

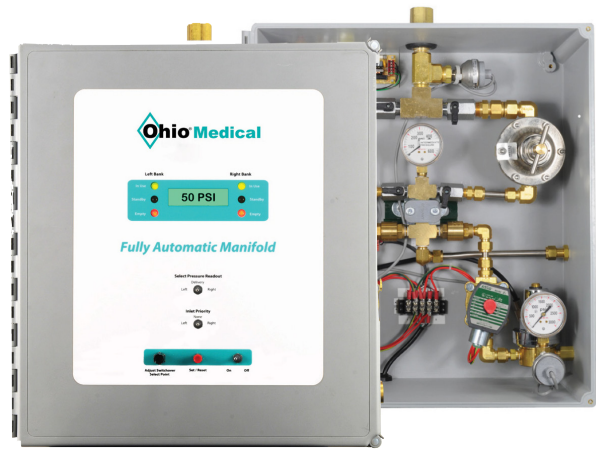


MEDICAL AND LAB GAS DIGITAL MANIFOLD



FEATURES & BENEFITS

- Digital LCD Pressure Display
- NEMA 4x Enclosure
- Automatic Leak Detection
- Automatic Transducer Diagnostic Testing



SPECIFICATIONS

The medical and lab gas manifold shall be Ohio Medical Healthcair® series. The manifold shall comply with the latest edition of NFPA® 99.

The manifold shall provide an uninterrupted supply of gas to the pipeline at a constant pressure. The manifold shall permit automatic switchover for the “in use” (primary) bank of cylinders to the “reserve” (secondary) bank of cylinders.

The manifold shall have a NEMA 4x enclosure allowing the manifold to be mounted outdoors in a semi-protected environment (0° - 140°F). The manifold shall be equipped with an internal power supply module, header bars/cylinder connections, master shut off valves and optional external heaters for Nitrous Oxide (N2O) and Carbon Dioxide (CO2) service.

The pressure control cabinet shall contain dual pressure regulators and switches that assure an uninterrupted, regulated flow of gas to the pipeline. The cabinet shall have a digital pressure display and three analog pressure gauges, one for each supply side and one for the pipeline delivery pressure. A group of indicator lights shall be used to indicate the status of the left and right cylinder banks. “In Service” is indicated by the green light, and the “Reserve” cylinder bank is indicated by the yellow “Ready to Use” light. A red “Replace Cylinder” light indicates a depleted cylinder bank. The manifold shall be equipped with a left or right bank inlet priority switch. An external switch over setting module shall be provided.

The control cabinet shall be equipped with a leak detection alert, in the event the reserve cylinder bank decreases by 25% from the initial standby pressure. When this occurs, the standby status light and the empty status light will blink indicating that a leak has been detected. The unit shall include a self diagnostic testing feature to check the internal inlet and delivery pressure transducer sensors. During this test if a fault is found the digital display will read “ERROR” Right, Left, or Delivery depending on where the fault was generated.

Dry contacts are provided in the internal alarm terminal strip for connection to a remote alarm to signal when the reserve bank (secondary) is in use. No manual resetting is required when the bank has been replaced with new cylinders and re-pressurized, the red light goes off and the yellow “Ready to Use” light comes on and the replaced bank is now the reserve bank.

The space saver header bars shall be modular in design to allow for future expansion. Each inlet port shall be equipped with an individual check valve. Each brass header bar shall include a master shutoff valve to isolate the gas supply during emergency situations.

Cylinder connections shall be flexible to facilitate proper cylinder alignment with the header bar. Each connection shall include gas-specific CGA fittings at both ends. Flexible cylinder pigtailed shall include stainless steel mesh covering, as applicable. Oxygen cylinder connections shall be provided with copper pigtailed.

Piping regulators and control switchover components shall be cleaned for oxygen service.

Equipment is manufactured in the USA and produced in an ISO 9001 registered facility.

* Oxygen manifolds shall be equipped with copper pigtailed.

Product Includes	UL / CSA / CE / ISO 5175, BS 6158 / EN 730 (BAM / DIN) / AS 4603 - Components
Designed to	National Fire Protection Association (NFPA® 99 and 51) Compressed Gas Association (V-1, E-1, E-3, E-4, G-1) American National Standards Institute (A-13.1, B.57-1)
Cabinet Dimensions	16"W x 18"H x 10.5"D
Input Voltage	90 - 264 VAC
Unit Operating Power Consumption	1.0 Amp, 120VAC

SPACE SAVER HEADER BARS

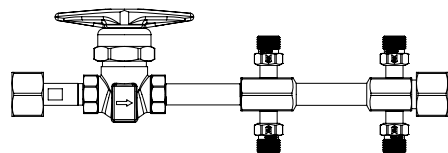
Space saver header bars are ideal for manifold applications where space is limited. The modular header bars feature dual ports, allowing for optimum cylinder placement. The complete kits include the following components for each side of the manifold: Main shutoff valve; header bar segments with check valves at each connection port; 36" flexible pigtails, except for high pressure oxygen, which are 24" copper; mounting brackets. The kits can be used for low- or high-pressure gases, except for low pressure oxygen. The header bars can be expanded in the future if additional capacity is required.

Kit	O2	N2O	N2	Instrument Air	CO2	Length*
1 x 1	261694-01	261695-01	261696-01	261697-01	261698-01	43.3"
2 x 2	261694-02	261695-02	261696-02	261697-02	261698-02	52.1"
3 x 3	261694-03	261695-03	261696-03	261697-03	261698-03	63.1"
4 x 4	261694-04	261695-04	261696-04	261697-04	261698-04	51.7"
5 x 5	261694-05	261695-05	261696-05	261697-05	261698-05	63.1"
6 x 6	261694-06	261695-06	261696-06	261697-06	261698-06	71.9"
7 x 7	261694-07	261695-07	261696-07	261697-07	261698-07	73.1"
8 x 8	261694-08	261695-08	261696-08	261697-08	261698-08	71.4"
9 x 9	261694-09	261695-09	261696-09	261697-09	261698-09	92.9"
10 x 10	261694-10	261695-10	261696-10	261697-10	261698-10	101.7"
11 x 11	261694-11	261695-11	261696-11	261697-11	261698-11	112.6"
12 x 12	261694-12	261695-12	261696-12	261697-12	261698-12	111.4"
13 x 13	261694-13	261695-13	261696-13	261697-13	261698-13	122.4"
14 x 14	261694-14	261695-14	261696-14	261697-14	261698-14	131.2"

*Length is for both sides of header bar connected to an 18" wide manifold cabinet.
Total horizontal space will be dependent upon cylinder placement.

HEADER BAR SEGMENTS WITH DUAL CONNECTIONS

The header bar segments allow customers to configure standard or customized cylinder-bank arrangements, such as 3 × 3, 4 × 4, or 4 × 6. Each bank begins with a shutoff-valve segment and may be expanded using extension segments.



Example: 3 × 3 Oxygen Manifold

For each bank: One (1) Shutoff Valve with 1 Outlet — Part No. 263126-1

One (1) Extension with 2 Outlets — Part No. 263131-2

Total for both banks: two (2) of each part number

Example: 4 × 6 Oxygen Manifold

Four-cylinder bank: One (1) Shutoff Valve with 4 Outlets — Part No. 263126-4

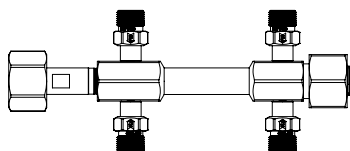
Six-cylinder bank: One (1) Shutoff Valve with 4 Outlets — Part No. 263126-4

One (1) Extension with 2 Outlets — Part No. 263131-2

Description	Oxygen	Nitrous Oxide	Nitrogen	Air	Carbon Dioxide	Instrument Air	Length
Shutoff valve and 1 outlet	263126-1	263129-1	263128-1	263127-1	263130-1	263135-1	13.5"
Shutoff valve and 2 outlets	263126-2	263129-2	263128-2	263127-2	263130-2	263135-2	17.9"
Shutoff valve and 4 outlets	263126-4	263129-4	263128-4	263127-4	263130-4	263135-4	17.7"

OPTIONAL EXTENSION WITH OUTLETS

Header bar extensions allow customers to increase the capacity of an existing manifold without replacing the complete header bar assembly. Extensions are available with two, four, or six additional cylinder outlets and are ordered separately for each cylinder bank.



Expansion Example – Existing 2 × 2 to 4 × 4 Oxygen Manifold

To expand an existing 2 × 2 oxygen manifold to a 4 × 4 configuration, add:

Two (2) Extensions with 2 Outlets, Part No. 263131-2 — one extension for each bank

Each existing two-cylinder bank will receive two additional cylinder connections, increasing the manifold capacity to four cylinders per bank.

A 90° header bar elbow, Part No. **261677**, may be added where a change in header bar direction is required.

Description	Oxygen	Nitrous Oxide	Nitrogen	Air	Carbon Dioxide	Instrument Air	Length
Extension with 2 outlets	263131-2	263134-2	263133-2	263132-2	263145-2	263146-1	11.5"
Extension with 4 outlets	263131-4	263134-4	263133-4	263132-4	263145-4	263146-2	11.5"
Extension with 6 outlets	263131-6	263134-6	263133-6	263132-6	263145-6	263146-4	16.5"
90° Elbow for header bar	261677						

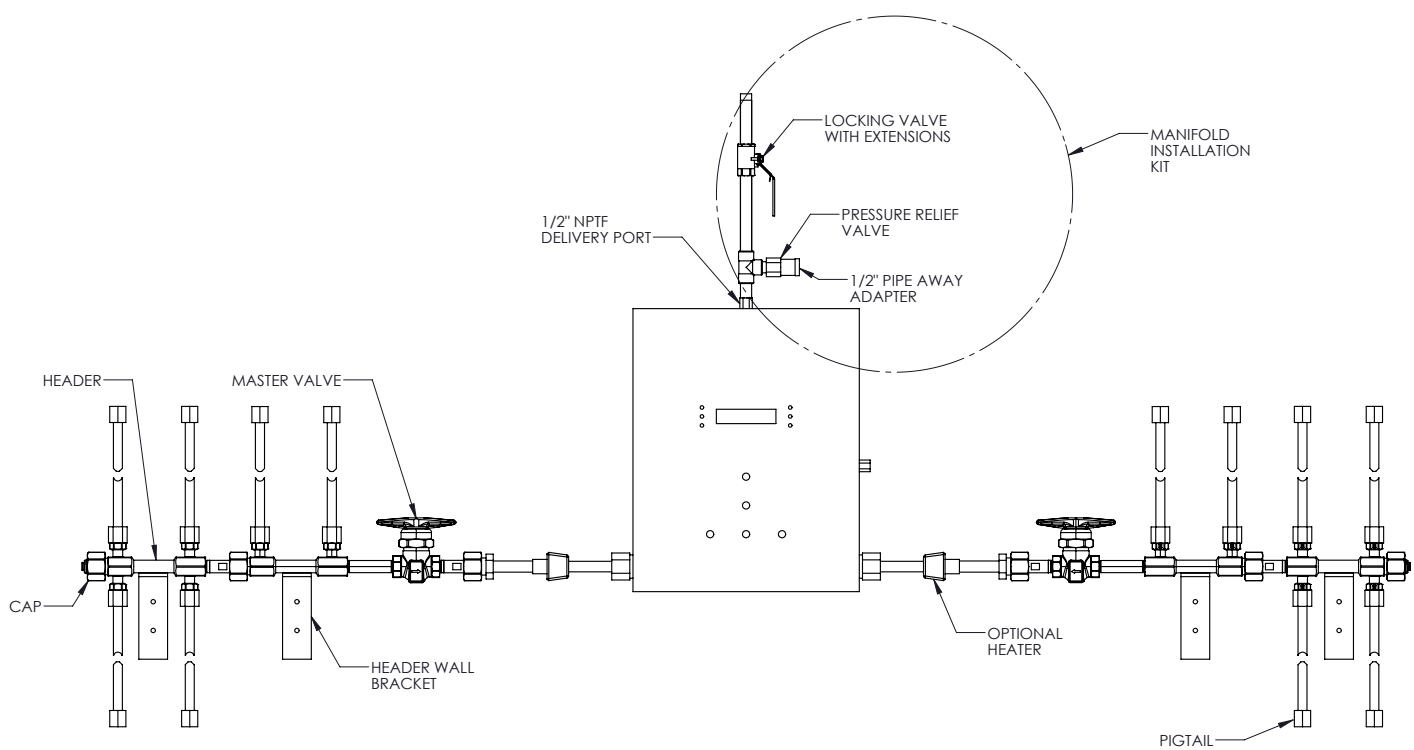
MANIFOLD ORDERING

Multi-Voltage Digital Manifold (Cabinet Only)	
263433	O ₂ , 50 lbs
263435	N ₂ O, 50 lbs
263437	N ₂ , 50 lbs
263439	Air, 50 lbs
263441	CO ₂ , 50 lbs
263411	IA-Low, 50 lbs
263414	IA-High, 50 lbs

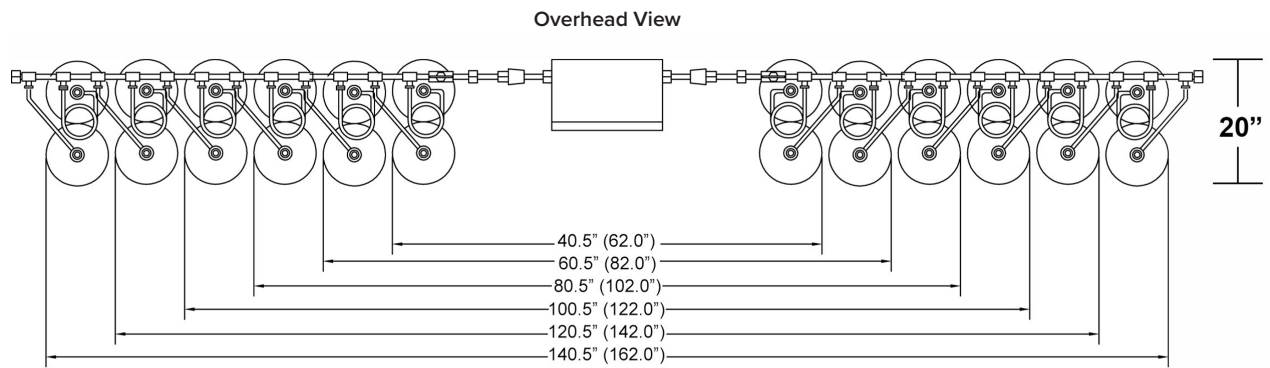
Optional Heater Kit for N ₂ O & CO ₂	
263431	115v Heater, USA, 2 Required
263409	220v Heater, Other, 2 Required

Manifold Installation Kits			
263463	Installation Kit for O ₂ , N ₂ O, Air, IA-L & CO ₂	263464	Installation Kit for IA-H & N ₂
	Installation Kit Includes		Installation Kit Includes
232600	75 psi Relief Valve	232604	250 psi Relief Valve
232602	1/2"Pipe Adaptor	232602	1/2"Pipe Adaptor
261600-05	1/2" Locking Source Valve	261600-05	1/2" Locking Source Valve
261600-07	3/4" Locking Source Valve	261600-07	3/4" Locking Source Valve
261600-10	1" Locking Source Valve	261600-10	1" Locking Source Valve
261600-12	1-1/4" Locking Source Valve	261600-12	1-1/4" Locking Source Valve

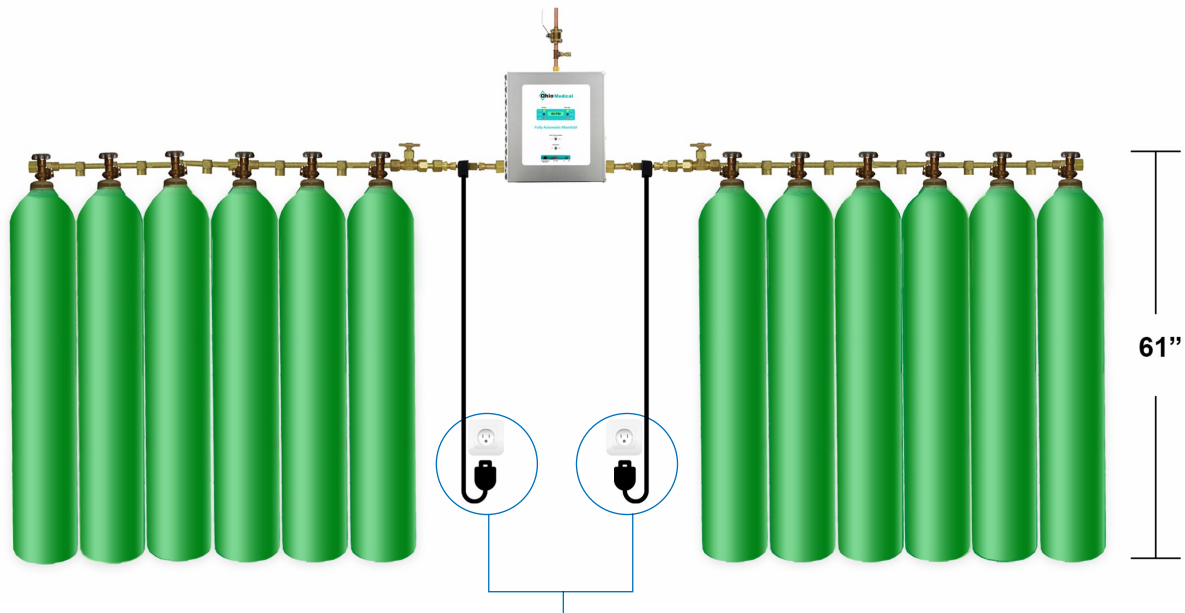
PIPE AWAY RELIEF VALVE ILLUSTRATION



DIMENSIONAL DRAWING & ATTACHMENT ILLUSTRATION



Dimensions in parentheses are with optional Heaters.



The two power cords are provided for the optional heater kit for N₂O and CO₂