

Gas Delivery Equipment

SourceTrak[™] Manifold Systems (53 & 54 Manifold Series)



The SourceTrak™ Manifold System distributes gas safer and more efficiently.

Introduction

Matheson's SourceTrak[™] Manifold Systems offer a safe and efficient method of connecting multiple cylinders to a common gas supply line to provide centralized distribution of gas for both high and low purity delivery requirements. SourceTrak[™] Manifold Systems can be used as a manually operated system in conjunction with a line regulator to regulate downstream delivery pressure, or they can be used as an integrated part of Matheson's Automatic Switchover Systems (see SwitchPro[™]). Utilizing SourceTrak[™] Manifold Systems for the distribution of gas provides greater safety in the cylinder storage area by reducing repetitive cylinder handling and also minimizes the risk of ambient contamination within the gas delivery network.

The SourceTrak[™] Manifold Systems can be furnished in brass or stainless steel materials to provide delivery service for a broad range of gases and are rated for pressures of up to 3000 psig. All SourceTrak[™] Manifold Systems are single row configurations and are provided with the manifold piping, station (diaphragm) valves, 3-ft. flex hose, integral check valves, and manifold mounting brackets/clamps as standard components. The SourceTrak[™] Manifold Systems are designed for "right side" cylinder set-up, where the gas flows from right to left through the manifold piping. (Left side set-up available as an option).

Applications

• Control gas delivery from multiple cylinders within a centralized distribution system providing safer and more efficient delivery of gas with the flexibility to address customized applications.

Design Features

- Ideal for High (UHP 99.999%+) or Low Purity Gas Delivery available in brass or 316 stainless steel materials.
- Provides gas delivery for up to '4' cylinders (standard) or up to '10' cylinders (optional).
- Maximum delivery pressure up to 3000 psig.
- Manifold gas outlet connection is CGA compatible for Regulator attachment.
- Design allows convenient access to all components.
- Compact design is cost effective to implement and install.
- Manifold support brackets/clamps compatible for use with U-Channel frames.
- Optional features allow custom design for specific gas delivery applications.

Recommendations for Proper Application & Use of Manifold Systems

- Manifolds should be used for distribution of a single gas during the entire life of the manifold. It is not recommended to change the gas service of the manifold.
- 2) Manifolds should always be used to distribute a single gas and should never be used to mix gases.
- 3) All Manifold pigtails should contain integral check valves as a safety measure. The use of a check valve should never be construed as a substitute for closing the Manifold station valve.
- 4) All standard Matheson Manifold Systems are constructed on 12" cylinder centers (station valve to station valve) to provide maximum support, stability and cylinder clearance. The end-user should never modify or change the dimensions and/or components of any Manifold System without authorization from Matheson.
- 5) Matheson has designed the SourceTrak[™] Manifold Systems to meet a broad range of gas distribution needs and applications; however, Matheson welcomes the opportunity to quote and construct custom designs suited to a specific application.



SourceTrak[™] Manifold Systems (53 & 54 Manifold Series) (continued)

Specifications

Standard Gases Delivered*:

Inerts	580 CGA
Flammables	350 CGA
Carbon Dioxide	320 CGA

*NOTE: The CGA's shown above represent common gases used in the laboratory environment and are not exclusive for use with the SourceTrak[™] Manifold System. Many gases using CGA's other than those listed are compatible for use with Manifold Systems. Please consult a Matheson Tri-Gas customer service representative for ordering a SourceTrak[™] Manifold System for a gas which is not listed.

Wetted Components:	Brass or 316 Stainless Steel
Maximum Inlet Pressure:	3000 psig
	(depending upon CGA rating)
Manifold Outlet Connection:	CGA Bushing –
	Brass or Stainless Steel

Standard SourceTrak™ System Assembly

Cylinder Stations are located on 12" centers.



SourceTrak's[™] configuration permits easy access to change out cylinders and maintain continuous gas delivery (Regulator is ordered separately)

Standard Features

Standard Manifold System Components*

- Manifold Piping
- (Manual) Diaphragm Station Valves (1 per cylinder station)
- 3-ft. Flex Hoses with integral check valves
- Right Side Cylinder Set-Up (gas outlet is at left side)
- Mounting Brackets & Clamps

*NOTE: Pressure regulators are not included as a standard item and must be ordered separately. Consult with a Matheson Tri-Gas customer service representative to select the optimum regulator to satisfy your gas delivery pressure requirements.

Don't See What You Want Below?

Matheson offers a complete line of SourceTrak[™] Manifold Systems. Our standard, most common configuration options are listed below. However, if you don't see what you're looking for, contact a Matheson Tri-Gas customer service representative and ask to speak with your local equipment sales support specialist. They can help you configure a SourceTrak[™] Manifold that meets your specific requirements.

Options include:

- Up to ten Cylinders
- Rigid Pigtails
- 6 ft. Flex Hoses
- Cylinder Holder with Strap
- Cylinder Holder (with Strap or with Strap and Chain)
- Vent Valve
- Master Valve
- Left Side Cylinder Set Up
- Eliminate Check Valves
- NFPA Label and Mounting Plate
- CGA Handles

Model			No. of
Number	Material	Gas / CGA	Cylinders
53-28T	Brass	Inert / CGA 580	2
53-38T	Brass	Inert / CGA 580	3
53-48T	Brass	Inert / CGA 580	4
53-28V	Brass	Flammable / CGA 350	2
53-38V	Brass	Flammable / CGA 350	3
53-48V	Brass	Flammable / CGA 350	4
53-28W	Brass	Carbon Dioxide / CGA 320	2
53-38W	Brass	Carbon Dioxide / CGA 320	3
53-48W	Brass	Carbon Dioxide / CGA 320	4

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Model Number	Material	Gas / CGA	No. of Cylinders
54-28T	Stainless Steel	Inert / CGA 580	2
54-38T	Stainless Steel	Inert / CGA 580	3
54-48T	Stainless Steel	Inert / CGA 580	4
54-28V	Stainless Steel	Flammable / CGA 350	2
54-38V	Stainless Steel	Flammable / CGA 350	3
54-48V	Stainless Steel	Flammable / CGA 350	4
54-28W	Stainless Steel	Carbon Dioxide / CGA 320	2
54-38W	Stainless Steel	Carbon Dioxide / CGA 320	3
54-48W	Stainless Steel	Carbon Dioxide / CGA 320	4

