



MANIFOLD SYSTEMS



Genstar Technologies Company, Inc.

COMPANY OVERVIEW

Founded in 1969, **Genstar Technologies Co., Inc. (Gentec)** is a world-class manufacturer specializing in producing high quality gas control components. Gentec's product lines include ultra high purity, high purity, and industrial gas control and handling devices, medical gas control systems, high pressure gas products, and gas welding apparatus. As a total system solution provider, Gentec also offers its customer value-added services such as technical support, on-site evaluation, design, and implementation.



Today, Genstar Technologies is a global industrial leader renowned for outstanding customer service, excellent product quality, and continuous technological innovation.



TABLE OF CONTENTS

Manifold Purchase Specifications Form ----- **2**

Manifold Systems

Dual Manifold Systems ----- **3**

Simplex Manifold Systems ----- **4-5**

Single Manifold Systems ----- **6-7**

Semi-Automatic Manifold Systems ----- **8-9**

Automatic Manifold Systems ----- **10-11**

Digital Automatic Manifold Systems ----- **12-13**

Semi-Automatic Manifold Systems for Liquid Vessels ----- **14**

Manifold Accessories

Changeover Manifolds ----- **15**

Changeover Manifolds & Pippings ----- **16**

Station Drops ----- **17**

Connectors & Valves ----- **18**

Pigtails, Wall mounts, Pipe Holders / Supports ----- **19**

Flashback Arrestors ----- **20**

Flashback Arrestors, Pressure Switches & Alarms ----- **21**

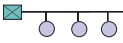
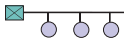
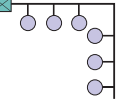
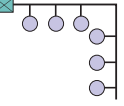

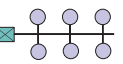
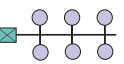
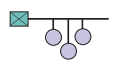
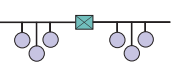
Flashback Arrestors, Quick Connectors & Flowmeters ----- **22**


Manifold Regulators ----- **23**


Station & Line Regulators ----- **24**

Manifold Purchase Specifications Form

- 1 Application of the manifold system: Industrial Specialty Gas Others _____
- 2 Application gas type: Oxygen Acetylene Propane Air
 Carbon Dioxide (CO₂) Inert Gases (Argon, Nitrogen, Helium) Others _____
- 3 Type of manifold changeover system required: Manual Semi-Automatic Automatic
- 4 Outlet pressure required: (PSI) _____
- 5 Outlet flow rate required: (SCFH) _____
- 6 Type of mounting: 1-Wall Mount 2-Floor Mount _____
- 7 Cylinder Valve Spacing: 5" 10" 13" 18" _____
- 8 Number of cylinders required: _____
- 9 Manifold system layout:

Layout	Series No.	5200 Series	5300/5400/5500/5500D/5600 Series
1 Standard Layout			
2 "L" shape Layout			
3 "U" shape Layout			
4 Crossover Layout			
5 Staggered Layout			

 — Changeover Manifolds

 — Cylinder

10 Model No. of manifold system required: _____

11 Accessories: (The following accessories are recommended for additional safety)

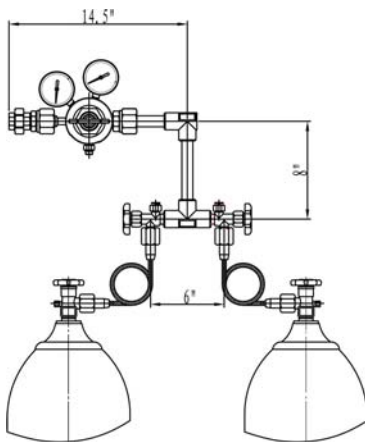
Pressure Switch	Model No.	_____	Qty	_____
Alarm System	Model No.	_____	Qty	_____
Gas Terminal (Pipeline)	Model No.	_____	Qty	_____
Gas Heater*	Model No.	_____	Qty	_____
Others	Model No.	_____	Qty	_____

*: Optional 500 SCFH heater is available for CO₂ & N₂O gas service with withdrawal rates above 35 SCFH / cylinder.

Note: Please fill out the above form so GENTEC can recommend the most suitable manifold system for your application. Please do not hesitate to contact us for more information.

Dual Manifold Systems

5100 series dual manifold system is a simple gas delivery system which provides a maximum of 2 cylinders in service at one time . This non-extendable system is suitable for maintenance and simple gas applications or one cylinder in service at one time and one in reserve where a manual change over is required.



Features

- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ Individual Station Shut-off Valves.
- ✦ Wall mount installation only.

Standard Construction

- ✦ 24" flexible high pressure stainless steel braided pigtails with check valve, Rigid copper pigtails are available as an option. Pigtails for acetylene models are equipped with dry flashback arrester.
- ✦ For Acetylene or Fuel gas model, outlet connection is mounted with a dry flashback arrester (FA30PF) for additional safety precaution.
- ✦ Gen Tec's high flow regulator series 153M.
- ✦ Relief valve for protecting downstream piping.

MODEL NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5100X	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5100Y	ACETYLENE	400	2-15	3/4" NPT (M)	PIGTAIL, CGA510
5100F	PROPANE	400	5-125	3/4" NPT (M)	PIGTAIL, CGA510
5100C	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5100IN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5100Q	AIR	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

Ordering Information

Please specify the "model number" when ordering. For example: 5100X indicates a dual "oxygen" manifold system.

Simplex Manifold Systems

5200 series simplex manifold system is designed for a single source of gas supply from one cylinder bank. Although this system can be used as a main delivery system, it is typically used in industrial and medical applications as a high pressure emergency back-up system for liquid vessel or bulk tank systems.



Features

- Open-style manifold.
- System can be designed for right or left direction.
- Silver brazing on piping joints for maximum leak prevention.
- System is designed to accommodate future expansion needs.
- Pressure switch port available.
- Wall or stand mount available.

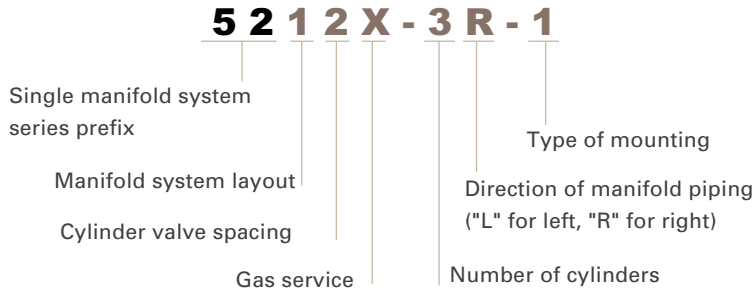
Standard Construction

- 24" flexible high pressure stainless steel braided pigtails with check valve. Rigid copper pigtails are available as an option. Pigtails for Acetylene models are equipped with a dry flashback arrestor.
- For Acetylene or fuel gas model, outlet connection is mounted with a dry flashback arrestor (FA30PF) for additional safety precaution. As an option, hydraulic flashback arrestors are available for an additional charge.
- Gentec's high flow regulator series 155M.
- Relief valve for protecting downstream piping.

SERIES NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5200X	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5200Y	ACETYLENE	400	2-15	3/4" NPT (M)	PIGTAIL, CGA510
5200F	PROPANE	400	5-125	3/4" NPT (M)	PIGTAIL, CGA510
5200C	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5200IN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5200Q	AIR	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

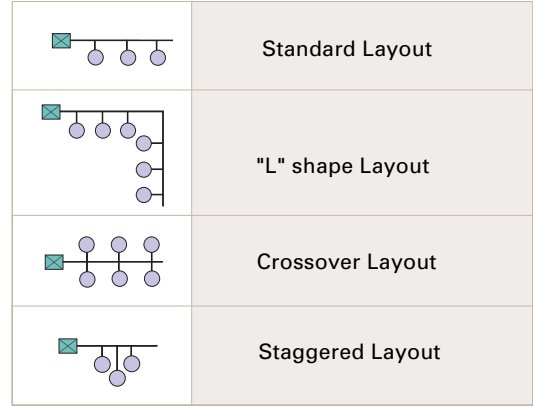
Ordering Information

Please follow the instructions below to select the correct model number.



Note: Direction of piping (Right or Left) is indicated by facing the manifold

Manifold System Layouts



Manifold System Layout

PART NUMBER	MANIFOLD SYSTEM LAYOUT
1	STANDARD LAYOUT
2	"L" SHAPE LAYOUT
3	N/A
4	CROSSOVER LAYOUT
5	STAGGERED LAYOUT

Cylinder Valve Spacing

PART NUMBER	CYLINDER VALVE SPACING
1	5"
2	10"
3	13"
4	18"

Gas Service

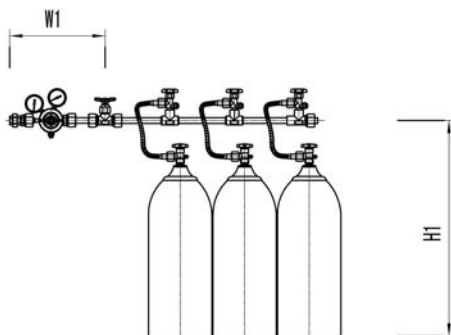
PART NUMBER	GAS SERVICE
X	OXYGEN
Y	ACETYLENE
F	PROPANE
C	CO ₂
IN	Ar, He, N ₂
Q	AIR

Type of Mounting

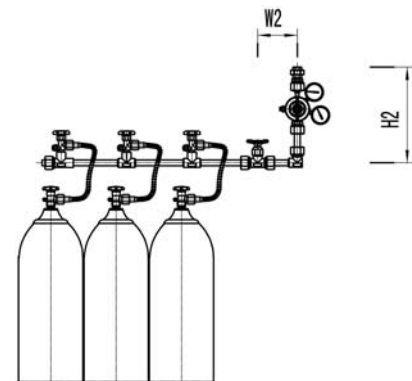
PART NUMBER	TYPE OF MOUNTING
1	WALL MOUNT
2	FLOOR MOUNT

Example 5212X-3R-1 indicates a 3 cylinder right-handed simplex manifold system. Distance between each cylinder is 10" on standard horizontal layout.

Installation Dimensions



Right-handed simplex manifold system



Left-handed simplex manifold system

GAS SERVICE	W1 (inch)	H1 (inch)	W2 (inch)	H2 (inch)
OXYGEN, AIR, Ar, He, N ₂ , CO ₂	14	61	6	15
ACETYLENE, PROPANE	21	61	6	21

Single Manifold Systems

5300 series single manifold system consists of a main gas delivery bank and a reserve bank of cylinders. When the primary cylinder bank is depleted, “turn off” the valve on the primary bank and open the valve on the reserve bank for continuous supply of gas. The changeover of this system needs to be operated manually.



Features

- ✦ Open-style manifold.
- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ System is designed to accommodate future expansion needs.
- ✦ Pressure switch port available.
- ✦ Easy Installation.
- ✦ Wall or stand mount available.

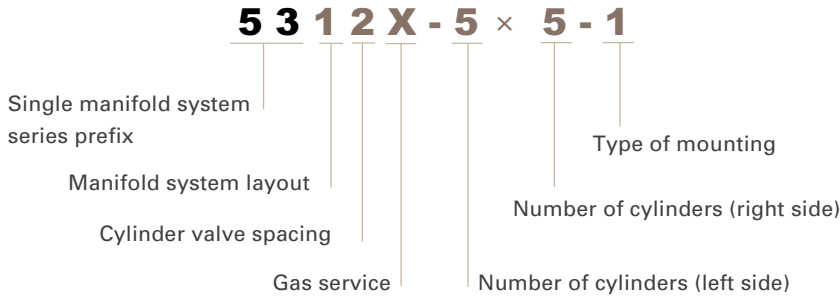
Standard Construction

- ✦ 24" flexible high pressure stainless steel braided pigtails with check valve. Rigid copper pigtails are available as an option. Pigtails for Acetylene models are equipped with dry flashback arrestor.
- ✦ For Acetylene or fuel gas model, outlet connection is mounted with dry flashback arrestor (FA30PF) for additional safety precaution. As an option, hydraulic flashback arrestors are available for an additional charge.
- ✦ Gentec's ultra high flow regulator series 155M.
- ✦ Relief valve for protecting downstream piping.

SERIES NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5300X	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5300Y	ACETYLENE	400	2-15	3/4" NPT (M)	PIGTAIL, CGA510
5300F	PROPANE	400	5-125	3/4" NPT (M)	PIGTAIL, CGA510
5300C	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5300IN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5300Q	AIR	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

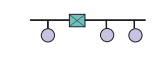
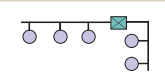
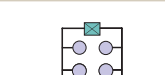
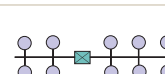
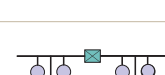
Ordering Information

Please follow the instructions below to select the correct model number.



Note: Direction of piping (Right or Left) is indicated by facing the manifold

Manifold System Layouts

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

Manifold System Layout

PART NUMBER	MANIFOLD SYSTEM LAYOUT
1	STANDARD LAYOUT
2	"L" SHAPE LAYOUT
3	"U" SHAPE LAYOUT
4	CROSSOVER LAYOUT
5	STAGGERED LAYOUT

Cylinder Valve Spacing

PART NUMBER	CYLINDER VALVE SPACING
1	5"
2	10"
3	13"
4	18"

Gas Service

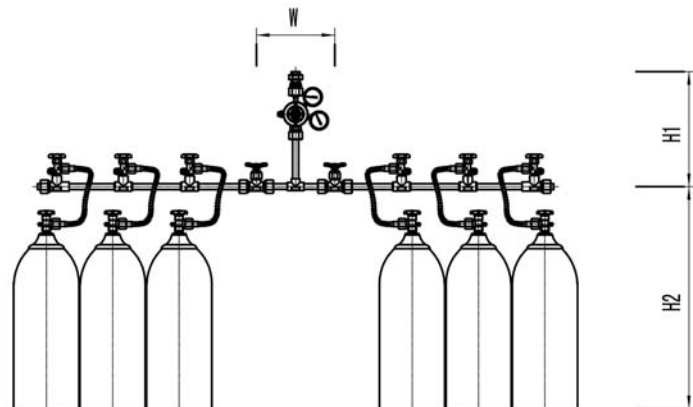
PART NUMBER	GAS SERVICE
X	OXYGEN
Y	ACETYLENE
F	PROPANE
C	CO ₂
IN	Ar, He, N ₂
Q	AIR

Type of Mounting

PART NUMBER	TYPE OF MOUNTING
1	WALL MOUNT
2	FLOOR MOUNT

Example 5312X-5x5-1 indicates a 5 x 5 cylinder single manifold system. Distance between two cylinders is 10" on standard horizontal layout.

Installation Dimensions



GAS SERVICE	W (inch)	H1 (inch)	H2 (inch)
OXYGEN, AIR, Ar, He, N ₂ , CO ₂	11	19	61
ACETYLENE, PROPANE	11	26	61

Semi-Automatic Manifold Systems

5400 series manifold system is designed to provide an uninterrupted gas supply. It consists of a primary bank and a reserve bank of cylinders. When the primary cylinder bank is depleted, 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.



Features

- ✦ Open-style manifold.
- ✦ Secondary regulator stabilizes gas flow rate of the main pipeline.
- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ System is designed to accommodate future expansion needs.
- ✦ Unique changeover valve provides continuous supply of gas between primary and reserve banks.
- ✦ Pressure switch port available.
- ✦ Easy installation.
- ✦ Wall or stand mount available.

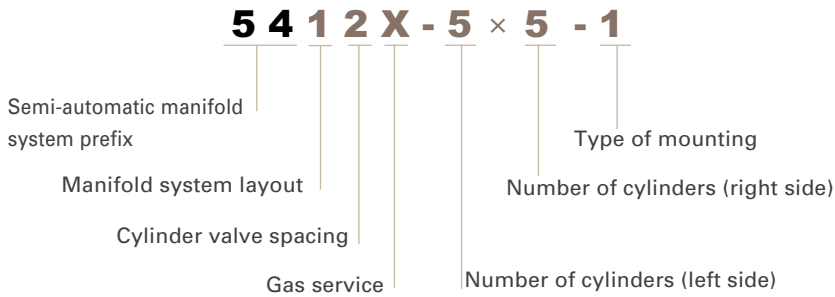
Standard Construction

- ✦ 24" flexible high pressure stainless steel braided pigtails with check valve. Rigid copper pigtails are available as an option. Pigtails for Acetylene models are equipped with dry flashback arrestor.
- ✦ For Acetylene or fuel gas model, outlet connection is mounted with dry flashback arrestor (FA30PF) for additional safety precaution. As an option, hydraulic flashback arrestors are available for an additional charge.
- ✦ Gentec's ultra high flow regulator series 155L (except for acetylene) & 155M.
- ✦ Relief valve for protecting downstream piping.

SERIES NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5400X	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5400Y	ACETYLENE	400	2-15	3/4" NPT (M)	PIGTAIL, CGA510
5400F	PROPANE	400	5-125	3/4" NPT (M)	PIGTAIL, CGA510
5400C	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5400IN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5400Q	AIR	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

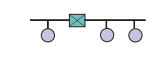
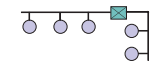
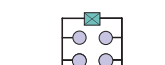
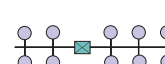
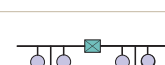
Ordering Information

Please follow the instructions below to select the correct model number.



Note: Direction of piping (Right or Left) is indicated by facing the manifold

Manifold System Layouts

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

Manifold System Layout

PART NUMBER	MANIFOLD SYSTEM LAYOUT
1	STANDARD LAYOUT
2	"L" SHAPE LAYOUT
3	"U" SHAPE LAYOUT
4	CROSSOVER LAYOUT
5	STAGGERED LAYOUT

Cylinder Valve Spacing

PART NUMBER	CYLINDER VALVE SPACING
1	5"
2	10"
3	13"
4	18"

Gas Service

PART NUMBER	GAS SERVICE
X	OXYGEN
Y	ACETYLENE
F	PROPANE
C	CO ₂
IN	Ar, He, N ₂
Q	AIR

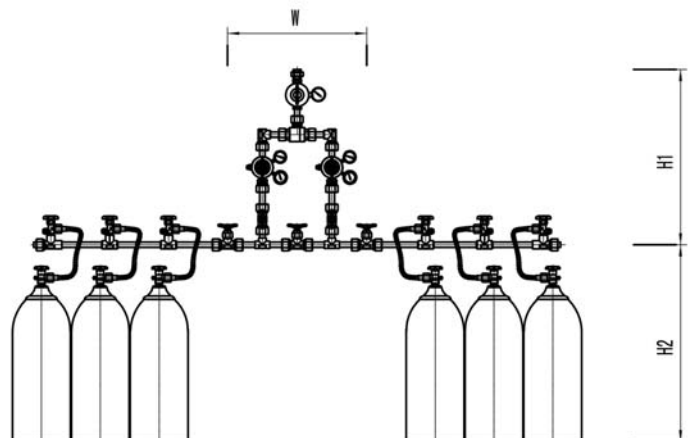
Type of Mounting

PART NUMBER	TYPE OF MOUNTING
1	WALL MOUNT
2	FLOOR MOUNT

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

Installation Dimensions

GAS SERVICE	W (inch)	H1 (inch)	H2 (inch)
OXYGEN, AIR, Ar, He, N ₂ , CO ₂	22	19	61
ACETYLENE, PROPANE	22	26	61



Automatic Manifold Systems

5500 series automatic manifold system is designed to provide an uninterrupted gas supply without any manual adjustments. This system automatically changes over when the primary cylinder bank is depleted. Even in case of power failure, the system continues to supply gas without interruption.



Features

Automatic Changeover System

- ✦ Fully enclosed, tamper-resistant metal cabinet.
- ✦ Pressure switch control.
- ✦ Light indicators provide system status.
- ✦ Systems for fuel gas come with an Anti-explosive device.
- ✦ Remote alarm panels are available as an option.

Pipeline

- ✦ Open-style manifold.
- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ System is designed to accommodate future expansion needs.
- ✦ Unique changeover valve provides continuous supply of gas between primary and reserve banks.
- ✦ Pressure switch port available.
- ✦ Easy Installation.
- ✦ Wall or floor mount available.

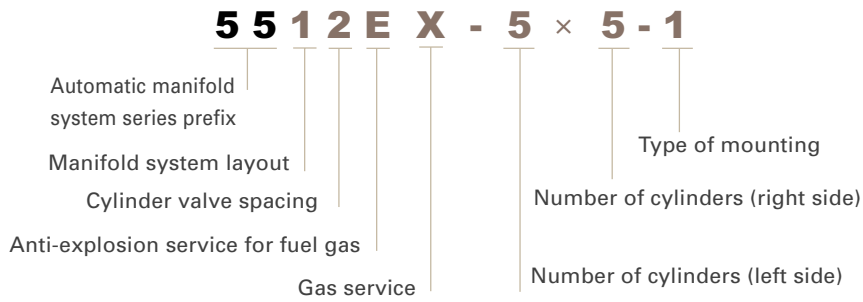
Standard Construction

- ✦ 24" flexible high pressure stainless steel braided pigtails with check valve. Rigid copper pigtails are available as an option. Acetylene models equipped with dry flashback arrestor.
- ✦ For Acetylene or fuel gas model, outlet connection is mounted with dry flashback arrestor (FA30PF). As an option, hydraulic flashback arrestors are available for an additional charge.
- ✦ Gentec's ultra high flow regulator series 153 & 155L.
- ✦ Relief valve for protecting down-stream piping.

SERIES NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5500X	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5500EY	ACETYLENE	400	2-15	3/4" NPT (M)	PIGTAIL, CGA510
5500EF	PROPANE	400	5-125	3/4" NPT (M)	PIGTAIL, CGA510
5500C	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5500IN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5500Q	Air	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

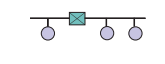
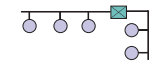
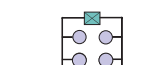
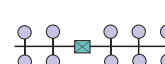
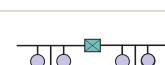
Ordering Information

Please follow the instructions below to select the correct model number.



Note: Direction of piping (Right or Left) is indicated by facing the manifold

Manifold System Layouts

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

Manifold System Layout

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1	STANDARD LAYOUT
2	"L" SHAPE LAYOUT
3	"U" SHAPE LAYOUT
4	CROSSOVER LAYOUT
5	STAGGERED LAYOUT

Cylinder Valve Spacing

PART NUMBER	CYLINDER VALVE SPACING
1	5"
2	10"
3	13"
4	18"

Gas Service

PART NUMBER	GAS SERVICE
X	OXYGEN
Y	ACETYLENE
F	PROPANE
C	CO ₂
IN	Ar, He, N ₂

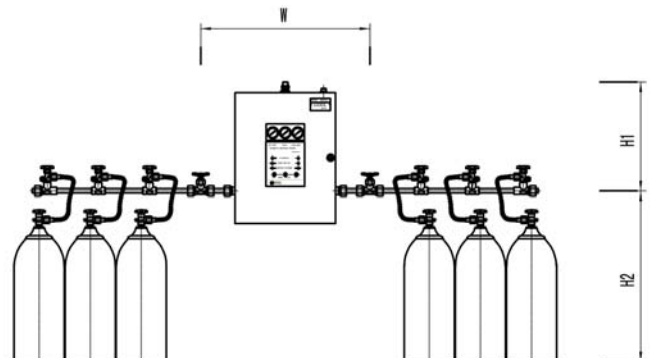
Type of Mounting

PART NUMBER	TYPE OF MOUNTING
1	WALL MOUNT
2	FLOOR MOUNT

Example 5512EX-5x5-1 indicates a 5 x 5 cylinder automatic manifold system. Distance between cylinder is 10" on standard horizontal layout.

Installation Dimensions

GAS SERVICE	W1 (inch)	H1 (inch)	H2 (inch)
OXYGEN, Ar, He, N ₂ , H ₂	22	19	61
ACETYLENE, PROPANE	22	26	61



Digital Automatic Manifold Systems

5500D series digital automatic manifold system is designed to provide an uninterrupted gas supply with an integrated circuit board. The fully automatic manifold system monitors cylinder bank pressure electronically, controls the changover when the primary cylinder bank is depleted, and eliminates the need to manually reset the valve. Even in case of power failure, the system continues to supply gas without interruption.



Features

Automatic Changeover System

- ✦ Fully enclosed, tamper- resistant metal cabinet.
- ✦ Pressure switch control.
- ✦ LED indicators provide system status.

Pipeline

- ✦ Open-styled manifold.
- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ System is designed to accomodate future expansion needs.
- ✦ Unique changeover valve provides continuous supply of gas between primary and reserve banks.
- ✦ Pressure switch port available.
- ✦ Easy Installation.
- ✦ Wall or floor mount available.

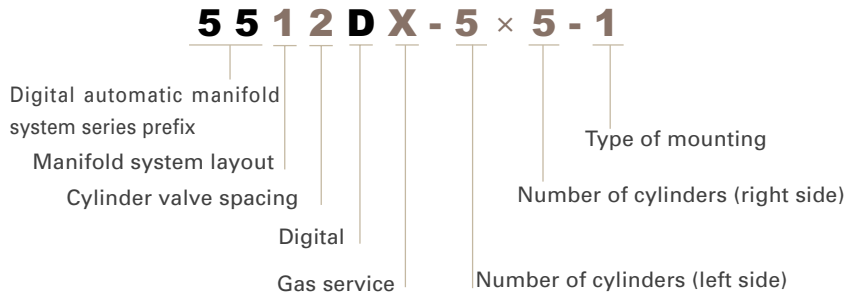
Standard Construction

- ✦ 24" flexible high pressure stainless steel braided pigtails with check valve. Rigid copper pigtails are available as an option.
- ✦ Gentec's ultra high flow regulator series 153 & 155L.
- ✦ Relief valve for protecting downstream piping.

SERIES NUMBER	GAS SERVICE	MAX.INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5500DX	OXYGEN	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA540
5500DC	CO ₂	3000	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5500DIN	Ar, He, N ₂	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA580
5500DN	N ₂ O	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590
5500DQ	Air	3000	10-200	3/4" NPT (M)	PIGTAIL, CGA590

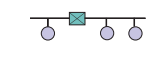
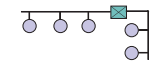
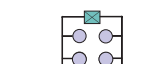
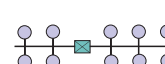
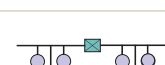
Ordering Information

Please follow the instructions below to select the correct model number.



Note: Direction of piping (Right or Left) is indicated by facing the manifold

Manifold System Layouts

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

Manifold System Layout

PART NUMBER	MANIFOLD SYSTEM LAYOUT
1	STANDARD LAYOUT
2	"L" SHAPE LAYOUT
3	"U" SHAPE LAYOUT
4	CROSSOVER LAYOUT
5	STAGGERED LAYOUT

Cylinder Valve Spacing

PART NUMBER	CYLINDER VALVE SPACING
1	5"
2	10"
3	13"
4	18"

Gas Service

PART NUMBER	GAS SERVICE
X	OXYGEN
C	CO ₂
IN	Ar, He, N ₂
N	N ₂ O

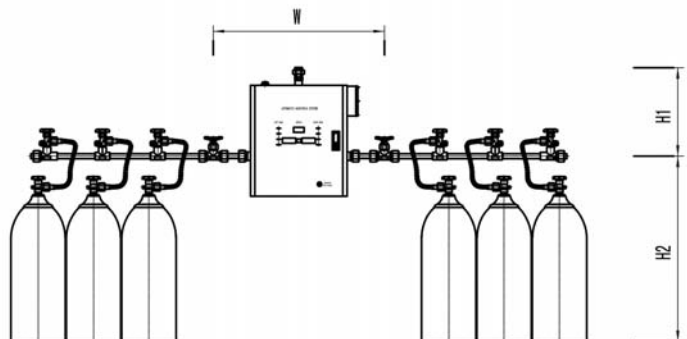
Type of Mounting

PART NUMBER	TYPE OF MOUNTING
1	WALL MOUNT
2	FLOOR MOUNT

Example: 5512DX-5x5-1 indicates a 5 x 5 oxygen cylinder, digital automatic manifold system. Distance between two cylinders is 10" on standard horizontal layout.

Installation Dimension

GAS SERVICE	W1 (inch)	H1 (inch)	H2 (inch)
OXYGEN, Ar, He, N ₂ , CO ₂ , N ₂ O	22	19	61



Semi-Automatic Manifold Systems For Liquid Vessels

5600 series manifold system is designed specifically for liquid vessels to provide an uninterrupted gas supply. When the primary liquid vessel is depleted, 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.



Features

- ✦ Semi-automatic changeover control.
- ✦ Unique changeover valve provide continuous supply of gas between primary and reserve banks.
- ✦ Easy Installation.
- ✦ Relief valve for protecting downstream piping.
- ✦ GENTEC high flow regulator series 153M & 853LC.

MODEL NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	OUTLET CONNECTION	INLET DESCRIPTION
5600X	OXYGEN	500	5-125	3/4" NPT (M)	PIGTAIL, CGA540
5600C	CO ₂	500	5-125	3/4" NPT (M)	PIGTAIL, CGA320
5600IN	Ar, He, N ₂	500	5-125	3/4" NPT (M)	PIGTAIL, CGA580

Note: *The flow rate depends on the number of vessels used and the vaporization rate of gas supplied.*

Ordering Information

Example 5600X indicates oxygen liquid vessels manifold system.

Simplex Changeover Manifolds

Designed for single-sided cylinder manifold systems (right or left).

Inlet connection thread: 1-11 1/2NPS RH(M).

Outlet connection thread: 3/4" NPT(M).

Max.Inlet Pressure: 3000 psig for Oxygen, CO₂, Ar, He, N₂, Air
400 psig for Acetylene, Propane



5200X-00R



5200X-00L

MODEL NUMBER	GAS SERVICE	DESCRIPTION
5200X-00L	OXYGEN	LEFT BANK with RV
5200X-00R	OXYGEN	RIGHT BANK with RV
5200YD-00L	ACETYLENE	LEFT BANK WITH FA (FA30PF) & RV
5200YH-00L	ACETYLENE	LEFT BANK WITH FA (GFA-1000A) & RV
5200YD-00R	ACETYLENE	RIGHT BANK WITH FA (FA30PF) & RV
5200YH-00R	ACETYLENE	RIGHT BANK WITH FA (GFA-1000A) & RV
5200FD-00L	PROPANE	LEFT BANK WITH FA (FA30PF) & RV
5200FH-00L	PROPANE	LEFT BANK WITH FA (GFA-1000LPG) & RV
5200FD-00R	PROPANE	RIGHT BANK WITH FA (FA30PF) & RV
5200FH-00R	PROPANE	RIGHT BANK WITH FA (GFA-1000LPG) & RV
5200C-00L	CO ₂	LEFT BANK with RV
5200C-00R	CO ₂	RIGHT BANK with RV
5200IN-00L	Ar, He, N ₂	LEFT BANK with RV
5200IN-00R	Ar, He, N ₂	RIGHT BANK with RV
5200Q-00L	AIR	LEFT BANK with RV
5200Q-00R	AIR	RIGHT BANK with RV

FA: Flashback Arrestor

RV: Relief Valve

Dual Changeover Manifolds

Designed for dual changeover manifold systems. Inlet connection thread: 1-11 1/2NPS RH(M). Outlet connection thread: 3/4 NPT(M)

Max.Inlet Pressure: 3000 psig for Oxygen, CO₂, Ar, He, N₂, Air.
400 psig for Acetylene, Propane.



5300X-00

MODEL NUMBER	GAS SERVICE	DESCRIPTION
5300X-00	OXYGEN	
5300YD-00	ACETYLENE	WITH FA (FA30PF) with RV
5300YH-00	ACETYLENE	WITH FA (GFA-1000A) with RV
5300FD-00	PROPANE	WITH FA (FA30PF) with RV
5300FH-00	PROPANE	WITH FA (GFA-1000LPG) with RV
5300C-00	CO ₂	with RV
5300IN-00	Ar, He, N ₂	with RV
5300Q-00	AIR	with RV

FA: Flashback Arrestor

RV: Relief Valve

Semi-Automatic Changeover Manifolds

Designed for semi-automatic changeover manifold systems. Outlet connection thread: 3/4" NPT(M). Inlet connection thread: 1-11 1/2NPS RH(M); Max.Inlet Pressure: 3000 psig for Oxygen, CO₂, Ar, He, N₂, Air; 400 psig for Acetylene, Propane.



5400X-00

MODEL NUMBER	GAS SERVICE	DESCRIPTION
5400X-00	OXYGEN	
5400YD-00	ACETYLENE	WITH FA (FA30PF) & RV
5400YH-00	ACETYLENE	WITH FA (GFA-1000A) & RV
5400FD-00	PROPANE	WITH FA (FA30PF) & RV
5400FH-00	PROPANE	WITH FA (GFA-1000LPG) & RV
5400C-00	CO ₂	WITH RV
5400IN-00	Ar, He, N ₂	WITH RV
5400Q-00	AIR	WITH RV
5400H-00	H ₂	WITH RV

FA: Flashback Arrestor

RV: Relief Valve

Manifold Pipings

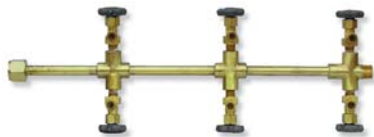
Header extension consists of a gas delivery pipe and header valves. It is expandable for different application requirements.



GHER-310X (right-sided manifold pipings)



GHLE-310X (left-sided manifold pipings)

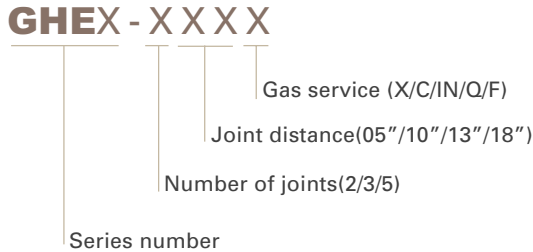


GHCE-310X (dual-sided manifold pipings)

Features

- ✦ Machined with class "A" brass stock.
- ✦ Silver brazing on piping joints for maximum leak prevention.
- ✦ Maximum working pressure: 3000 psig
- ✦ Inlet (Header valve): Fuel Gas - CGA510
Oxygen - CGA540
CO₂ - CGA320
Ar,He,N₂ - CGA580
Air - CGA590
Breathing Air - CGA346
Acetylene-CGA300
- ✦ Outlet: 1-11 1/2NPS
- ✦ GHER, GHLE series designed with inlet connections at every joint.
- ✦ GHCE series designed with 2 inlet connections at every joint.

Ordering Information for Manifold Piping



SERIES NUMBER	PIPING SHAPE & LAYOUT JOINTS	NUMBER OF JOINTS	JOINT DISTANCE	GAS SERVICE
GHER	Right-Sided	2,3,5	5"	X: O ₂ C: CO ₂ IN: Ar, He, N ₂ Q: Air, F: Acetylene Propane BQ: Breathing Air
			10"	
			13"	
GHEL	Left-Sided	2,3,5	18"	
			5"	
			10"	
GHEC	Dual-Sided	2,3,5	13"	
			18"	
			5"	

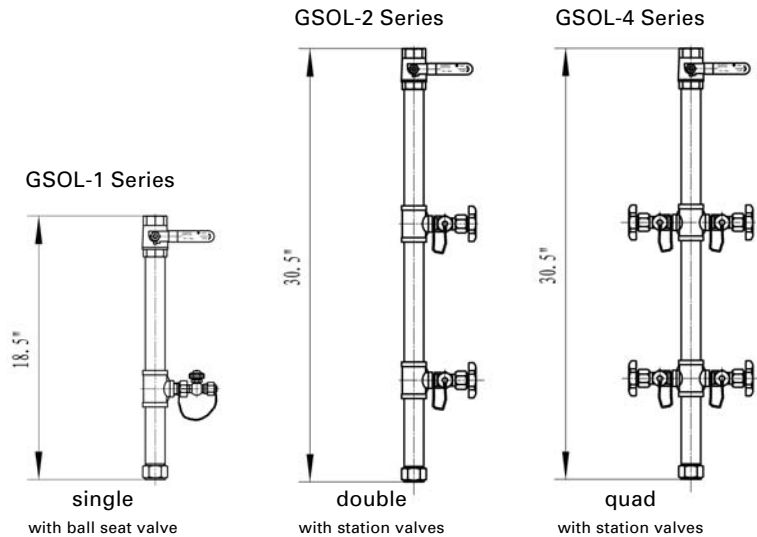
Example: GHER-210X indicates a right side oxygen manifold piping system with 2 joints, and 10" joint distance.

Station Drops

- GSOL series station drops are designed for gas delivery workstations.
- Inlet connection: 1/2" NPT
- Station Regulators are available (page 24)
- In-Line shut-off valves (Ball Valves) are available (page 18)
- Check valves for oxygen and Fuel gases are available (page 18)
- Labeled for Gas Service

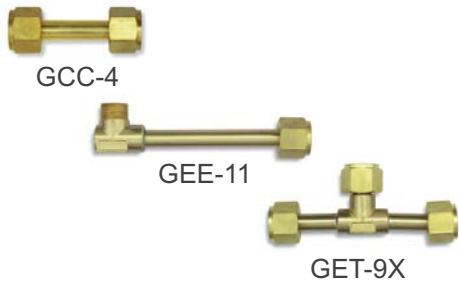


GSOL-2X-R



MODEL NUMBER	GAS SERVICE	NO. OF OUTLET	OUTLET CONNECTION
GSOL-1X-R	OXYGEN	1	Station Valve, 7/8"-14RH(M), CGA024
GSOL-2X-R	OXYGEN	2	Station Valve, 7/8"-14RH(M), CGA024
GSOL-4X-R	OXYGEN	4	Station Valve, 7/8"-14RH(M), CGA024
GSOL-1X-H	OXYGEN	1	Ball Seat Valve, 9/16"-18RH(M), CGA022
GSOL-2X-H	OXYGEN	2	Ball Seat Valve, 9/16"-18RH(M), CGA022
GSOL-4X-H	OXYGEN	4	Ball Seat Valve, 9/16"-18RH(M), CGA022
GSOL-1IN-R	CO ₂ , INLET GAS	1	Station Valve, 7/8"-14RH(F), CGA034
GSOL-2IN-R	CO ₂ , INLET GAS	2	Station Valve, 7/8"-14RH(F), CGA034
GSOL-4IN-R	CO ₂ , INLET GAS	4	Station Valve, 7/8"-14RH(F), CGA034
GSOL-1IN-H	CO ₂ , INLET GAS	1	Ball Seat Valve, 5/8"-18RH(F), CGA032
GSOL-2IN-H	CO ₂ , INLET GAS	2	Ball Seat Valve, 5/8"-18RH(F), CGA032
GSOL-4IN-H	CO ₂ , INLET GAS	4	Ball Seat Valve, 5/8"-18RH(F), CGA032
GSOL-1F-R	FUEL GAS	1	Station Valve, 7/8"-14LH(M), CGA025
GSOL-2F-R	FUEL GAS	2	Station Valve, 7/8"-14LH(M), CGA025
GSOL-4F-R	FUEL GAS	4	Station Valve, 7/8"-14LH(M), CGA025
GSOL-1F-H	FUEL GAS	1	Ball Seat Valve, 9/16"-18LH(M), CGA023
GSOL-2F-H	FUEL GAS	2	Ball Seat Valve, 9/16"-18LH(M), CGA023
GSOL-4F-H	FUEL GAS	4	Ball Seat Valve, 9/16"-18LH(M), CGA023

Pipe Connectors



MODEL NUMBER	LENGTH	INLET CONNECTION	OUTLET CONNECTION	DESCRIPTION
GEE-4	4-1/2"	1-11 1/2 NPS-RH (M)	1-11 1/2 NPS-RH (F)	90° CONNECTOR
GEE-8	8-1/3"	1-11 1/2 NPS-RH (M)	1-11 1/2 NPS-RH (F)	
GEE-11	11-1/3"	1-11 1/2 NPS-RH (M)	1-11 1/2 NPS-RH (F)	T CONNECTOR
GET-9X	8-2/3"	1-11 1/2 NPS-RH (F)	1-11 1/2 NPS-RH (F)	
GCC-4	4"	1-11 1/2 NPS-RH (F)	1-11 1/2 NPS-RH (F)	CONNECTOR
GCC-4L	4"	1-11 1/2 NPS-RH (F)	1-11 1/2 NPS-LH (F)	

Valves & Accessories



GMV-180
Master Valve



GMV-90X
Header Valve



GMV-92X
Station Valve



GMQ-183
Ball Valve



GHFN-X



EN-100A



GCC-A



24-0205



27-CV-IL
In-line check valve

MODEL NUMBER	INLET / OUTLET CONNECTION	GAS SERVICE	DESCRIPTION
GMV-180	1-11 1/2 NPS	*ALL GASES	MASTER VALVES
GMV-90X	CGA540 / 1/2"NPT	O ₂	HEADER VALVES
GMV-90Y	CGA300 / 1/2"NPT	ACETYLENE	
GMV-90F	CGA510 / 1/2"NPT	ACETYLENE, PROPANE	
GMV-90C	CGA320 / 1/2"NPT	CO ₂	
GMV-90IN	CGA580 / 1/2"NPT	N ₂ , Ar, He	
GMV-90Q	CGA590 / 1/2"NPT	Air	
GMV-90BQ	CGA346 / 1/2"NPT	Breathing Air	
GMV-92X	1/2" NPT / 7/8-14 RH (M) (CGA024)	O ₂	STATION VALVES
GMV-92F	1/2" NPT / 7/8-14 LH (M) (CGA025)	ACETYLENE, PROPANE	
GMV-92IN	1/2" NPT / 7/8-14 RH (F) (CGA034)	CO ₂ , Air, N ₂ O, Ar, He	
GMQ-183	1/2" NPT / 1/2" NPT	*ALL GASES	IN-LINE BALL VALVE
GMQ-184	1/2" NPT / 3/4" NPT	*ALL GASES	
27-CV-IL	1/2" NPT(M) / 1/2" NPT(F)	ACETYLENE, PROPANE, O ₂	IN-LINE CHECK VALVE
24-0205	1/4"NPT / 9/16-18RH (CGA022)	O ₂	BALL SEAT VALVES
24-0206	1/4"NPT / 9/16-18LH (CGA023)	ACETYLENE, PROPANE	
24-0215AR	1/4"NPT / 5/8-18RH (CGA032)	CO ₂ , Inert Gas	

*All gases = non-corrosive gases

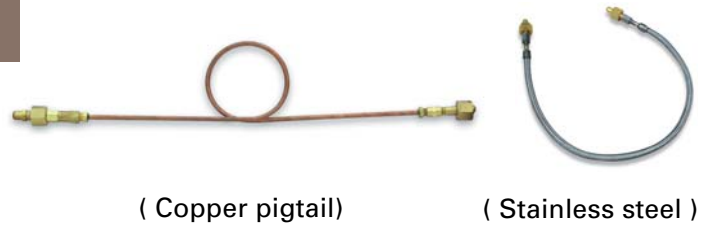
MODEL NUMBER	DESCRIPTION
GHFN-X	NUT 1-11 1/2 NPS RH (F)
GHFN-F	NUT 1-11 1/2 NPS LH (F)
EN-100A	PLUGS
R155-111	UNIONS 1/4" NPT(M) / 1-11 1/2 NPS RH (M)
R155-111A	UNIONS 1/4" NPT(M) / 1-11 1/2 NPS LH (M)
R155-110	UNIONS 1/2" NPT(M) / 1-11 1/2 NPS RH (M)
R155-110A	UNIONS 1/2" NPT(M) / 1-11 1/2 NPS LH (M)
GCC-A	UNIONS 3/4" NPT(M) / 1-11 1/2 NPS RH (M)
GCC-C	UNIONS 3/4" NPT(M) / 1-11 1/2 NPS LH (M)

Relief Valves

MODEL NUMBER	INLET / OUTLET CONNECTION	GAS SERVICE	VENTING PRESSURE (PSI)
27-RV-Y-20	3/4" NPT	ACETYLENE	20
27-RV-F-40	3/4" NPT	FUEL GAS	40
27-RV-F-200	3/4" NPT	FUEL GAS	200
27-RV-IN-600	1/2" NPT	CO ₂ , Inert Gas	600

High Pressure Pigtails

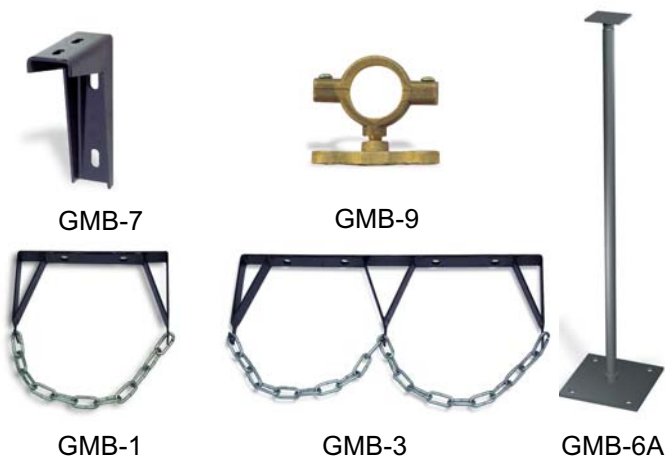
- Rigid copper and flexible stainless steel braided pigtails are available.
- Dry Flash Back Arrestor included in Fuel Gas Models.



MODEL NUMBER	GAS SERVICE	INLET/OUTLET CONNECTION	LENGTH	TYPE	CHECK VALVE	FLASH BACK ARRESTOR
GPF-36X-CV	OXYGEN	CGA540	36"	STAINLESS PIGTAIL (TEFLON HOSE CORE)	Y	N
GPF-24X-CV	OXYGEN	CGA540	24"	STAINLESS PIGTAIL (TEFLON HOSE CORE)	Y	N
GRP-24X-CV	OXYGEN	CGA540	24"	COPPER PIGTAIL	Y	N
GPS-36C-CV	CO2	CGA320	36"	STAINLESS PIGTAIL	Y	N
GPS-24C-CV	CO2	CGA320	24"	STAINLESS PIGTAIL	Y	N
GRP-24C-CV	CO2	CGA320	24"	COPPER PIGTAIL	Y	N
GPS-36IN-CV	Ar,He,N2	CGA580	36"	STAINLESS PIGTAIL	Y	N
GPS-24IN-CV	Ar,He,N2	CGA580	24"	STAINLESS PIGTAIL	Y	N
GRP-24IN-CV	Ar,He,N2	CGA580	24"	COPPER PIGTAIL	Y	N
GPS-36Q-CV	Air	CGA590	36"	STAINLESS PIGTAIL	Y	N
GPS-24Q-CV	Air	CGA590	24"	STAINLESS PIGTAIL	Y	N
GRP-24Q-CV	Air	CGA590	24"	COPPER PIGTAIL	Y	N
GPS-36Q-CV-346	Breathing Air	CGA346	36"	STAINLESS PIGTAIL	Y	N
GPS-24Q-CV-346	Breathing Air	CGA346	24"	STAINLESS PIGTAIL	Y	N
GRP-24Q-CV-346	Breathing Air	CGA346	24"	COPPER PIGTAIL	Y	N
GPS-36Y-FA	Acetylene	CGA510	36"	STAINLESS PIGTAIL	Y	Y
GPS-24Y-FA	Acetylene	CGA510	24"	STAINLESS PIGTAIL	Y	Y
GPS-36Y-FA-300	Acetylene	CGA300	36"	STAINLESS PIGTAIL	Y	Y
GPS-24Y-FA-300	Acetylene	CGA300	24"	STAINLESS PIGTAIL	Y	Y
GPS-36F-FA	Propane	CGA510	36"	STAINLESS PIGTAIL	Y	Y
GPS-24F-FA	Propane	CGA510	24"	STAINLESS PIGTAIL	Y	Y
GRP-24F-FA	Propane	CGA510	24"	COPPER PIGTAIL	Y	Y

Note: End connectors of stainless steel tubings and pigtails are made of brass material.

Cylinder Wall Mounts, Pipe Holders, and Pipe Supports



MODEL NUMBER	DESCRIPTION
GMB-1	SINGLE CYLINDER WALL MOUNT (9" wide)
GMB-2	SINGLE CYLINDER WALL MOUNT (14" wide)
GMB-3	DUAL CYLINDER WALL MOUNT (9" wide)
GMB-4	DUAL CYLINDER WALL MOUNT (14" wide)
GMB-6A	PIPE SUPPORT (61")
GMB-7	PIPE HOLDER Bracket
GMB-9	PIPE HOLDER

Hydraulic Flashback Arrestors

Hydraulic Flash Arrestor is designed for use on Acetylene or Fuel Gas Manifold Systems to protect the main gas supply from the dangers of reverse flow and flashbacks. A pressure relief valve is included to provide additional protection from excessive pressure.



GFA-300A Flashback Arrestor GFS-300 Stand

MODEL NUMBER	GAS SERVICE	DELIVERY FLOW (SCFH)	RELIEF VALVE VENT PRESSURE (PSI)	INLET/OUTLET CONNECTION
GFA-1000A	ACETYLENE	1000	20	1 1/2" NPT
GFA-1000LPG	PROPANE, LPG	1000	40	1 1/2" NPT
GFA-300A	ACETYLENE	300	20	1 1/2" NPT
GFA-300LPG	PROPANE, LPG	300	40	1 1/2" NPT
GFS-1000	STAND FOR GFA-1000A & GFA-1000LPG			
GFS-300	STAND FOR GFA-300A & GFA-300LPG			

In-line Low Pressure Flashback Arrestors

Designed for use on Acetylene or Fuel Gas Manifold Systems with low pressure piping system to protect the main gas supply from the dangers of reverse flow and flashbacks by stainless steel sintered elements and check valves.



FA30PO

MODEL NUMBER	GAS SERVICE	WORKING PRESSURE (psi)	DELIVERY FLOW (SCFH)	INLET CONNECTION	OUTLET CONNECTION
FA30PF	ACETYLENE, PROPANE	22	2450	3/4" NPT (F)	3/4" NPT (F)
FA30PO	OXYGEN	145	5700	3/4" NPT (F)	3/4" NPT (F)

High Pressure Flashback Arrestors

Designed for use on Acetylene or Fuel Gas Manifold Systems with high pressure piping system to protect the main gas supply from the dangers of reverse flow and flashbacks. Stainless steel sintered elements and check valves are constructed for additional protection.



FA40HPF

MODEL NUMBER	GAS SERVICE	MAX.INLET PRESSURE (psi)	INLET CONNECTION	OUTLET CONNECTION
FA40HPF	ACETYLENE, PROPANE	400	1/4" NPT (F)	1/4" NPT (M)

Pressure Switches (Explosion-Proof Type)

Pressure switches are designed for gas manifold systems to activate remote alarm systems. Operates when cylinder/line pressure is below minimum pressure setting.



Explosion-Proof Type

MODEL NUMBER	PRESSURE RANGE (psi)	MAX.INLET PRESSURE (psi)	PRESSURE CONNECTION	EXPLOSION-PROOF TYPE
GHPS-1	5-50	500	1/4" NPT	NO
GHPS-2	30-600	1500	1/4" NPT	NO
GHPS-3	100-1500	2200	1/4" NPT	NO
GHPS-4	400-1500	4500	1/4" Female NPT	YES
GHPS-5	15-75	1000	1/4" Female NPT	YES
GHPS-6	50-450	3000	1/4" Female NPT	YES
GHPS-7	2-25	1000	1/4" Female NPT	YES

Remote Alarm Panels

Remote alarm panel is suitable for all manifold systems. The alarm is activated to provide audio and visual warning when the service bank is exhausted. A press of reset button in front of the panel will silence the buzzer. The red alarm light will remain illuminated until the exhausted bank gets replaced.



MODEL NUMBER	TYPE	NO,OF GASES
SGPA-1	AUDIO & VISUAL ALARM	1
SGPA-1-V	VISUAL ALARM	1
SGPA-2	AUDIO & VISUAL ALARM	2
SGPA-4	AUDIO & VISUAL ALARM	4

Regulator Flashback Arrestors

Designed for mounting on the regulator outlet. Internal stainless steel sintered elements and check valves are constructed to provide protection from flashbacks.



FA7RF



FA7RO

MODEL NUMBER	GAS SERVICE	WORKING PRESSURE (psi)	INLET CONNECTION	OUTLET CONNECTION
FA7RF	ACETYLENE PROPANE	15	9/16-18 LH (F)	9/16-18 LH (M)
FA7RO	OXYGEN	145	9/16-18 UNF-RH (F)	9/16-18 RH (M)

Quick Connectors with Check Valves

Designed with a check valve to provide protection from backflow during gas cutting processes.



RH14X



RH19X

MODEL NUMBER	GAS SERVICE	WORKING PRESSURE (psi)	INLET CONNECTION	OUTLET CONNECTION
RH14X	OXYGEN	145	9/16-18 RH (F)	9/16-18 RH (M)
RH14F	FUEL GAS	30	9/16-18 LH (F)	9/16-18 LH (M)
RH18X	OXYGEN	145	9/16-18 RH (F)	1/4" HOSE NIPPLE
RH18F	FUEL GAS	30	9/16-18 LH (F)	1/4" HOSE NIPPLE

Flowmeters

Precision gas flow control for MIG and TIG welding, laboratorial, and other industrial applications. Suitable for use on piping systems.



191FM-60

MODEL NUMBER	GAS SERVICE	WORKING PRESSURE (psi)	FLOWRATE	INLET CONNECTION	OUTLET CONNECTION
191FM-60	Ar / CO2	50	10-60SCFH	1/4"NPT (M)	5/8"-18 RH (F)
191FM-60A	Ar / CO2	50	10-60SCFH	9/16"-18 RH (F)	5/8"-18 RH (F)
191FM-100	Ar / CO2	50	20-100SCFH	1/4"NPT (M)	5/8"-18 RH (F)
191FM-100A	Ar / CO2	50	20-100SCFH	9/16"-18 RH (F)	5/8"-18 RH (F)
191FM-70	Nitrogen / Air	50	10-70SCFH	1/4"NPT (M)	5/8"-18 RH (F)
191FM-70A	Nitrogen / Air	50	10-70SCFH	9/16"-18 RH (F)	5/8"-18 RH (F)
191FM-50	Helium	50	10-50SCFH	1/4"NPT (M)	5/8"-18 RH (F)
191FM-50A	Helium	50	10-50SCFH	9/16"-18 RH (F)	5/8"-18 RH (F)
191FM-150	Helium	50	20-150SCFH	1/4"NPT (M)	5/8"-18 RH (F)
191FM-150A	Helium	50	20-150SCFH	9/16"-18 RH (F)	5/8"-18 RH (F)
191FM-75	Hydrogen	50	15-75SCFH	1/4"NPT (M)	9/16"-18 LH (M)
191FM-75A	Hydrogen	50	15-75SCFH	9/16"-18 LH (F)	9/16"-18 LH (M)
191FM-200	Hydrogen	50	40-200SCFH	1/4"NPT (M)	9/16"-18 LH (M)
191FM-200A	Hydrogen	50	40-200SCFH	9/16"-18 LH (F)	9/16"-18 LH (M)



155MY-15



153MC-125

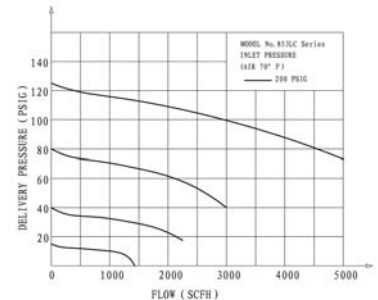
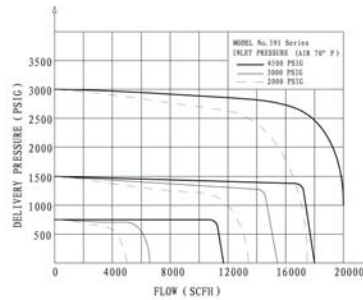
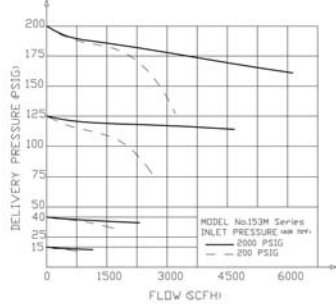
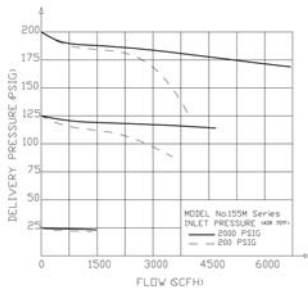


591X-750-A



853LCX-125

SERIES	MODEL NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	INLET CONNECTION	OUTLET CONNECTION
155M SERIES	155MX-125	OXYGEN	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MX-200		3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MY-15	ACETYLENE	400	2-15	1-11 1/2 NPS RH (M)	1-11 1/2 NPS LH (F)
	155MF-40	LPG	400	2-40	1-11 1/2 NPS RH (M)	1-11 1/2 NPS LH (F)
	155MIN-125	Ar, He, N ₂	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MIN-200		3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MQ-125		3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MQ-200	AIR	3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MC-125	CO ₂	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	155MC-200		3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
153M SERIES	153MX-125	OXYGEN	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MX-200		3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MY-15	ACETYLENE	400	2-15	1-11 1/2 NPS LH (M)	1-11 1/2 NPS LH (F)
	153MF-40	LPG	400	2-40	1-11 1/2 NPS LH (M)	1-11 1/2 NPS LH (F)
	153MF-125	LPG	400	5-125	1-11 1/2 NPS LH (M)	1-11 1/2 NPS LH (F)
	153MIN-125	Ar, He, N ₂	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MIN-200		3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MQ-125		3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MQ-200	AIR	3000	10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	153MC-125	CO ₂	3000	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
153MC-200	3000		10-200	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)	
591-A SERIES	591X-750-A	OXYGEN	3000	50-750	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591X-1500-A		3000	100-1500	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591X-3000-A		3000	200-3000	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591X-4500-A		5500	200-3000	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591IN-1500-A	Ar, He, N ₂	3000	100-1500	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591IN-3000-A		3000	200-3000	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591IN-4500-A		5500	300-4500	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591Q-1500-A	AIR	3000	100-1500	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591Q-3000-A		3000	200-3000	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	591Q-4500-A		5500	300-4500	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
853LC SERIES	853LCX-125	OXYGEN	500	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	853LCCD-125	CO ₂	500	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)
	853LCIN-125	Ar, N ₂	500	5-125	1-11 1/2 NPS RH (M)	1-11 1/2 NPS RH (F)





155LX-80

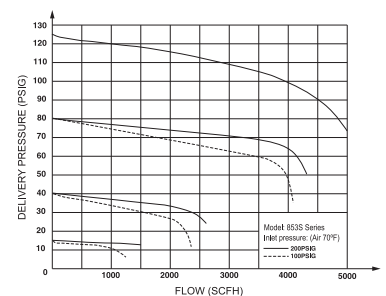
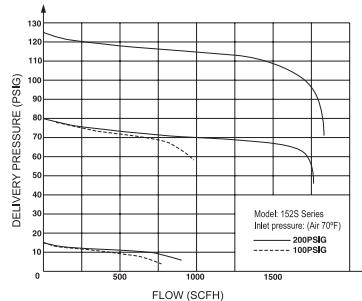
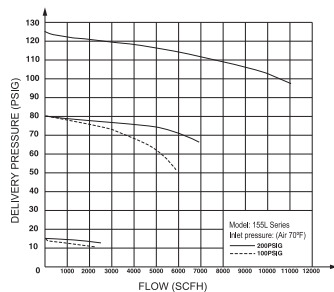


152SX-80



853SRIN-40

SERIES	MODEL NUMBER	GAS SERVICE	MAX. INLET PRESSURE (psi)	DELIVERY PRESSURE (psi)	INLET CONNECTION	OUTLET CONNECTION
155L SERIES	155LX-80		350	3-80	3/4" NPT (F)	3/4" NPT (F)
	155LX-125	OXYGEN	350	5-120	3/4" NPT (F)	3/4" NPT (F)
	155LX-200		350	10-200	3/4" NPT (F)	3/4" NPT (F)
	155LY-15	ACETYLENE	350	2-15	3/4" NPT (F)	3/4" NPT (F)
	155LF-125	LPG	350	5-120	3/4" NPT (F)	3/4" NPT (F)
	155LUN-80		350	3-80	3/4" NPT (F)	3/4" NPT (F)
	155LUN-125	Ar, He, N ₂	350	5-120	3/4" NPT (F)	3/4" NPT (F)
	155LUN-200		350	10-200	3/4" NPT (F)	3/4" NPT (F)
	155LQ-80		350	3-80	3/4" NPT (F)	3/4" NPT (F)
	155LQ-125	AIR	350	5-120	3/4" NPT (F)	3/4" NPT (F)
	155LQ-200		350	10-200	3/4" NPT (F)	3/4" NPT (F)
	155LC-125	CO ₂	350	5-120	3/4" NPT (F)	3/4" NPT (F)
152L SERIES	152LX-125	OXYGEN	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	152LY-15	ACETYLENE	350	2-15	1/4" NPT (F)	1/4" NPT (F)
	152LF-80	LPG	350	3-80	1/4" NPT (F)	1/4" NPT (F)
	152LUN-125	Ar, He, N ₂	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	152LQ-125	AIR	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	152LC-125	CO ₂	350	5-120	1/4" NPT (F)	1/4" NPT (F)
853L SERIES	853LX-125	OXYGEN	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	853LY-15	ACETYLENE	350	2-15	1/4" NPT (F)	1/4" NPT (F)
	853LF-80		350	3-80	1/4" NPT (F)	1/4" NPT (F)
	853LF-125	LPG	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	853LUN-125	Ar, He, N ₂	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	853LQ-125	AIR	350	5-120	1/4" NPT (F)	1/4" NPT (F)
	853LC-125	CO ₂	350	5-120	1/4" NPT (F)	1/4" NPT (F)
152S SERIES	152SX-40		200	2-40	7/8-14 RH (F)	9/16-18 RH (M)
	152SX-80	OXYGEN	200	4-80	7/8-14 RH (F)	9/16-18 RH (M)
	152SX-125		200	5-125	7/8-14 RH (F)	9/16-18 RH (M)
	152SY-15	ACETYLENE	200	2-15	7/8-14 LH (F)	9/16-18 LH (M)
	152SF-80		200	4-80	7/8-14 LH (F)	9/16-18 LH (M)
	152SF-125	LPG	200	5-125	7/8-14 LH (F)	9/16-18 LH (M)
	152SIN-40		200	2-40	7/8-14 RH (M)	5/8-18 RH (F)
	152SIN-80	AIR	200	4-80	7/8-14 RH (M)	5/8-18 RH (F)
	152SIN-125	INERT GAS	200	5-125	7/8-14 RH (M)	5/8-18 RH (F)
	152SIN-40FG	CO ₂	200	0-40 SCFH	7/8-14 RH (M)	5/8-18 RH (F)
	853S SERIES	853SF-80	LPG	200	4-80	7/8-14 LH (F)
853SX-40			200	2-40	7/8-14 RH (F)	9/16-18 RH (M)
853SX-80		OXYGEN	200	4-80	7/8-14 RH (F)	9/16-18 RH (M)
853SX-125			200	5-125	7/8-14 RH (F)	9/16-18 RH (M)
853SY-15		ACETYLENE	200	2-15	7/8-14 LH (F)	9/16-18 LH (M)
853SR SERIES	853SRF-80	LPG	200	4-80	7/8-14 LH (F)	9/16-18 LH (M)
	853SRIN-80	INERT GAS	200	4-80	7/8-14 RH (F)	5/8-18 RH (F)
	853SRIN-125	CO ₂	200	5-125	7/8-14 RH (F)	5/8-18 RH (F)
	853SRX-80		200	4-80	7/8-14 RH (F)	9/16-18 RH (M)
	853SRX-125	OXYGEN	200	5-125	7/8-14 RH (F)	9/16-18 RH (M)
	853SRY-15	ACETYLENE	200	2-15	7/8-14 LH (F)	9/16-18 LH (M)
155S SERIES	155SF-80	LPG	350	4-80	1-11 1/2 NPS LH (F)	7/8-14 LH (M)
	155SX-125	OXYGEN, INERT GAS, CO ₂	350	5-125	1-11 1/2 NPS RH (F)	7/8-14 RH (M)
	155SY-15	ACETYLENE	350	2-15	1-11 1/2 NPS LH (F)	7/8-14 LH (M)



CRYOGENIC VESSEL

What you need to know?

- Vaporization Rate: Typically 250 to 350 SCFH.
- Outlet Pressure: Typically 125 PSIG, 300 PSIG Models are also available.
- Evaporization Rate: Up to 3% per day will vent to atmosphere.
- Temperature: Vaporizing gas is very cold. Approximately -300° Fahrenheit.

Warning: Multiple liquid cylinder manifolds MUST have the pressure building regulator of each vessel set at the same pressure to insure proper cylinder withdrawal.

HOW MANY CYLINDERS DO I NEED?

Example Of Argon Mix Manifold System At A Mig Welding Shop:

- (250 CF/Cylinder) less 20 CF Left in Cylinder due to auto changeover leaves 230 CF/ Cylinder. 250 CF if its a manual changeover system.

(28 CFH/Station) x 6.5 Hours/Day x 50% Duty Cycle = 91.0 CF/Day/Station

- 91.0 CF/Day/Station x 8 Welding Stations - 728 CF/Day

$$\frac{728 \text{ CF/Day}}{230 \text{ CF/Cylinder}} = 3.16 \text{ Cylinders/Day}$$

$$\frac{12 \text{ Cylinders per Header}}{3.16 \text{ Cylinders/Day}} = 3.8 \text{ Days per Header} \times 2 \text{ Headers} = \text{Maximum 7.6 Days between deliveries}$$

- Minimum Gas supply of 1 day required. Thus, in order to get gas delivery once a week (ie. every Wednesday) we need 24 cylinders of cylinders delivered every seven days in order to have continuous, uninterrupted service with an automatic changeover manifold. Formula on page 7 under "Determining the Right Manifold for your Application."

MANIFOLD SYSTEMS

- **Dual Manifold Systems**
- **Simplex Manifold Systems**
- **Single Manifold Systems**
- **Semi-Automatic Manifold Systems**
- **Automatic Manifold Systems**
- **Semi-Automatic Manifold For Liquid Vessels**

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