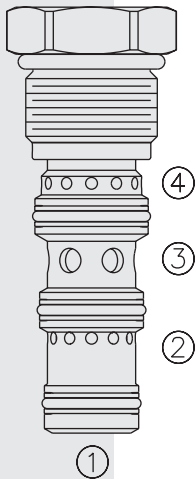


FD50-44 Flow Divider/Combiner . . . Heavy Duty,



DESCRIPTION

High performance, high pressure, multifunction, screw-in, cartridge-style, spool-type flow divider/combiner.

OPERATION

In the dividing mode, the **FD50-44** will divert input flow from port ③ to ports ② and ④, based on the ratio specified. This valve provides a highly accurate, pressure compensated division of inlet flow or combination of return flow regardless of system operating pressure. When the flow direction is reversed, the valve will combine flows from ports ② and ④ to port ③.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Wide operating flow range.
- Accurate division or combination of flow.
- Industry common cavity.

RATINGS

Operating Pressure: 345 bar (5000 psi)

Pressure Drop: 24 bar (350 psi) at maximum inlet flow

Flow Range Options:

Model Code **11**: 50:50 rated @ 2.5–9.5 lpm (0.7–2.5 gpm) input

Model Code **22**: 50:50 rated @ 4–19 lpm (1.0–5.0 gpm) input

Model Code **44**: 50:50 rated @ 7.5–38 lpm (2.0–10.0 gpm) input

Flow Accuracy: 5% of inlet flow at maximum flow rate;
10% of inlet flow at minimum flow rate

Temperature: -40 to 120°C

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

Note: Standard 10 size 4-way bodies should not be used with this product.
See page 8.010.1 for special flow divider bodies.

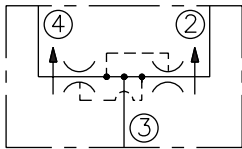
Cavity: VC10-4 (Variation "A"); See page 9.110.1

Cavity Tool: CT10-4X; See page 8.600.1

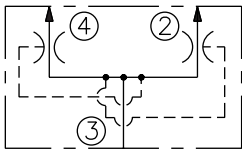
Seal Kit: SK10-4X-MMM; See page 8.650.1

SYMBOLS

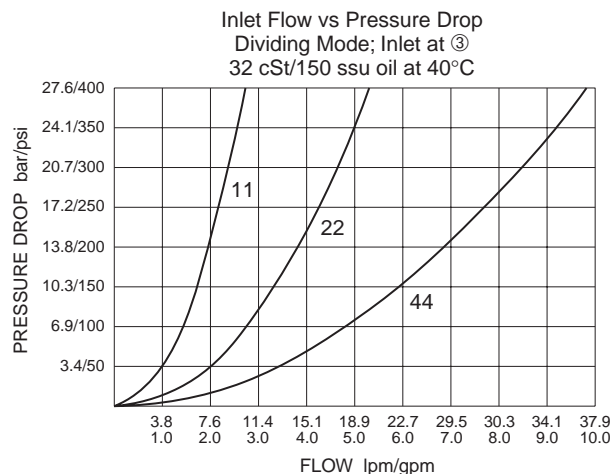
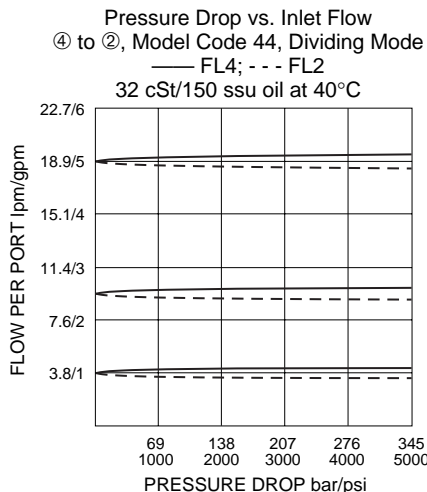
USASI:



ISO:



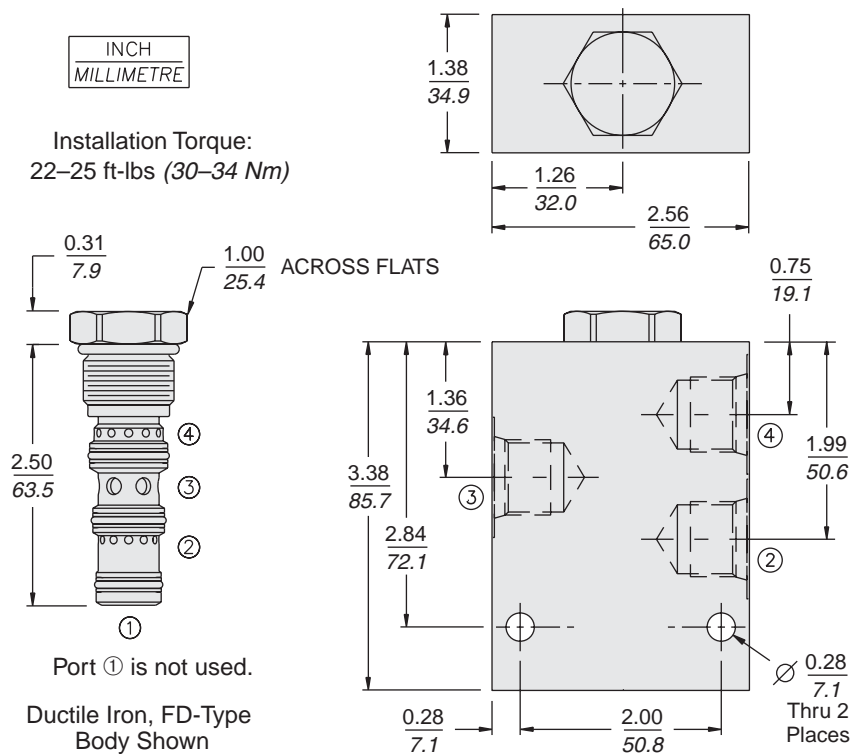
PERFORMANCE (Cartridge Only)



Multifunction

FD50-44

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.11 kg. (0.25 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Special Ported Body: Ductile iron, required for operation over 207 bar (3000 psi). Aluminum bodies are available for lower pressure operation. See page 8.010.1

TO ORDER

FD50-44 - - -

Special FD-Type Ductile Iron Ported Bodies

- Cartridge Only **0**
- SAE 6 (all ports) **6TD**
- SAE 8 (all ports) **8TD**
- SAE 8 port ③; SAE 6 ports ② & ④ **8DD**
- 1/4 in. BSP* (all ports) **2BD**
- 3/8 in. BSP* (all ports) **3BD**

*BSP Body; U.K. Mfr. Only

NOTE: Standard 10-size 4-way bodies should not be used for flow dividers. See Special, FD-type, flow divider bodies, page 8.010.1.

Dividing/Combining Ratio

- 11** 50:50 rated @ 2.5–9.5 lpm (0.7–2.5 gpm) input
- 22** 50:50 rated @ 4–19 lpm (1.0–5.0 gpm) input
- 44** 50:50 rated @ 7.5–38 lpm (2.0–10.0 gpm) input

Seals

- N** Buna N (Std.)
- V** Fluorocarbon
- P** Polyurethane (required for operation over 241 bar/3500 psi)