4/2, 4/3 WAY DIRECTIONAL VALVES KV

- NG 6, 10
- Up to 350 bar *[5 076 PSI]*
- Up to 60 L/min *[15.8 GPM]* for NG 6
- Up to 100 L/min *[26.4 GPM]* for NG 10

- Connecting dimensions to ISO 4401.

KV-4/3-5KO-6-R, KV-4/3-5KO-10-R

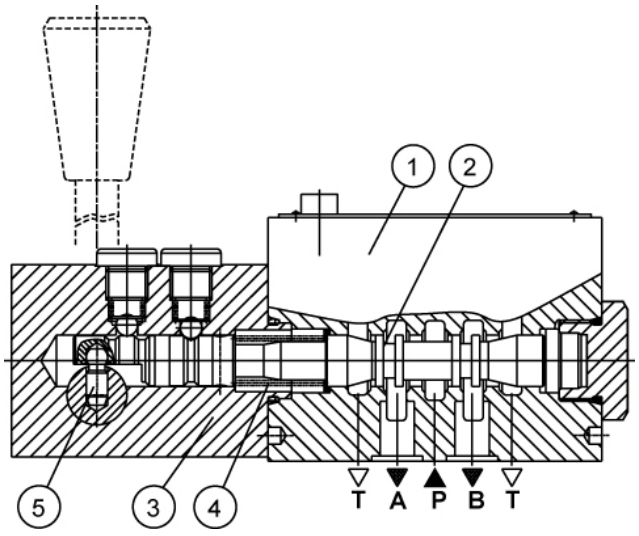
Operation

Directional valves type KV with direct mechanical operation by means of a lever control the direction of the hydraulic fluid medium flow.
These directional valves consist of a housing (1), control spool (2), control mechanism (3), and return spring (4). In 4/3-way directional valves the centre position of the control spool is the neutral position. The change-over to one of the operating positions "a" or "b" is done by moving the operating pin lever (5) in such a manner that its acts on the control spool (2) so as to clear corresponding flow ways and establish relevant links between ports, A, B, P, and T.
On ceasing to apply force to the control mechanism (3), the return spring (4) push the control spool into the neutral position.

There are two types of operation:

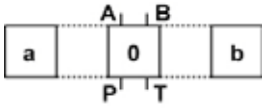
1/ With control spool not held in the operating position (the control spool returns to neutral position on ceasing to apply force to the control mechanism - type KV-../..-R).

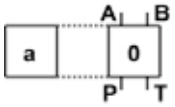
2/ With control spool held (detent) in the operating position (the control spool remains in the operating position on ceasing to apply force to the control mechanism lever - type KV-../..-RA).



Hydraulic symbols

Spool types



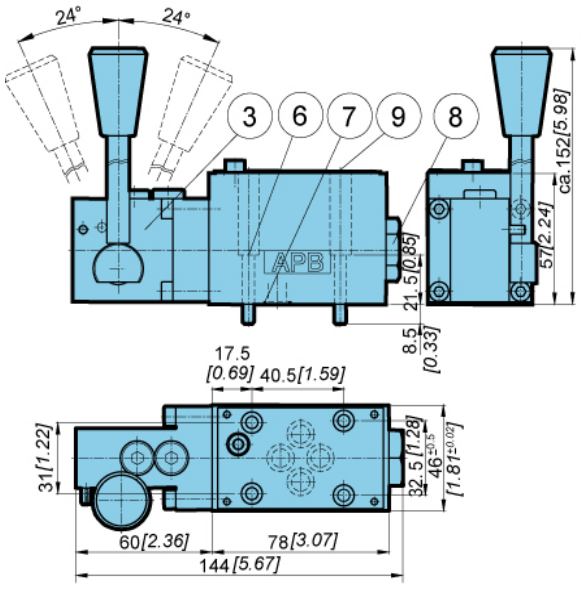


Features

Size			6	10
Flow rate		L/min *[GPM]*	60 *[15.8]*	100 *[26.4]*
Operating pressure	P, A, B	bar *[PSI]*	350 *[5 076]*	
	T	bar *[PSI]*	160 *[2 320]*	
Viscosity range		mm^2/s *[SUS]*	15 to 380 *[69.5 to 1 760]*	
Oil temperature range		°C *[°F]*	-20 to+70 *[-4 to 158]*	
Filtration		NAS 1638	8	
Mass		kg *[lb]*	2,05 *[4.52]*	5,23 *[11.53]*
Mounting position			Optional	

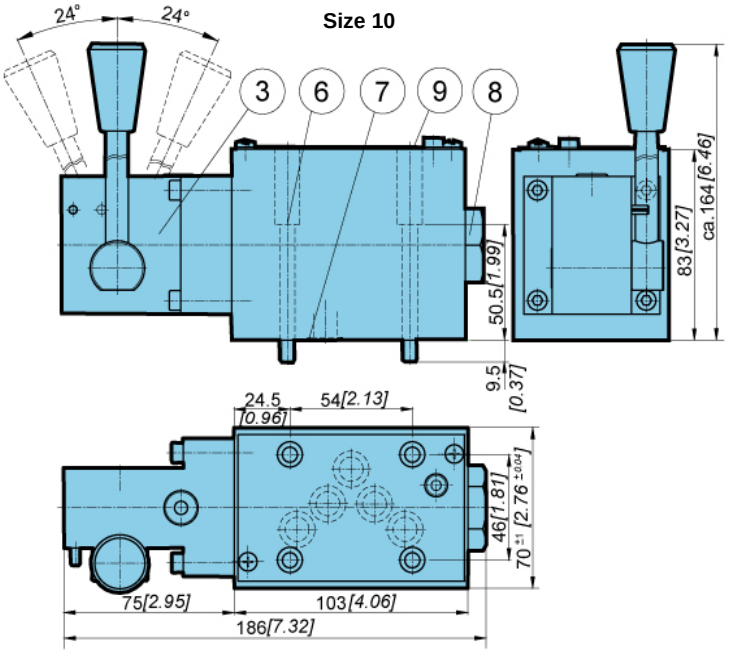
Dimensions

Size 6



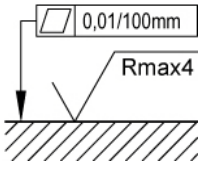
3. Control mechanism on side ''a''
   4/3 valves
   4/2 valves, spool types 51A
6. Fixing screws 4 pcs M5x30 to ISO 4762-10.9
   (by special order).
   Required tightening torque Md = 9 Nm.
7. O-ring 9.25x1.78
8. Valve cap.
9. Nameplate.

Size 10



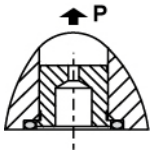
3. Control mechanism on side ''a''
   4/3 valves
   4/2 valves, spool types 51A
6. Fixing screws 4 pcs M6x60 to ISO 4762-10.9
   (by special order).
   Required tightening torque Md = 15 Nm.
7. O-ring 12.42x1.78
8. Valve cap.
9. Nameplate.

Required quality of the mating surface.



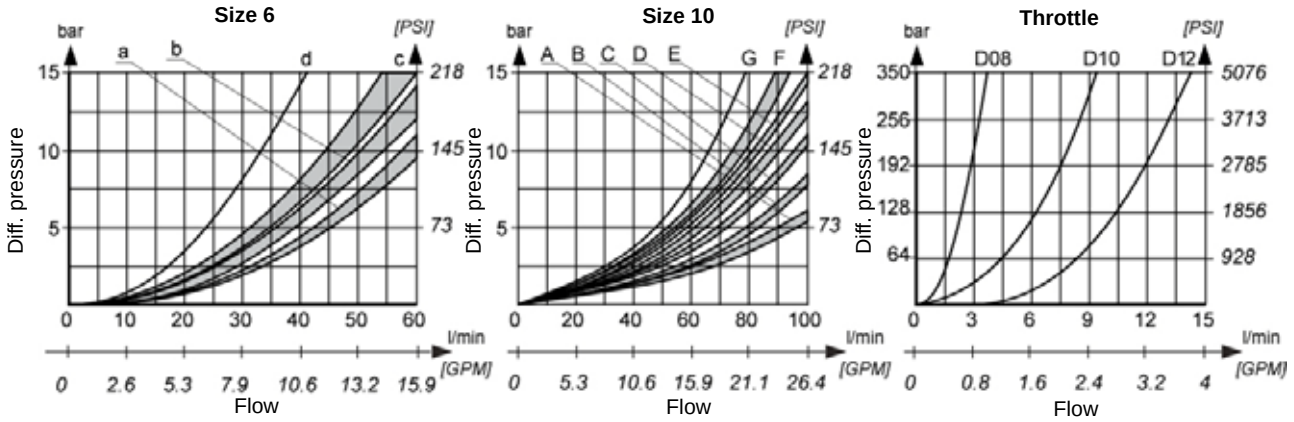
Cartridge throttle

If flow rates greater than permissible occur during change-over, a cartridge throttle must be fitted into P-line of the directional valve.



ΔP-Q Performance curves

Measured at 50°C *[122°F]* and viscosity of 32 mm^2/s *[148 SUS]*.



Spool	P-A	P-B	A-T	B-T	P-T
1	b,D	b,D	c,B	c,C	-
2	c,B	c,B	c,A	c,A	d,G
6	b,E	b,E	a,B	a,B	-
51A	c,D	b,D	c,C	a,B	-

Model code

K V - 4 / □ - 5 K O - □ - □ - □ - □ - □ - ✱

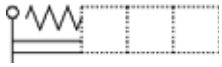
Number of spool position

2	**2**
3	**3**

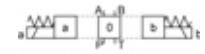
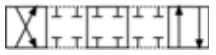
Size

Size 6	**6**
Size 10	**10**

Control spool held

	**R**
	**RA**

Spool type

	
	**1**
	**2**
	**6**
	**51A**

Throttle mm *[in]*

No designation	Without throttle in P line
D08	Throttle Ø 0,8 *[0.03 dia.]*
D10	Throttle Ø 1,0 *[0.04 dia.]*
D12	Throttle Ø 1,2 *[0.05 dia.]*

Seal type

No designation	NBR seals for mineral oil HL,HLP to DIN 51524
E	FPM seals for HETG, HEES, HEPG to VDMA 24568 and ISO 15380

Special requirements to be briefly specified