

High accuracy flow divider valve

Capacity:
1.5 - 8 gpm (6 - 30 L/min.)

Functional Group:

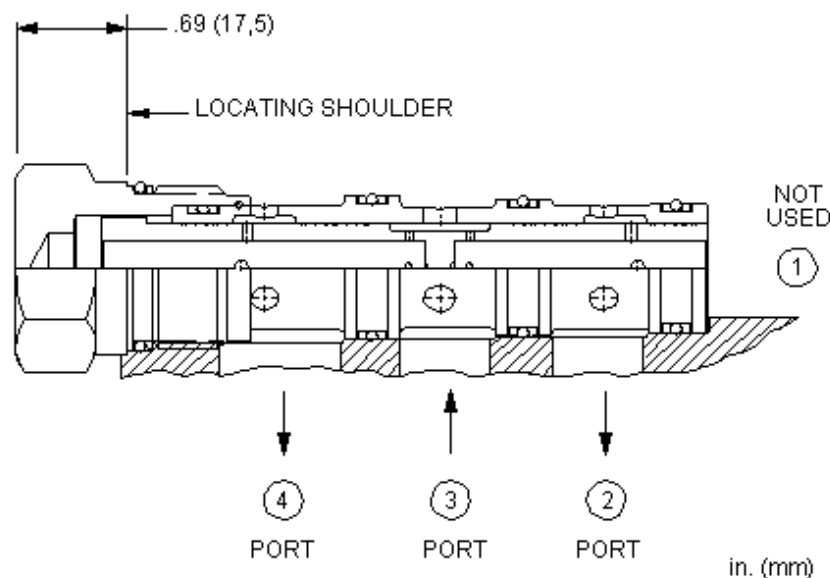
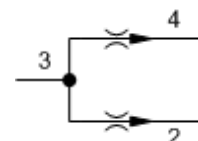
Products : Cartridges : Flow Divider : Divider : Divide Only - High Accuracy

Model:

FSDC

Product Description

Flow dividers are sliding-spool, pressure-compensated devices used to split oil flow to two different branches of a circuit in a designated ratio. These valves are suitable for applications that use the following: unidirectional hydraulic motors, hydraulic cylinders where flow division in one direction only is required, and multiple circuits that are serviced from one pump supply.



Technical Features

- All flow divider and divider/combiner cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size).
- Operating characteristics cause the leg of the circuit with the greatest load to receive the higher percentage of flow in dividing mode. If a rigid mechanism is used to tie actuators together, the lead actuator may pull the lagging actuator and cause it to cavitate.
- In applications involving rigid mechanisms between multiple actuators, operating inaccuracy will cause the eventual lock-up of the system. If the mechanical structure is not designed to allow for the operating inaccuracy inherent in the valve, damage may occur.
- In motor circuits, rigid frames or mechanisms that tie motors together, and/or complete mechanical synchronized motion of the output shaft of the motors, either by wheels to the pavement or sprockets to conveyors, will contribute to cavitation, lock-up and/or pressure intensification.
- Variations in speed and lock-up can be attributed to differences in motor displacement, motor leakage, wheel diameter variance and friction of wheels on the driving surface.
- This valve is a divider only; any attempt to flow backwards through the valve is not advised.
- Below the minimum flow rating there is not enough flow for the valve to modulate. It is effectively a tee. If flow starts at zero and rises, there will be no dividing control until the flow reaches the minimum rating.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

Technical Data

	U.S. Units	Metric Units
Cavity	T-32A	
Capacity	1.5 - 8 gpm	6 - 30 L/min.
Pressure Drop at Maximum Rated Input Flow	250 psi	18 bar
Pressure Drop at Minimum Rated Input Flow	30 psi	2 bar
Series (from Cavity)	Series 2	
Valve Hex Size	1 1/8 in.	28,6 mm
Valve Installation Torque	45 - 50 lbf ft	60 - 70 Nm
Seal Kits - Cartridge	Buna: 990-032-007	
Seal Kits - Cartridge	Viton: 990-032-006	
Model Weight	0.57 lb.	0.26 kg.

Split	Input Flow		Rated Accuracy	Maximum Possible Flow Variation
50:50	Max Rated	8 gpm	±2%	3.84 - 4.16 gpm
		30 L/min		14,4 - 15,6 L/min
	Min rated	1.5 gpm	±3%	.70 - .80 gpm
		6,0 L/min		2,8 - 3,2 L/min

The maximum possible variation is at 5000 psi (350 bar) differential between legs with the high pressure leg being the higher flow.

FSDC-XAN**Control****Standard Options****X** Not Adjustable**Flow Split****Standard Options****A** 50/50**Seal Material****Standard Options**

N Buna-N
V Viton