



# 4/2 WAY AUTOMATIC DIRECTIONAL VALVES PKV-...-T

- NG 6
- Up to 210 bar [3 045 PSI]
- Up to 30 L /min [7.9 GPM]
- Connecting dimensions to ISO 4401.
- Automatic, load - independent reversal.
- Predefined actuator direction at start - up.



PKV-6-T, PKV-6-T-G

### Operation

These valves reverse the movement of an actuator every time the flow through the valve stops. Preferential starting is P → B and A → T position. The spool is moved by two springs and locked by unbalanced pressure inside valve. When no more flow is crossing the valve, the spool changes the position inverting the direction of the actuator. These valves are mostly used to control the movement compactors or system where it is not possible to use electrical device.

### About the spindle for the PKV-6-T-G valves:

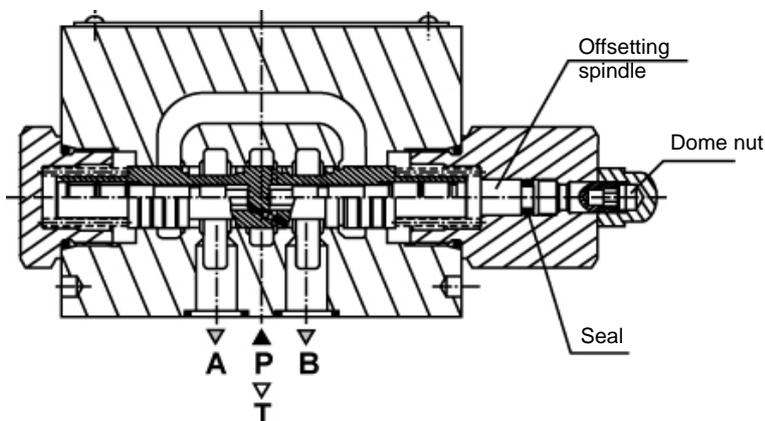
The spindle for the PKV-6-T-G valves is used just to set the system pressure limiter. To set the maximum pressure you have to block the self-reversing function.

### Procedure to set a pressure on the system pressure limiter:

- 1/ Switch off the pump or reduce pressure to minimum (10 bar max).
- 2/ To set the system pressure limiter first block the automatic reversal of the valve.  
Remove the dome nut and turn the offsetting spindle clockwise until it hits its inner end spool. The spool is now clamped P to B and A to T.
- 3/ Start the pump and set the required pressure.
- 4/ After that stop again the pump.
- 5/ Turn the offsetting spindle anticlockwise until it hits its outer end stop then put the dome nut back.

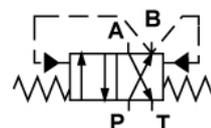


**Never turn the offsetting spindle when the valve is pressurized over 10 bar [145 PSI]. This can cause seal damage. If necessary switch off the pump.**



### Hydraulic symbol

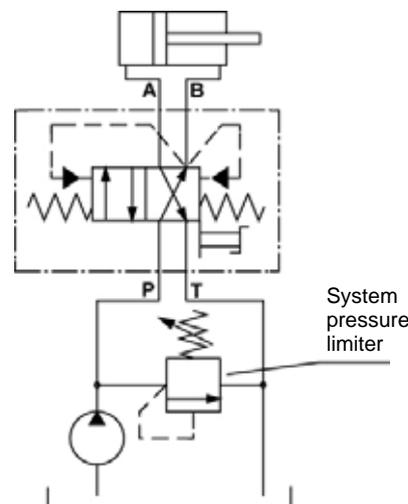
#### PKV-6-T



#### PKV-6-T-G



### Mounting example



Mechanically operated

Hydraulically operated

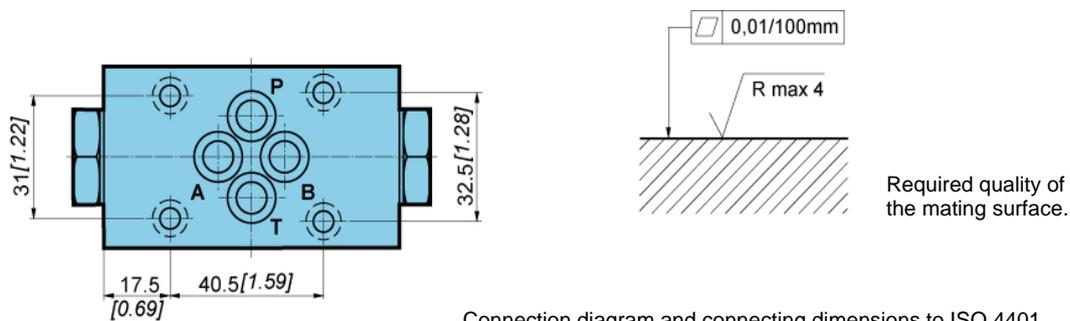
Electrically operated



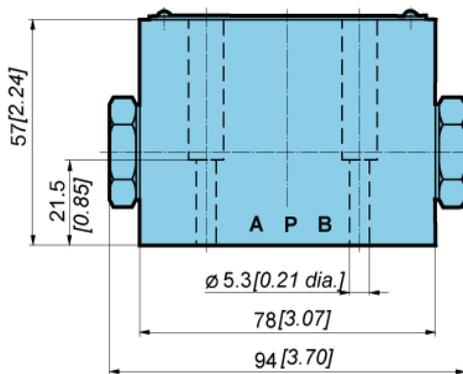
**Features**

|                                   |                          |                           |
|-----------------------------------|--------------------------|---------------------------|
| <b>Size</b>                       | <b>6</b>                 |                           |
| <b>Flow rate min/max</b>          | L/min [GPM]              | 3/30 [0.8/7.9]            |
| <b>Operating pressure P, A, B</b> | bar [PSI]                | 50 to 210 [725 to 3 045]  |
| <b>Max. pressure T</b>            | bar [PSI]                | 40 [580]                  |
| <b>Viscosity range</b>            | mm <sup>2</sup> /s [SUS] | 20 to 200 [92.7 to 926.8] |
| <b>Oil temperature range</b>      | °C [°F]                  | -20 to +60 [-4 to 140]    |
| <b>Filtration</b>                 | NAS 1638                 | 8                         |
| <b>Mass</b>                       | PKV-6-T                  | 1,3 [2.8]                 |
|                                   | PKV-6-T-G                | 1,4 [3.1]                 |

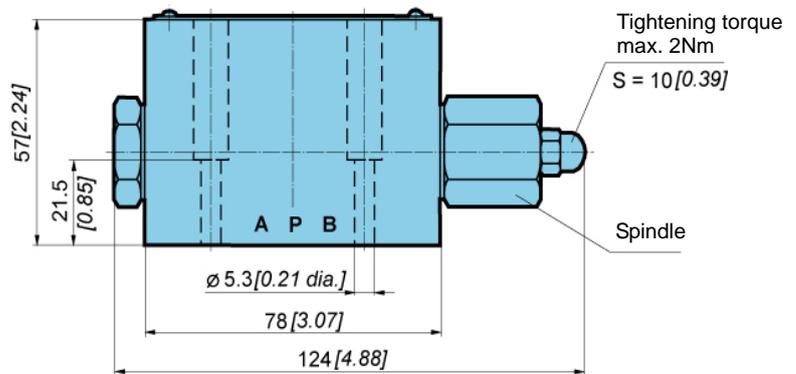
**Dimensions**



Connection diagram and connecting dimensions to ISO 4401.



**PKV-6-T**



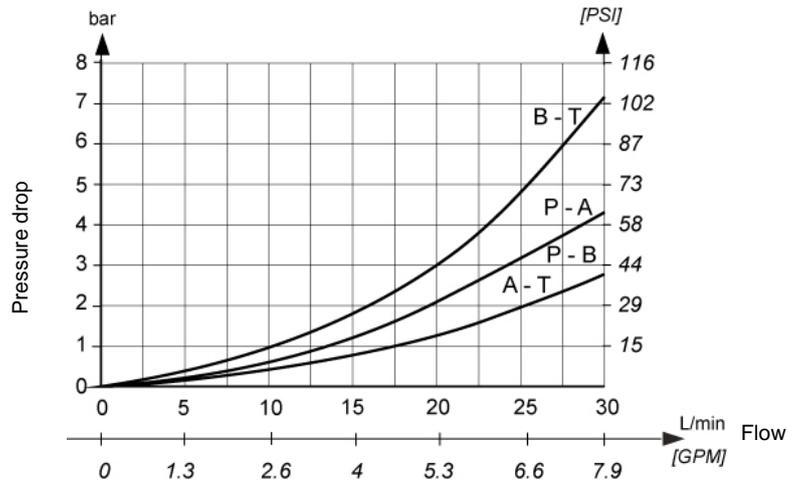
**PKV-6-T-G**

4 x fixing screws M5x30 to DIN EN ISO 4762-10.9 must be ordered separately.  
 Required tightening torque Md = 9 Nm [79.65 in.lbf].



**ΔP-Q Performance curves**

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



Mechanically operated

**Model code**

**P** **K** **V** - **6** - **T** -  -  - **\***

**Offsetting spindle**

Without offsetting spindle No designation  
 With offsetting spindle **G**

**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**

Hydraulically operated

Electrically operated