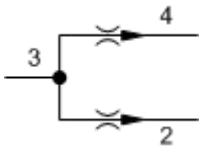
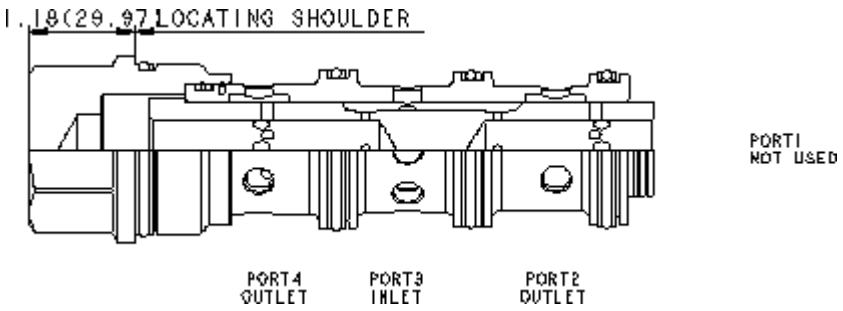
High accuracy flow divider valve

CAPACITY: 6 - 30 gpm / CAVITY: T-34A





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)
X	Not Adjustable

FLOW SPLIT	(A)
A	50/50

SEAL MATERIAL	(N)
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
50:50	Max Rated	30 gpm	±2.0%	14.4 - 15.6 gpm
		120 L/min		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.

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