

High accuracy flow divider valve

Capacity:

6 - 30 gpm (23 - 120 L/min.)

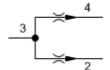
Functional Group:

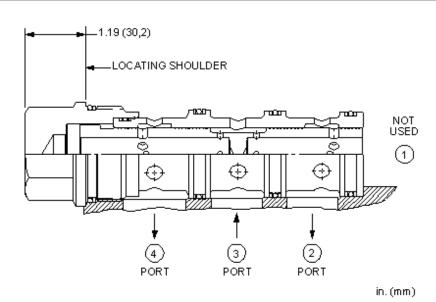
Products: Cartridges: Flow Divider: Divide Only - High Accuracy

Model: **FSFC**

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-34A		
Capacity	6 - 30 gpm	23 - 120 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 4		
Valve Hex Size	1 5/8 in.	41,3 mm	
Valve Installation Torque	350 - 375 lbf ft	475 - 500 Nm	
Seal Kits - Cartridge	Buna: 990-034-007		
Seal Kits - Cartridge	Viton: 990-034-006		
Model Weight	2.87 lb.	1.30 kg.	

Split	Input Flow		Rated Accuracy	Maximum Possible Flow Variation	
50:50	Max Rated	30 gpm 120 L/min	±2.0%	14.4 - 15.6 gpm 57,6 - 62,4 L/min	
	Min rated	6 gpm	±3.0%	2.8 - 3.2 gpm	
		24 L/min		11,3 - 12,7 L/min	

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

FSFC-XAN

Control		Flow Split			Seal Material	
Standard Options		Standard Options		Standard Options		
X	Not Adjustable	Α	50/50	N V	Buna-N Viton	