5400 SERIES

Semi-Automatic Manifold Systems

5400 series semi-automatic manifold system is designed to provide an uninterrupted gas supply. It consists of a primary bank and a reserve bank of cylinders. When the pressure in the primary cylinder bank reduces to the pre-set value, the changeover takes place automatically to provide continuous supply of gas from the reserve bank. Upon changing the cylinders, the regulators on both banks need to be re-adjusted in order for the changeover to occur automatically next time. The secondary regulator in the main pipeline stabilizes the outlet gas flow.

Features

- Open-style manifold
- Secondary regulator for consistant high flow delivery pressure to the pipeline
- Silver brazing on piping joints for maximum leak prevention
- System is designed to accommodate future expanison needs
- System is mounted with gas filters
- Unique changeover valve provides uninterrupted supply of gas from primary and reserve banks
- Pressure switch port is available
- Headers have been tested to withstand high cylinder pressure
- Wall or floor mount available

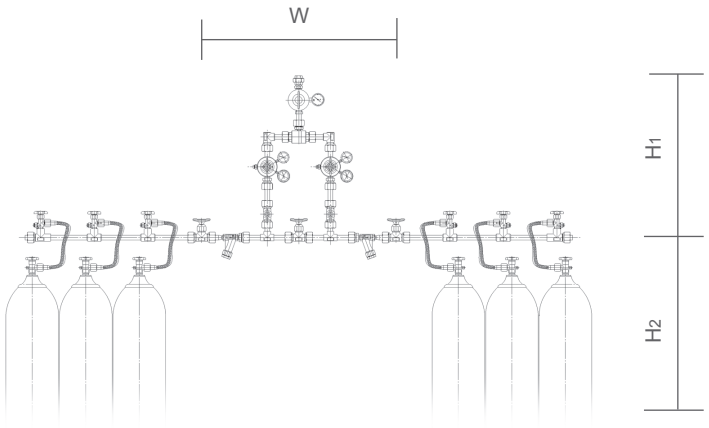
Standard Construction

- 24” flexible high pressure stainless steel braided pigtails* with check valve, Rigid copper pigtails are standard when gas service is oxygen. Pigtails for acetylene models are equipped with dry flashback arrestor.
- Gentec’s high flow regulator series 155L (except for acetylene) & 155M-A.
- Carbon Dioxide manifold systems are provided with 155CG electric heating regulator. Siphon cylinder should not be used in the manifold system.

Specifications

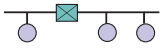
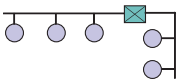
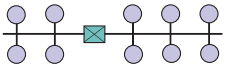
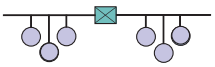
Series	Gas Service	Max. Inlet Pressure psi (bar)	Delivery Pressure psi (bar)	Max. Delivery Flow SCFH (m^3/h)	Outlet Connection	Pigtail Specifications
5400X	Oxygen	3000 (207)	10~200 (0.7~14)	3500 (100)	3/4” NPT (M)	Pigtail, CGA540
5400MA	Medical Air	3000 (207)	10~200 (0.7~14)	3500 (100)	3/4” NPT (M)	Pigtail, CGA346
5400N2O	Nitrous Oxide	3000 (207)	10~200 (0.7~14)	1750 (50)	3/4” NPT (M)	Pigtail, CGA326
5400C	Carbon Dioxide	3000 (207)	5~125 (0.4 ~ 9.0)	2100 (60)	3/4” NPT (M)	Pigtail, CGA320
5400IN	Argon	3000 (207)	10~200 (0.7~14)	1750 (50)	3/4” NPT (M)	Pigtail, CGA580
	Helium	3000 (207)	10~200 (0.7~14)	7000 (200)	3/4” NPT (M)	Pigtail, CGA580
	Nitrogen	3000 (207)	10~200 (0.7~14)	3500 (100)	3/4” NPT (M)	Pigtail, CGA580
5400Q	Air	3000 (207)	10~200 (0.7~14)	3500 (100)	3/4” NPT (M)	Pigtail, CGA590
5400H	Hydrogen	3000 (207)	10~200 (0.7~14)	10500 (300)	3/4” NPT (M)	Pigtail, CGA350

Installation Dimensions



Gas Service	W1 in.(mm)	H1 in.(mm)	H2 in.(mm)
Oxygen, Air, Argon, Nitrogen, Helium	35.9 (912)	29.1 (739)	55.1 (1400)
Carbon Dioxide	48.8 (1240)	29.1 (739)	55.1 (1400)

Manifold System Layouts

Standard Layout	"L" shape Layout	"U" shape Layout	Crossover Layout	Staggered Layout
				

Ordering Information

54	1	2	X	- 5L - 5R	- 1
Series	**Manifold System Layout**	**Cylinder Valve Spacing**	**Gas Service**	**Number of Cylinders (left-hand / right-hand)**	**Type of Mounting**
Semi-automatic manifold system	1: Standard layout 2: "L" Shape layout 3: "U" shape layout 4: Crossover layout 5: Staggered layout	1: 5" (127 mm) 2: 10" (254 mm) 3: 13" (330 mm) 4: 18" (457 mm)	X: Oxygen C: Carbon Dioxide IN: Ar, He, N_2 Q: Air H: Hydrogen	1L-2R: One cylinder on the left, Two cylinders on the Right 5L-5R: Five cylinders on the left, Five cylinders on the Right ... Note: Direction of piping (Right or Left) is indicated by facing the manifold.	1: Wall mount 2: Floor mount

Example: 5412X-5x5-1 indicates a 5 x 5 cylinder semi-automatic manifold system.
Distance between two cylinders is 10" on standard horizontal layout.