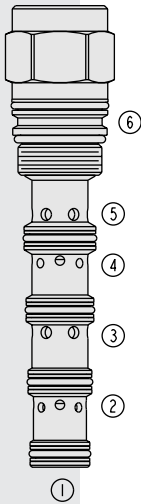


# DIRECTIONAL VALVES

## PE16-S67H Proportional, Pilot Operated

U.S. Patent  
6,554,014



### DESCRIPTION

A screw-in, cartridge-style, proportional, spring-centered, pilot-operated spool-type hydraulic directional valve.

### OPERATION

When the PE16-S67H is in neutral position port ③ is blocked and ports ②, ④ and ⑤ are in communication with each other. When the remote pilot signal at ① exceeds the force of the bias spring, the spool shifts proportionally to the applied pilot pressure to allow flow from ③ to ④, through a load such as a hydraulic cylinder or motor, and from ② to ⑤ and to tank. On remote pilot signal at ⑥, the spool shifts proportionally to the applied pressure in the opposite direction, thus reversing the flow direction. **The valve's spool is symmetrical, providing meter-in and meter-out control.**

### FEATURES

- Hardened spool and cage for long life.
- Cost-effective cavity.
- Excellent metering characteristics.
- Good linearity.

### RATINGS

**Maximum Operating Pressure:** Port ③: 345 bar (5000 psi)

Ports ② and ④: 240 bar (3500 psi)

Ports ① and ⑥: 27.6 bar (400 psi)

**Orifice Diameter:** Between ports ② and ④ and port ⑤ in neutral position: 0.030 in.

**Flow:** See Performance Chart

**Internal Leakage:** 590 ml/minute (36 cu. in./minute) at 207 bar (3000 psi)

**Temperature:** -40 to 120°C with standard Buna N seals

**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

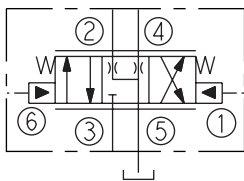
**Cavity:** VC16-S6; See page 9.116.1

**Cavity Tool:** CT16-S6; See page 8.600.1

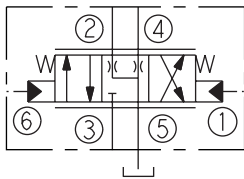
**Seal Kit:** SK16-S6P-BMMMM; See page 8.650.1

### SYMBOLS

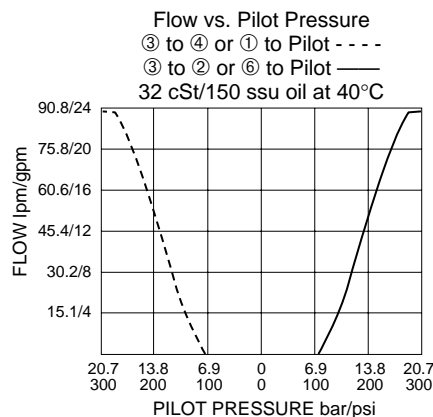
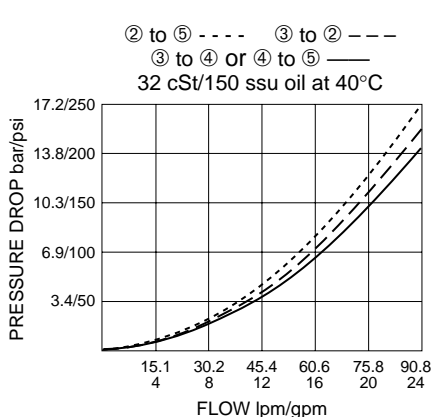
#### USASI:



#### ISO:

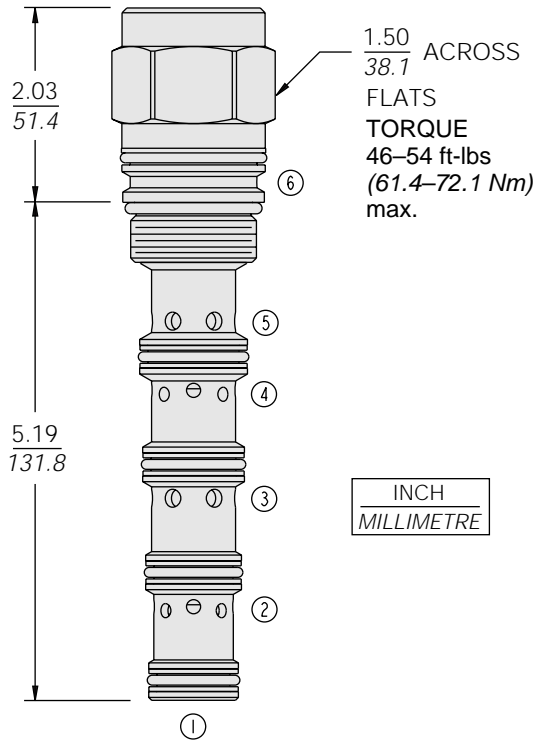


### PERFORMANCE (Cartridge Only)



## DIMENSIONS

U.S. Patent 6,554,014



## MATERIALS

**Cartridge:** Weight: 0.76 kg. (1.68 lbs.)  
 Steel with hardened work surfaces.  
 Zinc-plated exposed surfaces.  
 Buna N O-rings and polyester elastomer back-ups standard.

**Test Body:** Consult Factory

## TO ORDER

PE16-S67H - -

**Porting**  
 Cartridge Only 0

### Seals

- N** Buna N (Std.)
- P** Polyurethane (for pressures over 240 bar/3500 psi)
- V** Fluorocarbon