

Avante Automatic

Digital Gas Manifold

FEATURES

- › Input power 120 VAC, 50 to 60 Hz.
- › 24" flexible stainless steel braided pigtails. Vertical crossover and staggered styles include 36" pigtails for half of the cylinders. All pigtails include a check valve.
- › 36" copper pigtails with check valve supplied with oxygen units
- › CGA connections with integral check valves at each header station.
- › Unit of measure switching (psi, kPa, BAR).
- › Dual line pressure regulators
- › Special header configurations available upon request (Ushaped, L-shaped, etc.). (Dimensional sketch of installation required).
- › Built for expansion by adding header extensions.
- › Cabinet weight 70 lbs.
- › May be converted from high pressure cylinder use to use with low or medium pressure liquid portable bulk vessels.
- › Line pressure sensor may be mounted inside the cabinet or remotely located to eliminate the need for a high/low pressure switch for master alarm operation.



ELECTRONIC GAS-FLOW MEASUREMENT

The NFPA 99 compliant digital, fully automatic manifold requires no manual resetting of valves or levers. The unit switches from “Bank in Use” to “Reserve” bank without fluctuation in line delivery pressure. Simultaneously, the “Reserve in Use” alarm is triggered by the manifold’s microprocessor. The manifold will continue to provide gas, in the event of a power failure, until both banks are depleted.

After the switchover, the “Reserve” bank will then become the “Bank in Use”. The manifold microprocessor shall also trigger the “High Line Pressure” and “Low Line Pressure” alarms without the need for additional pressure switches or transducers. The manifold shall be capable of being upgraded after installation, to be used with low or medium pressure portable bulk vessels or for use at higher or lower delivery pressures.

The control panel incorporates three large, green, illuminated LED displays, for the Left Bank, the Right Bank, and for Delivery Pressure. Analog gauges are also provided so that line and both bank pressures may be observed in the event of a power failure. The control panel also incorporates a set of LED’s for each bank, green for “Bank in Use”, amber for “Ready” and red for “Empty”. All manifold regulators, piping and control switching equipment shall be cleaned for use with oxygen service and installed in a steel cabinet (weatherproof version available) to provide protection and minimize tampering.

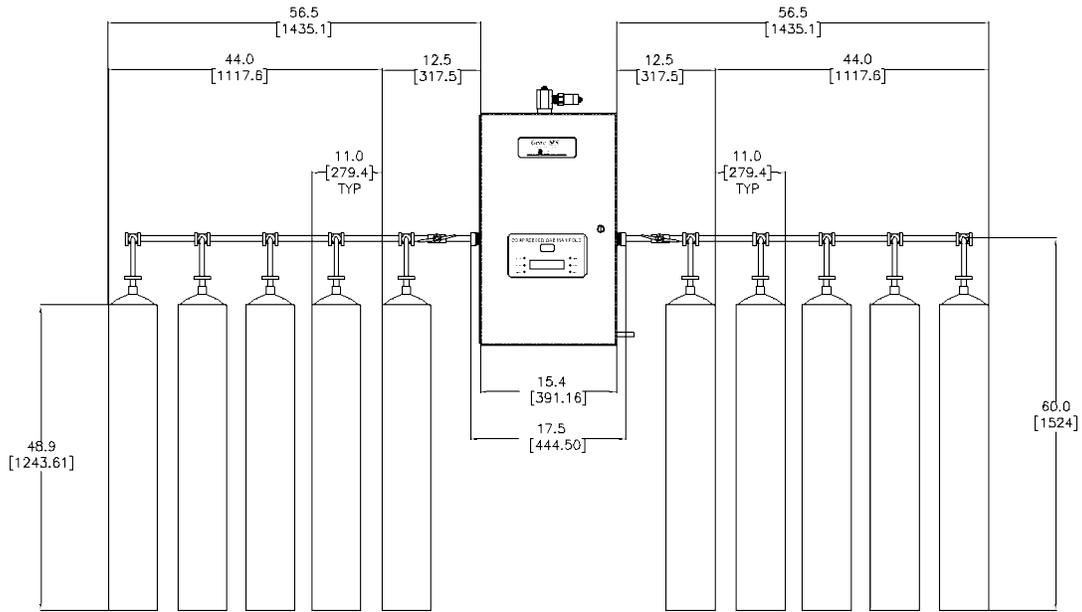
The header bars are equipped with emergency high pressure shutoff valves outside the cabinet to allow for emergency isolation of the header bars. The header bar shall incorporate integral check valves for each station.

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Flow Capacity

Gas Service	Standard Line Regulators	High Capacity Line Regulators	Without Heaters	With Heaters
Oxygen or Medical Air	2,500 SCFH (1,180 l/min)	4,500 SCFH (2,120 l/min)	N/A	N/A
Hyperbaric Oxygen	N/A	5,000 SCFH (2,358 l/min)	N/A	N/A
Nitrous Oxide or Carbon Dioxide	X	N/A	40 SCFH (19 l/min)	500 SCFH (236 l/min)
Nitrogen	3,000 SCFH (1,415 l/min)	6,000 SCFH (2,830 l/min)	N/A	N/A

Dimensional Drawing



Design Lengths	Total # of Cylinders	4	6	8	10	12	16	20
STANDARD (10" INCH CENTERS) OVERALL MANIFOLD LENGTH		5' - 3" (1.60m)	6' - 11" (2.11m)	8' - 7" (2.62m)	10' - 3" (3.12m)	11' - 11" (3.63m)	15' - 5" (4.65m)	18' - 9" (5.72)
STAGGERED DESIGN (5" CENTERS) OVERALL MANIFOLD LENGTH		4' - 6" (1.32m)	5' - 4" (1.57m)	6' - 2" (1.83m)	7' - 0" (2.08m)	7' - 10" (2.34m)	9' - 6" (2.85m)	11' - 2" (3.35m)
VERTICAL CROSSOVER (10" CENTERS) OVERALL MANIFOLD LENGTH		3' - 7" (1.10m)	N/A	5' - 3" (1.60m)	N/A	6' - 11" (2.11m)	8' - 7" (2.62m)	10' - 3" (3.12m)