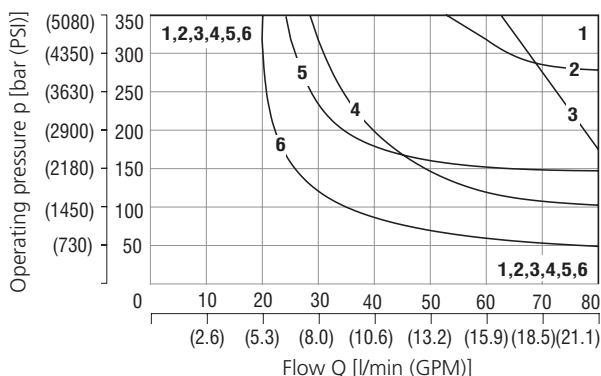
#### Technical Data

Valve size	06 (D03)	
Max. flow	l/min (GPM)	80 (21.1)
Max. operating pressure at ports P, A, B	bar (PSI)	350 (5080)
Max. operating pressure at port T	bar (PSI)	20 (290)
Operating force	see table	
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... +212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... +248)
Mass	kg (lbs)	1.6 (3.53)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Mounting interface / tolerances	SMT_0019	Size 06
Spare parts	SP_8010	

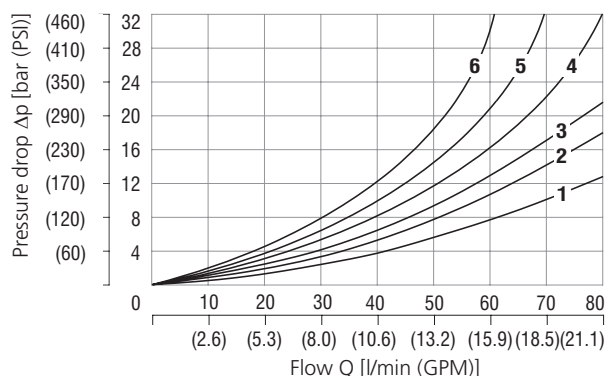
#### Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

##### Operating limits



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

##### Pressure drop related to flow rate



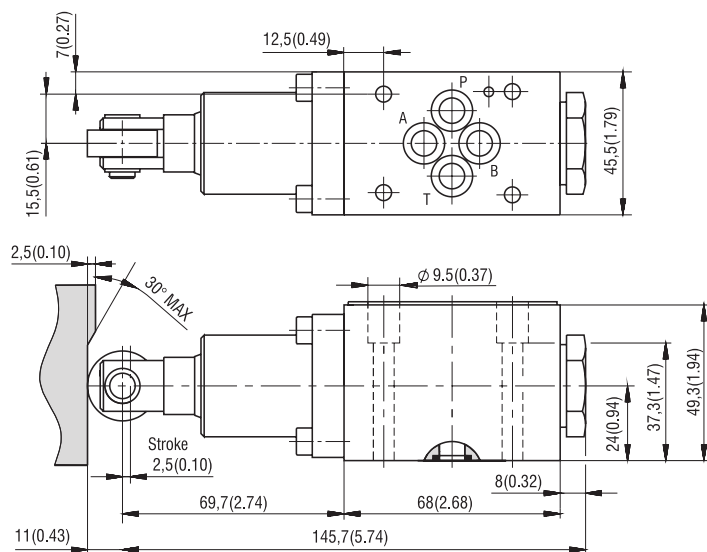
	P-A	P-B	A-T	B-T	P-T
Z11, R11, R21, X11	2	2	3	3	
C11	5	5	5	6	3
H11	2	2	2	2	3
A51	2	2			
P51		1	3		
Y51		2	2		
C51	2			3	4
Z51, H51		2	3		

For operating limits under conditions other than shown, contact our technical department. Admissible operating limits may be considerably lower with only one direction of flow (A or B plugged, or without flow.)

## Dimensions in millimeters (inches)

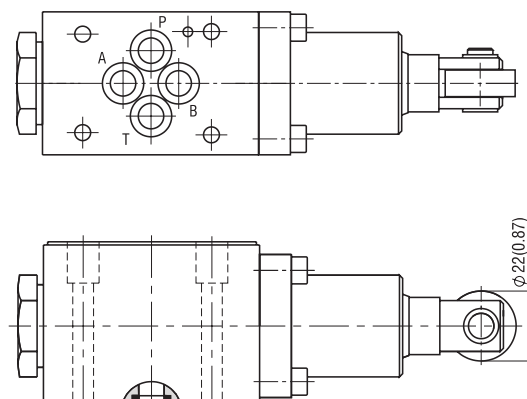
### Spool symbols

R11, R21, A51, P51, Y51, C51, Z51, H51



### Spool symbols

Z11, X11, C11, H11



### Spool Symbols

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

### Operating Force

Operating pressure	Pressure at port T: 0 bar (0 PSI)			Pressure at port T: 20 bar (290 PSI)		
	Start stroke	Working stroke	Max stroke	Start stroke	Working stroke	Max stroke
100 bar (1450 PSI)	35 N (8 lbf)	135 N (30 lbf)	195 N (44 lbf)	60 N (13 lbf)	160 N (36 lbf)	220 N (49 lbf)
200 bar (2900 PSI)	35 N (8 lbf)	135 N (30 lbf)	195 N (44 lbf)	60 N (13 lbf)	160 N (36 lbf)	220 N (49 lbf)
300 bar (4350 PSI)	35 N (8 lbf)	135 N (30 lbf)	195 N (44 lbf)	60 N (13 lbf)	160 N (36 lbf)	220 N (49 lbf)

### Ordering Code

RPK1 - 06  -  -  -

4/2 directional control valve, roller cam operated

Valve size

Number of valve positions  
two positions

Spool symbols  
see the table "Spool Symbols"

2

**Surface treatment**  
**No designation** housing phosphated, steel parts  
 zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**A** zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**B** zinc-coated (ZnNi), ISO 9227 (520 h)

**No designation**  
**V**

**Seals**  
 NBR  
 FPM (Viton)

The port restrictor plugs can be ordered separately from the spare parts data sheet HA 8010. The port restrictor plugs can be ordered separately in spare parts data sheet. Mounting bolts M5 x 45 DIN 912-10.9 or studs must be orderer separately.

Tightening torque is 8.9 Nm (6.56 ft-lbf).

Besides the shown, commonly used valve versions other special models are available. Contact our technical support for their identification, feasibility and operating limits.