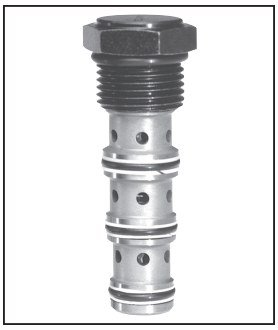
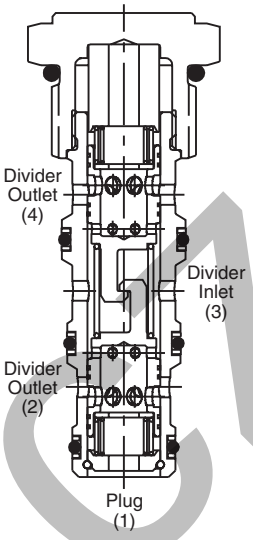
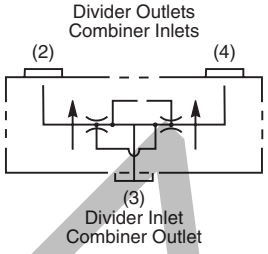
General Description

Flow Divider/Combiner Valve. FDC101 divides flow from a single source proportionally to two actuators. In the reverse mode, flow from two sources is combined into one flow. When dividing or combining flow to synchronize two cylinders, please consider that the flow accuracy is ±10%.
For additional information see Technical Tips on pages FC1-FC4.







Features

- Hardened, precision ground parts for durability
- Cartridge design
- Ratios of 50-50, 60-40 and 66-33 available
- All external parts zinc plated

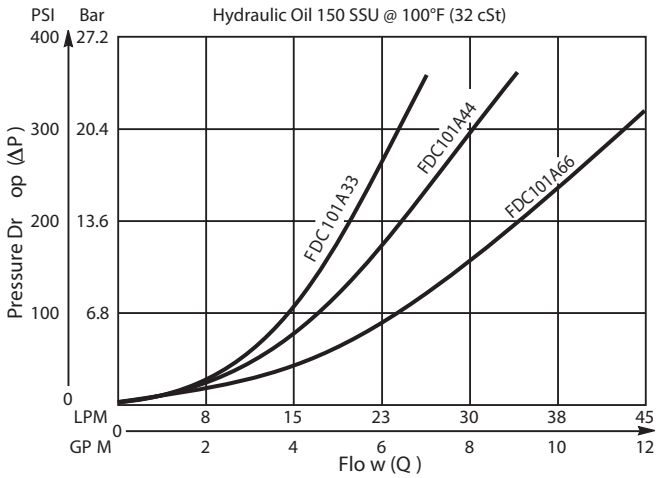
Specifications

Maximum Flow	45 LPM (12 GPM)
Maximum Inlet Pressure	245 Bar (3500 PSI)
Accuracy	±10%
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO-4406 18/16/13, SAE Class 4
Approx. Weight	0.14 kg (0.30 lbs.)
Cavity	C10-4 (See BC Section for more details)
Form Tool	Rougher NFT10-4R Finisher NFT10-2F

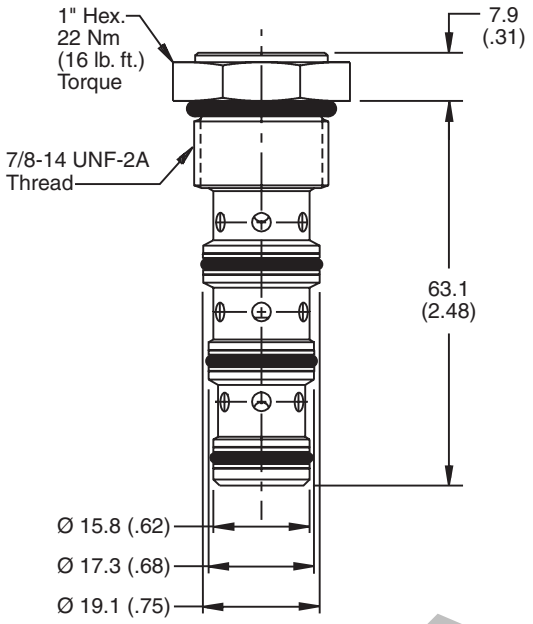
Note: When machining a manifold using the FDC101, use C10-4 cavity. Do not machine a port that directs flow to the nose of the cavity.

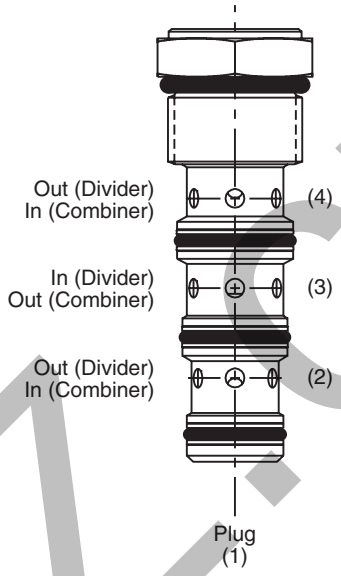
Performance Curve

Flow vs. Pressure Drop
(Through cartridge only)



Dimensions Millimeters (Inches)





THIRD-ANGLE PROJECTION

Ordering Information

FDC101		
10 Size Flow Divider/ Combiner Valve	Flow Division	Seals

Highlighted represents preferred options that offer the shortest lead times. Other options may be available, but at extended lead times.

Code	Fixed Style Flow
A11	3.80 LPM (1 GPM) min. inlet 11.3 LPM (3 GPM) max. inlet 50% '4' Port and 50% '2' Port
A33	11.3 LPM (3 GPM) min. inlet 22.5 LPM (6 GPM) max. inlet 50% '4' Port and 50% '2' Port
A44	15.0 LPM (4 GPM) min. inlet 30.0 LPM (8 GPM) max. inlet 50% '4' Port and 50% '2' Port
A66	22.5 LPM (6 GPM) min. inlet 45.0 LPM (12 GPM) max. inlet 50% '4' Port and 50% '2' Port

Code	Seals / Kit No.
Omit	Nitrile / (SK10-4)
V	Fluorocarbon / (SK10-4V)

Order Bodies Separately
See section BC

B10	–	4	–	
10 size		4-Way Cavity		Port Size

Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)
A8T	SAE-8 / Aluminium (3000 PSI)