

# Overview of Restek's Ultra-High Purity (UHP) Gas Regulators

- Regulators feature metal-to-metal seals throughout for long-term leak-tightness.
- Metal diaphragm outlet valve ensures gas purity.
- Each regulator is helium leak-test-certifiable to 1x10<sup>-8</sup> scc/sec.
- Temperature range: -40 °C to 60 °C

## Ultra-High Purity (UHP) Brass Body Gas Regulators

UHP brass regulators are the best choice when using ultra-high purity carrier gas for sensitive GC applications using MS, PID, or ECD detection methods. They feature reduced internal dead-volume, relative to stainless steel bodies. The metal valve diaphragm ensures leak-free shut-off. Oxidation-resistant chrome plating maintains a like-new appearance.

# **Dual-Stage Ultra-High Purity Chrome-Plated Brass Gas Regulators**

- · Oxidation-resistant, chrome-plated.
- Most stable outlet pressure control.
- Secondary pressure regulation not needed.
- Most widely used regulator.
- Less internal volume than stainless steel gas regulators.



Fitting	Outlet Pressure	Outlet Gauge	qty.	cat.#	price
CGA 580 (N2 He, Ar)	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	21667	
CGA 350 (H <sub>2</sub> , P <sub>5</sub> )	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	21668	
CGA 590 (Air)	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	21669	



## Single-Stage Ultra-High Purity Chrome-Plated Brass Gas Regulators

- · Oxidation-resistant, chrome-plated.
- Use when there is secondary pressure regulation downstream.
- Identical gas purity protection as with dual-stage gas regulators.

Inlet gauge: 0 to 4,000psig (0-27,579kPa)
Outlet assembly: diaphragm valve, 1/4" tube fitting

Fitting	Outlet Pressure	Outlet Gauge	qty.	cat.#	price
CGA 580 (N <sub>2</sub> , He, Ar)	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	20646	
CGA 350 (H <sub>2</sub> , P <sub>5</sub> )	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	20647	
CGA 590 (Air)	0 to 100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	20648	



#### **Ultra-High Purity Chrome-Plated Brass Line Gas Regulator**

- Oxidation-resistant, chrome-plated.
- Use where you need to reduce the line pressure by 20 psig (138 kPa) or more.
- Same purity protection as high-pressure cylinder regulators.

Inlet connections:  $^{1}/_{4}$ " FPT Outlet assembly:  $^{1}/_{4}$ " FPT port

Fitting	Outlet Pressure	Outlet Gauge	qty.	cat.#	price
1/4" female NPT ports*	0-50psig (0-345kPa)	30" - 0 to 100psig (0-689kPa)	ea.	21666	
1/4" female NPT ports*	0-100psig (0-689kPa)	30" - 0 to 200psig (0-1379kPa)	ea.	22452	

<sup>\*</sup>Order appropriate male connector, pipe-to-tube fittings.



#### Swagelok® Male Connector, Pipe-to-Tube Fittings



Size	Similar to	Brass			Stainless Steel		
(inches)	Swagelok	qty.	cat.#	price	qty.	cat.#	price
1/4" to 1/4" NPT	400-1-4	10-pk.	23134	\$44	2-pk.	23184	
1/8" to 1/4" NPT	200-1-4	10-pk.	23136	\$50	2-pk.	23186	
1/4" to 1/8"	200-R-4	5-pk.	23129	\$29	2-pk.	23179	
	(inches)  1/4" to 1/4" NPT  1/8" to 1/4" NPT	(inches) Swagelok  1/4" to 1/4" NPT 400-1-4  1/8" to 1/4" NPT 200-1-4	(inches)         Swagelok         qty.           1/4" to 1/4" NPT         400-1-4         10-pk.           1/8" to 1/4" NPT         200-1-4         10-pk.	(inches)         Swagelok         qty.         cat.#           1/4" to 1/4" NPT         400-1-4         10-pk.         23134           1/8" to 1/4" NPT         200-1-4         10-pk.         23136	(inches)         Swagelok         qty.         cat.#         price           1/4" to 1/4" NPT         400-1-4         10-pk.         23134         \$44           1/8" to 1/4" NPT         200-1-4         10-pk.         23136         \$50	(inches)         Swagelok         qty.         cat.#         price         qty.           1/4" to 1/4" NPT         400-1-4         10-pk.         23134         \$44         2-pk.           1/s" to 1/4" NPT         200-1-4         10-pk.         23136         \$50         2-pk.	(inches)         Swagelok         qty.         cat.#         price         qty.         cat.#           1/4" to 1/4" NPT         400-1-4         10-pk.         23134         \$44         2-pk.         23184           1/s" to 1/4" NPT         200-1-4         10-pk.         23136         \$50         2-pk.         23186







Mar 2011

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