

Ultra-High-Purity Line

Electronic Service

PRESSURE REGULATORS

Description: The Airgas® Ultra High-Purity Line Regulators are an internally threadless pressure regulator and are specifically designed for instrument/analyzer and semiconductor applications. This line regulator's unique carrier design disperses gas uniformly through the regulator to improve purging. The regulator seat material meets the requirements for corrosive and inert gases.

These regulators are all orbitally welded with high-purity face seal connections and have a 32 Ra internal surface finish. Optional 10 Ra electropolished.

Instrument applications include gas management systems in petrochemical/refineries and process analyzer systems. Semiconductor applications include general-purpose gas management (air, condensed dry air (CDA), and plant nitrogen).

This regulator is a high-pressure ultra-high-purity line regulator. It is used at the process point or inline.



Design Features

32 Ra Internal Surface Finish

Unique Patented Compression Member

loads the seal to the body without requiring a threaded nozzle or additional seal to atmosphere.

Meets NACE Standard MR0175

Captured Bonnet

allows for safety venting.

Specifications	
Max Rated Inlet Pressure	4,000 psig (2.76 bar)
Outlet Pressure Range	2–25, 3–60, 4–100, 5–250 psig
Cv	0.06
Ambient Operating Temperature	–40° F to 150° F (–38° C to 65° C)
Designed Leak Rate	2 x 10 ⁻⁸ scc/sec (helium)
Weight	1.5 lbs (0.7 kg)
Ports	3 – 1/4" Face Seal
Inlet	1/4" Female Face Seal
Outlet	1/4" Male Face Seal
Gauge Ports	1/4" Male Face Seal
Gauge Size	2" diameter
Supply Pressure Effect	0.1/100 psi

Materials	
Body	316L Stainless Steel
Bonnet	Nickel Plated Brass
Seat	PCTFE
Diaphragm	Hastelloy® C-22
Gauges	2" Female Face Seal
Filter	None
Seals	PTFE
Poppet	Elgloy®
Poppet Spring	Iconel®
Carrier	Stainless Steel
Back-up washer	316L Stainless Steel
Back-up O-ring	FKM

Ordering Information				
Product Number	Material	Max Inlet Pressure (psig)	Max Outlet Pressure (psig)	Outlet Gauge Range (psig)
Y11-HP980A	316L Stainless Steel	4,000	30	0–60
Y11-HP980B	316L Stainless Steel	4,000	60	0–100
Y11-HP980D	316L Stainless Steel	4,000	100	0–200
Y11-HP980F	316L Stainless Steel	4,000	250	0–400