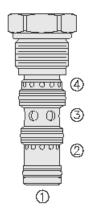


#### **Overview**



#### **Description**

The FD50-44 is a screw-in cartridge, spool type flow divider/combiner valve.

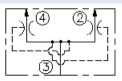
#### **Operation**

The valve provides pressure compensated proportional division of inlet flow or combining of two return flows regardless of system operating pressure conditions. The valve is intended for use in mineral based or synthetic hydraulic fluids with lubricating properties.

#### **Features**

- · Choice of flow ranges.
- · Quiet, modulated response.
- · Wide operating flow range.
- · Accurate division or combination of flow.
- Optional corrosion-resistant plating.
- Industry-common cavity.

# **Symbol**



# **Ratings**

#### Pressure Ratings

345 bar (5000 psi) Pressure rating 1034 bar (15000 psi) Burst pressure

#### Flow Ratings

2.0 to 7.0 lpm (0.5 to 1.8 gpm) - Note: Model code 99 Inlet flow rating 2.5 to 9.5 lpm (0.7 to 2.5 gpm) Note: Model code 11 4 to 19 lpm (1.0 to 5.0 gpm) - Note: Model code 22 7.5 to 38 lpm (2.0 to 10.0 gpm) - Note: Model code 44 Approximately 10% of maximum inlet flow Synchronizing flow - Note: Of inlet flow at maximum flow rate Flow accuracy - Note: Of inlet flow at minimum flow rate 10 %

#### Temperature Ratings

Ambient temperature

-40 to 100 °C (-40 to 212 °F) -26 to 204 °C (-15 to 400 °F) - Note: With buna N seals Operating fluid temperature - Note: With fluorocarbon seals -54 to 107 °C (-65 to 225 °F) - Note: With polyurethane seals -54 to 107 °C (-65 to 225 °F) - Note: With urethane seals -40 to 70 °C (-40 to 160 °F) Storage temperature -40 to 90 °C (-40 to 194 °F)

### **Other Ratings**

960 hr salt spray per ASTM b117 (model number - gfd50-44) Corrosion protection

### Operating Parameters

Mineral based or synthetic hydraulic fluid with lubricating properties Fluids

7.4 to 420 cSt Fluid viscosity range

Maximum operating contamination 18/16/13 per ISO 4406

level

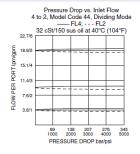
## **Properties**

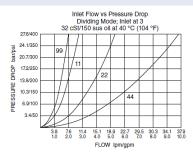
Unit weight 0.11 kg (0.25 lb) 164 cm<sup>2</sup> (25.4 in<sup>2</sup>) Internal wetted surface area

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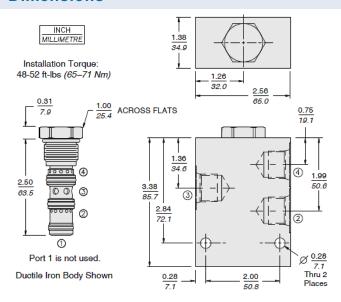


## **Performance**





# **Dimensions**



# **Installation Specifications**

VC10-4 Cavity

65 to 71 N-m (48 to 52 ft-lb) Cartridge installation torque

None Orientation restriction

#### **Accessories**

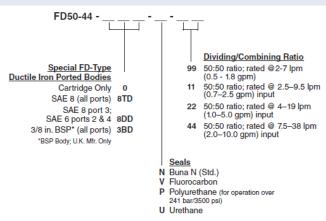
SK10-4X-MMM - Note: X=seal option Seal kit

SK10-4U-000 - Note: Urethane

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# **Order Code**



# Model Options FD50-44-H-J-N

# **H Line Body**

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
6TD	Ductile Iron SAE 6

#### J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
Р	Polyurethane

# N Flow Dividing/Combining

DESCRIPTION
50/50 Rated at 2.5-9.5 lpm (0.7-2.5 gpm)
50/50 Rated at 4.0-19.0 lpm (1.0-5.0 gpm)
Not listed in outline
50/50 Rated at 7.5-38.0 lpm (2.0-10.0 gpm)
Not listed in outline
50/50 Rated at 2.0-7.0 lpm (0.5-1.8 gpm)

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