

High-Delivery Pressure Regulators

High-Purity for Noncorrosive/Corrosive Service

Model 208

Model 208 Series regulators provide high-pressure delivery of corrosive and noncorrosive gases under high inlet pressure conditions. Single-stage design requires periodic readjustment of delivery pressure as inlet pressure decreases. These regulators are recommended for manufacturing process and gas filling applications involving high-purity gases.



Benefits/Features

Single-stage regulator designed for pressure control of gases when pressure rise is not critical.

Stainless steel or brass diaphragm outlet valve provides on/off flow control and maintains gas purity.

Designed to handle high pressures up to 2500 psig (172 bar).

Piston design ensures safety and extends the durability of the regulator.

Threaded bonnet allows for easy panel mounting.

Filter traps foreign matter, extends regulator life and reduces maintenance.

Specifications

Inlet Pressure: 3000 psig (207 bar) maximum

Operating Temperature Range:
-15°F to 140°F (-26°C to 60°C)

Flow Coefficient: $C_v = 0.06$

Supply Pressure Effect:
2 psi per 100 psi (0.1 bar per 7 bar)

Regulator Inlet Port: 1/4" NPT Female

Inlet Connection: Specify CGA

Outlet Connection: 1/4" NPT Female and all other inlet/outlet configurations

Gauge Size: 2" (53 mm) face

Weight:

Brass: 3.9 lbs. (1.8 kg)

Stainless steel: 3.7 lbs. (1.7 kg)

Materials of Construction

Body: Brass or 316 Stainless Steel

Piston: 316 Stainless Steel

O-Ring: Viton®

Seat: PTFE

Seals: PTFE

Bonnet: Brass or 300 Stainless Steel

Gauges: Brass or stainless steel

| Model 208 | | Delivery Pressure Range | | Delivery Pressure Gauge (dual scale) | | Cylinder Pressure Gauge (dual scale) | |
|--------------|-----------------|-------------------------|----------|--------------------------------------|---------|--------------------------------------|---------|
| | | psig | bar | psig | bar | psig | bar |
| Brass | Stainless Steel | | | | | | |
| Q1-208AB-(*) | Q1-208AS-(*) | 10 – 800 | 0.7 – 55 | 0 – 1000 | 0 – 69 | 0 – 4000 | 0 – 276 |
| Q1-208BB-(*) | Q1-208BS-(*) | 20 – 1500 | 1 – 103 | 0 – 2000 | 0 – 138 | 0 – 4000 | 0 – 276 |
| Q1-208CB-(*) | Q1-208CS-(*) | 30 – 2500 | 2 – 172 | 0 – 3000 | 0 – 207 | 0 – 4000 | 0 – 276 |

* Specify CGA. Other cylinder connections are available – please contact your Air Liquide representative.

Options: Model No. Q1-PMNCP chrome-plated nut for stainless steel and brass

Model No. Q1-CAPVENTBR brass captured venting configuration allows for complete capture when connected to a vent line

Model No. Q1-CAPVENTSS stainless steel captured venting configuration allows for complete capture when connected to a vent line

Very High-Flow Piston Regulators

For Noncorrosive/Corrosive Service

Model 229

These piston-type regulators are designed for very high-flow applications. The Model 229B is suitable for noncorrosive applications, while the 229S is designed for corrosive gases.

The Model 229S is not recommended for oxygen service.



Benefits/Features

Balanced poppet (stem) design minimizes the effect of changes in the inlet pressure on the delivery pressure.

Designed to handle high-flow in excess of 500 SCFM of air at 3000 psig (207 bar) inlet pressure.

Pressure relief valve provided for 350 psig (24 bar) and 500 psig (35 bar) models to protect regulator components from over pressurization.

Stainless steel filter in the inlet port traps foreign matter, extends regulator life and reduces maintenance.

Large low-torque handle allows easy adjustment of delivery pressure.

Specifications

Inlet Pressure: 3750 psig (259 bar) maximum

Operating Temperature Range:
0°F to 165°F (-18°C to 74°C)

Flow Coefficient: $C_v = 1.7$

Supply Pressure Effect:
1 psi per 100 psi (0.1 bar per 7 bar)

Inlet/Outlet Connection: 1/2" NPT Female

Relief Valve: Self-Reseating, 1/4" NPT outlet

Gauge Size: 2.5" (67 mm) face

Weight: 7 lbs. (3.2 kg)

Materials of Construction

Body: Brass or 303 Stainless Steel

Seats: PTFE

Seals: PCTFE and Viton®

Filter: 316 Stainless Steel

Bonnet: Brass or 300 Series Stainless Steel

Other Metals Parts Exposed to Gas:
Brass or stainless steel

Gauges: Brass or 316 Stainless Steel

| Model 229 | | Delivery Pressure Range | | Delivery Pressure Gauge (dual scale) | | Cylinder Pressure Gauge (dual scale) | |
|-----------|-----------------|-------------------------|---------|---|---------|---|---------|
| | | psig | bar | psig | bar | psig | bar |
| Brass | Stainless Steel | | | | | | |
| Q1-229AB | Q1-229AS | 20 – 350 | 1 – 24 | 0 – 400 | 0 – 28 | 0 – 4000 | 0 – 276 |
| Q1-229BB | Q1-229BS | 40 – 500 | 3 – 34 | 0 – 600 | 0 – 42 | 0 – 4000 | 0 – 276 |
| Q1-229DB | Q1-229DS | 100 – 1500 | 7 – 103 | 0 – 2000 | 0 – 138 | 0 – 4000 | 0 – 276 |

Options: Model Q1-PMRINGSP82 aluminum panel mounting ring clamp

High-Pressure Piston Regulators

High-Purity for Noncorrosive/Corrosive Service

Model 2900

These single-stage piston regulators are available in brass or stainless steel and are designed to handle high inlet pressures up to 6,000 psig (414 bar). The stainless steel version is designed to handle high inlet pressures up to 10,000 psig (690 bar). Both are recommended for manufacturing and gas filling process applications.



Benefits/Features

Piston sensed design provides a safe and durable regulator where high delivery pressures are required.

Low-torque handle allows for easy adjustment of delivery pressure, even at high inlet/outlet pressure differentials.

Sintered metal filter protects internal components to extend regulator service life.

Specifications

Inlet Pressure:

Brass: 6,000 psig (414 bar) maximum
Stainless Steel: 10,000 psig (690 bar) maximum

Operating Temperature Range:

-65°F to 140°F (-55°C to 60°C)

Flow Coefficient: Cv = 0.06

Supply Pressure Effect:

1 psi per 100 psi (0.1 bar per 7 bar)

Filter Size: 40 microns

Regulator Inlet Port: 1/4" NPT Female

Inlet Connection: Specify CGA

Outlet Connection: 1/4" NPT Male

Gauge Size: 2.5" (67 mm) face

Weight:

Brass: 5 lbs. (2.3 kg)

Stainless Steel: 5.5 lbs. (2.5 kg)

Materials of Construction

Body: Brass bar stock or 303 Stainless Steel

Piston: 300 Series Stainless Steel

O-Ring: Viton®

Seat: PCTFE

Seals: PTFE

Filter: Brass or 300 Stainless Steel

Bonnet: Brass bar stock or 300 Stainless Steel

Gauges: Brass or stainless steel

| Model 2900 | | Delivery Pressure Range | | Delivery Pressure Gauge (dual scale) | | Cylinder Pressure Gauge (dual scale) | |
|---------------|-----------------|-------------------------|----------|---|---------|---|---------|
| | | psig | bar | psig | bar | psig | bar |
| Brass | Stainless Steel | | | | | | |
| Q1-2900AB-(*) | | 200 – 1500 | 14 – 103 | 0 – 2000 | 0 – 138 | 0 – 7500 | 0 – 518 |
| Q1-2900BB-(*) | | 300 – 3500 | 21 – 241 | 0 – 4000 | 0 – 276 | 0 – 7500 | 0 – 518 |
| Q1-2900CB-(*) | | 400 – 6000 | 28 – 414 | 0 – 7500 | 0 – 518 | 0 – 7500 | 0 – 518 |
| | Q1-2900AS-(*) | 200 – 3500 | 14 – 241 | 0 – 4000 | 0 – 276 | 0 – 10,000 | 0 – 690 |
| | Q1-2900BS-(*) | 400 – 6000 | 28 – 414 | 0 – 7500 | 0 – 518 | 0 – 10,000 | 0 – 690 |

* Specify CGA. Other cylinder connections are available – please contact your Air Liquide representative.