



## 6/2 WAY DIRECTIONAL VALVE KV

- NG 6
- Up to 350 bar [5 076 PSI]
- Up to 50 L/min [13.2 GPM]
- Plug-in connector for solenoids to ISO 4400.
- Threaded connections to ISO 9974 (Metric), ISO 1179 (BSPP/Gas), ISO 11926 (UNF).
- Protection of solenoid IP 65 to EN 60529 / IEC 60529.
- Fulfil EMC (89/336/EEC).



KV-6/2-6-S50

### Operation

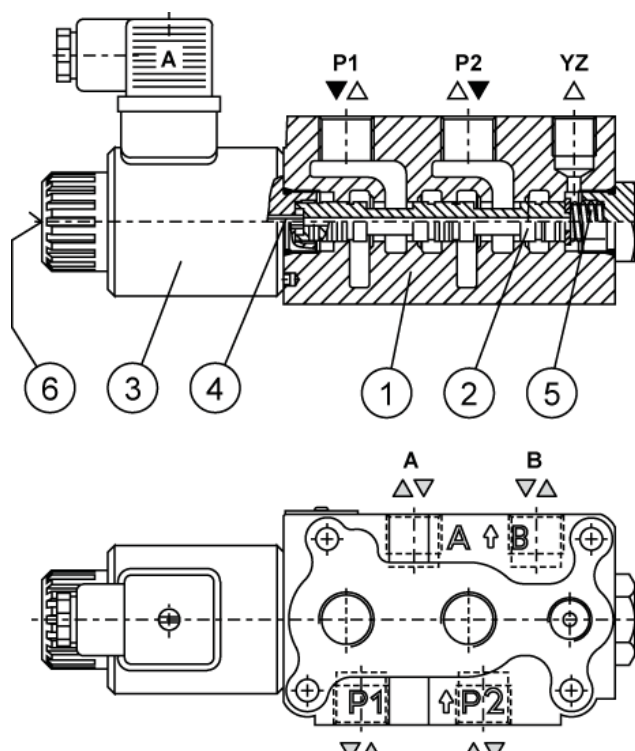
Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow. They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

The KV type directional valves consist of a housing (1), a control spool (2), a solenoid (3) and a return spring (5).

Change-over to the operating position is done by energizing the solenoid (3), whereby the solenoid plunger acts on the control spool (2) via the operating pin (4), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B and P2.

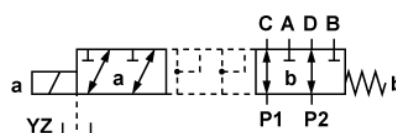
When the solenoid (3) is de-energized, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C, D and P2.

The change-over can also be done manually by pressing the emergency hand operator (6).

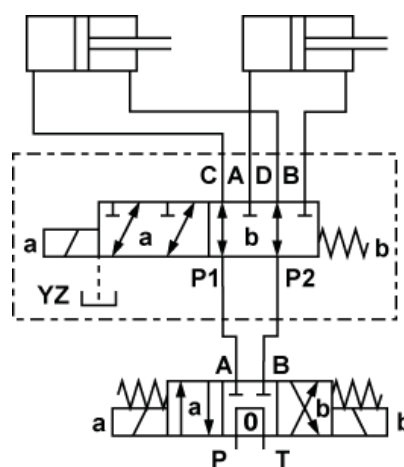


### Hydraulic symbol

Spool type



### Mounting example



Mechanically operated

Hydraulically operated

Electrically operated



## Features

### Hydraulic

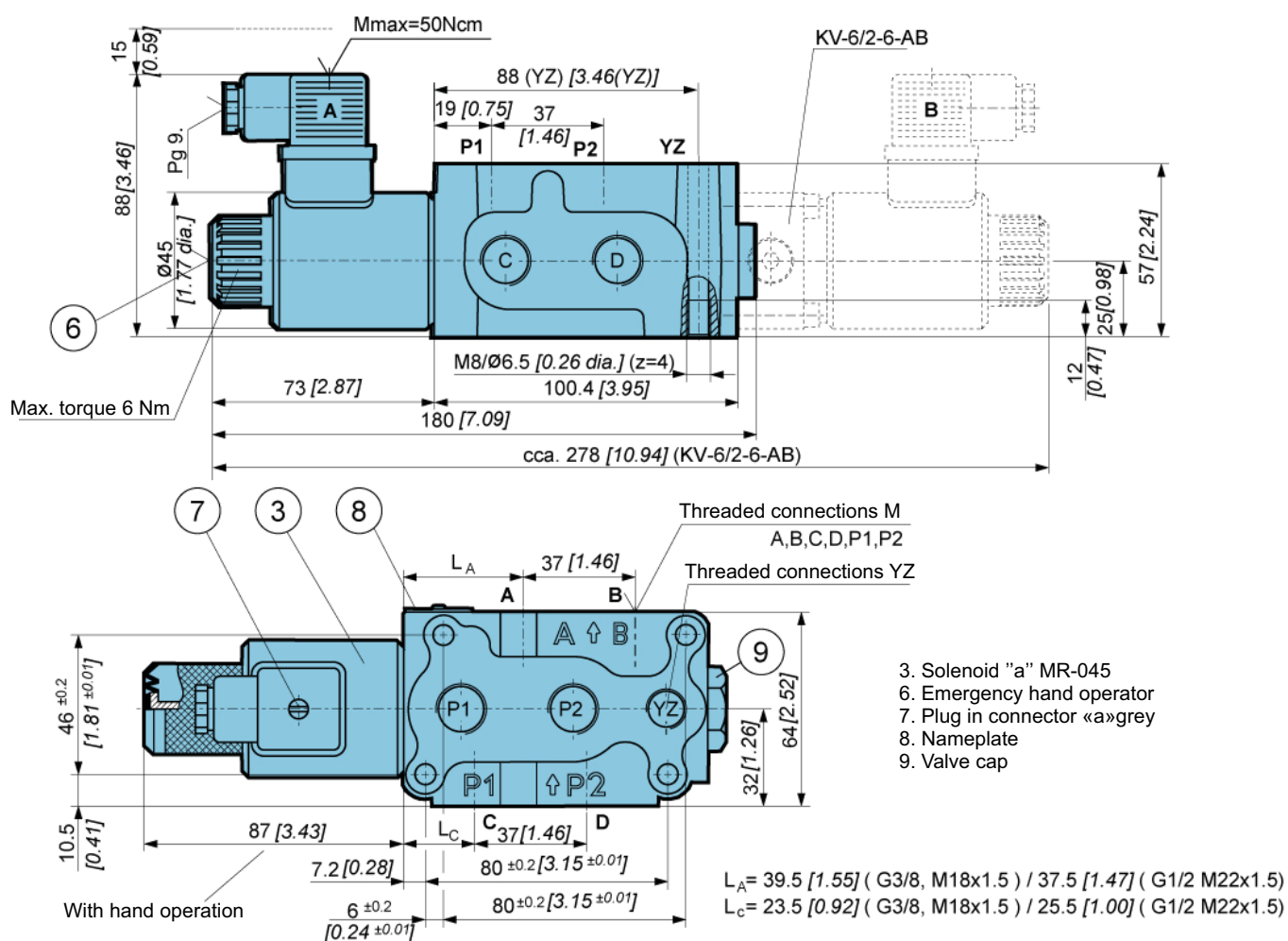
Size	6		
Flow rate	L/min [GPM]		50 [13.2]
Operating pressure	With YZ	bar [PSI]	350 [5 076]
	Without YZ		250 [3 625]
Oil temperature range	°C [°F]		-20 to +70 [-4 to +158]
Viscosity range	mm <sup>2</sup> /s [SUS]		15 to 380 [3.24 to 82]
Mounting position	Optional		
Mass	Kg [lb]		2,5 [5.51]
Filtration	NAS 1638		8

### Electrical

Supply voltage	V	12, 24 DC
Power	W	29*
Switching frequency	1/h	15 000
Ambient temperature	°C [°F]	to +50 [to +122]
Coil temperature	°C [°F]	to +180 [to +356]
Duty cycle	Continuous	

\* 12 V supply voltage - 36 W.

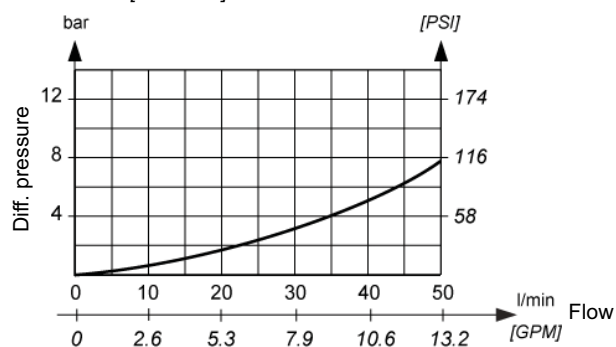
## Dimensions



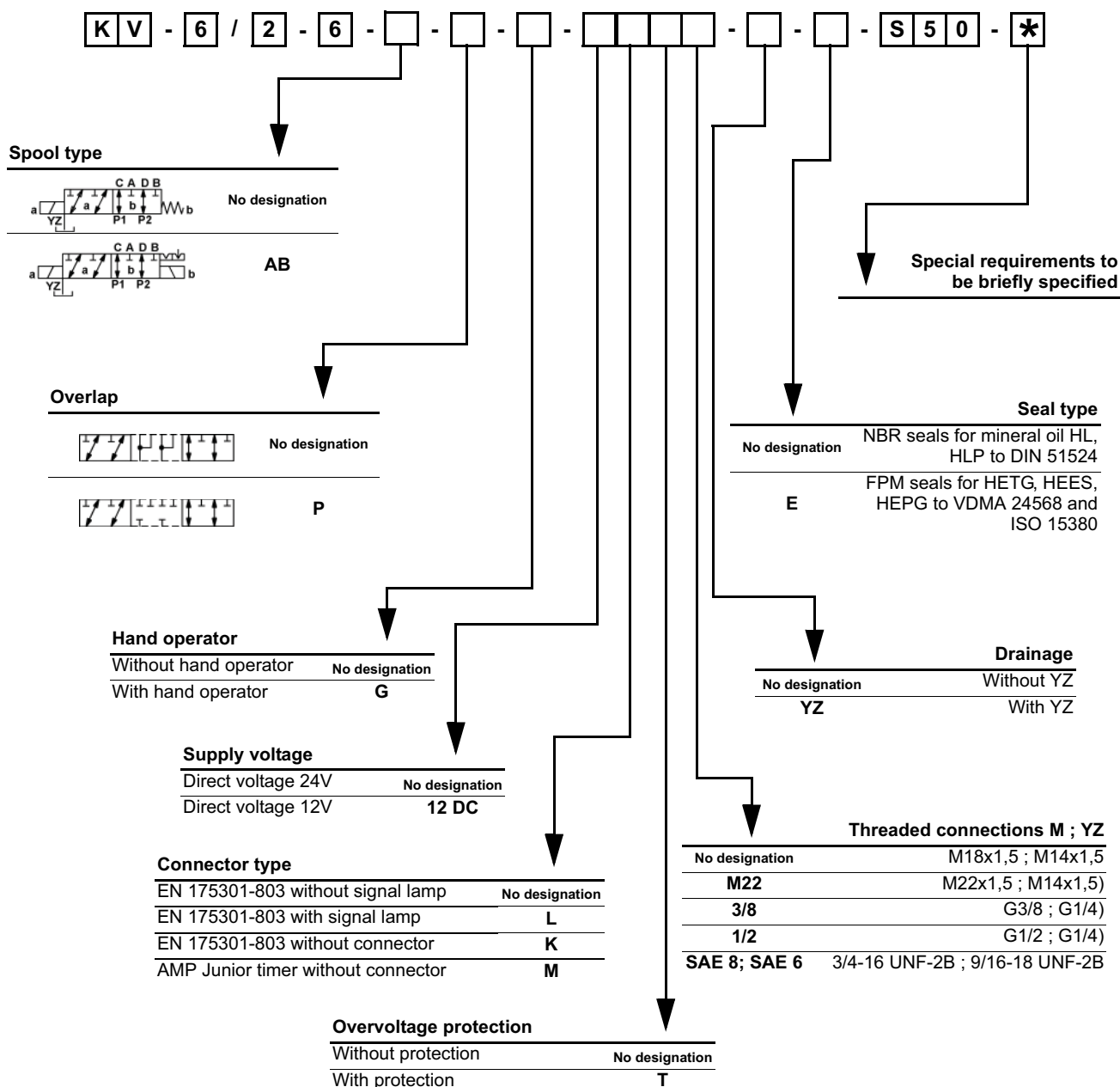


### $\Delta p$ -Q Performance curve

Measured at 40°C [104°F] and viscosity of 32 mm<sup>2</sup>/s [148 SUS].



## Model code





## 6/2 WAY DIRECTIONAL VALVES KV

- NG 10
- Up to 350 bar [5 076 PSI]
- Up to 120 L/min [31.7 GPM]
- Plug-in connector for solenoids to ISO 4400.
- Threaded connections to ISO 9974 (Metric), ISO 1179 (BSPP/Gas), ISO 11926 (UNF).
- Protection of solenoid IP65 to EN 50529 / IEC 60529.



KV-6/2-10

### Operation

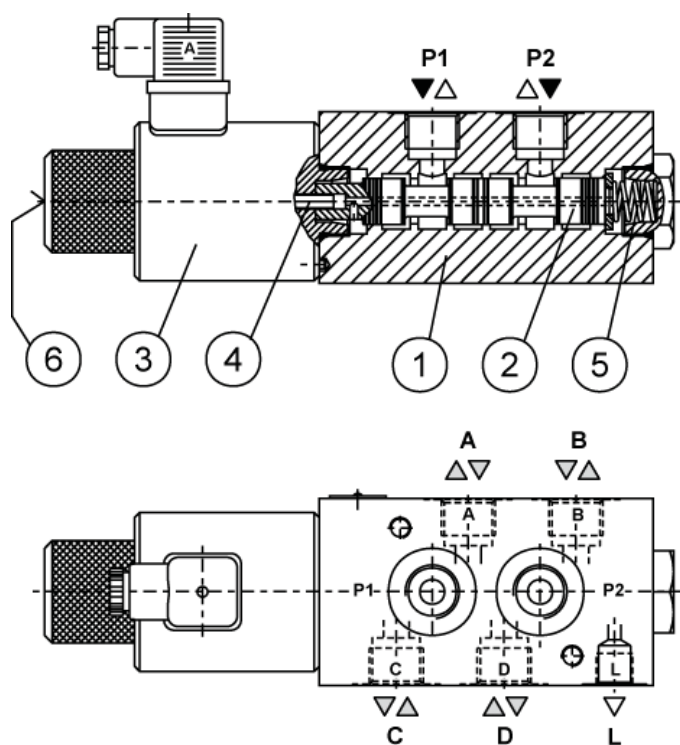
Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow. They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

The KV type directional valves consist of a housing (1), a control spool (2), a solenoid (3) and a return spring (5).

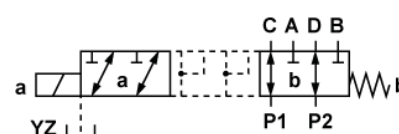
Change-over to the operating position is done by energizing the solenoid (3), whereby the solenoid plunger acts on the control spool (2) via the operating pin (4), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B and P2.

When the solenoid (3) is de-energized, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C, D and P2.

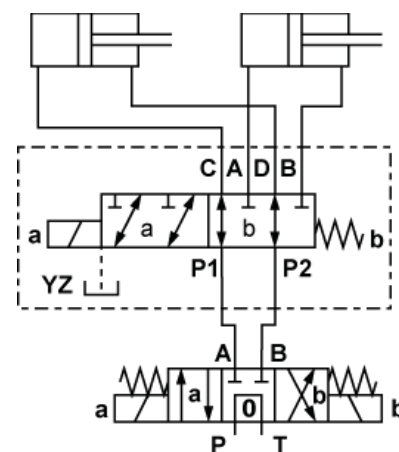
The change-over can also be done manually by pressing the emergency hand operator (6).



### Hydraulic symbol



### Mounting example



Mechanically operated

Hydraulically operated

Electrically operated



## Features

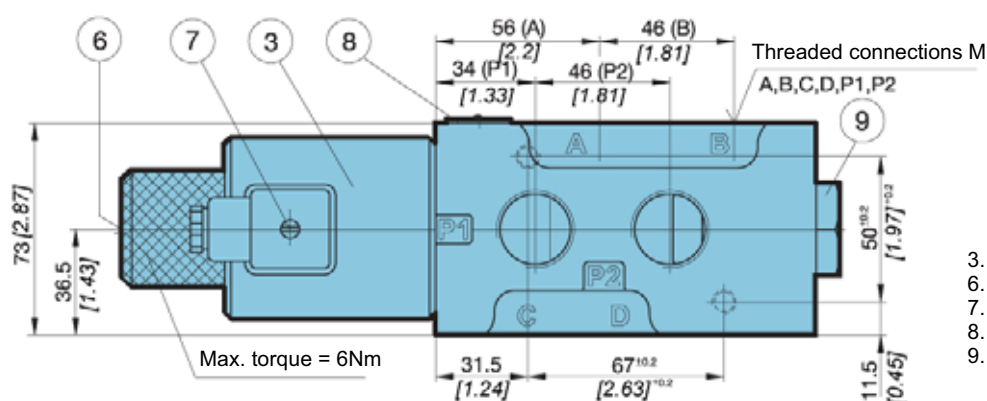
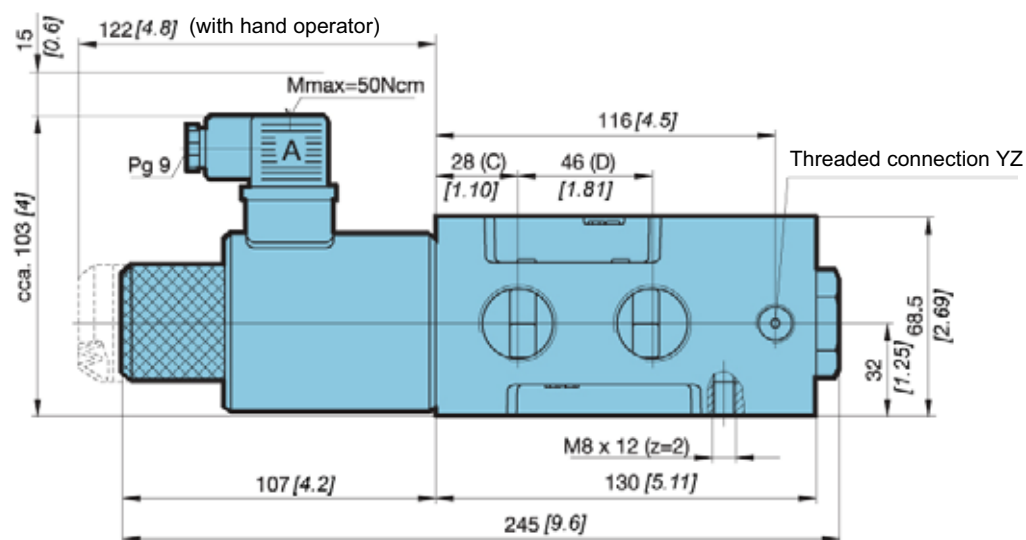
### Hydraulic

Size	10	
Flow rate	L/min [GPM]	120 [31.7]
Operating pressure	With YZ	350 [5 076]
	Without YZ	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	Kg [lb]	5,5 [12.12]
Filtration	NAS 1638	8

### Electrical

Supply voltage	V	12, 24 DC
Power	W	45
Switching frequency	1/h	15000
Ambient temperature	°C [°F]	to +50 [to +122]
Coil temperature	°C [°F]	to +180 [to +356]
Duty cycle	Continuous	

## Dimensions

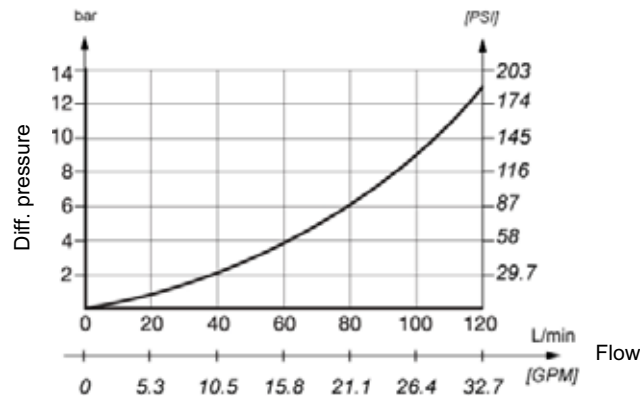


- 3. Solenoid "a" MR-060
- 6. Emergency hand operator
- 7. Plug-in connector «a» - grey
- 8. Nameplate
- 9. Valve cap



## ΔP-Q Performance curves

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



## Model code

**K V** - **6** / **2** - **10** - **□** - **□** - **□** - **□** - **□** - **□** - **□** - **\***

### Hand operator

Without hand operator

No designation

With hand operator

G

### Supply voltage

Direct voltage 24V

No designation

Direct voltage 12V

12 DC

### Connector type

EN 175301-803 without signal lamp

No designation

EN 175301-803 with signal lamp

L

EN 175301-803 without connector

K

AMP Junior timer without connector

M

### Overvoltage

Without overvoltage protection

No designation

With overvoltage protection

T

### Threaded connections M ; YZ

M22x1,5 ; M14x1,5

M22

M27x2 ; M14x1,5

M27

G1/2 ; G1/4

1/2

G3/4 ; G1/4

3/4

7/8-14 UNF-2B ; 9/16-18 UNF-2B

SAE 10; SAE 6

### Drainage

Without YZ

No designation

With YZ

YZ

### Seal type

NBR seals for mineral oil HL, HLP to DIN 51524

No designation

FPM seals for HETG, HEES, HEPG to VDMA

E

24568 and ISO 15380

**Special requirements to be briefly specified**

Mechanically operated

Hydraulically operated

Electrically operated



## 6/2 WAY DIRECTIONAL VALVES KV-6K (NG 6)

- NG 6
- Up to 250 bar [3625 PSI]
- Up to 50 L/min [13.2 GPM]
- Direct in-line mounting.
- Plug-in connector for solenoids to ISO 4400.
- Threaded connections to ISO 9974 (Metric), ISO 1179 (BSPP/Gas), ISO 11926 (UNF).
- Protection of solenoid IP65 to EN 60529 / IEC 60529.
- Fulfil EMC (89/336/EEC).



KV-6K/2-6

### Operation

Directional valves type KV-6K/2-6 with direct solenoid operation control the direction of the hydraulic medium flow.

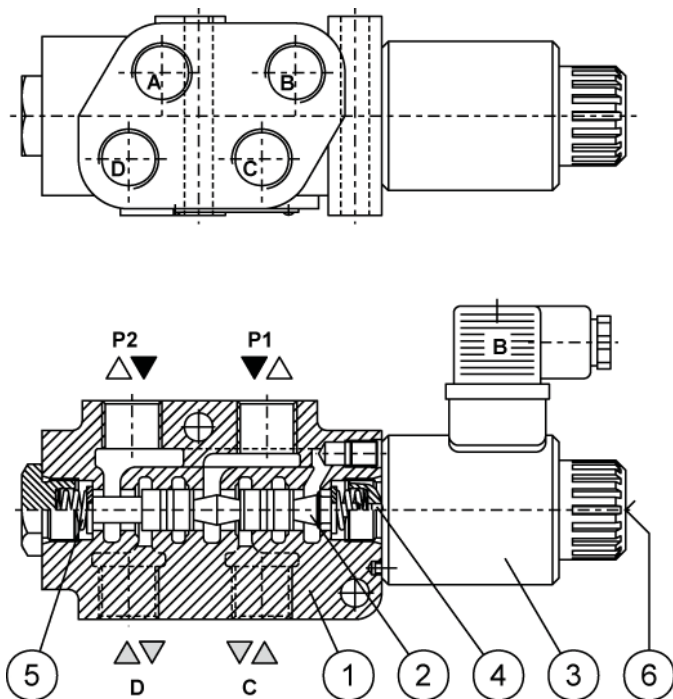
They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

The KV-6K/2-6 type directional valves consist of a housing (1), a control spool (2), and a solenoid (3) with return spring (5).

Change-over to the operating position is done by energizing the solenoid (3), whereby the solenoid plunger acts on the control spool (2) via the operating pin (4), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A,B and P2.

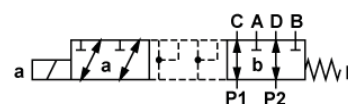
When the solenoid (3) is de-energized, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C,D and P2.

The change-over can also be done manually by pressing the emergency hand operator (6).

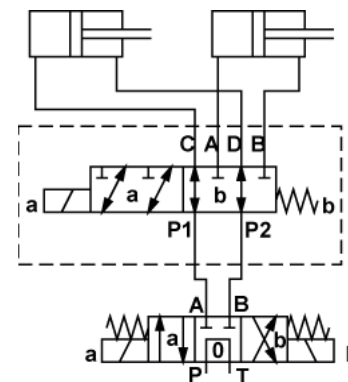


### Hydraulic symbol

Spool type



### Mounting example



Mechanically operated

Hydraulically operated

Electrically operated



## Features

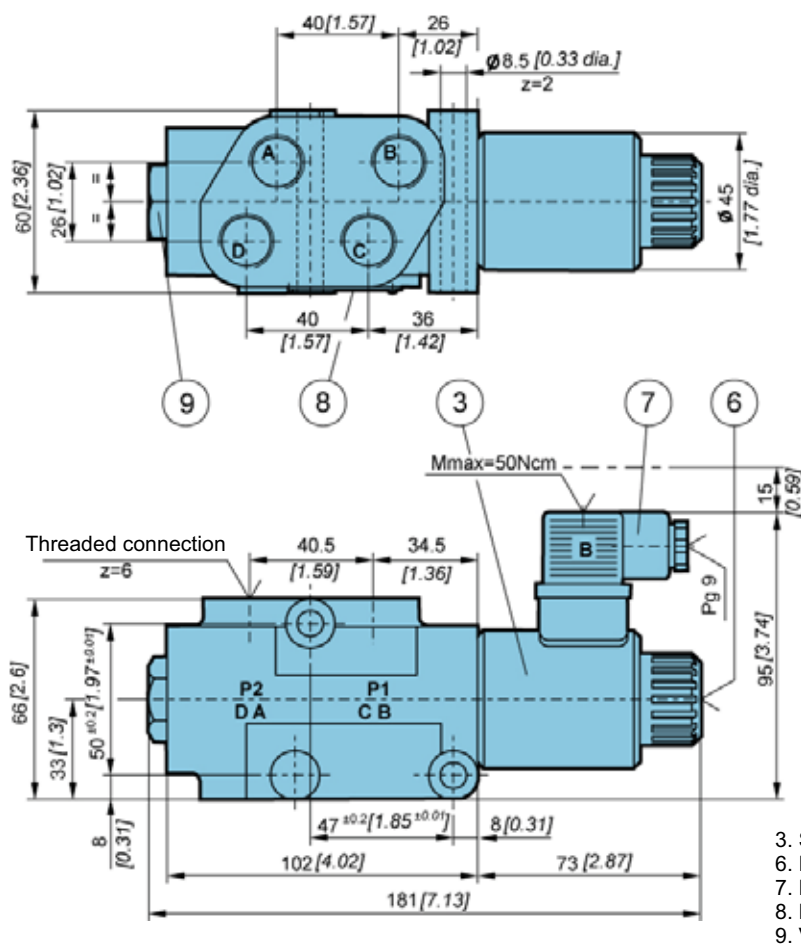
### Hydraulic

Size		6
Flow rate	L/min [GPM]	50 [13.2]
Operating pressure	bar [PSI]	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	Kg [lb]	2,5 [5.51]
Filtration	NAS 1638	8

### Electrical

Supply voltage	V	12, 24 DC
Power	W	29
(12 V DC supply voltage)	W	36
Switching frequency	1/h	15000
Ambient temperature	°C [°F]	to +50 [to +122]
Coil temperature	°C [°F]	to +180 [to +356]
Duty cycle		Continuous

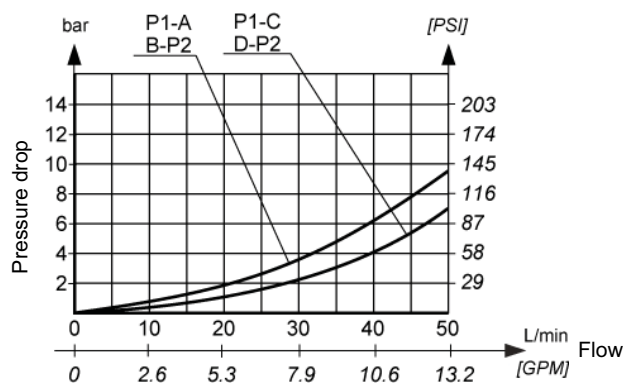
## Dimensions





### ΔP-Q Performance curves

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



### Model code

**K V** - **6 K** / **2** - **6** - **□** - **□** - **□** - **□** - **□** - **\***

#### Hand operator

Without hand operator **No designation**  
 With hand operator **G**

#### Supply voltage

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

#### Connector type

EN 175301-803 without signal lamp **No designation**  
 EN 175301-803 with signal lamp **L**  
 EN 175301-803 without connector **K**  
 AMP Junior timer without connector **M**

#### Overvoltage

Without overvoltage protection **No designation**  
 With overvoltage protection **T**

#### Threaded connections

M18x1,5 **No designation**  
 G 3/8 **G3/8**  
 9/16-18 UNF-2B **SAE 6**

#### Seal type

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

Special requirements to be briefly specified

Mechanically operated

Hydraulically operated

Electrically operated