

Cyclone Technology Regulators w/Supelcoat™

Airgas' unique line of Cyclone Technology pressure regulators are designed to preserve the specific gas mixture. These have a unique internal design to ensure all surfaces are continually swept, thus not allowing any dropout regardless of differences in specific weight of the various compounds within the mixture. These regulators also have a proprietary Supelcoat™ coating that prevent interaction of corrosive and volatile compounds in high purity gas mixtures used in EPA analysis.

This unique internal design and coating will prevent compounds like Mercury from sticking to the wetted surfaces of the regulator as the gas passes through. Also for chromatography processes where the gas cannot be compromised by any interaction, this organic coating provides a complete inert surface.

Pressure Regulators

REGULATORS



The coating does not allow for any loss of a component of a gas such as reactive like reduced sulfur compounds, ammonia, NO₂, HCl. Environmental testing processes where the gases would have formaldehyde and HF would also benefit from using these products.

Specifications	
Maximum Rated Inlet Pressure	4,000 psig
Outlet Pressure Ranges	0-30, 0-60, 0-100,
Flow Capacity	Cv = 0.25 line Cv=0.06 single two stage
Ambient Operating Temperature	-40° F to +150° F
Designed Leak Rate	bubble tight
Ports (6)	¼" FNPT
Inlet	¼" FNPT
Outlet	¼" Compression
Decay Inlet Characteristic	0.01/100 psi

Materials of Construction	
Body	316 Stainless Steel
Bonnet	Nickel-Plated Brass
Seat	PCTFE
Diaphragm	Hastelloy C-22
Gauges	2 1/2" Stainless Steel
Outlet Valve	316 Stainless Steel
Trim	316 Stainless Steel
Poppet Spring	Inconel

Design Features

- All internal surfaces are continuously sweep with the unique cyclone technology, ensures the gas mixture is maintained
- Exceptional speed in recovery of base line after cylinder change out, no need for long purging
- Low internal volume
- Enhances analytical applications in that the gas and components within a gas mixture will not react to the metal of the components that the gas comes in contact with
- Ensures compounds within the gas such as Mercury are not diluted due to interaction or sticking to untreated metal
- Offered in both single and two stage designs
- Convoluted Hastelloy C-22 Diaphragms provide superior leak integrity without contamination from a non-metallic liner or seal.
- Bonnet Vent Ports (with optional bonnet vent adaptors) allow venting of hazardous gases in the event of diaphragm failure.
- Standard Threaded Bonnet (with optional collar-mount nuts) for easy panel mounting.
- High-Flow Capacity permits excellent pressure control for multi-instrument applications.
- Threadless Seat Design provides longer regulator life.
- Shipped ready for use

Airgas Quality Policy

The purpose of the Airgas Quality System is to continually improve our manufacturing and related processes to provide our customers with the highest product purity, consistency, and service.

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Ordering Information						
Product Number	Material	Max Inlet Pressure (psig)	Max Outlet Pressure (psig)	Capacity (scfh @ Max Del. Pressure)	Inlet Gauge Range (psig)	Delivery Gauge Range (psig)
Line Regulator						
Y11-C441ASC	316 SS	1,250	30	600	30" Hg-0-30	NA
Y11-C441BSC	316 SS	1,250	60	1,080	0-100	NA
Y11-C441CSC	316 SS	1,250	100	1,140	0-200	NA
Single Stage						
Y11-C444A (CGA)SC	316 SS	4,000	30	190	0-4,000	30" Hg-0-30
Y11-C444B (CGA)SC	316 SS	4,000	60	270	0-4,000	0-100
Y11-C444D (CGA)SC	316 SS	4,000	100	380	0-4,000	0-200
Two Stage						
Y12-C445A (CGA)SC	316 SS	4,000	30	190	0-4,000	30" Hg-0-30
Y12-C445B (CGA)SC	316 SS	4,000	60	270	0-4,000	0-100
Y12-C445D (CGA)SC	316 SS	4,000	100	380	0-4,000	0-200

Available Options	
Product Number	Description
Y99-CHROMNUTV	Panel Mounting Nut
Y99-BONNETADP	Bonnet Vent Adaptor
Y15-418984	Wall Mount Bracket Line Regulator
Y99-26460	1/4" MNPT x 1/4" Compression
Y99-4VCR	1/4" VCR® connection on Inlet/Outlet (VCR x 1/4" MNPT)
Y15-QMS1	Quick Mounting Option for 1 Cylinder single and two stage
Y15-QMS2	Quick Mounting Option for 2 Cylinders single and two stage