



# General Purpose Two Stage Regulator

## LM - Series

### DESCRIPTION

The LM regulators are specifically designed as an economical instrument for use in non-critical applications involving inert and non-corrosive gas applications. The LM regulator should not be used in applications where inboard diffusion of atmospheric impurities water and oxygen or the out gassing of hydrocarbon based impurities will negatively impact the work being performed.

### FEATURES

- Minimal internal Volume: .450 cubic inches
- Seat area protected by a 35 micron filter.
- Four delivery pressures available.
- Excellent pressure regulation - less than 2 psig variance from full to empty cylinder.
- All exterior surfaces chrome plated.

### APPLICATIONS

The LM series regulators are ideally suited for use with inert, flammable, and hydrocarbon gases used in non-critical gas applications where a constant delivery pressure is required from full to empty cylinder.

### SPECIFICATIONS

Max. Inlet Pressure: 3,000 psig  
 Operating Temperature Range: -20°F to 120°F  
 Internal Volume: .450 cubic inches  
 Leakage: Bubble Tight  
 Flow Coefficient (C<sub>v</sub>):  
 Shipping Weight: 3.1 lbs.



### MATERIALS OF CONSTRUCTION

Body: Brass Barstock, Chrome Plated  
 Bonnet: Zinc, Chrome Plated  
 Diaphragm: Teflon coated Viton  
 Seat: Kel-F  
 Seals:  
 Filters: 35 Micron Sintered Bronze

### Model Selection Guide

Example: LM150V580 = model LM with up to 150 psig delivery pressure, with an packed outlet valve and CGA 580 inlet connection

Specify:	Maximum Delivery Pressure		Outlet Port	CGA Inlet Connection
<b>LM</b>	[***]		[*]	[***]
	<b>Delivery Pressure Range</b> 015 = 0-15 psig  045 = 0-45 psig 100 = 0-100 psig 150 = 0-150 psig	<b>Delivery Pressure Gauge</b> 30" Hg - 0-30 or 0-30 Red Line 0 - 60 0 - 200 0 - 200	<b>0</b> - None (1/4" NPT female)  <b>V</b> - Packed Valve	<b>000</b> - None (1/4" NPT female) <b>280</b> - Medical Breathing Mixtures <b>300</b> - Acetylene <b>320</b> - Carbon Dioxide <b>326</b> - Nitrous Oxide <b>346</b> - Zero Air, Compressed Air <b>350</b> - Hydrogen* <b>510</b> - Acetylene <b>540</b> - Oxygen <b>580</b> - Helium, Nitrogen, Argon <b>590</b> - Zero Air



# High Purity Two Stage Brass Barstock Regulator

## LMSS - Series

### DESCRIPTION

The LMSS regulators are designed and constructed for both high purity and general purpose applications. While compact in design these regulators provided outstanding performance, but are rugged and versatile enough for laboratory or plant applications. They are ideally suited for use for applications where precise control of pressure is required.

### FEATURES

- Minimal internal volume: .450 cubic inches.
- Seat area protected by a 30 micron filter.
- Four delivery pressure ranges available.
- Stainless steel diaphragm eliminates contamination from diffusion or out gassing.
- External self reseating relief valve.
- Designed to pass an helium leak-rate test of  $1 \times 10^{-8}$  SCC/SEC.



### APPLICATIONS

The LMSS series regulators are ideal for critical pressure reduction applications, where precise control of pressure or flow is required. They are an excellent choice for use with high purity carrier gases or gas mixtures used with gas chromatographs and other instrumentation requiring up to 5.0 gas purity.

### MATERIALS OF CONSTRUCTION

- Body: Brass Barstock, Chrome Plated
- Bonnet: Zinc, Chrome Plated
- Diaphragm: 316 Stainless Steel
- Seat: Kel-F
- Seals: Teflon
- Filters: 30 micron sintered porous bronze
- Gauges: 2" Chrome Plated Brass

### SPECIFICATIONS

- Max. Inlet Pressure: 3,000 psig
- Operating Temperature Range: -20°F to 120°F
- Internal Volume: 0.450 in
- Leakage: Bubble Tight
- Flow Coefficient ( $C_V$ ):
- Shipping Weight: 3.1 lbs (without outlet valve)

### OPTION SPECIFICATIONS

- Optional Diaphragm Valve: Chrome Plate Brass Body  
Kel-f Seat, Eigeloy  
Diaphragm and Viton seals

### Model Selection Guide

Example: LMSS150V580 = model LMSS with up to 150 psig delivery pressure, with an diaphragm outlet valve and CGA 580 inlet connection

Specify:	Maximum Delivery Pressure		Outlet Port	CGA Inlet Connection
<b>LMSS</b>	[***]		[*]	[***]
	<b>Delivery Pressure Range</b> 015 = 0-15 psig  045 = 0-45 psig 100 = 0-100 psig 150 = 0-150 psig	<b>Delivery Pressure Gauge</b> 30" Hg - 0-30 or 0-30 Red Line 0 - 60 0 - 200 0 - 200	<b>0</b> - None (1/4" NPT female)  <b>V</b> - Diaphragm Valve	<b>000</b> - None (1/4" NPT female) <b>280</b> - Medical Breathing Mixtures <b>300</b> - Acetylene <b>320</b> - Carbon Dioxide <b>326</b> - Nitrous Oxide <b>346</b> - Zero Air, Compressed Air <b>350</b> - Hydrogen* <b>510</b> - Acetylene <b>540</b> - Oxygen <b>580</b> - Helium, Nitrogen, Argon <b>590</b> - Zero Air