

# 5270 SERIES

## 5270 SERIES REGULATOR

The 5270 Series of regulators are intended for primary pressure and flow control of laser welding gases supplied from high pressure cylinders. For use with both CO<sub>2</sub> and Nd:YAG laser welding, the 5270 provides gas flows for plasma suppression and trailing gas shield gases.

### Advanced Features

**CHROME-PLATED BRASS BODY** Economical high purity design

**316L STAINLESS STEEL DIAPHRAGMS** No inboard gas diffusion

**STAINLESS STEEL TUBE OUTLET CONNECTIONS** Leak-tight connections

**DUAL RANGE FLOW CONTROL** Argon and Helium flow scales

**HIGH INLET PRESSURE DESIGN** Flexible gas sources

**LARGE CONVOLUTED DIAPHRAGM** Smooth pressure changes

**CAPSULE® SEAT ASSEMBLY** Increased life and serviceability



8065275-01-1 shown

### Applications

**CO<sub>2</sub> Laser Welding**  
Helium flow control  
30-200 SCFH

**Nd:YAG Laser Welding**  
Argon flow control  
10-60 SCFH

**Double Flow Control (806-5279)**  
Dual 10-60 SCFH Argon/  
30-200 SCFH He flow tubes

### Materials

**Body**  
Chrome-plated brass barstock

**Bonnet**  
Chrome-plated die cast zinc

**Seat**  
PTFE 3000 PSIG (210 BAR) max  
PCTFE 4500 PSIG (310 BAR) max

**Filter**  
10-micron sintered bronze

**Diaphragm**  
316L stainless steel

**Internal Seals**  
PTFE

### Specifications

**Maximum Inlet Pressure**  
3000 PSIG (210 BAR)  
4500 PSIG (310 BAR) model 5278

**Temperature Range**  
-40°F to 140°F (-40°C to 60°C)

**Gauge**  
2" diameter dual-scale brass

**Ports**  
1/4" FPT  
1/8" FPT (Flowmeter inlet)

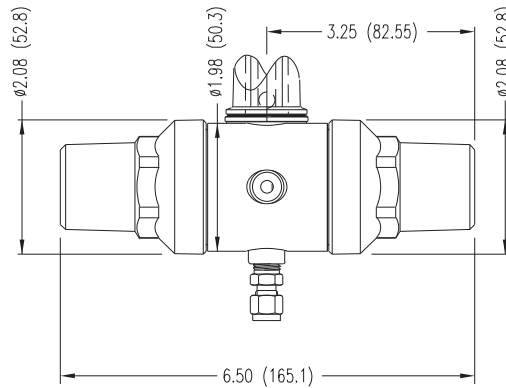
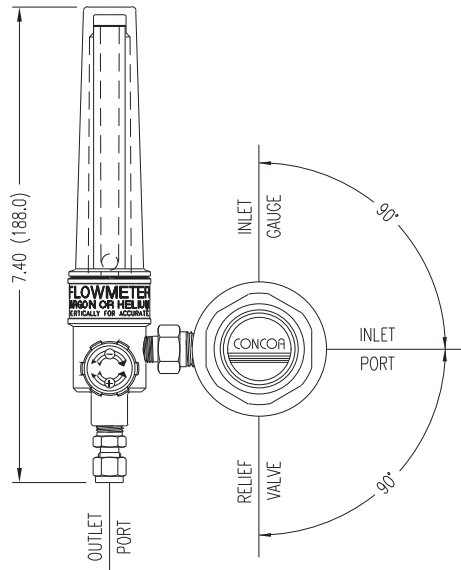
**Flowtube**  
10-60 SCFH Argon/  
30-200 SCFH Helium dual-scale

# Laser Welding

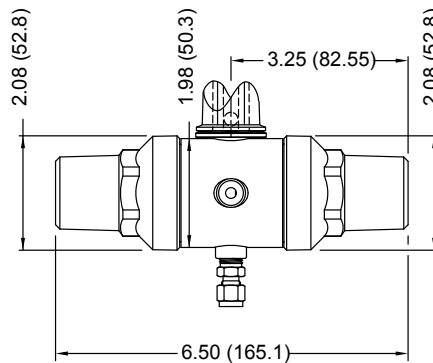
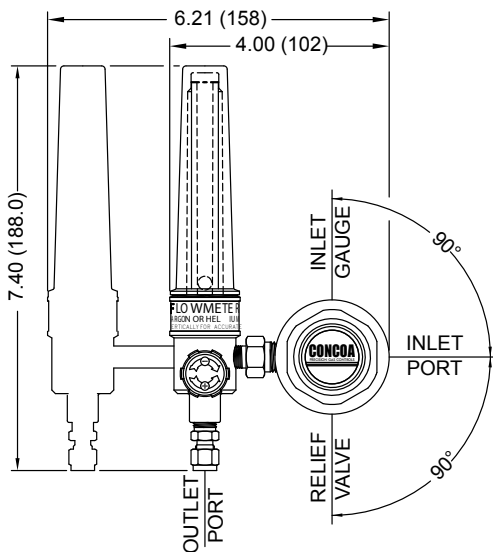
Supply

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## Installation Dimensions



8065278 shown



8065279 shown

## Ordering Information

5270 Series	Part Number	Inlet	Flowmeter	Gas Service	Outlet
	8065275-01-1	CGA 580	Single (Argon/Helium)	Inert Gases 3000 PSIG (210 BAR)	1/8" stainless steel compression tube fitting
	8065278-01-1	CGA 680	Single (Argon/Helium)	Inert Gases 4500 PSIG (310 BAR)	1/8" stainless steel compression tube fitting
	8065279-01-1	CGA 580	Dual (Argon/Helium)	Inert Gases 3000 PSIG (210 BAR)	1/8" stainless steel compression tube fitting

## Related Options

Option	Series	Description
Laser Gas Stations	See page 6	Convenient regulator wall mount, including tee, bracket, and flexible stainless steel hose with check valve in the inlet gland
Laser Panels	See page 7	Three gas panel delivery systems for the laser gases (Helium, Nitrogen, and Carbon Dioxide)
Purge Devices	See page 49	Tee and straight purge configurations to satisfy all requirements