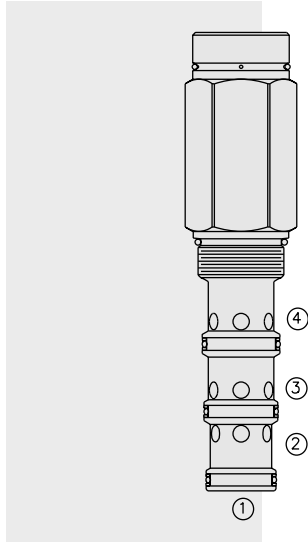


DIRECTIONAL VALVES

PD42-M45 Piloted 2-Way Spool



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic directional valve for three-way circuits requiring remote pilot actuation.

OPERATION

In neutral (unpiloted), the **PD42-M45** allows flow from ③ to ② bidirectionally. The spring chamber is directed to port ④.

On remote pilot signal at ①, the valve shifts to block ③ to ② bidirectionally.

Note that ④ is common to the spring chamber. Pressure on ④ will directly (1:1) affect required pilot pressure and must always be added to the bias spring value.

FEATURES

- Hardened spool and cage for long life.
- Optional sealed pilot.
- Industry-standard ISO cavity.

RATINGS

Maximum Operating Pressure: With Polyurethane Seals: Ports ①, ② & ③: 344 bar (5000 psi); Port ④: 210 bar (3000 psi)

Flow: See Performance Chart

Internal Leakage: 246 ml/minute (15 cu. in./minute) max. at 344 bar (5000 psi)

Pilot Pressure Required:

To Spool Crossover: 13 bar (188 psi)

To Full Spool Shift: 17.2 to 27.6 bar (250 to 400 psi)

Temperature: -40 to 120°C with standard Buna 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 ssu)

Installation: No restrictions; See page 9.020.1

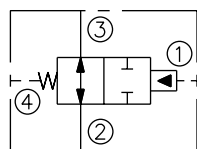
Cavity: VC42-M4; See page 9.142.1

Cavity Tool: CT42-M4XX; See page 8.600.1

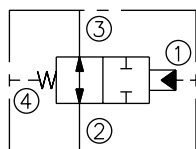
Seal Kit: SK42-4X-MMM; See page 8.650.1

SYMBOLS

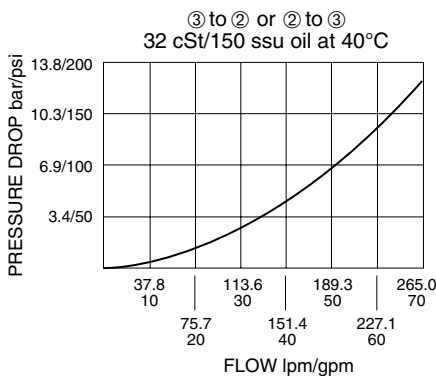
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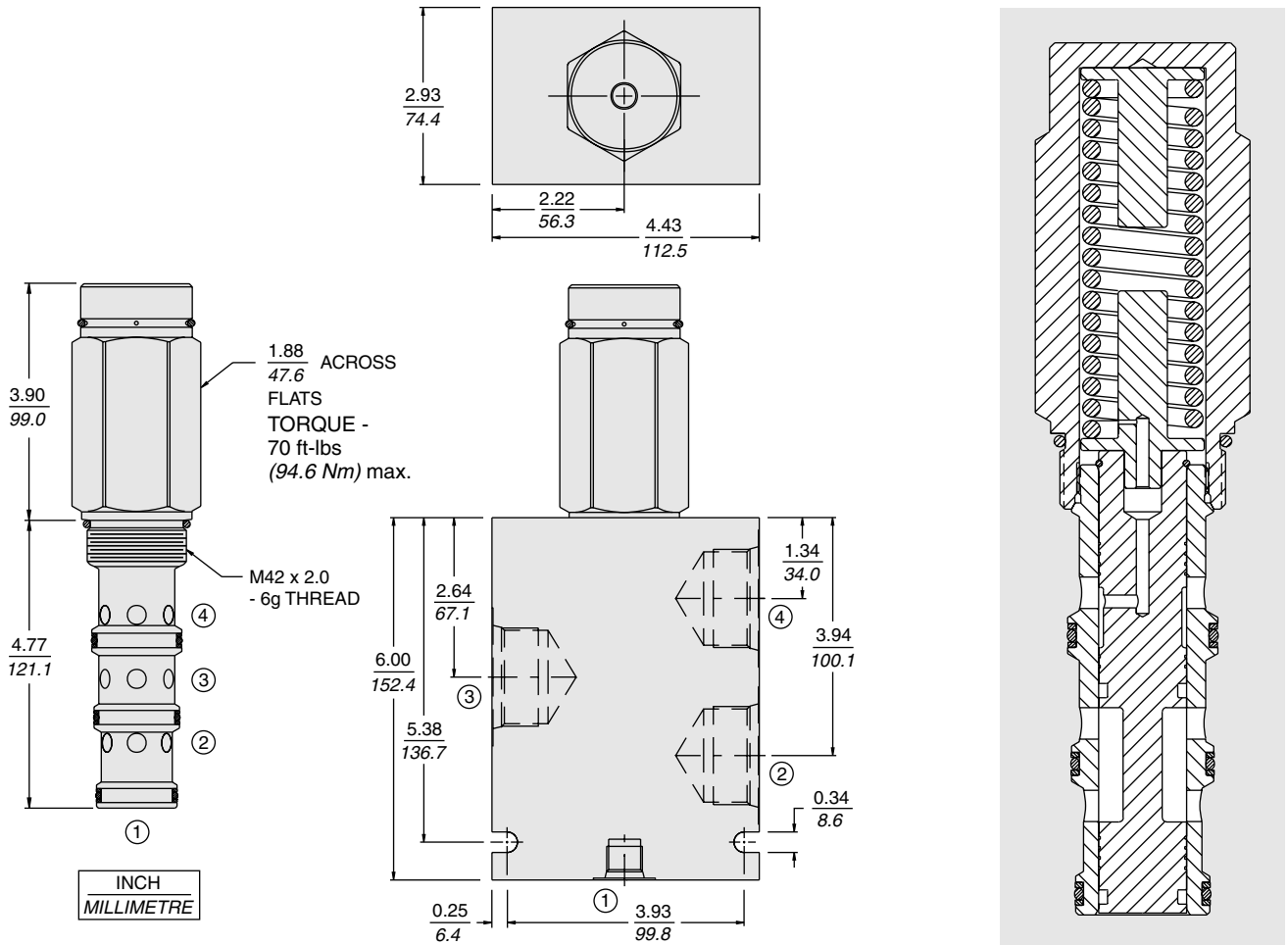


PERFORMANCE (Cartridge Only)



PD42-M45

DIMENSIONS

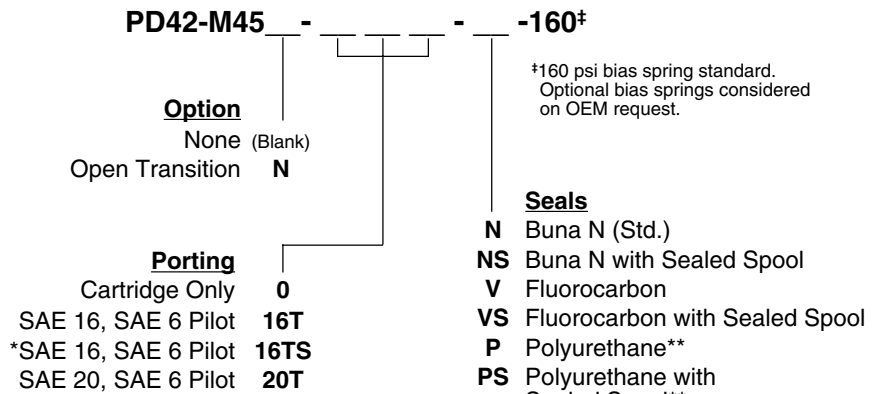


MATERIALS

Cartridge: Weight: 0.52 kg. (1.15 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.5 kg. (3.3 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); see page 8.042.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER



*Steel body for pressures over 3500 psi

Note: All bodies are PD type.