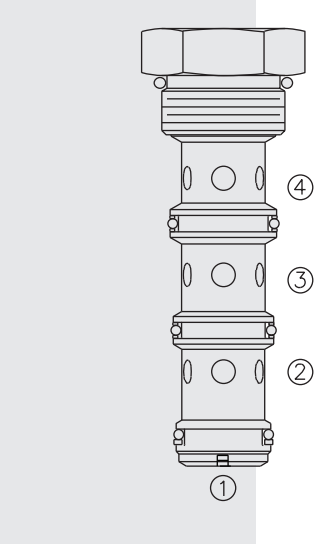
FD56-45 Flow Divider/Combiner . . . Heavy Duty,



Note: This new FD56-45 flow divider incorporates the features of the older FDxx-40, FDxx-41 and FDxx-42 flow dividers in one product. It is designed to supersede the older models. OEMs are encouraged to consider this newer, more robust and versatile model for new applications.

DESCRIPTION

A heavy duty, multifunction, screw-in, cartridge-style, spool-type flow divider/combiner. It provides pressure-compensated proportional division of inlet flow or combining of two return flows regardless of system operating pressure. The **FD56-45** has an orifice at Port 1 to facilitate removal of the spring ring if needed.

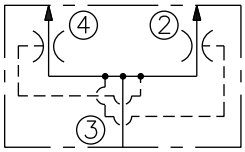
OPERATION

In the dividing mode, the **FD56-45** will divert input flow from 3 to 2 and 4, based on the ratio specified, regardless of operating pressure. When the flow direction is reversed the valve will combine flows from 2 and 4 to port 3. Synchronizing flow is provided in both the dividing and combining modes at "bottomed" conditions in cylinder applications and at stalled conditions in motor applications.

FEATURES

- Hardened parts for long life.
- Wide operating flow range.
- Quiet, modulated response.
- Industry common cavity.
- Synchronizing in dividing and combining modes.
- Floating cage — High installation torque.

ISO SYMBOL



RATINGS

Operating Pressure: 345 bar (5000 psi)

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

Flow Options, Dividing/Combing (Ratio: 50:50)
Input Flow: 25-98 lpm (6.5-26 gpm) Model Code: 44
Input Flow: 32-128 lpm (8.5-34 gpm) Model Code: 66
Input Flow: 57-167 lpm (15-44 gpm) Model Code: 88
Input Flow: 68-197 lpm (18-52 gpm) Model Code: 99

Flow Accuracy: 10% of maximum rated flow for Models 44 & 66; 15% for 88 & 99

Synchronizing Flow: Approximately 10% of maximum inlet flow

Temperature: -40 to 100°C (-40 to 212°F) with Buna N seals; -26 to 204°C (-15 to 400°F) with fluorocarbon seals; -54 to 107°C (-65 to 224°F) with polyurethane 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

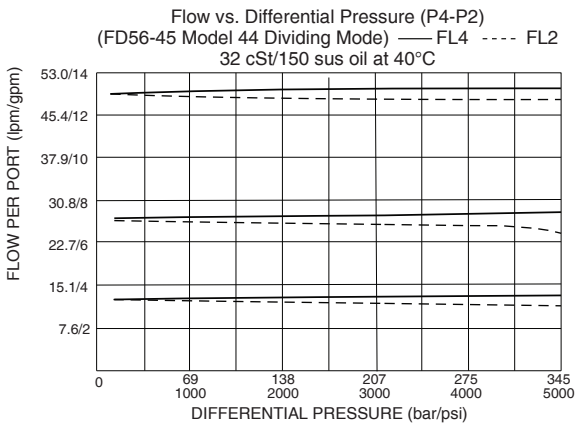
Installation: No restrictions; See page 9.020.1
Note: Standard 16 size 4-way bodies can be used with this product with Port 1 plugged. See page 8.016.1 for special flow divider bodies.

Cavity: VC16-4; See page 9.116.1

Cavity Tool: CT16-4X; See page 8.600.1

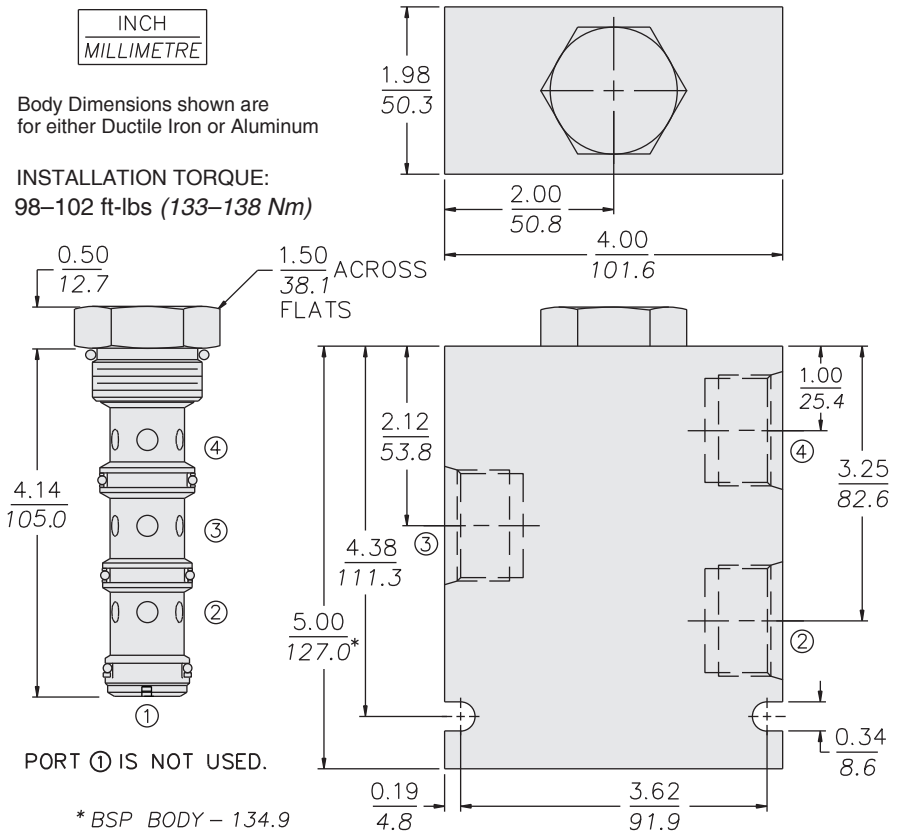
Seal Kit: SK16-4X-MMM; See page 8.650.1

PERFORMANCE (Cartridge Only)



Multifunction FD56-45

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.38 kg. (0.83 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Ported Body: Ductile iron body required for operation over 207 bar (3000 psi). Aluminum bodies are available for lower pressure operation. FD-type bodies recommended but a standard 4-way body may also be used with Port 1 plugged. See page 8.016.1.

TO ORDER

FD56-45 - __ __ __ - __ - __ __

Ported Bodies

Cartridge Only	**0**
SAE 10 (all ports)	**10TD**
SAE 12 (all ports)	**12TD**
SAE 16 (all ports)	**16TD**
SAE 16 port 3; SAE 12 ports 2 & 4	**16DD**
3/4 in. BSP* (all ports)	**6BD**
1 in. BSP* (all ports)	**8BD**
1 in. BSP* port 3; 3/4 in. BSP* ports 2 & 4	**8FD**

*BSP Body; U.K. Mfr. Only

Seals

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

Dividing/Combining Ratio

- **44** 50:50 rated @ 25-98 lpm (6.5-26 gpm) input
- **66** 50:50 rated @ 32-128 lpm (8.5-34 gpm) input
- **88** 50:50 rated @ 57-167 lpm (5-44 gpm) input
- **99** 50:50 rated @ 68-197 lpm (18-52 gpm) input