



# 100 Series Regulators

# 109 SERIES

The 109 Series regulators are intended for pressure control of general purpose laboratory gases where minor fluctuations in outlet pressure due to diminishing inlet supply pressure can be tolerated.

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



109 6504-580 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

## Materials

- Body**  
Forged brass
- Bonnet**  
Brass-plated die-cast zinc
- Seat**  
PTFE
- Filter**  
10 micron sintered bronze
- Diaphragm**  
PTFE-lined Neoprene
- Internal Seals**  
PTFE

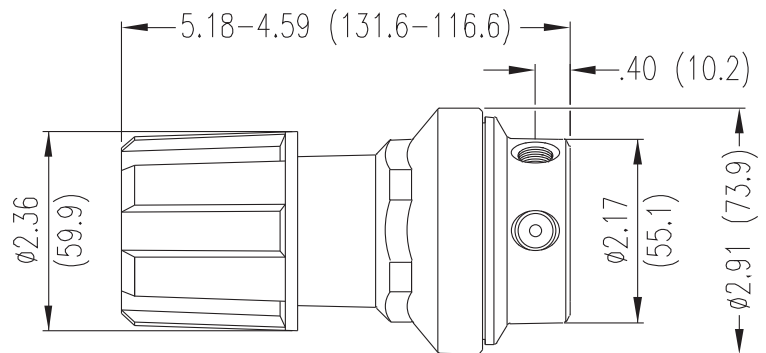
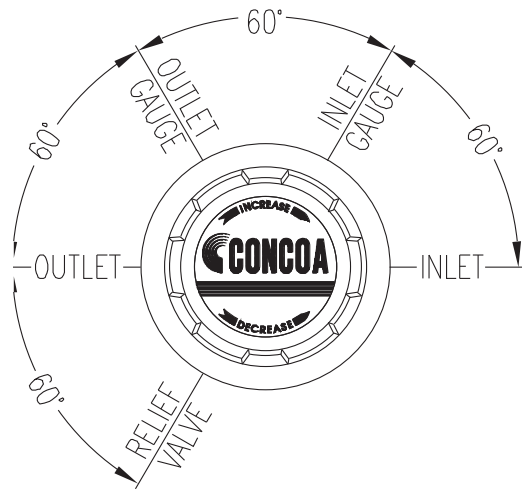
## Specifications

- 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
- Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
- Cv**  
0.28  
See page 207 for flow curves
- Weight (109 6504-580)**  
3.3 lbs. (1.5 kg)

# 100 Series Regulators



## Installation Dimensions



REGULATORS

## Ordering Information

Order No. (109 Series Single Stage)	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assembly
109 6501-CON	0-15 PSIG	0-30 PSIG/0-210 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 6502-CON	0-15 PSIG	0-30 PSIG/0-210 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 6504-CON	0-40 PSIG	0-60 PSIG/0-400 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 6505-CON	0-40 PSIG	0-60 PSIG/0-400 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 6512-CON	0-120 PSIG	0-200 PSIG/0-1400 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 6513-CON	0-120 PSIG	0-200 PSIG/0-1400 kPa	0-4000 PSIG/0-28,000 kPa	Needle valve 1/4" MPT
109 6520-CON	0-200 PSIG	0-400 PSIG/0-2800 kPa	0-4000 PSIG/0-28,000 kPa	1/4" tube fitting
109 6521-CON	0-200 PSIG	0-400 PSIG/0-2800523	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

# Regulator Flow Curves



## Flow Curves for 109, 202 and 455 Series Single Stage

