

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	15 - 70 gpm
Mounting Hole Diameter	.42 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: YGFBXANXN

CONTROL	(X)	FLOW SPLIT	(A)	SEAL MATERIAL	(N)	ORIFICE PART DESIGNATION(X)	PORT AND MATERIAL DESIGNATION	(N)
X Not Adjustable		A 50/50		N Buna-N V Viton		X Slip @ 3000 psi = 36.67 gpm (with FSFH primary cartridge, High capacity, closed center, flow divider-combiner valve) A Slip @ 3000 psi = 0 gpm (with FSFH primary cartridge, High capacity, closed center, flow divider-combiner valve) T Slip @ 3000 psi = 12.33 gpm (with FSFH primary cartridge, High capacity, closed center, flow divider-combiner valve) Y Slip @ 3000 psi = 64.85 gpm (with FSFH primary cartridge, High capacity, closed center, flow divider-combiner valve) Z No Orifice Plug Installed (with FSFH primary cartridge, High capacity, closed center, flow divider-combiner valve)	N Ports 2, 3, 4 — SAE 20; Gage Ports (Plugged) — SAE 8; Aluminum 5 Port 3 — 1 1/4 in. Code 62; Ports 2 & 4 — 1" Code 62; Gage Ports (Plugged) — SAE 8; Aluminum 5/M Port 3 — 1 1/4 in. Code 62; Ports 2 & 4 — 1" Code 62; Gage Ports (Plugged) — SAE 8; Metric Aluminum 5/S Port 3 — 1 1/4 in. Code 62; Ports 2 & 4 — 1" Code 62; Gage Ports (Plugged) — SAE 8; Iron 5/T Port 3 — 1 1/4 in. Code 62; Ports 2 & 4 — 1" Code 62; Gage Ports (Plugged) — SAE 8; Metric Iron E Ports 2, 3, 4 — 1" NPTF; Gage Ports (Plugged) — SAE 8; Aluminum E/S Ports 2, 3, 4 — 1" NPTF; Gage Ports (Plugged) — SAE 8; Iron F Ports 2, 3, 4 — 1 1/4" NPTF; Gage Ports (Plugged) — SAE 8; Aluminum F/S Ports 2, 3, 4 — 1 1/4" NPTF; Gage Ports (Plugged) — SAE 8; Iron M Ports 2, 3, 4 — SAE 16; Gage Ports (Plugged) — SAE 8; Aluminum M/S Ports 2, 3, 4 — SAE 16; Gage Ports (Plugged) — SAE 8; Iron N/S Ports 2, 3, 4 — SAE 20; Gage Ports (Plugged) — SAE 8; Iron Q Port 3 — 1 1/4" Code 61; Ports 2 & 4 — 1" Code 61; Gage Ports (Plugged) — SAE 8; Aluminum Q/M Port 3 — 1 1/4" Code 61; Ports 2 & 4 — 1" Code 61; Gage Ports (Plugged) — SAE 8; Metric Aluminum	

PORT AND MATERIAL**DESIGNATION (N)**

Q/S	Port 3 — 1 1/4" Code 61 ; Ports 2 & 4 — 1" Code 61; Gage Ports (Plugged) — SAE 8; Iron
Q/T	Port 3 — 1 1/4" Code 61 ; Ports 2 & 4 — 1" Code 61; Gage Ports (Plugged) — SAE 8; Metric Iron
X	Ports 2, 3, 4 — 1" BSPP; Gage Ports (Plugged) — SAE 8; Aluminum
X/S	Ports 2, 3, 4 — 1" BSPP; Gage Ports (Plugged) — SAE 8; Iron
Y	Ports 2, 3, 4 — 1 1/4" BSPP; Gage Ports (Plugged) — SAE 8; Aluminum
Y/S	Ports 2, 3, 4 — 1 1/4" BSPP; Gage Ports (Plugged) — SAE 8; Iron

INCLUDED COMPONENTS

Part	Description	Quantity
280-040-094*	Orifice	2
A330-006-008*	SAE Plug	2
FSFHAN	Cartridge - Primary	1

TECHNICAL FEATURES

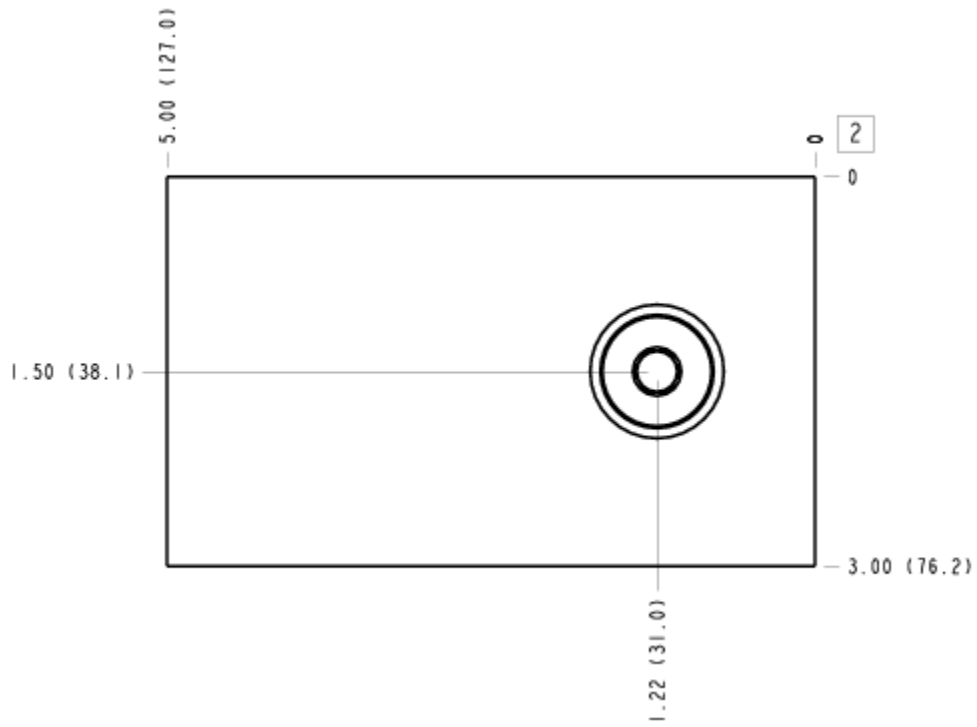
- Operating characteristics cause the leg of the circuit with the greatest load to receive the higher percentage of flow in dividing mode. If a rigid mechanism is used to tie actuators together, the lead actuator may pull the lagging actuator and cause it to cavitate.
- In combining mode, compensating 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.

MANIFOLD FACES

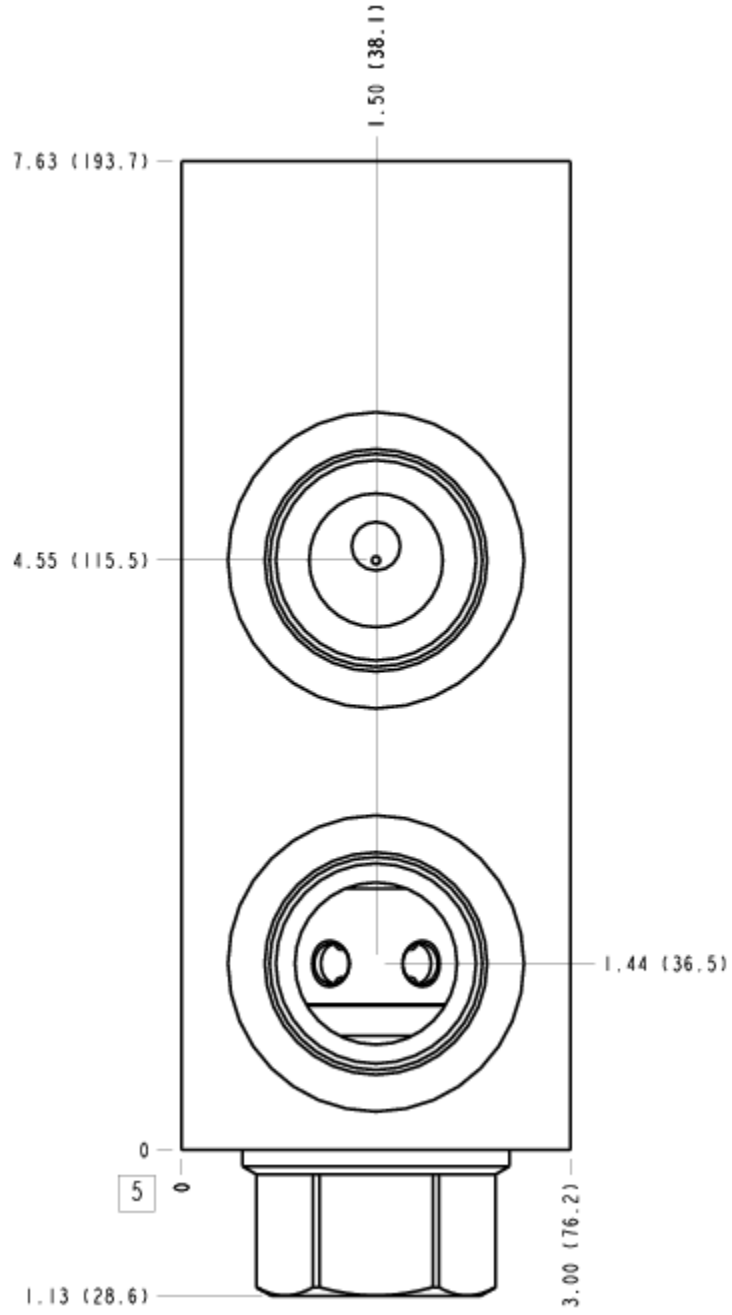
FACE GRID

1	2	3	4
5	6	7	8
9	10	11	12

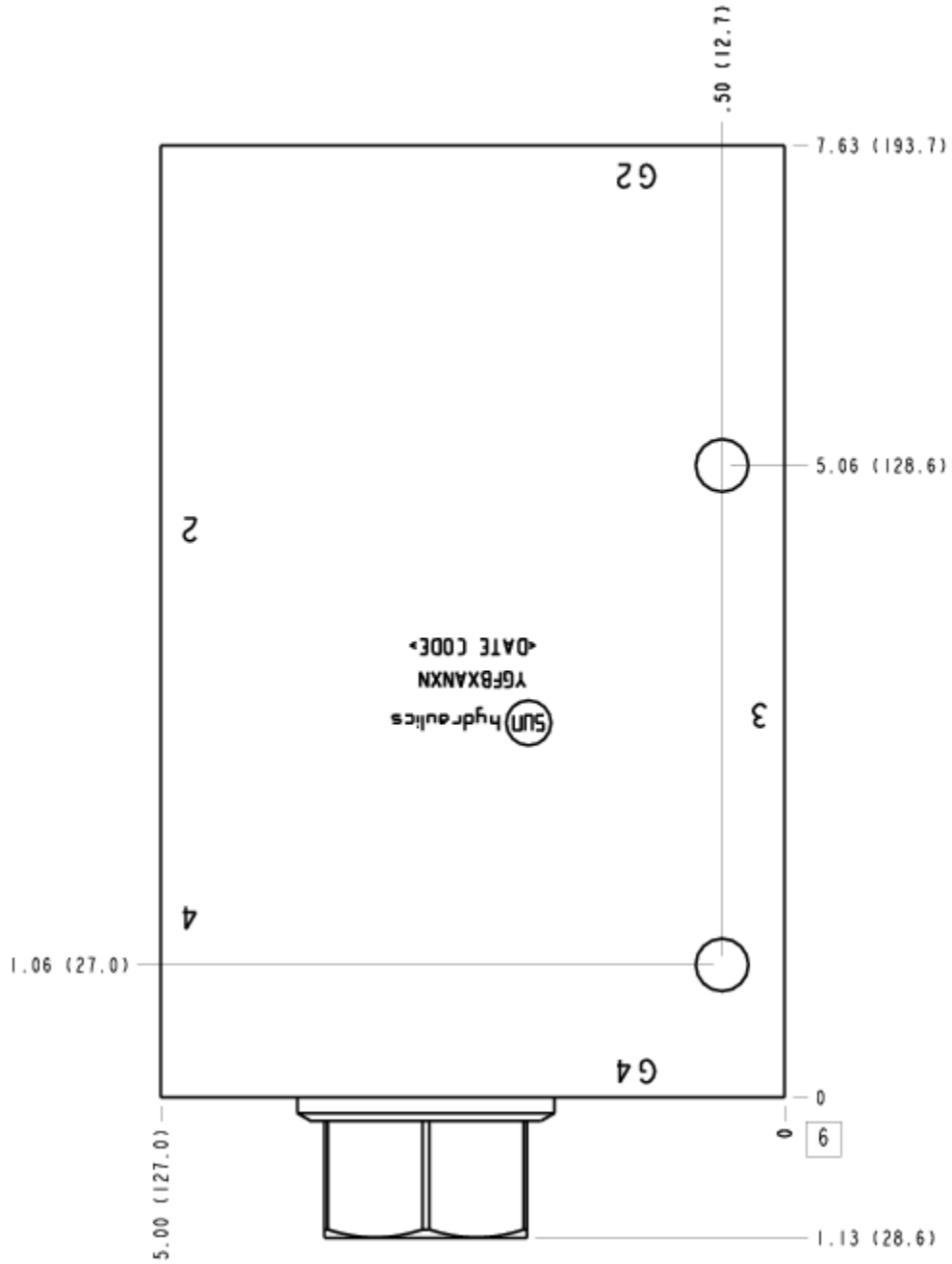
FACE 2



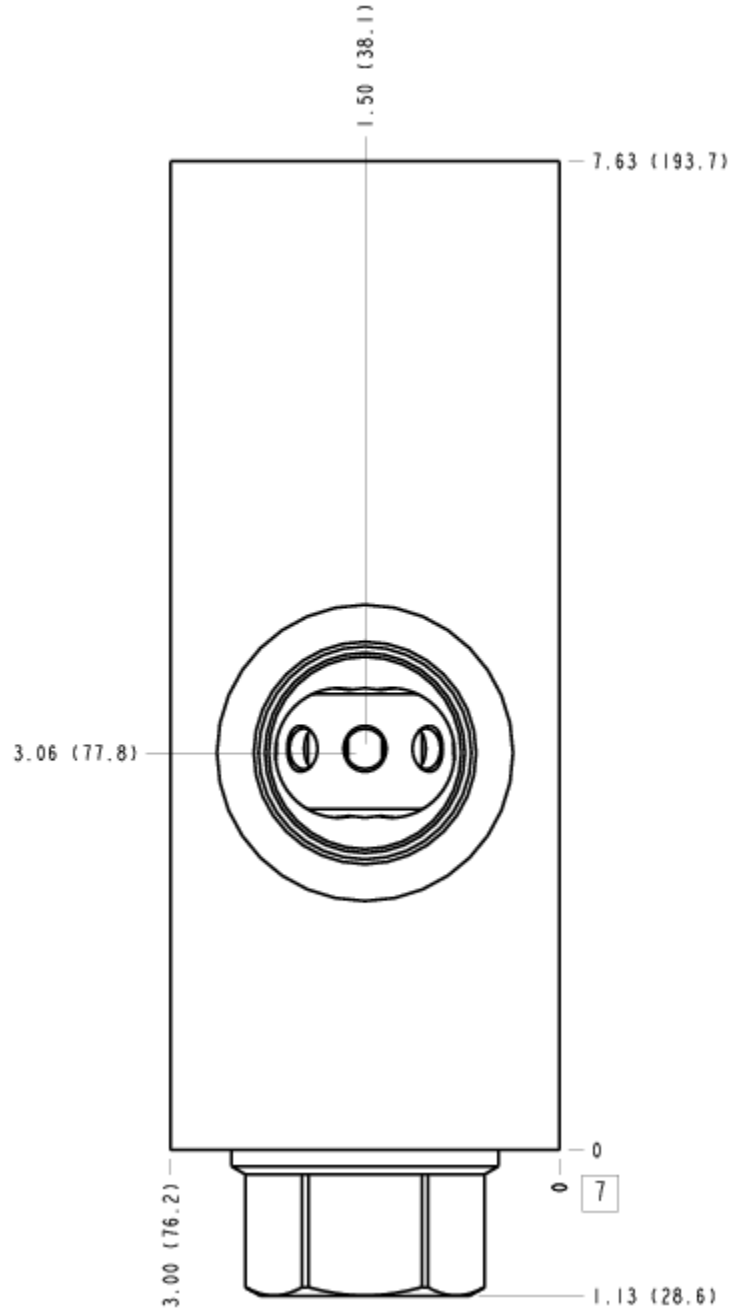
FACE 5



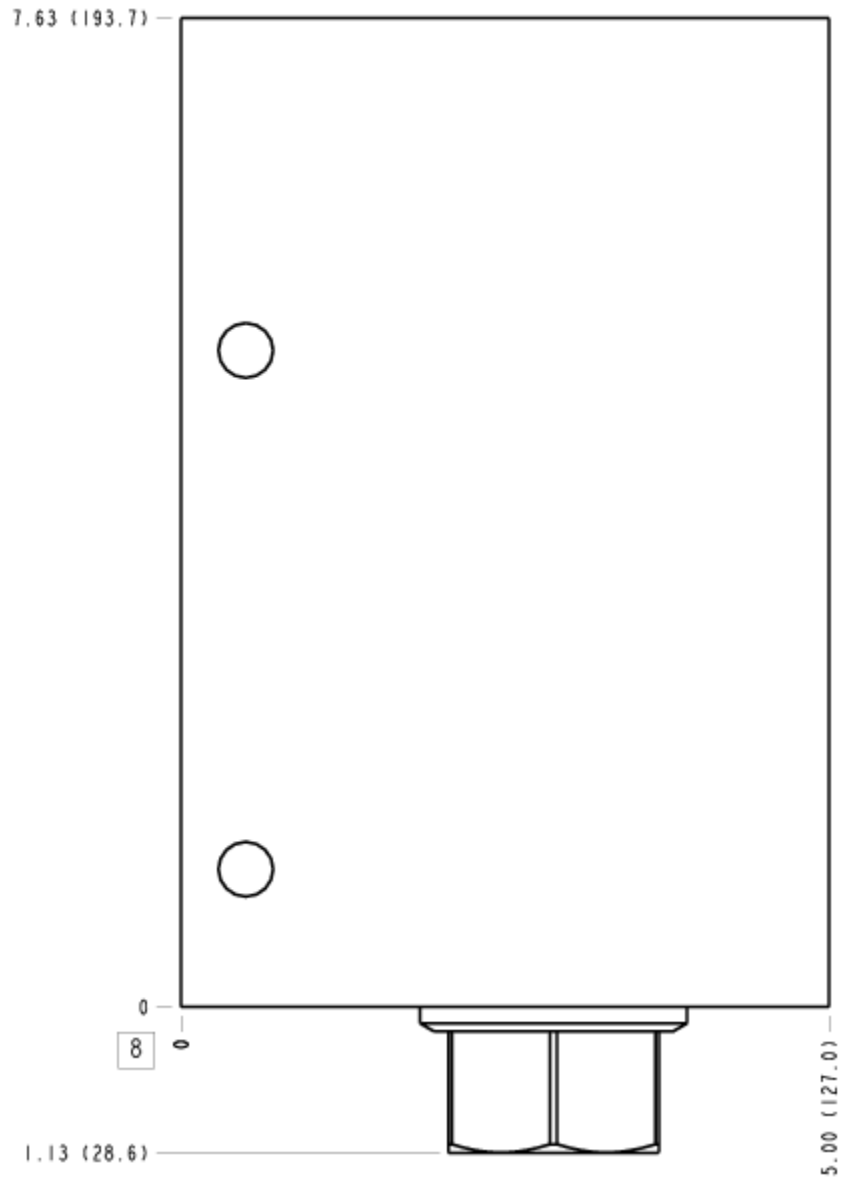
FACE 6



FACE 7



FACE 8



FACE 10

