



# 100 Series Regulators

# 109 SERIES

The 109 Series regulators are intended for pressure control of general purpose laboratory gases with applications requiring constant pressure control and delivery regardless of supply pressure variations.

- Dual Stage
- Forged Brass Body
- PTFE-Lined Diaphragm
- Five Port Configuration



109 7505-580 shown

## Typical Applications

- Purging
- Pressure testing
- Blanketing
- Chamber pressurization

## Features

- CAPSULE® Seat**  
Increased serviceability and life
- PCTFE-Lined Neoprene Diaphragm**  
Sensitive to downstream conditions
- Forged Body**  
Durable, long-lasting construction
- Field-Adjustable Pressure Limit**  
Safeguard downstream equipment
- Integral Relief Valve**  
Diaphragm and gauge protection
- High Flow Capacity**  
Supply multiple user locations
- Forged Brass Body**  
Economical high purity design
- Pressure Ranges 0-15 to 0-200 PSIG (0-1 to 0-14 BAR)**  
Broad range of applications
- 10 Micron Filtration in Both Stages**  
Fail-safe seat performance

## Materials

- Body**  
Forged brass
- Bonnet**  
Brass-plated die-cast zinc
- Seat**  
PCTFE (first stage)  
PTFE (second stage)
- Filter**  
10 micron sintered bronze
- Diaphragm**  
PTFE-lined neoprene
- Internal Seals**  
PTFE

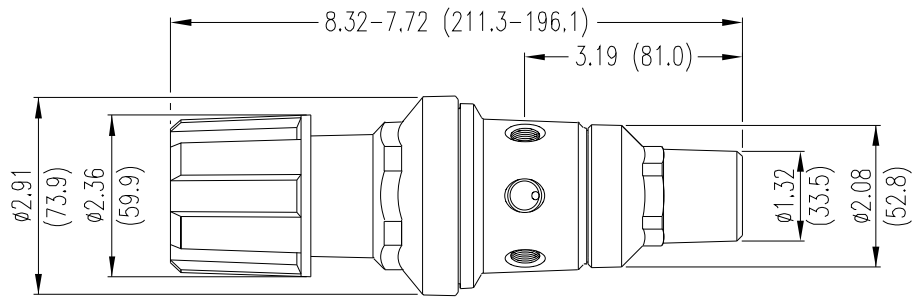
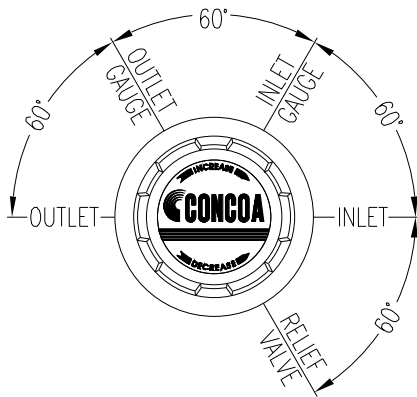
## Specifications

- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)
- Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- Gauges**  
2 1/2" (68mm) diameter brass
- Ports**  
1/4" FPT
- Cv**  
0.28  
*See page 207 for flow curves*
- Weight (109 7505-580)**  
4.69 lbs. (2.13 kg)

# 100 Series Regulators



## Installation Dimensions



REGULATORS

## Ordering Information

Order No. (109 Series Dual Stage)	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assembly
109 7501-CGA	0-15 PSIG	0-30 PSIG/0-210 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 7502-CGA	0-15 PSIG	0-30 PSIG/0-210 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 7504-CGA	0-40 PSIG	0-60 PSIG/0-400 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 7505-CGA	0-40 PSIG	0-60 PSIG/0-400 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 7512-CGA	0-120 PSIG	0-200 PSIG/0-1400 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 7513-CGA	0-120 PSIG	0-200 PSIG/0-1400 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 7520-CGA	0-200 PSIG	0-400 PSIG/0-2800 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 7521-CGA	0-200 PSIG.	0-400 PSIG/0-2800 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT

## Related Options

Options	Order No.	Description
Protocol station	Add letter "M" after inlet	Convenient regulator wall mount, including tee, bracket, and stainless steel flexible hose with check valve in the inlet gland
Protocol purge station	Add letter "Q" after inlet	Convenient regulator wall mount with purge

# Flow Curves for 109 Series Dual Stage

