



This valve assembly is intended for use in tractive systems. It incorporates a divider/combiner valve along with provisions for slip orifices. The divider/combiner provides 2 equal flows for positive traction and the slip orifices can be sized to allow for steering.

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

Body Type	Line mount
Capacity	4 - 17 gpm
Mounting Hole Diameter	.34 in.
Mounting Hole Depth	Through
Mounting Hole Quantity	2

- NOTES:**
- **Important:** Carefully consider the maximum system pressure. The pressure rating of the manifold is dependent on the manifold material, with the port type/size a secondary consideration. Manifolds constructed of aluminum are not rated for pressures higher than 3000 psi (210 bar), regardless of the port type/size specified.
  - For detailed information regarding the cartridges contained in this assembly, click on the models codes shown in the Included Components tab.

## OPTION SELECTION EXAMPLE: YGDBXANS

CONTROL	(X)	FLOW SPLIT	(A)	SEAL MATERIAL	(N)	ORIFICE PART DESIGNATION	(S)
<b>X</b> Not Adjustable		<b>A</b> 50/50		<b>N</b> Buna-N <b>V</b> Viton		<b>S</b> Slip @ 3000 psi = 9.17 gpm (with FSDH primary cartridge, High capacity, closed center, flow divider-combiner valve)	
						<b>A</b> Slip @ 3000 psi = 0 gpm (with FSDH primary cartridge, High capacity, closed center, flow divider-combiner valve)	
						<b>N</b> Slip @ 3000 psi = 3.14 gpm (with FSDH primary cartridge, High capacity, closed center, flow divider-combiner valve)	
						<b>U</b> Slip @ 3000 psi = 16.21 gpm (with FSDH primary cartridge, High capacity, closed center, flow divider-combiner valve)	
						<b>Z</b> No Orifice Plug Installed (with FSDH primary cartridge, High capacity, closed center, flow divider-combiner valve)	

### TECHNICAL FEATURES

- 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 combining mode, compensating characteristics will cause the leg of the circuit with the lowest load to receive the higher percentage of flow. If a synchronization feature is not included, an additive accuracy error will be experienced with each full stroke of the actuator.
- In applications involving rigid mechanisms between multiple actuators, operating inaccuracy will cause the eventual lock-up of the system. If the mechanical structure does not 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.
- Extreme pressure intensification can occur on multiple wheel drive vehicles.
- Differential slip for tractive drive systems must be achieved with orifices in the body/manifold.
- 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 or combining control until the flow reaches the minimum rating.