

Submittal Data Sheet

Features

- Fully automatic – no resetting of valves or levers.
- Input power 120 VAC, 50 to 60 Hz – single point connection.
- 400 psig differential rated solenoid – can't lock up.
- 72" flexible pigtails.
- Economizer circuits for maximum efficiency of gas use.
- Single or Dual line pressure regulators.
- Built for expansion by adding header extensions.
- Cabinet weight 70 lbs.
- May be converted from low or medium pressure liquid portable bulk vessel use to use with high pressure cylinders.

Specification

The fully automatic manifold shall be a Powerex Genesys™ TMLU series. No manual resetting of valves or levers shall be required. The unit shall switch from "Bank in Use" to "Reserve" bank without fluctuation in line delivery pressure. Simultaneously, the "Reserve in Use" alarm shall be triggered by the manifold's circuit board. The manifold shall continue to provide gas, in the event of a power failure, until both banks are depleted. After the switchover, the "Reserve" bank shall then become the "Bank in Use". The manifold shall be capable of being upgraded after installation, to upgrade to high flow line regulator(s), higher delivery pressures, from single to dual line regulators, or to be converted for use with high pressure (up to 2,500 psig) cylinders.

The control cabinet shall also incorporate economizer gas circuits for both banks. The economizer circuits will allow the head pressure of the reserve bank to be utilized instead of venting to atmosphere so long as there is sufficient system gas usage.

Flow Capacity

Gas Service	Standard Line Regulators	High Capacity Line Regulators	Without Heaters	With Heaters
Oxygen	800 SCFH (378 l/min)	1,600 SCFH (755 l/min)	N/A	N/A
Nitrous Oxide or Carbon Dioxide	800 SCFH (378 l/min)	1,600 SCFH (755 l/min)	40 SCFH (19 l/min)	500 SCFH (236 l/min)
Nitrogen	1,000 SCFH (472 l/min)	1,800 SCFH (850 l/min)	N/A	N/A

Note: Above flow rates allow up to 10 psig pressure drop in line pressure.

Note: External vaporizers will be required to achieve these flow rates. Typical portable bulk vessels without external vaporizers will flow 250 to 350 scfh per vessel (consult the specifications provided by the vessel manufacturer).

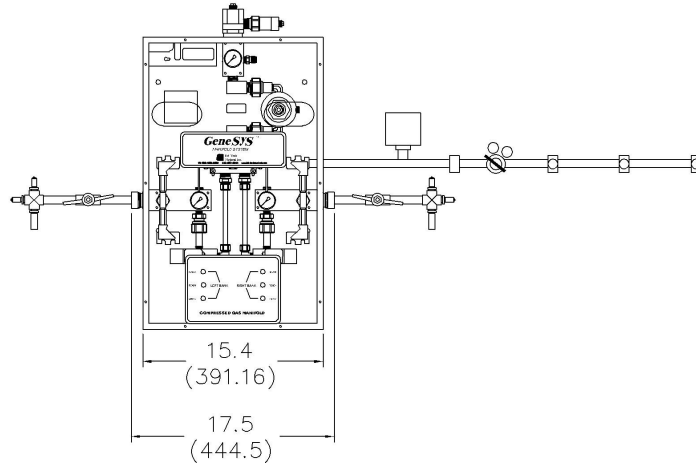


The manifold may be used with portable bulk vessels with either 235 psig or 350 psig relief valves or mixed combinations of vessels with 235 or 350 relief valves.

The control panel shall incorporate a set of LED's for each bank, green for "Bank in Use", amber for "Ready" and red for "Empty". Analog gauges are also provided so that all above pressure zones may be observed in the event of a power failure.

All manifold regulators, piping and control switching equipment shall be cleaned for oxygen service and installed in a steel cabinet to provide protection and minimize tampering.

Dimensional Drawing

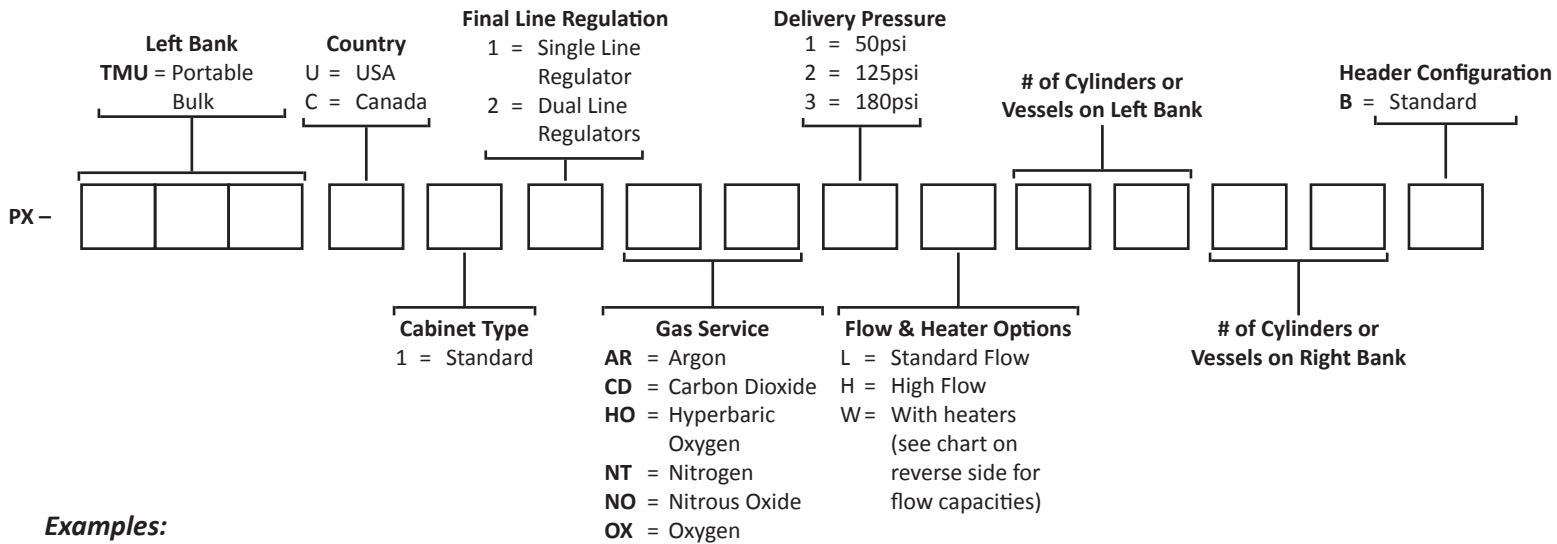


Design Lengths

Total Number of Cylinders	2	4	6
Cabinet only dimensions (includes inlet & outlet fittings) 26 1/4" H x 17.5" W x 9" D	57"	57"	72"
Cabinet width + left header width + right header width only – no vessels	(1.45 m)	(1.45 m)	(1.72 m)
Cabinet width + width of vessels)	7' – 0"	11' – 0"	15' – 0"
Overall manifold length with cabinet & all vessels against wall. (Note: dimensions shown at right are "worst case" as the vessels, approximately 24" in diameter each, may be staggered or placed in rows and placed underneath the manifold cabinet thereby requiring less wall space). The 72" flexible pigtailed provided allow the vessels to be located in any position within an approximate 4' radius of the header.	(2.134 m)	(3.353 m)	(4.572 m)

Ordering Information

Easy to use modular ordering system. Fill in the 15 blanks to specify the manifold that meets your needs.



Examples:

PX-TMLU11OX1L0202B = Portable bulk vessel x portable bulk vessel Genesys™ Manifold, standard Cabinet, CGA 540 Oxygen service, Single Line Regulator, 50 psi delivery, standard flow, 2 x 2 standard headers (high pressure reserve manifold to be ordered separately – RSP series)