

Equipment Quick Reference Guide



MATHESON

ask. . .The Gas Professionals™

Model 18 Series

Single-Stage General Purpose Brass Regulator



General purpose regulators with rugged construction for use with non-corrosive gases.

Neoprene Diaphragms

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
18A-510**	0-15 psig	0-30 psig	0-400 psig
18B-CGA	0-15 psig	0-30 psig	0-4000 psig
18-CGA	2-50 psig	0-60 psig	0-4000 psig
18L-CGA	4-100 psig	0-150 psig	0-4000 psig
18H-CGA	10-200 psig	0-400 psig	0-4000 psig
18R-CGA***	20-500 psig	0-1000 psig	0-4000 psig

*Note: Some CGA limitations may apply.

**For Acetylene Service Only

***Uses Tee handle. All other models use black knob as shown.

Model 81 Series

Dual-Stage Deluxe General Purpose Brass Regulator



General purpose regulators constructed for use with non-corrosive gases.

Neoprene Diaphragms

Ordering Information

Model No.	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
81L-CGA	2-15 psig	0-30 psig	0-3000 psig
81LA-510**	2-15 psig	0-15 psig	0-400 psig
81-CGA	4-50 psig	0-100 psig	0-3000 psig
81H-CGA	10-125 psig	0-200 psig	0-3000 psig
81-250-CGA	20-250 psig	0-400 psig	0-3000 psig

*Note: Some CGA limitations may apply.

**Acetylene service only

Model 1250 Series

Dual-Stage Brass Regulator



High purity regulators constructed for use with non-corrosive gases.

Stainless Steel Diaphragms

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
1251-CGA	2-15 psig	0-30 psig	0-4000 psig
1252-CGA	4-50 psig	0-100 psig	0-4000 psig
1253-CGA	10-125 psig	0-200 psig	0-4000 psig
1254-CGA	20-250 psig	0-400 psig	0-4000 psig

*Note: Some GCA limitations may apply.

Model 3020, 3030 and 3040 Series

Single-Stage High-Purity/High Delivery Pressure Brass Regulators



High-purity brass regulators designed for delivery pressures up to 2500 psig.

3020: Stainless Steel Diaphragm
3030: Piston Regulator
3040: Piston Regulator

Ordering Information

Model No.	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3020-CGA	20-500 psig	0-1000 psig	0-3000 psig
3030-CGA	100-1500 psig	0-2000 psig	0-4000 psig
3040-CGA	100-2500 psig	0-3000 psig	0-4000 psig

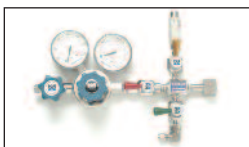
Model 3210 Series

Single-Stage Deluxe Corrosion Resistant Monel Regulator



Corrosive service regulators constructed of Monel for superior corrosion resistance.

Monel Gauges, Body, Diaphragm and Valve Spring



Shown with optional cross purge.

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3215A-CGA	1-50 psig	0-100 psig	none
3216A-CGA	3-200 psig	0-300 psig	none
3217A-CGA	1-50 psig	0-100 psig	0-1000 psig

**Note: Some CGA limitations may apply.*

Model 3530 Series

Single-Stage High Purity Brass Regulator



High purity brass regulators designed for economical analytical applications using non-corrosive gases.

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3537-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3538-CGA	2-30 psig	30" vac-0-60 psig	0-1000 psig
3539-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3536-CGA	10-250 psig	0-400 psig	0-3000 psig

**Note: Some CGA limitations may apply.*

Model 3510 Series

Single-Stage High-Purity Stainless Steel Regulator



High purity regulators designed for analytical applications using non-corrosive or low PPM corrosive mixture gases.

Stainless Steel Diaphragm

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3510-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3513-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3515-CGA	4-100 psig	30" vac-0-200 psig	0-1000 psig
3516-CGA	10-250 psig	30" vac-0-300 psig	0-3000 psig
3517-CGA	20-500 psig	0-1000 psig	0-3000 psig

*For No Lube applications, specify Model Numbers 35XX-NL-CGA.

Model 3610A Series

Single-Stage High-Purity Stainless Steel Regulator with Tied Diaphragm



High-purity regulators designed for analytical applications using corrosive, toxic, or pyrophoric gases.

Stainless Steel Diaphragm

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3610A-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3611A-N/I	2-30 psig	30" vac-0-60 psig	30" vac-0-300 psig
3612A-CGA	2-30 psig	30" vac-0-60 psig	0-1000 psig
3613A-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3615A-CGA	4-100 psig	30" vac-0-200 psig	0-1000 psig

*Note: Some CGA limitations may apply.

Model 3120 Series

Dual-Stage High-Purity Brass Regulator



High-purity brass regulators designed for use with analytical applications.

Stainless Steel Diaphragm

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3121-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3122-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3126-CGA	10-250 psig	0-400 psig	0-3000 psig
3128-CGA	15-350 psig	0-1000 psig	0-3000 psig

*Note: Some CGA limitations may apply.

Model 3810 Series

Dual-Stage High-Purity Stainless Steel Regulator



High-purity regulators designed for analytical applications using non-corrosive or Low PPM corrosive mixture gases.

Stainless Steel Diaphragm

Ordering Information

Model No.*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3810-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3813-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3816-CGA	10-250 psig	0-400 psig	0-3000 psig
3818-CGA	15-350 psig	0-600 psig	0-3000 psig

For No Lube applications, specify Model Numbers 35XX-NL-CGA.

*Note: Some CGA limitations may apply.

Model DR492

On-Demand Regulator



This simple-to-use regulator makes calibration quick and easy by eliminating the need for sample bags, syringes, canisters, flow meters, or special operator training.

Simply connect to the calibration gas cylinder, and

connect the regulator outlet to the instrument sample pump. 3/16" hose barb out.

Ordering Information

Model No.*	Inlet
DR492-AV-350-H	CGA 350
DR492-AV-4PF-H	1/4" NPTF
DR492-AV-580-H	CGA 580
DR492-AV-C10-H	C10

*Other inlet/outlet fittings available.

Model 4900 Series

Single Stage Corrosion Resistant Stainless Steel, Monel, Hastelloy Regulator



High purity, single stage regulator with tied diaphragm and Hastelloy trim for use with high vapor pressure corrosive gases. Convuluted diaphragm provides sensitivity, minimum droop.

Stainless Steel Diaphragm

Ordering Information

Model No.	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
4903-660	2-50 psig	100 psig	300 psig
4905-CGA	2-50 psig	100 psig	3000 psig
4915-CGA	2-50 psig	100 psig	1000 psig
4920-CGA	10-200 psig	300 psig	3000 psig
4921-CGA	10-200 psig	300 psig	1000 psig

Options

Model No.	Description
4775-CGA	Cross Purge Assembly

Model 6103A and 6104A Series

Flash Arrestors



6103A Model



6104A Model

The Model 6103A Series is constructed of brass and neoprene with a stainless flame barrier, and is ideal for protecting fuel systems in laboratory applications.

The Model 6104A Series is constructed of stainless steel, Teflon, and Viton, and is designed for use in high purity flammable gas applications.

Ordering Information

Model No.		Inlet Connection	Outlet Connection
6103A-F	Flammable	1/4" NPT F	1/4" NPT F
6103A-FL	Flammable	9/16"-18 LH F	9/16"-18 LH M
6103A-O	Oxidizer	1/4" NPT F	1/4" NPT F
6103A-OR	Oxidizer	9/16"-18 RH F	9/16"-18 RH M
6104A*	Both	1/4" NPT F	1/4" NPT M
6104A-V4M [‡]	Both	1/4" VCR M	1/4" VCR M

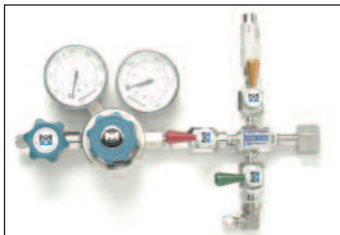
*Flash Arrestor ships with labels for flammables and oxidizers for the user to install
 ‡Male VCR x 1/4" NPT, threaded and teflon taped

Purge Assemblies

A purge assembly is recommended for use with toxic, corrosive, or flammable gases. The cross purge and tee purge assemblies help to ensure safety when working with hazardous gases. The tee purge is used for general purpose corrosive or hazardous applications; the cross purge is intended for use with high purity applications where preventing contamination is critical. The cross purge also protects the system from atmospheric contamination.

Models 4774 and 4775

Cross Purge Assemblies



Model 4774 Cross Purge Assembly shown with regulator attached; please order regulator separately

Ordering Information

Model No.	Material
4774-CGA	All 316 Stainless Steel
4775-CGA	Aluminum-Silicon-Bronze Valves with Monel Block and Check Valve

Models 4753 and 4754

Tee Purge Assemblies



Ordering Information

Model No.	Material	Valve
4753-350	Brass	MM 4373B
4753-510	Brass	MM 4373B
4754-350	Stainless Steel	MM 4374B
4754-510	Stainless Steel	MM 4374B

MATHESON-Kitagawa Toxic Gas Detector System

The MATHESON-Kitagawa Toxic Gas Detector System is a complete “sampling and analysis” kit for on-the-spot readings. It is an excellent method for day-to-day checking, screening, QC in the lab or plant and spot testing. Non-technical employees can operate the MATHESON-Kitagawa System with a minimum of training. Tubes to be purchased separately.



Ordering Information

Model No.	Description
8014KB	Toxic Gas Detector Kit - with 400B Pump (SEI approved), Spare Parts, Carrying Case and Instruction Card. Order tubes separately.

Model 8066

LeakHunter Plus™

The MATHESON Model 8066 is a truly universal leak detector. Extensive R&D efforts have resulted in a multi-functional leak detector specially engineered to perform superbly in both portable and benchtop applications. It is designed to both locate and measure a wide variety of gas leaks quickly, precisely and cleanly.



Ordering Information

Model No.	Description
8066	LeakHunter Plus™ Complete with “Flex-and-Stay” Standard and Extension Probes, 115 VAC Adapter/Charger w/NiCad Battery, Durable Carrying Case

Portable Monitors

The 01 Series are personal, single gas monitors designed for personal protection from combustible hydrocarbons, Oxygen deficiency, Hydrogen Sulfide, or Carbon Monoxide.

The GX-2003 is a personal 5-in-1 monitor with sample pump. Available configured with 1-5 sensors for LEL

combustibles, Oxygen deficiency, Carbon Monoxide, Hydrogen Sulfide or 100% Methane.



The GX-2009 is the smallest and lightest 4 gas monitor in the world. It monitors and displays combustibles, Oxygen, Carbon Monoxide, and Hydrogen Sulfide. Waterproof and dustproof design with IP67 rating.

Visit our website at www.mathesongas.com for a complete listing of all models and configurations.

The Gas Sniper Portable Gas Detector

The Gas Sniper features PPM , %LEL or %Volume measurement capability to address a wide range of monitoring requirements. The Gas Sniper detects and monitors many standard gases including many toxic gases. In addition, the Gas Sniper's ability to simultaneously detect up to '6' gases provides users with the ability to configure multiple gas monitoring combinations never before offered in a portable gas monitor. For quick response and recovery from distant sampling locations, the Gas Sniper utilizes an internal pump to draw samples up to 125 feet and utilizes hydrophobic filters to prevent moisture contamination. The Gas Sniper will continuously operate for up to 30 hours on alkaline batteries or 18 hours on Ni-Cad batteries.



Ordering Information

Model No.	Description
SNIPER-01	Gas Sniper Portable Gas Detector with LEL/ppm (Methane) Sensor*
SNIPER-02	Gas Sniper Portable Gas Detector with O ₂ Sensor
SNIPER-03	Gas Sniper Portable Gas Detector with LEL (Methane), O ₂ , H ₂ S & CO Sensor
SNIPER-04	Gas Sniper Portable Gas Detector with '1' Toxic Sensor
SNIPER-05	Gas Sniper Portable Gas Detector with '2' Toxic Sensors†

*Gas Sniper-01 model suitable for EPA Method 21 applications.

†The Gas Sniper can be ordered with up to '6' sensors installed. Please specify the gas or gas combinations when ordering. For Gas Sniper models requiring '2' toxic sensors and special configured models containing up to '6' sensors – please consult factory for availability, pricing and delivery. In models where multiple gas sensors are desired, some gas combinations may not be available due to cross-interference/compatibility considerations.

GasScanner 1C, 2C, 4C and 8C



MATHESON's GasScanner is a powerful, low cost fixed system controller for one to eight points of gas detection. It is microprocessor controlled, versatile, and simple to install and operate.

Ordering Information

Model No.	Description
GS-1C	1 Channel Gas Monitor
GS-2C	2 Channel Gas Monitor
GS-4C	4 Channel Gas Monitor
GS-8C	8 Channel Gas Monitor

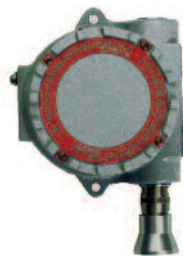
Remote Alarm



MATHESON's GSA-RI remote alarm provides both strobe and audible alarms. Can be wired to activate both from a single alarm, or separately for different alarm levels.

GSS Series GasScanner Diffusion Transmitters

The GSS Series Transmitters are available for LEL, O₂, H₂S, CO and for various fuels or solvents.



Ordering Information

Model No.	Description
GSS-O2	Oxygen, 0-25%, Diffusion, Transmitter
GSS-CH4	Methane, 100% LEL Diffusion, Transmitter
GSS-H2	Hydrogen, 100% LEL Diffusion, Transmitter
GSS-CO	Carbon Monoxide, Diffusion, Transmitter

Call Customer Service @ **1-800-416-2505** or visit our website **www.mathesongas.com** for more gas listings.

GSM Series GasScanner Diffusion Stand-Alone Transmitters

The GSM Series is a state of the art transmitter that can operate as an independent, stand alone system or as part of a system connected with an analog signal to GasScanner controller. Includes display and relays.



Ordering Information

Model No.	Description
GSM-O2	Oxygen, 0-25%, Diffusion, Transmitter
GSM-CH4	Methane, 100% LEL Diffusion, Transmitter
GSM-H2	Hydrogen, 100% LEL Diffusion, Transmitter
GSM-CO	Carbon Monoxide, Diffusion, Transmitter

Call Customer Service @ **1-800-416-2505** or visit our website **www.mathesongas.com** for more gas listings.

PUR-Gas™ In-Line Purifier Systems

The PUR-Gas™ Purifier product line has been expanded to offer a range of high-performance gas purification products in the traditional “In-Line” (trap) design that is commonly utilized for point-of-use purification within the laboratory environment. The “In-Line” purifier configuration allows the purifier to be installed easily into your gas delivery lines* or mounted on the wall with mounting clips if bench-top space is limited. The unique “End Connectors”** allow you to remove the spent purifier without tools and install a replacement in just seconds. During replacement of the purifiers, check valves within the “End Connectors” automatically seal the gas delivery lines to the atmosphere, eliminating diffusion of potential contaminants into the gas stream and maintaining existing gas purity. Similar to the PUR-Gas™ Cartridge Purifier Systems, the PUR-Gas™ “In-Line” Purifiers provide superior contaminant removal to produce 99.9999% purity.



*Easy to replace.
No tools required.
No contamination.*

**most purifier positions require no additional support*

***end connectors ordered separately*

Ordering Information

Model No.	Description
PUR-IL-MT1	PUR-Gas In-Line Moisture (H ₂ O) Trap
PUR-IL-OT1	PUR-Gas In-Line Oxygen (O ₂) Trap
PUR-IL-HT1	PUR-Gas In-Line Hydrocarbon (HC) Trap

“End-to-End” Tube Connectors

Model No.	Description
PUR-IL-CBR2	1/8" Brass In-Line Connector (set of 2)
PUR-IL-CBR4	1/4" Brass In-Line Connector (set of 2)
PUR-IL-CSS2	1/8" Stainless Steel In-Line Connector (set of 2)
PUR-IL-CSS4	1/4" Stainless Steel In-Line Connector (set of 2)

Models 6124, 6134 and 6164

All Welded 316 Stainless Steel High Purity Depth Filters

MATHESON depth filters utilize a fiberglass media and are rated to 250 psig service. They are 100% efficient at a 0.2 micron level.

They feature an all welded stainless steel housing and are available in a wide selection of pipe, tubing and VCR connections.



The "all-welded" Models 6124, 6134 and 6164 feature a cylindrical, microporous, fiberglass filter media, molded with an acrylic binder and supported by a perforated 316 stainless steel screen. Can be used with a wide range of non-corrosive gases.

Ordering Information

Model No.	Inlet/Outlet Connections	Max. Flow SLPM**	Dimensions (L x D)
Filters with Pipe Fittings			
6164-P4FF	1/4" FPT x FPT	150	3.0" x 1.66"
6134-P8FF	1/2" FPT x FPT	400	4.1" x 2.38"
6124-P12FF	3/4" FPT x FPT	1000	7.5" x 2.38"

** @ 15 psig Inlet, Atmospheric Outlet

Model 6190 Series

0.01 Micron Membrane Gas Filter

MATHESON has provided an efficient solution to control particulates by introducing this Teflon media filter to achieve gas stream filtration efficiency to the 0.01 micron level with a high performance membrane gas filter.

This filter may be installed in non-corrosive gas streams that are supplied by either cylinder sources, bulk sources or an on-site generating plant. Installing the membrane filter near the reaction chamber itself affords the best protection in eliminating particulates that can be released into the gas stream.



Ordering Information

Model No.	Inlet/Outlet Connections	Dimensions (L x D)
6190-T4FF	1/4" Swagelok	5.56" x 2.20"
6190-V4MM	1/4" VCR M x M	5.62" x 2.20"

Model 465

Moisture & Impurity Indicator

The Model 465 indicator is used to indicate the downstream presence of moisture in a gas line from the exhaustion of the molecular sieve material in the Model 450B and 460 purifiers.



Ordering Information

Model No.	Description
465	Moisture Indicator
PLU-0070-XX	Replacement Indicator Plug

Model 450B

High Pressure / Low Capacity Gas Purifier

The Model 450B Gas Purifier removes oil, water vapor and foreign particles from many* non-corrosive gases, and is designed for operating at high line working pressures where lower capacities of contaminant removal are required. It has a black anodized aluminum housing that accepts replaceable cartridges, which remove foreign matter through the use of molecular sieve materials and special filters.



Ordering Information

Model No. (Housing)	Description
450B	Purifier Housing (without cartridge)

Model No. (Cartridge)	Description
451	For Removal of Oil and Water
452	For Removal of Water
453	For Removal of particles over 5 microns**
454	Activated Charcoal Purifier***

* Consult MATHESON for specific applications.

** Not for Acetylene use *** For acetone control in acetylene

Model 460

Low Pressure / High Capacity Gas Purifier

The Model 460 Gas Purifier is similar to the Model 450B; however, it is specifically designed for higher capacities of contaminant removal and lower working line pressure. It has an aluminum housing that accepts large capacity replacable cartridges. The housing may be permanently installed in the line and may be serviced without disturbing the line connections (assure 12" clearance space under flanged end). Inlet is on the side and outlet is on the top.



Ordering Information

Model No. (Housing)	Description
460	Purifier Housing (without cartridge)

Model No. (Cartridge)	Description
461	For Removal of Water
462	For Removal of Oil and Water
463	For Removal of Oil and Heavy Hydrocarbons

This series is not suitable for acetylene

Model FM-1050 Series High Accuracy Flow Meter (150mm)

The FM-1050 Series Flow Meters provide the most accurate indication and precise control of fluids available for a wide range of applications.



Model FM-1000 Series Compact High Accuracy Flow Meter (65mm)

The FM-1000 Series Flow Meters incorporate the innovative design of the FM-1050 in a more compact unit without reducing standards of accuracy.



Model PG-1000 Series Economical Acrylic Flow Meter with Glass Flow Tube

The PG-1000 Series Flow Meters are designed to allow reliable flow indication of gases at low capacities. Features a rugged economical plastic construction.



Ordering Information

Call Customer Service @ 1-800-416-2505 or visit our website www.mathesongas.com for additional information.

Model PM-1000 Series Economical Acrylic Flow Meters

The PM-1000 Series acrylic flow meters are a practical, low-cost approach to low flow rate indication of gases. A broad range of industrial applications involving non-corrosive fluids, normal atmospheres and less stringent accuracy demands are within the scope of this simplified, plain tapered tube design.



Model 7300 and 7400 Series Proportioners and Mixers

MATHESON's Model 7300 and 7400 Series Flow Meters are 150mm multi-tube flow meter manifolds used for proportioning or mixing multiple gas streams.



Ordering Information

Call **Customer Service @ 1-800-416-2505** or visit our website www.mathesongas.com for additional information.

The Tube-Cube®

The Tube-Cube is an innovative design developed and patented by MATHESON. It allows the interchange of flow tubes within a single frame. With the Tube-Cube you can quickly and easily change flow ranges without having to disconnect the flow meter from your system to change the entire frame.

Ordering Information

The Tube-Cube is standard equipment with the FM-1050 and FM-1000.

Mass Flow



MATHESON's Mass Flow Controllers and Flow Meters are among the most sophisticated systems available.

Mass Flow Meters and Controllers feature 316 stainless steel, and a variety of seal materials to suit almost any gas service.

MATHESON's new 8284A Four-Channel Control/Readout Box features an LCD screen which displays all four channels simultaneously, built-in Totalizer for each channel, library of gas names, blending functions, and RS-232 capability. All of these functions are housed in a half-rack enclosure.

Chrysalis® II Hydrogen Generator

High Performance No Maintenance

(HPNM) Series

NON-Desiccant Models

The Chrysalis® II High Performance No Maintenance (HPNM) Hydrogen Generator is the most advanced and reliable system available in the market. Simply add 0.5 Mohm deionized water to the generator to enable the electrolytic dissociation process to occur and create hydrogen.



Our generator utilizes an advanced dual-column purification system to remove residual moisture from the hydrogen gas produced. This dual-column automatically regenerates, eliminating the need for maintenance on the columns, and eliminating the need to include a desiccant cartridge in the system as a final purification step. Since desiccant cartridges are an expensive consumable that must be replaced frequently, the fact that our system does not incorporate one gives our system a low cost of ownership. Also, not requiring a desiccant cartridge means the user does not have to break the H₂ process gas line connections to replace the desiccant cartridge when it becomes saturated. Not having to break connections to replace a desiccant cartridge is the reason the hydrogen our system produces reaches a purity greater than 99.9999%.

Ordering Information

Model No.	Description
HYC-HPNM250	250 ccm HPNM Hydrogen Generator
HYC-HPNM500	500 ccm HPNM Hydrogen Generator

Chrysalis® II Whisper LC/MS Nitrogen Generator

The Chrysalis® II N₂-Whisper LC-MS Nitrogen Generator with integrated compressor is specifically designed to deliver the high nitrogen flow rates required for LC/MS instrument operation. Our Whisper LC/MS utilizes an extremely reliable special membrane technology to transform compressed air into a continuous stream of high purity dry nitrogen. Our Whisper system with compressor produces flow rates up to 35 slpm with a purity ranging between 98% to 99.5%. An optional PUR-Gas UHP purification system is available to increase outlet nitrogen purity to 99.9999% for applications needing 20 slpm or less.



Ordering Information

Model No.	Description
N2-Whisper LC-MS	35 slpm Nitrogen Generator with Compressor, 230 VAC/30 Amp/60 Hz

Chrysalis® II ZERO Air Generator

The Chrysalis® II GC/FID ZERO Air Generator reliably produces zero air from plant compressed air. The GC/FID model removes both hydrocarbons and carbon monoxide impurities to less than 0.1 ppm, and it removes 99.99% of all particles greater than 0.5 microns in diameter.



Ordering Information

Model No.	Description
ZAC-GC1500	1.5 slpm Standard GC/FID ZERO Air Generator
ZAC-GC3000	3 slpm Standard GC/FID ZERO Air Generator

GasTrak™ Delivery/Control Systems

MATHESON's GasTrak™ Control Systems represent a practical approach to controlling and delivering low or high purity gases for distribution to "point-of-use" locations to meet the operating requirements in today's laboratory environment. GasTrak™ Systems provide a cost effective, efficient and safer alternative to maintaining gas cylinders in the laboratory environment as the main source of gas supply. The GasTrak™ Control System is a simplified design which offers the ability to regulate gas operating pressure, provide gas purification and flow control within a single dedicated "GasTrak™ Station" for each specific gas being utilized and distributed within the lab. The individual "GasTrak™ Stations" can be wall mounted at the point-of-use for local instrument source control; or each of the individual "GasTrak™ Stations" can be combined into a complete system to provide centralized source control of multiple gases being used.



GasTrak™ System
(delivering 3 gases)

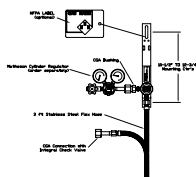


Single
GasTrak™
Station

For more information please contact our customer service at 800-416-2505.

Single Station Manifolds (53 & 54 Manifold Series)

MATHESON 53 and 54 Series Single Station Manifolds provide a convenient means of wall mounting a regulator. These products consist of a mounting bracket; flex hose and integral check valve. The manifolds may be used with many of MATHESON's single or dual stage, brass or stainless steel regulators (regulators sold separately).



Ordering Information

Model No.	Material	Gas/CGA
53-18T	Brass	Inert / CGA 580
53-18V	Brass	Flammable / CGA 350
53-18W	Brass	Carbon Dioxide / CGA 320
53-18B	Brass	Zero Air / CGA 590
54-18T	Stainless Steel	Inert / CGA 580
54-18V	Stainless Steel	Flammable / CGA 350
54-18W	Stainless Steel	Carbon Dioxide / CGA 320
54-18B	Stainless Steel	Zero Air / CGA 590

SourceTrak™ Manifold Systems (53 & 54 Manifold Series)

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 System distributes gas safer and more efficiently.

Ordering Information

Model No.	Material	Gas / CGA	No. of Cylinders
53-28T	Brass	Inert / CGA 580	2
53-38T	Brass	Inert / CGA 580	3
53-48T	Brass	Inert / CGA 580	4
54-28T	Stainless Steel	Inert / CGA 580	2
54-38T	Stainless Steel	Inert / CGA 580	3
54-48T	Stainless Steel	Inert / CGA 580	4

SwitchPro™ Automatic Switchover Systems (523 & 524 Series)

MATHESON's SwitchPro™ AUTOMATIC Switchover Systems are designed to provide a continuous supply of gas from a cylinder or a bank of cylinders. The SwitchPro™ System safely minimizes repetitive cylinder changeout labor and offers 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. Utilizing SwitchPro™ 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 523 & 524 Series Switchover will supply up to 5 scfm N₂.



Ordering Information

Model No.	Material	Gas / CGA	Line Regulator Pressure	No. of Cylinders
523-028T	Brass	Inert / CGA 580	No Line Reg	2
523-048TN	Brass	Inert / CGA 580	No Line Reg	4
523-A28T	Brass	Inert / CGA 580	0-30 psig	2
523-A48TN	Brass	Inert / CGA 580	0-30 psig	4
523-B28T	Brass	Inert / CGA 580	0-100 psig	2
524-028T	Stainless Steel	Inert / CGA 580	No Line Reg	2
524-048TN	Stainless Steel	Inert / CGA 580	No Line Reg	4
524-A28T	Stainless Steel	Inert / CGA 580	0-30 psig	2
524-A48TN	Stainless Steel	Inert / CGA 580	0-30 psig	4
524-B28T	Stainless Steel	Inert / CGA 580	0-100 psig	2

LPX SwitchPro

Model No.	Material	Standard Gas / CGA	No. of Cylinders
LPX3-B28C	Brass	Propane and Propylene 510	2
LPX4-B28C	Stainless Steel	Propane and Propylene 510	2
LPX-3-B48CN	Brass	Propane and Propylene 510	4

SwitchPro™ High Flow Switchover

MATHESON's High Flow Switchover system will deliver up to 50 scfm of N₂ flow. Designed to be used with both cylinders and dewars.



Cylinder/Panel Floor Racks

MATHESON now offers floor racks for holding switchover panels, process panels, etc., in three sizes: 2 cylinders, 4 cylinders or 6 cylinders. They are constructed of 11 gauge steel, and powder coated ASA61 gray.



PAN-5000 Series Analytical Grade Gas Distribution Panels

1-Valve Panel Model PAN-5100

This most basic panel design offers a pressure regulator and process on/off control valve. Connection to the gas supply is conveniently made using a standard stainless steel flexible hose. This panel is recommended when using inert gases with processes that do not require purge capability. Available with CGA 320, 326, 346, 540, 580 or 590. Each CGA contains an integral check valve.



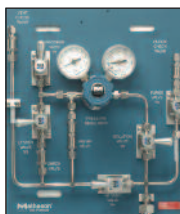
3-Valve Panel Model PAN-5300

The 3-valve panel provides a pressure regulator with both a process on/off control valve and a high pressure vent valve, allowing total isolation of the regulator, as well as the ability to purge contaminants that may have been introduced by changing cylinders. The vent line is protected from back flow by a check valve downstream of the vent valve. This panel is recommended when using non-toxic, non-corrosive, and non-pyrophoric gases with processes that require the additional purity that a high pressure purge is capable of supplying. Available with CGA 320, 326, 350, 510, 540, 580, or 590. Each CGA contains in integral check valve.



5-Valve Panel Model PAN-5500

The 5-valve panel provides all the same features as a 3-valve panel with the addition of a low-pressure vent valve, and adds the safety feature of being able to cycle purge the panel with an inert gas prior to disconnecting the cylinder. This panel provides the safety needed to handle toxic, semi-corrosive and flammable gases. The 5-valve panel is available with an optional venturi for vacuum evacuation of the panel during purging. The 5-valve panel is available with CGA 320, 326, 330, 350, 510, 540, 580, 590 or 660. Unlike the 1- and 3-valve designs, CGA's do not contain integral check valves.



Ordering Information

Model No.	Description
PAN-5110-350-A	1VLV, Panel 100 psig Del, CGA 350
PAN-5110-540-A	1VLV, 100 psi, CGA 540 with check valve
PAN-5110-580-O	1VLV, 100 psi, CGA 580 with check valve
PAN-5300-350-O	3VLV, 30 psi, CGA 350 with check valve
PAN-5310-350-O	3VLV, 100 psi, CGA 350 with check valve
PAN-5310-580-O	3VLV, 100 psi, CGA 580 with check valve
PAN-5500-350-O	5VLV, 30 psi, CGA 350 1 stage, Stainless Steel
PAN-5501-350-O	5VLV, 30 psi, with venturi, CGA 350

Model PAN-9300 Series

ULTRA-LINE Pressure Control Module with Cross Purge

The ULTRA-LINE Pressure Control Module with Cross Purge provides a safe UHP connection (welded / VCR type) between the gas supply, the ULTRA-LINE regulator, with valves, and system to perform a cylinder change out purge.



Ordering Information

Model No.	Delivery Pressure*
PAN-93X0-CGA-Optional Accessories	0 = 30 PSIG
	1 = 100 PSIG
	A = NO REG
	B = SUBATMOSPHERIC

*Delivery Pressure = X

Optional Accessories

- X = Excess Flow Switch (EFS) only (No Controller)
- E = Emergency Shut off (ESO) valve only (No Controller)
- H = 9370 Series ULTRA-LINE Regulator with Hastelloy trim
- A = GSM12 Controller Kit – Auto shutdown controller w/ excess flow switch and ESO.
- O = None



Model TW-5

Cylinder Hand Wheel Wrench

Model TW-5 is a specially constructed Cylinder Hand Wheel Wrench that enable easy opening of cylinder valves that have been fitted with a hand wheel. The design is also suitable for removing difficult cylinder caps.



Ordering Information

Model No.	Description
TW-5	Cylinder Hand Wheel Wrench

Gas Cylinder Cabinets Model 1170 Series

MATHESON Model 1170 is our standard gas cabinet series with a flat top design. The new construction is optimized for economy, without compromising safety or quality.



- Automatic door closure to ensure containment of leaks.
- Modular U-Channel Supports make installation of gas control panels, cylinder supports, shelving, and other equipment easy.
- Lockable access panel and wire reinforced safety glass viewing window have steel frames and are fully gasketed.
- Non-protruding paddle type latch prevents accidental opening and snagging. It slams and latches at three points and is fitted with a lock for security.
- Neoprene gaskets fit snugly around door to ensure a positive seal.
- Standard inlet air louver or optional diffuser plate fitted with an inlet filter (p/n VEN-0101-XX) let air into the cabinet.
- Flat-top design with exhaust stack.

Cylinder Specifications

Model No.	Cabinet Type	Overall Height	Depth	Width	Exhaust Flow Required (SCFM)	Exhaust Stack Diameter	Shipping Weight lbs
1177F	1 Cylinder	79"	19"	18"	175	4"	300
1178F	2 Cylinder	79"	19"	26"	250	6"	380
1179F	3 Cylinder	79"	19"	40"	450	8"	540

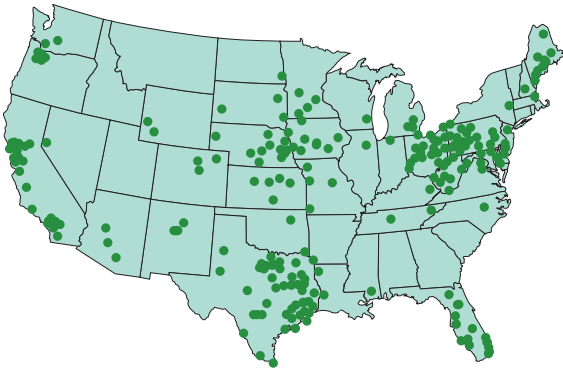
Gas Cylinder Cabinets

"Hard Hat" Series

MATHESON's new "Hard Hat" cabinet is designed for outdoor use and installation. It is ideally suited for handling gas applications in refinery environments. The cabinet incorporates several structural features making it weatherproof and is constructed from stainless steel materials to withstand harsh weather effects. The "Hard Hat" cabinet is available in standard sizes to accommodate up to three cylinders.



Model No.	Cabinet Type	Overall Height	Depth	Width
1177-HH	1 Cylinder	79"	19"	18"
1178-HH	2 Cylinder	79"	19"	26"
1179-HH	3 Cylinder	79"	19"	40"



National reach. Local values.



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