



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-32A
Series	2
Capacity	3 - 15 gpm
Maximum Operating Pressure	5000 psi
Divisional Accuracy at Max Input Flow	±3.5%
Divisional Accuracy at Minimum Input Flow	±6.5%
Pressure Drop at Maximum Rated Input Flow	250 psi
Pressure Drop at Minimum Rated Input Flow	30 psi
Rated Input Flow with 33/67 Split	2.2 - 11 gpm
Rated Input Flow with 40/60 Split	2.5 - 12.5 gpm
Rated Input Flow with 50/50 Split	3 - 15 gpm
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Model Weight	0.57 lb.
Seal kit - Cartridge	Buna: 990-032-007
Seal kit - Cartridge	Polyurethane: 990-032-002
Seal kit - Cartridge	Viton: 990-032-006

OPTION SELECTION EXAMPLE: FSDDXAN

CONTROL	(X) FLOW SPLIT	(A) SEAL MATERIAL	(N) MATERIAL/COATING
X Not Adjustable	A 50/50 B 40/60 C 33/67	N Buna-N V Viton	Standard Material/Coating IAP Stainless Steel, Passivated

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.
- Dividers with unequal ratios have the higher flow at port 4.
- 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 Variations	
				High Flow Leg	Low Flow Leg
50:50	Max	15 gpm	±3.5%	6.99 - 9.02 gpm	
	Rated	60 L/min		28 - 32 L/min	
	Min	3 gpm	±6.5%	1.30 - 1.70 gpm	
rated	12 L/min	5.2 - 6.7 L/min			
40:60	Max	12.5 gpm	±3.5%	7.1 - 7.9 gpm	4.6 - 5.4 gpm
	Rated	47 L/min		26.6 - 29.8 L/min	17.2 - 20.4 L/min
	Min	2.5 gpm	±6.5%	1.34 - 1.66 gpm	.84 - 1.16 gpm
rated	9.4 L/min	5.0 - 6.2 L/min		3.2 - 4.4 L/min	
33:67	Max	11 gpm	±3.5%	7.0 - 7.8 gpm	3.2 - 4.0 gpm
	Rated	42 L/min		26.5 - 29.5 L/min	12.5 - 15.5 L/min
	Min	2.2 gpm	±6.5%	1.3 - 1.6 gpm	.6 - .9 gpm
rated	8.4 L/min	5.1 - 6.2 L/min		2.2 - 3.3 L/min	

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