



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 DATA NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-34A
Series	4
Capacity	6 - 30 gpm
Pressure Drop at Maximum Rated Input Flow	250 psi
Pressure Drop at Minimum Rated Input Flow	30 psi
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Model Weight	2.81 lb.
Seal kit - Cartridge	Buna: 990-034-007
Seal kit - Cartridge	Polyurethane: 990-034-002
Seal kit - Cartridge	Viton: 990-034-006

OPTION SELECTION EXAMPLE: FSFCXAN

CONTROL	(X) FLOW SPLIT	(A) SEAL MATERIAL	(N)
X Not Adjustable	A 50/50	N Buna-N	V Viton

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.

PERFORMANCE CURVES

Split	Input Flow		Rated Accuracy	Maximum Possible Flow Variation	Split	Input Flow		Rated Accuracy	Maximum Possible Flow Variation
	Max	Rated				Max	Rated		
50:50	Max	30 gpm	±2.0%	14.4 - 15.6 gpm	50:50	Max	30 gpm	±2.0%	14.4 - 15.6 gpm
		120 L/min		57.6 - 62.4 L/min			120 L/min		57.6 - 62.4 L/min
	Min rated	6 gpm	±3.0%	2.8 - 3.2 gpm		Min rated	6 gpm	±3.0%	2.8 - 3.2 gpm
		24 L/min		11.3 - 12.7 L/min			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.

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