

## 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



806-5275 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 Ar flow tubes  
Dual 30-200 SCFH He flow tubes

### Materials

#### Body

Chrome-plated brass barstock

#### Bonnet

Chrome-plated die cast zinc

#### Seat

PTFE (3,000 PSIG max inlet)  
PCTFE (4,500 PSIG max inlet)

#### Filter

10-micron sintered bronze

#### Diaphragm

316L stainless steel

#### Internal Seals

PTFE

### Specifications

#### Maximum Inlet Pressure

3,000 PSIG (210 BAR)  
4,500 PSIG (310 BAR) model 5278

#### Temperature Range

-40 to 140°F (-40 to 60°C)

#### Gauge

2" diameter dual scale brass

#### Ports

¼" FPT  
⅛" FPT (Flowmeter inlet)

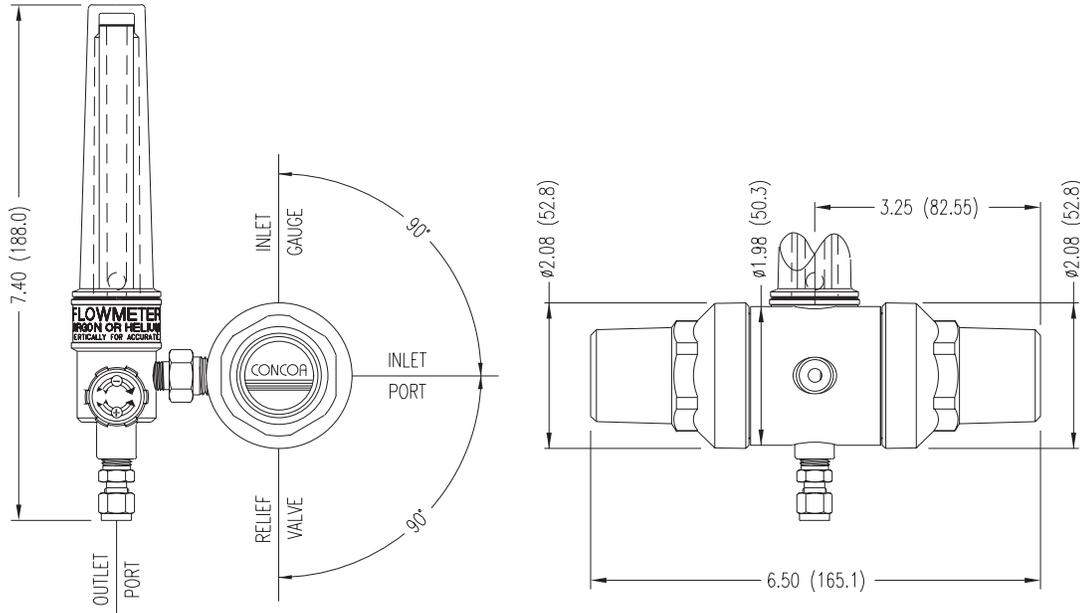
#### Flowtube (CFH)

10 - 60 CFH Argon  
10 - 200 CFH Helium

#### Weight

4.4 lbs. (2 kg)

## Installation Dimensions



## Ordering Information

Series	Part Number	Inlet	Flowmeter	Gas Service	Outlet
5270 Series	806-5275	CGA 580	Single (Dual Scale)	Inert Gases (3,000 PSIG inlet)	1/8" Stainless Steel Compression Tube Fitting
	806-5278	CGA 680	Single (Dual Scale)	Inert Gases (4,500 PSIG inlet)	
	806-5279	CGA 580	Dual (Dual Scale)	Inert Gases (3,000 PSIG Inlet)	

## Related Options

Option	Order Number	Description
Laser Gas Stations	See Page 8	Convenient regulator wall mount, including tee, bracket and flexible stainless steel pigtail with check valve in the inlet gland (Check valve not available on CGA 680 inlet models)
Laser Panels	See Page 9	Three Gas Panel delivery systems for the Laser Gases (Helium, Nitrogen and Carbon Dioxide)
Purge Devices	See Page 50	Tee and Straight Purge configurations to satisfy all requirements