



Maintains reliability
while reducing
the potential for leaks

Lifeline Manifold



Trouble free operation

The LifeLine® Global Manifold is designed in accordance with NFPA, CSA and ISO standards. The improved design, validated through extensive testing, ensures the manifold maintains its reliability while reducing the potential for leaks, avoiding wasteful gas losses. The NEMA 4 enclosure and environmental testing provides the ability for outdoor installations. Our LifeLine® Global Manifolds are designed to be superior performers in any medical gas service.

- Ultra high flow (tested to ISO 10524-2)
- Fully automatic
- Dome loaded regulators
- Fluoro-polymer free headers (cylinder O2 Service)
- Smallest space requirements
- No NPT connections
- Environmental Testing to MIL STD 810F
- Ignition testing to ISO 10524-2 to ensure the manifold can perform well for oxygen service
- Forging design reduces the connection points which means less opportunities for leaks

Line regulators and check valves are housed in brass forging to minimize connection points, therefore eliminating the potential for leaks

Vent valve pre-piped to vent port

NEMA 4 Enclosure houses both the power supply and control board

Pressure Switch (Pressure Transducer for TAE models)

LED Electronics Overlay for easy visual status of gas flow

Bank regulators and check valves are housed in brass forging to minimize connection points, therefore eliminating the opportunity for leaks

Service valve



Robust solenoid valve



Dome biasing for **best flow and solid reliability**

LifeLine® Global Manifolds use dome biased primary regulators to ensure maximum flow rates. Dome biased regulators do not open to the atmosphere and thus are not subject to the formation of ice in the regulator. Accumulated ice in the regulator is a very common cause of manifold failure. No air and no ice ensures solid reliability.



Liquid cylinder or gas cylinder

There are numerous benefits from a LifeLine® Global Manifold with whatever source type is most economical and practical. The LifeLine® Global Manifold can be set up for cylinder by cylinder, liquid by liquid by cylinder, or liquid by cylinder by cylinder configurations. LifeLine® Manifolds can also work to provide automatic backup for bulk and mini-bulk installations.



Simple to service & install

Installing a LifeLine® Manifold, whether new or as a replacement to old manifolds has been especially made easy. You mount a bracket, then hang the manifold on the bracket like a picture while you secure it in place. The source valve is included and connections to both the system piping and the vent piping are made with special unions designed for a gas-tight connection. Power comes into a NEMA 4 enclosure with quick connect terminals. You never have to go into the manifold to wire it. Release the two snap locks and the cabinet lifts off. Everything is right there in front of you, easily accessed for service or adjustment. However, should service be required, the LifeLine® manifold's full redundancy means almost any service operation can be done without a shutdown.



TotalAlert embedded capabilities

Our LifeLine® Manifolds are available in standard electronics or TAE (TotalAlert Embedded) electronics. In the standard version, pressure switches control the bank switchovers. With the TAE version, the pressure transducers monitor pressure in each bank of cylinders as well as delivery pressure. The TAE electronics are provided on a fully populated board with Ethernet connection for remote monitoring. The TAE version allows for e-mail alerts for alarm conditions and warnings when pressure drops below pre-defined settings advising customers to replace cylinders before ever reaching alarm conditions.



Shown: TAE Status Screen

Status screen shows all current pressure conditions including the left and right bank manifold pressure as well as any alarm conditions.

LifeLine Cylinder Manifold flow capacities

Delivery pressure	Minimum flow rate
380 kPA (55 psig) delivery	93.4 m3/hour (3,300 ft3/hour)
690 kPA (100 psig) delivery	130.8 m3/hour (4620 ft3/hour)
1.2 mPA (180 psig) delivery	151.2 m3/hour (5340 ft3/hour)

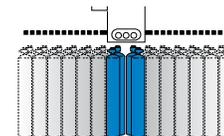
This flow rate is the minimum flow rate which will be expected just prior to switchover. With full cylinders, the flow rate may be considerably higher. Always compare manifolds at switchover.

LifeLine Liquid Manifold flow capacities

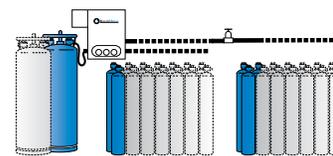
Gas	Maximum sustained flow rate ²
Argon	9.9 m3/hour (350 ft3/hour)
Carbon Dioxide	4.2 m3/hour (150 ft3/hour)
Nitrogen	9.9 m3/hour (350 ft3/hour)
Nitrous Oxide	3.1 m3/hour (110 ft3/hour)
Oxygen	9.9 m3/hour (350 ft3/hour)

Liquid containers have limits in their rate of delivery and are typically more limited than the manifold. Given below are typical output capacities for single liquid containers. With two liquid containers on a header, this capacity may be doubled.

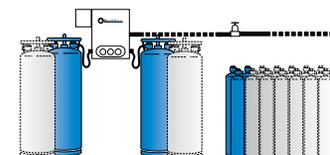
BeaconMedæ's does not recommend more than two liquid containers per header. (Note: containers do vary in capacity and this information should be used with care.)



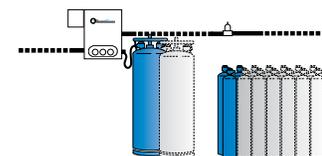
Gas x Gas



Liquid x Gas x Reserve



Liquid x Liquid x Reserve



Bulk liquid x Liquid x Reserve

• Key benefits at a glance



- *Liquid or gas configurations to match any medical gas requirement.*
- *Highly reliable dome biased switching.*
- *Easy to install, easy to service.*
- *No NPT Connections reduce the potential for leaks.*
- *Ignition Tested to ISO 10524-2.*
- *Flow Tested to ISO 10524-2.*
- *Available in Standard or TotalAlert*
- *Embedded (TAE) electronics. TAE allows for remote monitoring at your desktop.*
- *NEMA 4 power supply and control board enclosure. (Tested to MILSTD 810F). Every LifeLine manifold can go outdoors.*
- *Patent Pending.*



Life is in the details.®