Ultra-High-Purity Single-Stage

**Description:** The Airgas® Model 900 Ultra-High-Purity Single-Stage Regulators are internally threadless pressure regulator specifically designed for instrument/analyzer and semiconductor applications. This regulator’s unique carrier design disperses gas uniformly through the regulator to improve purging. The 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 regulator.

### 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**: 1–30, 2–60, 3–100, 10–250 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**: 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**: 0.6/100 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**: Elgiloy®
- **Poppet Spring**: Iconel®
- **Carrier**: Stainless Steel
- **Back-up washer**: 316L Stainless Steel
- **Back-up O-ring**: KFM

### Ordering Information

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Material</th>
<th>Max Inlet Pressure (psig)</th>
<th>Max Outlet Pressure (psig)</th>
<th>Inlet Gauge Range (psig)</th>
<th>Outlet Gauge Range (psig)</th>
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<tbody>
<tr>
<td>Y11-HP900A(CGA)</td>
<td>316L Stainless Steel</td>
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