



4/2, 4/3 WAY DIRECTIONAL PROPORTIONAL VALVE KVP

- NG 6
- Up to 350 bar [5 076 PSI]
- Up to 30 L/min [7.9 GPM]
- Plug-in connector for solenoids to ISO 4400. Connection diagram and connection dimensions to ISO 4401.
- 5 chamber models with good spool guidance. Optional control electronics: Amplifier P/N: 1659574.
- Protection of solenoid IP 65 to EN 60529 / IEC 60529.
- Fulfil EMC (89/336/EEC).

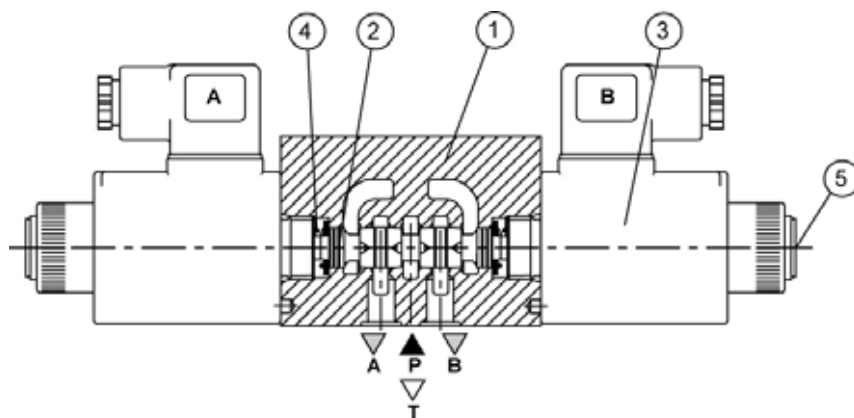


KVP-4/3-5KO-6

Operation

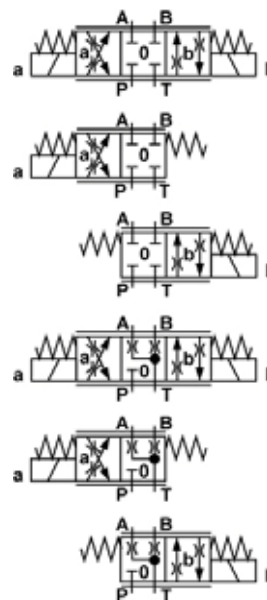
The KVP directional control valve is a proportional valve providing variable flow rates. This valve is used with control electronics. Typical applications are soft switching via adjustable ramps for the reduction of hydraulic and mechanical shocks, and electrically adjustable flow rates - speeds for automating machine functions.

This directional valves consist of a housing (1), a control spool (2), one or two proportional solenoids (3) and two return springs (4). The change-over can be done manually by pressing the emergency manual override (5).



Hydraulic symbols

Spool type



Mechanically operated

Hydraulically operated

Electrically operated



Features

Hydraulic

Size			6
Flow rate		L/min [GPM]	10, 20, 30 [2.6 - 5.2 - 7.9]
Operating pressure	A, B, P	bar [PSI]	350 [5 076]
	T		250 [3 625]
Oil temperature range		°C [°F]	-20 to +70 [-4 to +158]
Viscosity range		mm ² /s [SUS]	15 to 380 [3.24to82]
Mounting position	Optional		
Mass	4/2	kg [lb]	1,65 [3.63]
	4/3		2,2 [4.85]
Filtration		NAS 1638	7

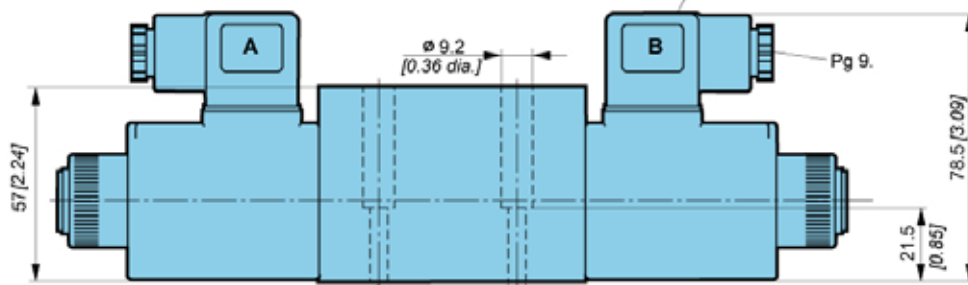
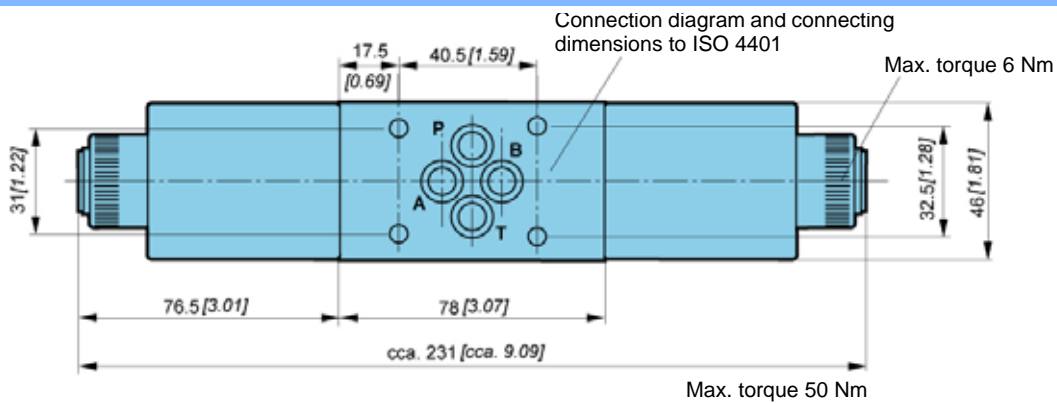
Proportional

Hysteresis	5% of max. flow rate		
Nominal current	12 DC	A	2
	24 DC		1

Electrical

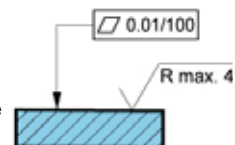
Supply voltage	V	12, 24 DC
Power	W	36
Ambiant temperature	°C [°F]	to+50 [to +122]
Coil temperature	°C [°F]	to +180 [to +356]
Duty cycle	Continuous	

Dimensions



Fixing screws 4 pcs M5 x 30 to EN ISO 4762 - 10.9 must be ordered separately / Max. torque Md = 9Nm

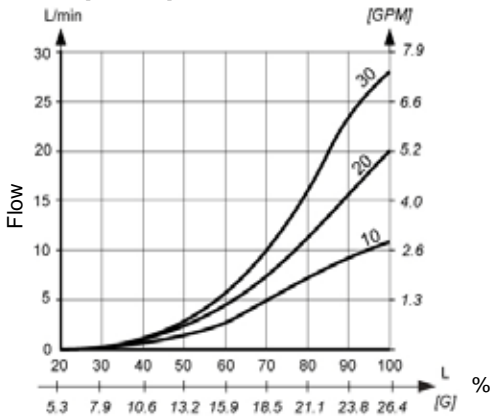
Required quality of the mating surface





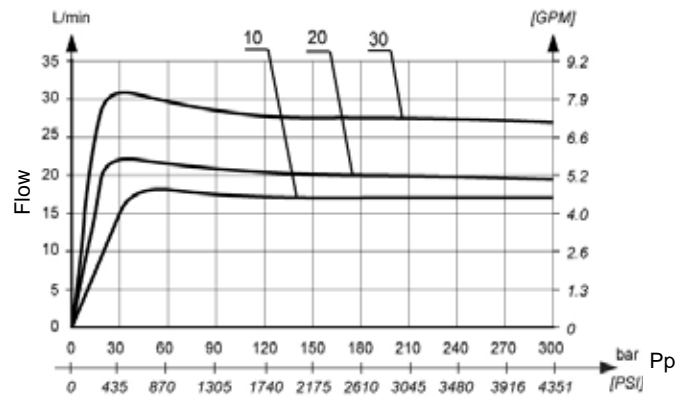
Input signal curves / Flow rate

Measured at 40°C [104°F] and viscosity of 32 mm²/s.
 $\Delta P=5$ bar [72.5PSI] P-A or P-B



Power limits transmitted

Measured at 40°C [104°F] and viscosity of 32 mm²/s.



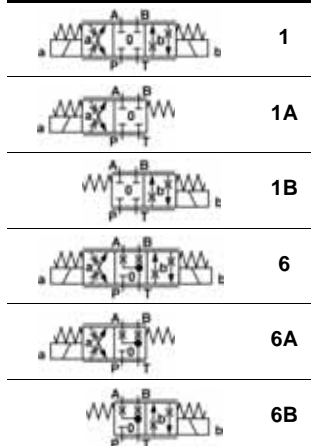
Model code

K V P - 4 / - 5 K O - 6 - - - - *

Number of spool positions

Two positions	2
Three positions	3

Spool types



Regulated flow rate

($\Delta P=5$ bar [72.1 PSI] / P-A or P-B)

0-10 L/min [0-2.6 GPM]	10
0-20 L/min [0-5.2 GPM]	20
0-30 L/min [0-7.9 GPM]	30

Supply voltage

Direct voltage 24V	No designation
Direct voltage 12V	12 DC

Special requirements to be briefly specified

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

Connector type

No designation	EN 175301-803 without signal lamp
L	EN 175301-803 with signal lamp
K	EN 175301-803 without connector
V	Deutsch

Mechanically operated

Hydraulically operated

Electrically operated