



4/3 WAY DIRECTIONAL VALVES KV

- NG 10
- Up to 350 bar [5 076 PSI]
- Up to 80 L/min [21.1 GPM]
- Up to 130 L/min [34.3 GPM]
- Direct hydraulic operation.
- Connecting dimensions to ISO 4401.
- Threaded connections to ISO 1179.

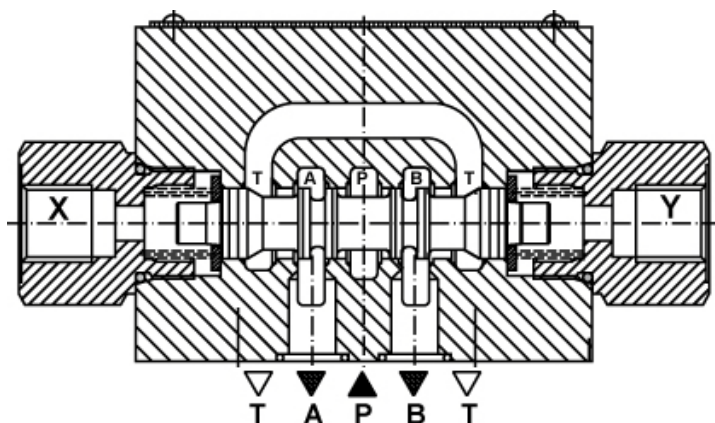


KV-4/3-5KO-10-H

Operation

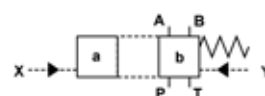
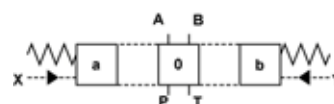
The KV-...-H is a hydraulically controlled 4/3 way directional control valve. The valve is operated by the pilot ports X and Y via the connection of an external pilot pipe direct on the valve body.

The minimum pilot pressure must be ensured for all operating conditions of the directional valve.



Hydraulic symbols

Spool types



Features

| | | |
|-----------------------------------|--------------------------|---------------------------|
| Size | | 10 |
| Flow rate | L/min [GPM] | 130 [34.3] |
| Operating pressure | Ports A, B, P | bar [PSI] 350 [5 076] |
| | Ports X, Y, T | bar [PSI] 210 [3 045] |
| Pilot supply pressure min. | bar [PSI] | 10 [145] |
| Viscosity range | mm ² /s [cSt] | 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] | 4,0 [8.8] |
| Mounting position | | Optional |

Mechanically operated

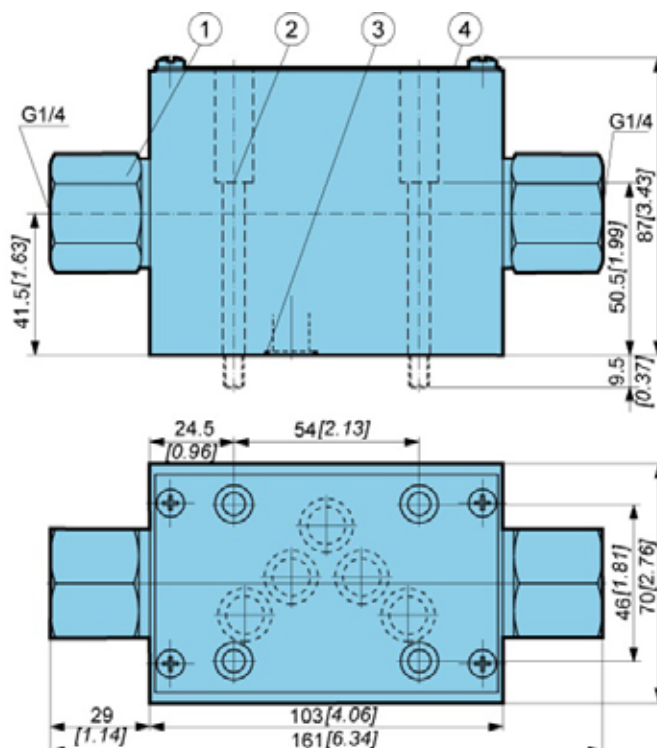
Hydraulically operated

Electrically operated



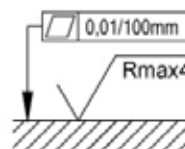
Dimensions

Size 10



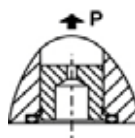
1. Threaded connection X (Y) - G1/4
2. Fixing screws 4 pcs M6x60 to ISO 4762-10.9 (by special order) Required tightening torque $M_d = 15\text{Nm}$
3. O-ring 12.42 x 1.78
4. Nameplate.

Required quality of the mating surface.



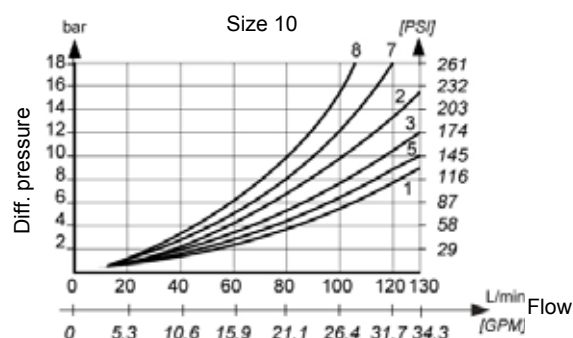
Cartridge throttle

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 mm²/s [148 SUS].



| Spool | P-A | P-B | A-T | B-T | P-T |
|-------|-----|-----|-----|-----|-----|
| 1 | 1 | 1 | 5 | 5 | - |
| 2 | 3 | 3 | 2 | 7 | 8 |
| 6 | 1 | 1 | 2 | 2 | - |
| 51A | 1 | 1 | 3 | 3 | - |

Model code

K V - **4** / **5 K O** - **H** - *****

Number of control spool position

Three positions

3

Size

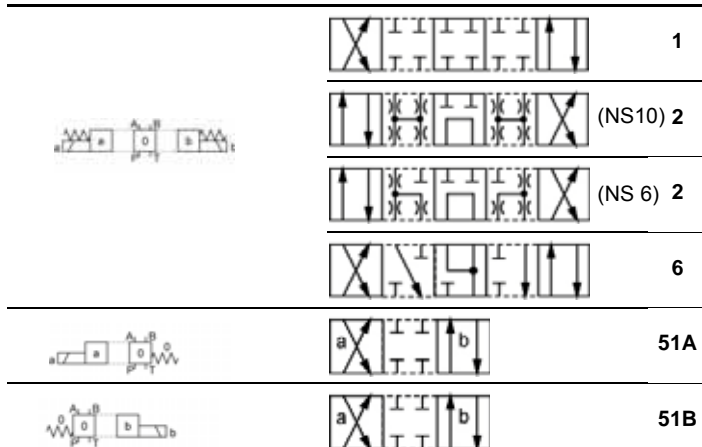
Size 10

10

Hydraulically operated

Special requirements to be briefly specified

Spool types



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

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.] |

Mechanically operated

Hydraulically operated

Electrically operated