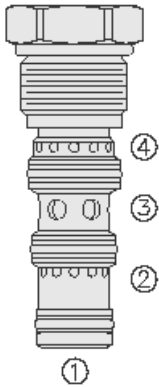




Overview



Description

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

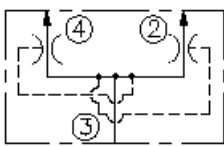
Operation

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

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

Flow Ratings

Inlet flow rating	2.0 to 7.0 lpm (0.5 to 1.8 gpm)	- Note: Model code 99
	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
Synchronizing flow	Approximately 10% of maximum inlet flow	
Flow accuracy	5 %	- Note: Of inlet flow at maximum flow rate
	10 %	- Note: Of inlet flow at minimum flow rate

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- 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
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Other Ratings

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

Operating Parameters

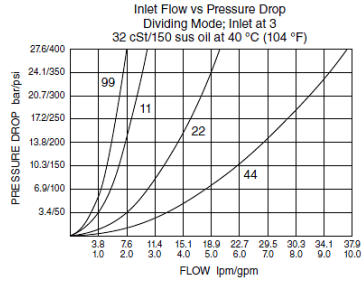
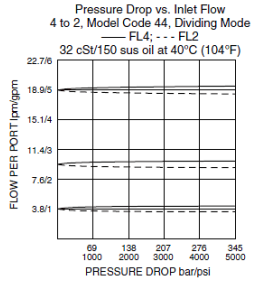
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

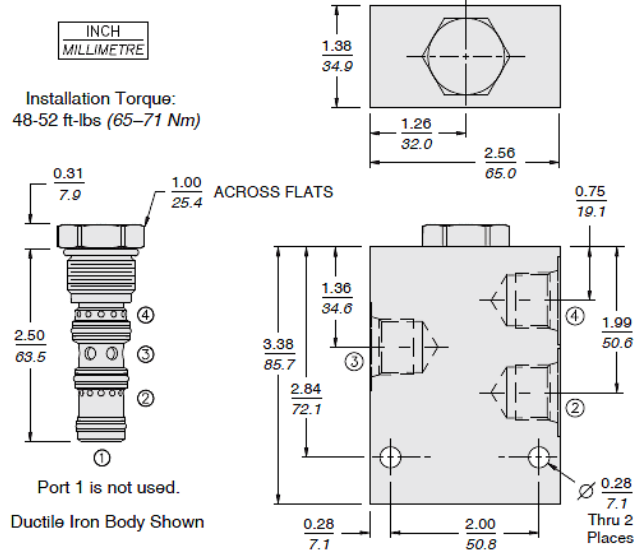
Unit weight	0.11 kg (0.25 lb)
Internal wetted surface area	164 cm ² (25.4 in ²)



Performance



Dimensions



Installation Specifications

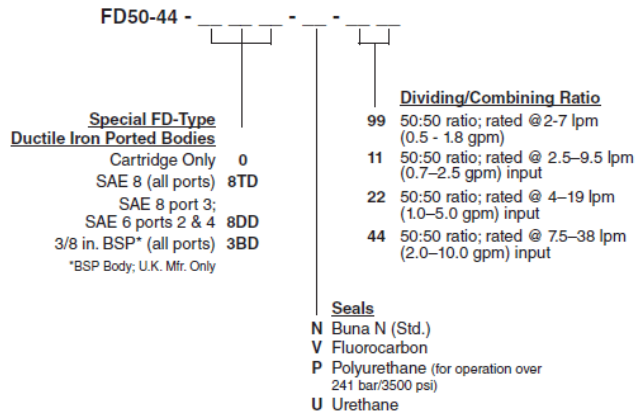
Cavity	VC10-4
Cartridge installation torque	65 to 71 N-m (48 to 52 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4X-MMM	- Note: X=seal option
	SK10-4U-000	- Note: Urethane



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
P	Polyurethane

N Flow Dividing/Combining

CODE	DESCRIPTION
11	50/50 Rated at 2.5-9.5 lpm (0.7-2.5 gpm)
22	50/50 Rated at 4.0-19.0 lpm (1.0-5.0 gpm)
33	Not listed in outline
44	50/50 Rated at 7.5-38.0 lpm (2.0-10.0 gpm)
66	Not listed in outline
99	50/50 Rated at 2.0-7.0 lpm (0.5-1.8 gpm)