



## 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).

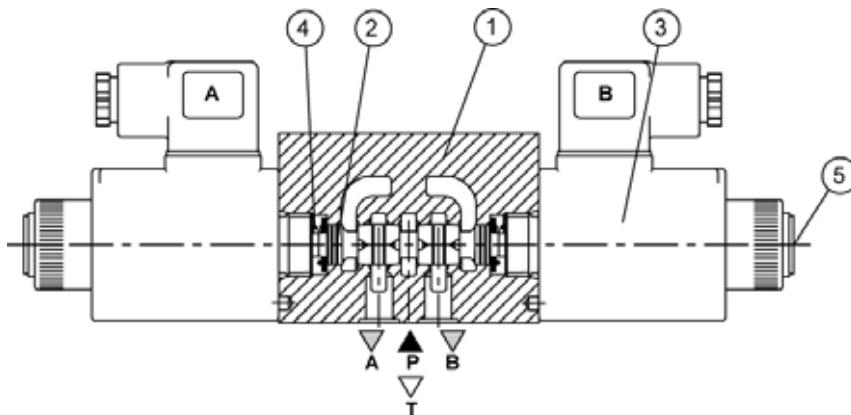


**KVP-4/3-5KO-6**

### Operation

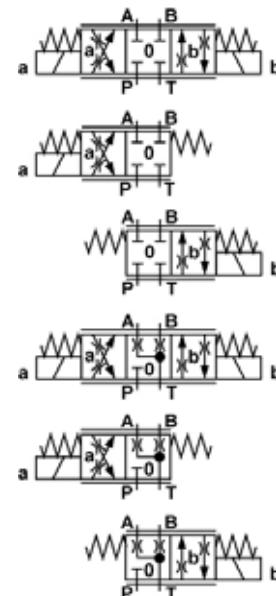
The KVP directional control valve is a proportional valve providing variable flow rates. This valve is used with control electronics. Typical applications are soft switching via adjustable ramps for the reduction of hydraulic and mechanical shocks, and electrically adjustable flow rates - speeds for 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 T	350 [5 076] 250 [3 625]
Oil temperature range	°C [°F]	-20 to +70 [-4 to +158]
Viscosity range	mm <sup>2</sup> /s [SUS]	15 to 380 [3.24 to 82]
Mounting position		Optional
Mass	4/2 4/3	1,65 [3.63] 2,2 [4.85]
Filtration	NAS 1638	7

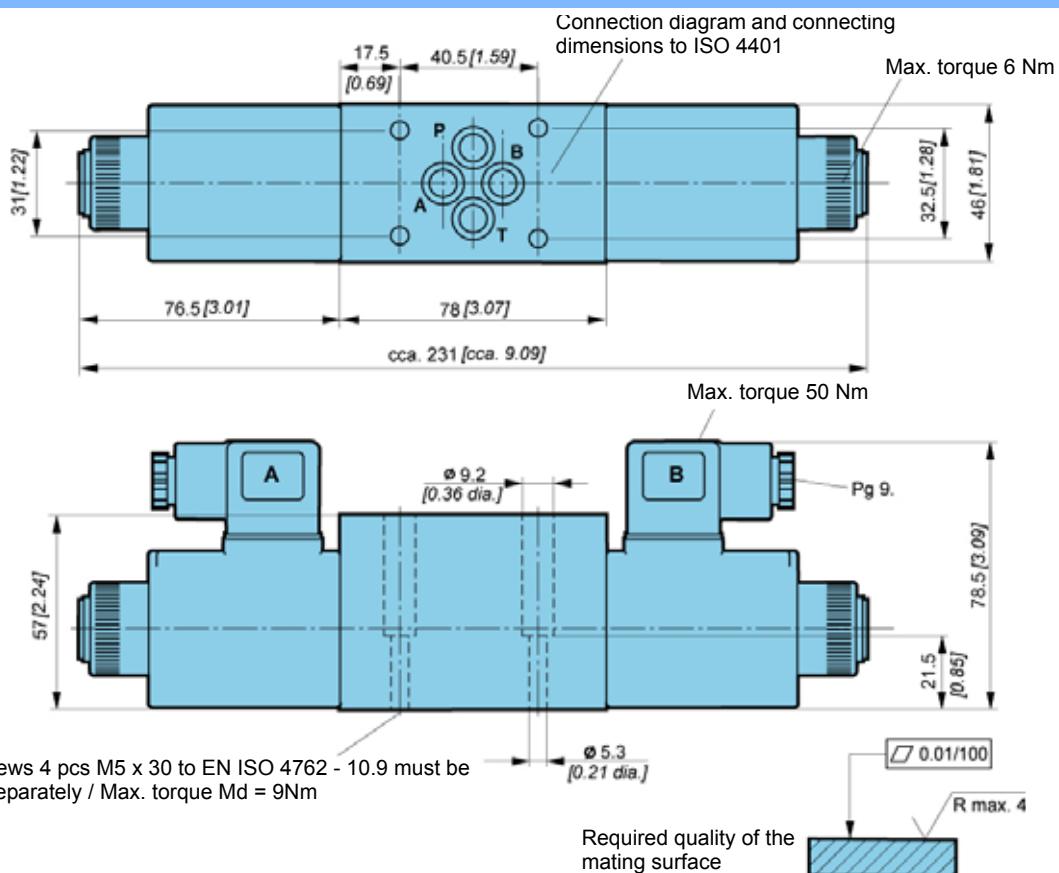
### Proportional

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

### 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

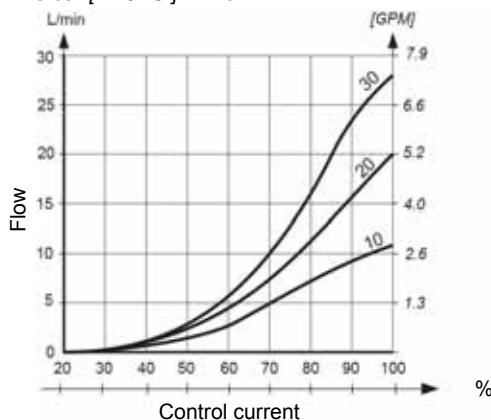
## Dimensions





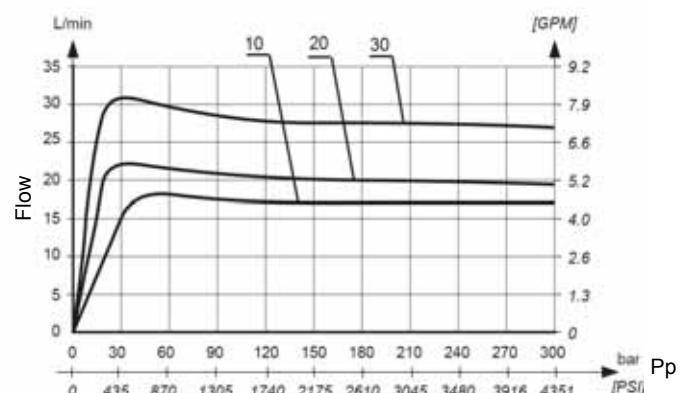
### Input signal curves / Flow rate

Measured at 40°C [104°F] and viscosity of 32 mm<sup>2</sup>/s.  
 $\Delta P=5$  bar [72.5 PSI] / P-A or P-B



### Power limits transmitted

Measured at 40°C [104°F] and viscosity of 32 mm<sup>2</sup>/s.



### Model code

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

#### Number of spool positions

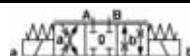
Two positions

2

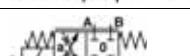
Three positions

3

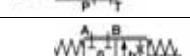
#### Spool types



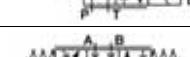
1



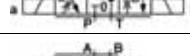
1A



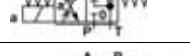
1B



6



6A



6B

#### 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

#### Special requirements to be briefly specified

**FA** Auxiliary control lever on valve side A

**FB** Auxiliary control lever on valve side B

#### 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

#### Supply voltage

Direct voltage 24V No designation

Direct voltage 12V 12 DC

Mechanically operated

Hydraulically operated

Electrically operated