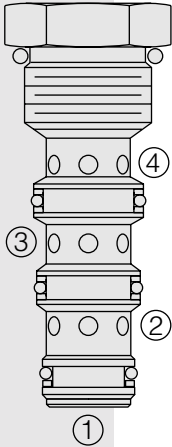


## FD52-45 Flow Divider/Combiner . . . Heavy Duty,



### DESCRIPTION

A heavy duty, multifunction, screw-in, cartridge-style, spool-type flow divider/combiner.

### OPERATION

In the dividing mode, the **FD52-45** will divert input flow from port ③ to ports 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.
- Quiet, modulated response.
- Wide operating flow range.
- Synchronizing in dividing and combining modes.
- Floating cage — High installation torque.
- Industry-common cavity.

### RATINGS

**Operating Pressure:** 345 bar (5000 psi)

#### Flow Options:

Input Flow: 60.6 lpm (16 gpm); Ratio: 50:50; Model Code: 44

Input Flow: 90.8 lpm (24 gpm); Ratio: 50:50; Model Code: 66

**Flow Accuracy:** 10% from 25–100% 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 ssu)

**Installation:** No restrictions; See page 9.020.1. Note: Standard 12 size 4-way bodies should not be used with this product. See page 8.012.1 for special flow divider bodies.

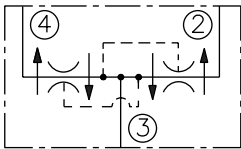
**Cavity:** VC12-4; See page 9.112.1 (Cavity Variation "A")

**Cavity Tool:** CT12-4X; See page 8.600.1

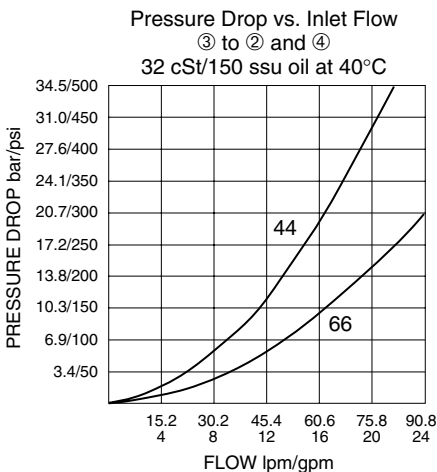
**Seal Kit:** SK12-4X-MMT; See page 8.650.1

### SYMBOLS

#### USASI/ISO:



### PERFORMANCE (Cartridge Only)

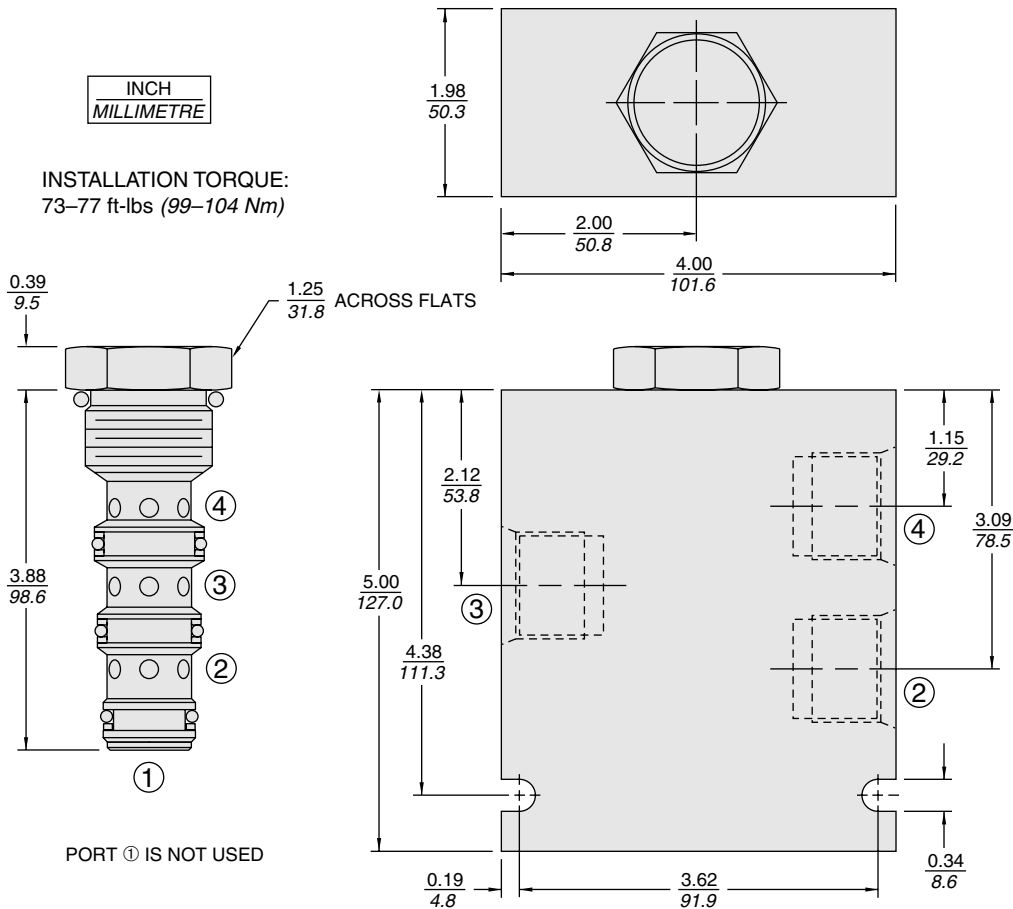


**Note:** This new FD52-45 flow divider incorporates the features of the older FDxx-40, FDxx-41 and FDxx-42 flow dividers in one product. It is designed to supersede the older models. OEM's are encouraged to consider this newer, more robust and versatile model for new applications.

# Multifunction

# FD52-45

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.28 kg. (0.61 lbs.); Steel with hardened work surfaces; Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

**Special Ported Body:** Weight: 1.50 kg. (3.30 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.012.1

**Note:** Ductile iron or steel body required for operation over 240 bar (3500 psi); body dimensions may differ; consult factory.

## TO ORDER

FD52-45 -

	-	-
<b>Porting</b>		
Cartridge Only	0	
SAE 10	10T	
SAE 12	12T	
See page 8.012.1	8D	
See page 8.012.1	10D	

### Flow Options (50/50 Ratio)

- 44 16 gpm (60 lpm)
- 66 24 gpm (90 lpm)

Consult factory for other flow options.

### Seals

- N Buna N (Std.)
- V Fluorocarbon
- P Polyurethane\*

NOTE: Standard 12-size 4-way bodies should not be used for flow dividers. See special flow divider bodies, page 8.012.1

\* Required for operation over 240 bar (3500 psi); FD50 option.