



300 Series Regulators

307 SERIES

The 307 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases or as point of use pressure control in high purity gas distribution systems.

- Single Stage
- Chrome-Plated Brass Barstock Body
- Four Port Configuration
- Rear Inlet

Typical Applications

- Bulk gas distribution systems
- Gas and liquid chromatography
- High purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization
- Liquefied hydrocarbon gas control
- Control of cryogenic gas



307 2031-580 shown

Features

- CAPSULE® Seat**
Increased serviceability and life
- 316L Stainless Steel Diaphragm**
No inboard diffusion
- Low Wetted Surface Area**
Minimal purge requirements
- Field-Adjustable Pressure Limit**
Safeguard downstream equipment
- Convolutd Diaphragm**
Smooth pressure changes
- Compact Design**
Easily transported and integrated into systems
- Chrome-Plated Brass Barstock Body**
Smooth surface finish
- Rear Panel-Mountable**
Easy installation
- Pressure Ranges 0-15 to 0-200 PSIG (0-1 to 0-14 BAR)**
Broad range of applications
- 3000 PSIG (210 BAR) Inlet Pressure Rating**
Safe use with high pressure cylinders

Materials

- Body**
Chrome-plated brass barstock
- Bonnet**
Chrome-plated die-cast zinc
- Seat**
PTFE
- Filter**
10 micron sintered bronze
- Diaphragm**
316L stainless steel
- Internal Seals**
PTFE

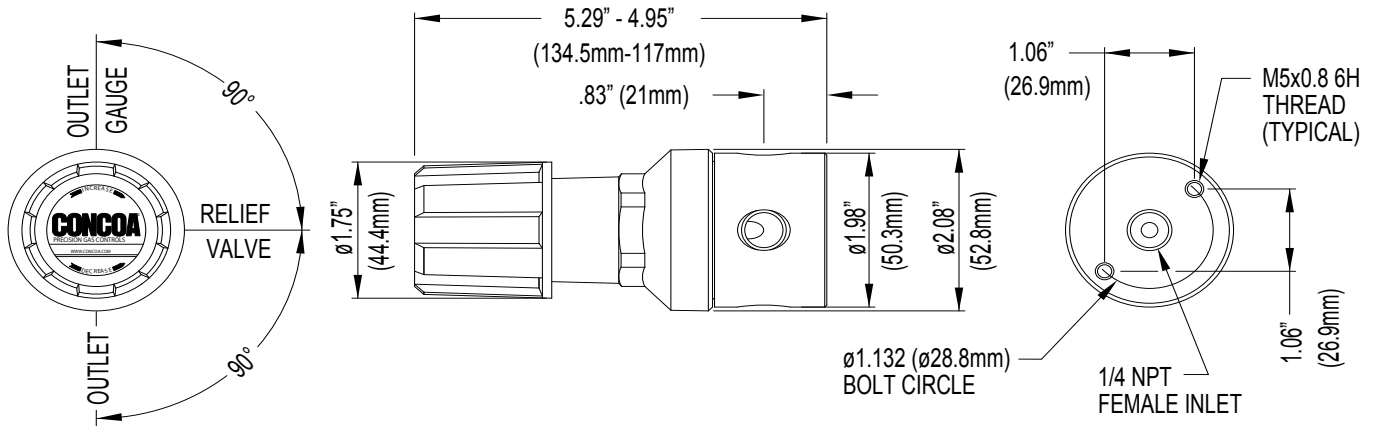
Specifications

- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Gauges**
2" (53mm) diameter chrome-plated brass
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁸ scc/sec
- Cv**
0.1
See page 202 for flow curves
- Weight (307 2031-580)**
2.9 lbs. (1.29 kg)

300 Series Regulators



Installation Dimensions



REGULATORS

Ordering Information

| 307 | A | B | C | D | -CON | Options | |
|------------|-----------------------------------|----------------------|----------------|---|---|---|-------------------|
| Series 307 | Outlet Pressure | Outlet Gauge | Inlet Gauge | Outlet Assemblies | Assembly Gauges | Inlet Connections | Installed Options |
| | 1: 0-15 PSIG (0-1 BAR) | 0-30 PSIG/ 0-2 BAR | 0: None | 0: 1/4" FPT port | 0: Bare body | M00: 1/4" FPT | None |
| | 2: 0-30 PSIG (0-2 BAR) | 0-60 PSIG/ 0-4 BAR | | 1: 1/4" MPT | 1: Standard assembly (PSIG/kPa gauges) | TF2: 1/8" tube | |
| | 3: 0-50 PSIG (0-3.5 BAR) | 0-100 PSIG/ 0-7 BAR | | 2: 1/4" tube fitting | 2: Standard assembly (BAR/PSIG gauges) | TF4: 1/4" tube | |
| | 4: 0-150 PSIG (0-10 BAR) | 0-200 PSIG/ 0-14 BAR | | 3: Diaphragm valve 1/4" tube fitting | | TF6: 3/8" tube | |
| | 5: 0-100 PSIG (0-7 BAR) | 0-200 PSIG/ 0-14 BAR | | 4: Diaphragm valve 1/4" MPT | | M06: 6mm tube | |
| | 6: 0-200 PSIG (0-14 BAR) | 0-400 PSIG/ 0-27 BAR | | 5: Needle valve 1/4" MPT | | CGA DIN 477 BS 341 Medical DISS and others available | |
| | 8: 2-15 LPM Carbon Dioxide | 2-15 LPM flowgauge | | 6: 1/8" tube fitting | | | |
| | 9: Custom calibration | Custom flowgauge | | 7: 3/8" tube fitting | | | |
| | | | | 8: DISS outlet | | | |
| | | | | 9: Diaphragm valve 1/4" FPT | | | |
| | | | | A: 3/8" BSP RH fitting | | | |
| | | | | B: Diaphragm valve 1/8" tube fitting | | | |
| | | | | M: 6mm tube fitting | | | |
| | | | | S: Diaphragm valve 6mm tube fitting | | | |

Related Options

| Order No. | Description |
|-----------|---------------------------|
| 835 0204 | Rear panel mount kit |
| 476 0002 | Helium Leak certification |



Regulator Flow Curves

Flow Curves for 302, 304, 305, 307, 322, 324, 327, 401, 402, 408, 420, 422, 426, 427, 428, 429 Series

