DIRECTIONAL VALVES

PD12-S61N  Piloted, 2-Position, 4-Way Spool

DESCRIPTION
A screw-in, cartridge-style, pilot-operated, 2-position, 4-way, spool-type, hydraulic directional valve.

OPERATION
In the neutral position, the PD12-S61N allows flow between ports ② and ③ and between ports ④ and ⑤. On remote pilot signal at ①, the valve shifts to allow flow between ports ③ and ④, while blocking ports ② and ⑤.

The spring chamber is vented to the tank through port ⑥. The vented spring chamber allows the valve to be fully pressurized at ports ①, ②, ③, ④ and ⑤ without affecting required pilot pressure. Pressure at ⑥ will affect required pilot pressure.

FEATURES
• Hardened spool and cage for long life.
• 110 and 170 psi bias springs available.

RATINGS
Maximum Operating Pressure: 240 bar (3500 psi)
Flow: 0 to 56 lpm (0 to 15 gpm); See Performance Chart
Internal Leakage: Maximum leakage at 240 bar (3500 psi):
197 ml/minute (12 cu. in./minute).
Temperature: -40 to 120°C (-40 to 248°F)
Filtration: See page 9.010.1
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1
Installation: No restrictions; See page 9.020.1
Cavity: VC12-S6; See page 9.112.1
Cavity Tool: CT12-S6XX; See page 8.600.1
Seal Kit: SK12-S6X-BMMMM; See page 8.650.1

SYMBOLS

USASI:

ISO:

PERFORMANCE (Cartridge Only)

![Performance Chart](image)
**DIMENSIONS**

![Diagram of PD12-S61N cartridge and ported body dimensions.](image)

**MATERIALS**

**Cartridge**: Weight: 0.21 kg. (0.46 lbs.)
- Steel with hardened work surfaces.
- Zinc-plated exposed surfaces.
- Buna N O-rings and polyester elastomer back-ups standard.

**Ported Body**: Test housing available; see page 8.012.1.

**TO ORDER**

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<thead>
<tr>
<th>PD12-S61N-</th>
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<tbody>
<tr>
<td><strong>Porting</strong></td>
<td>Cartridge Only 0</td>
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**Bias Spring**

<table>
<thead>
<tr>
<th>110</th>
<th>7.6 bar (110 psi)</th>
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<tr>
<td>170</td>
<td>11.7 bar (170 psi)</td>
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**Seals**

- **N**: Buna N (Std.)
- **NS**: Buna N with Sealed Spool between ① and ②
- **V**: Fluorocarbon
- **VS**: Fluorocarbon with Sealed Spool between ① and ②