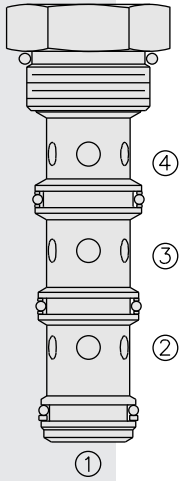


FD16-40 Flow Divider/Combiner



NOTE: This model has been superseded by the new FDxx-45 models, which incorporate the features of the FDxx-40, FDxx-41 and FDxx-42 series valves in one product. OEM's are encouraged to consider the newer, more robust and versatile FDxx-45 models for new applications:

- FD50-45; see page 5.632.1
- FD52-45; see page 5.634.1
- FD56-45; see page 5.636.1

DESCRIPTION

A screw-in, cartridge-style, spool-type flow divider/combiner. Standard flow dividing/combining ratios are maintained regardless of system operating pressure conditions.

OPERATION

In the dividing mode, the **FD16-40** will divert input flow from 3 to 2 and 4, based on the ratio specified, regardless of operating pressure.

The cartridge will combine input flows from both 2 and 4 to 3.

Should circuit operation result in a blockage of either 2 or 4, the opposite port may also close under certain conditions. Should this potential exist, consult factory.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Industry common cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Flow Options:

- Input Flow: 98.4 lpm (26 gpm); Ratio: 50:50; Model Code: 44
- Input Flow: 151.4 lpm (40 gpm); Ratio: 50:50; Model Code: 66
- Other ratio options available; consult factory.

Standard Compensator Bias Spring: 2.07 bar (30 psid)

Flow Accuracy: 10% from 33-100% of rated flow

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 that standard 16 size 4-way bodies should not be used with this product. See page 8.016.1 for special flow divider bodies.

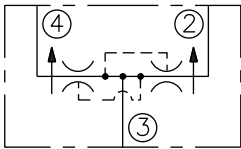
Cavity: VC16-4; See page 9.116.2

Cavity Tool: CT16-4XX; See page 8.600.1

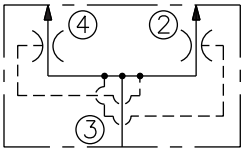
Seal Kit: SK16-4X-MMM; See page 8.650.1

SYMBOLS

USASI:

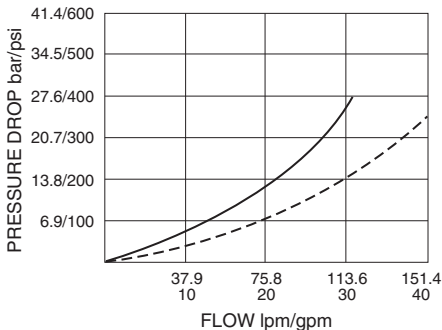


ISO:

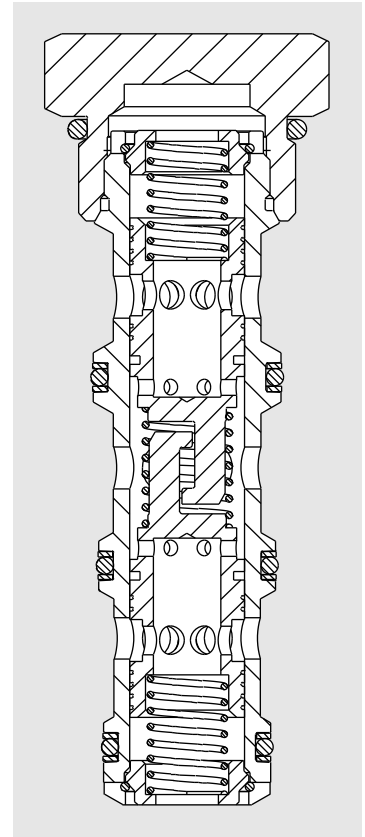
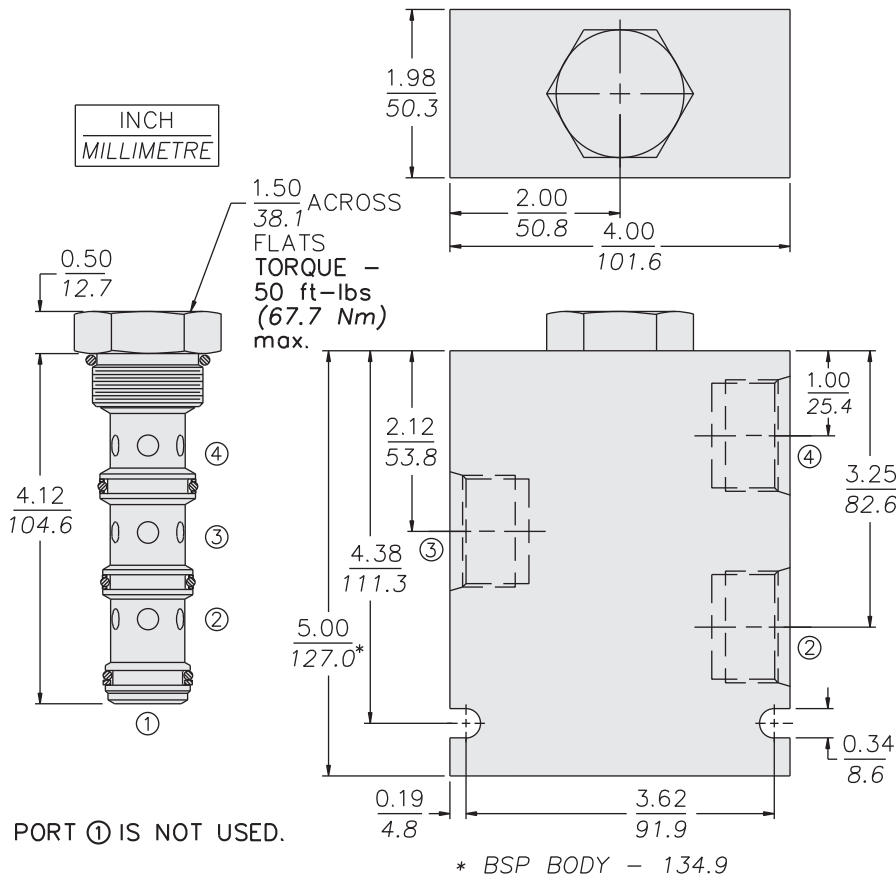


PERFORMANCE (Cartridge Only)

3 to 2 or 4: 44 Type — ;
66 Type - - -
32 cSt/150 sus oil at 40°C



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.36 kg. (0.80 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Special Ported Body: Weight: 1.5 kg. (3.3 lbs.)
Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.016.1.

TO ORDER

FD16-40 - [] - [] - []

Special Ported Bodies

Cartridge Only	0
SAE 12 (All Ports)	12T
SAE 12 Ports 2 & 4; SAE 16 Port 3	16D
SAE 16 (All Ports)	16T
3/4 in. BSP* (All Ports)	6B
3/4 in. BSP* Ports 2 & 4; 1 in. BSP* Port 3	7B
1 in. BSP* (All Ports)	8B

*BSP Body; U.K. Mfr. Only

Dividing/Combining Ratio

44	50:50 rated @ 98.4 lpm (26 gpm) input
66	50:50 rated @ 151.4 lpm (40 gpm) input

NOTE: Additional ratios and/or input flow sizings available for OEM applications. Consult factory.

Seals

N	Buna N (Std.)
V	Fluorocarbon

NOTE: Standard 16-size 4-way bodies should not be used for flow dividers. See special flow divider bodies, page 8.016.1.