



## Lab Master LG500 Series 5.0 Nickel Plated Brass Barstock Regulator

Lab Master LG500 Series regulators are intended for primary pressure gas control of:

- ▶ **Non-Corrosive**
- ▶ **High Purity gases** (up to 5.0 Grade)

The Lab Master LG500 series regulators are intended for primary pressure gas control of non corrosive, high purity gases, up to 5.0 purity grade.

### LGS500 Series –

Nickel Plated Brass Single Stage Regulator for applications where slight pressure variance in delivery pressure is acceptable (as cylinder pressure decreases)

### LGT500 Series –

Nickel Plated Brass Two Stage Regulator for applications where constant pressure is required (as cylinder pressure decreases)

### LGL500 Series –

Nickel Plated Brass Line Regulator for gas applications, for distribution systems (pipelines)



LGS500 SERIES



LGT500 SERIES



LGL500 SERIES



## Lab Master LG500 Series 5.0 Nickel Plated Brass Barstock Regulator

### LG500 SERIES

#### TYPICAL APPLICATIONS

Laboratory research  
Analytical process  
Process analysers  
Gas chromatography  
High purity cgas handling

#### FEATURES

Six port configuration  
Rear panel mounting capabilities  
(Line and single stage regulators)  
Encapsulated seat design  
Low wetted surface area  
Full range of inlet and outlet fittings  
Fitted pressure relief valve  
(Single and two stage regulators)

#### MATERIALS

Body: Nickel Plated Brass Barstock  
Bonnet: High Strength Alloy  
Seat: Nylon  
Diaphragm: 316L Stainless Steel  
Seals: PTFE  
Filter: 10 Micron sintered 316L Stainless Steel

#### SPECIFICATION

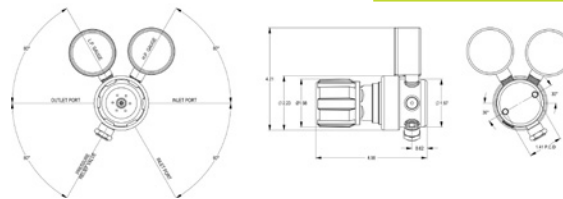
Maximum Inlet Pressure: 25 bar (360 psig), 60 bar (870 psig), 207 bar (3000 psig), 300 bar (4350 psig)\*  
Delivery Pressure Range psig: 0-15 psig, 0-22 psig, 0-50 psig, 0-90 psig, 0-150 psig  
Delivery Pressure Range bar: 0-1 bar, 0-1.5 bar, 0-3.5 bar, 0-6 bar, 0-10 bar  
Gauges: 50mm (2") diameter snap-on tamper proof lens  
Ports: 1/4" NPT Female  
Temperature Range: -40° C to +60° C (60° F to 140° F)  
Flow Coefficient: LGS / LGL:  $C_v=0.094$ ; LGT:  $C_v=0.078$   
Ports: 1/4" NPT Female  
Weight: LGL500 / 510 0.95kg (2.1lb); LGS500 / 510 1.05kg (2.3lb); LGT500 / 510 1.5kg (3.5lb)

\*Single and Two Stage regulators with no fitting fitted in to the regulator

### DIMENSIONS

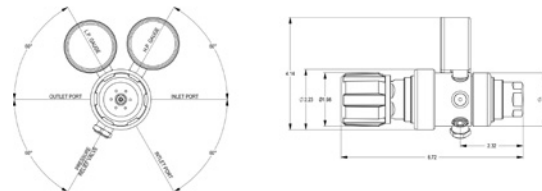
#### SINGLE STAGE REGULATOR

LG500 Series – Single Stage diaphragm regulator with relief valve



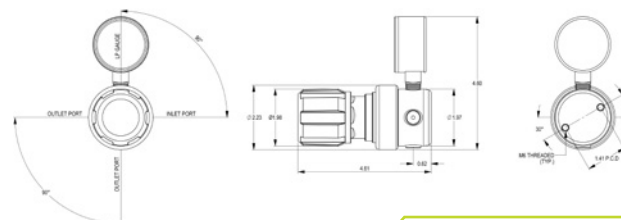
#### TWO STAGE REGULATOR

LG500 Series – Two Stage diaphragm regulator with relief valve



#### LINE REGULATOR

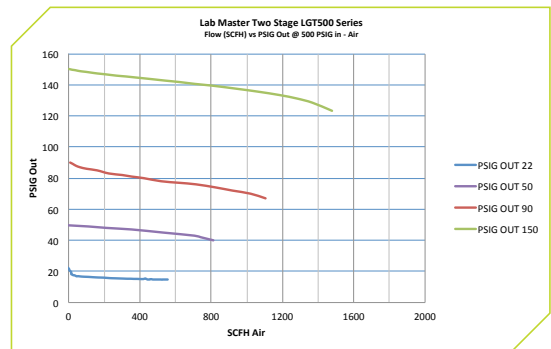
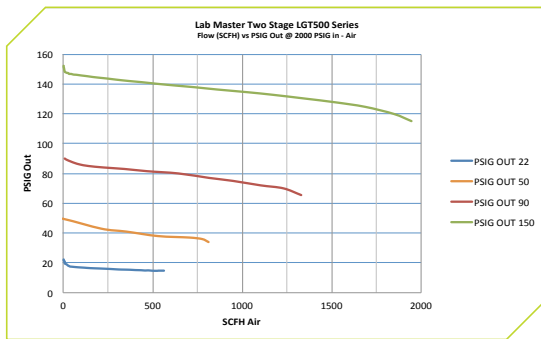
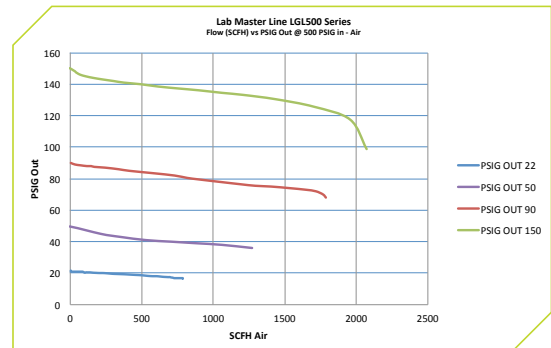
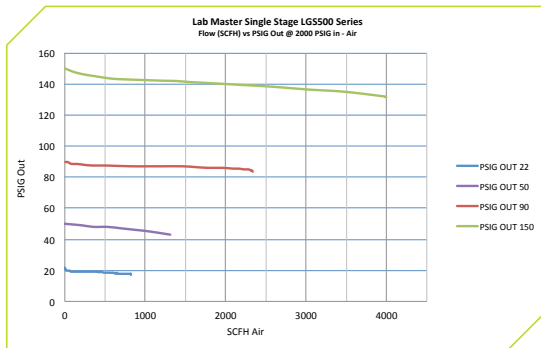
LG500 Series – Line regulator with no relief valve



# Lab Master LG500 Series

## 5.0 Nickel Plated Brass Barstock Regulator

### FLOW PERFORMANCE



### MODEL NO. SELECTOR GUIDE

# LGS500-03-05-03-03-102-39-L

PRODUCT MODEL	INLET PRESSURE	DELIVERY PRESSURE	INLET PRESSURE GAUGE UNIT	DELIVERY PRESSURE GAUGE UNIT	INLET FITTINGS	OUTLET FITTINGS	OPTIONS
LGS500	01 360 psi	01 0-15 psi	00 No Gauge	00 No Gauge	000 No Inlet Fittings	00 No Outlet Fittings	A No Options
LGS510	03 3000 psi	02 0-22 psi	03 Bar/psi	03 Bar/PSI	001 1/8" Compression Tube Brass	01 1/8" Compression Tube Brass	L Compliance Certificate
	04 4350 psi	03 0-50 psi	Plated Brass	Plated Brass	003 1/4" Compression Tube Brass\	03 1/4" Compression Tube Brass	N With Out Relief Valve
		04 0-90 psi			008 1/4" NPT Male Brass Chrome Plated	08 1/4" NPT Male Brass Chrome Plated	
		05 0-150 psi			093 CGA 296 Brass Chrome Plated	32 DRK Diffusion Resistant Shut-Off Valve 1/4" NPT Female Brass Chrome Plated	
					094 CGA 300 Brass Chrome Plated	33 DRK Diffusion resistant Shut-Off Valve 1/8" Tube Brass Chrome Plated	
					095 CGA 320 Brass Chrome Plated	34 DRK Diffusion resistant Shut-Off Valve 1/4" Tube Brass Chrome Plated	
					096 CGA 326 Brass Chrome Plated	36 DRK Diffusion resistant Shut-Off Valve 1/4" NPT Male Brass Chrome Plated	
					098 CGA 346 Brass Chrome Plated	39 Control Valve 1/4" NPT Male Brass Chrome Plated	
					099 CGA 350 Brass Chrome Plated	40 Control Valve 1/8" Compression Tube Brass Chrome Plated	
					100 CGA 500 Brass Chrome Plated	41 Control Valve 1/4" Compression Tube Brass Chrome Plated	
					101 CGA 510 Brass Chrome Plated		
					102 CGA 540 Brass Chrome Plated		
					104 CGA 580 Brass Chrome Plated		
					105 CGA 590 Brass Chrome Plated		
					109 CGA 992 Brass Chrome Plated		
					110 CGA 993 Brass Chrome Plated		

Rules: **LGS500** 1) Model number for delivery pressures from 22 up to 150 psi  
 2) Inlet Pressure of 4350 psi (option 4) only available with no inlet fitting (option 00 - inlet fittings) and option N (with out relief valve - options) not available  
**LGS510 Acetylene** 1) Model number for 15 psi delivery pressure only (Acetylene regulator) Inlet Fitting CGA 510 only and 360 psi inlet pressure

# Lab Master LG500 Series

## 5.0 Nickel Plated Brass Barstock Regulator

### MODEL NO. SELECTOR GUIDE

**LGT500-03-05-03-03-102-32-L**

PRODUCT MODEL	INLET PRESSURE	DELIVERY PRESSURE	INLET PRESSURE GAUGE UNIT	DELIVERY PRESSURE GAUGE UNIT	INLET FITTINGS	OUTLET FITTINGS	OPTIONS
<b>LGT500</b>	<b>01</b> 360 psi	<b>01</b> 0-15 psi	<b>00</b> No Gauge	<b>00</b> No Gauge	<b>000</b> No Inlet Fittings	<b>00</b> No Outlet Fittings	<b>A</b> No Options
<b>LGT510 Acetylene</b>	<b>03</b> 3000 psi	<b>02</b> 0-22 psi	<b>03</b> Bar/psi	<b>03</b> Bar/PSI	<b>001</b> 1/8" Compression Tube Brass	<b>01</b> 1/8" Compression Tube Brass	<b>L</b> Compliance Certificate
	<b>04</b> 4350 psi	<b>03</b> 0-50 psi	Plated Brass	Plated Brass	<b>003</b> 1/4" Compression Tube Brass\	<b>03</b> 1/4" Compression Tube Brass	<b>N</b> With Out Relief Valve (up to 150 psi)
		<b>04</b> 0-90 psi			<b>008</b> 1/4" NPT Male Brass Chrome Plated	<b>08</b> 1/4" NPT Male Brass Chrome Plated	
		<b>05</b> 0-150 psi			<b>092</b> CGA 280 Brass Chrome Plated	<b>32</b> DRK Diffusion Resistant Shut-Off Valve 1/4" NPT Female Brass Chrome Plated	
					<b>093</b> CGA 296 Brass Chrome Plated	<b>33</b> DRK Diffusion resistant Shut-Off Valve 1/8" Tube Brass Chrome Plated	
					<b>094</b> CGA 300 Brass Chrome Plated	<b>34</b> DRK Diffusion resistant Shut-Off Valve 1/4" Tube Brass Chrome Plated	
					<b>095</b> CGA 320 Brass Chrome Plated	<b>36</b> DRK Diffusion resistant Shut-Off Valve 1/4"NPT Male Brass Chrome Plated	
					<b>096</b> CGA 326 Brass Chrome Plated	<b>39</b> Control Valve 1/4"NPT Male Brass Chrome Plated	
					<b>098</b> CGA 346 Brass Chrome Plated	<b>40</b> Control Valve 1/8" Compression Tube Brass Chrome Plated	
					<b>099</b> CGA 350 Brass Chrome Plated	<b>41</b> Control Valve 1/4" Compression Tube Brass Chrome Plated	
					<b>100</b> CGA 500 Brass Chrome Plated		
				<b>101</b> CGA 510 Brass Chrome Plated			
				<b>102</b> CGA 540 Brass Chrome Plated			
				<b>104</b> CGA 580 Brass Chrome Plated			
				<b>105</b> CGA 590 Brass Chrome Plated			
				<b>109</b> CGA 992 Brass Chrome Plated			
				<b>110</b> CGA 993 Brass Chrome Plated			

Rules: **LGT500** 1) Model number for delivery pressures from 22 up to 150 psi  
 2) Inlet Pressure of 4350 psi (option 4) only available with no inlet fitting (option 00 - inlet fittings) and option N (with out relief valve - options) not available  
**LGT510 Acetylene** 1) Model number for 15 psi delivery pressure only (Acetylene regulator) Inlet Fitting CGA 510 only and 360 psi inlet pressure

### MODEL NO. SELECTOR GUIDE

**LGL500-02-05-00-03-000-39-L**

PRODUCT MODEL	INLET PRESSURE	DELIVERY PRESSURE	INLET PRESSURE GAUGE UNIT	DELIVERY PRESSURE GAUGE UNIT	INLET FITTINGS	OUTLET FITTINGS	OPTIONS
<b>LGL500</b>	<b>01</b> 360 psi	<b>01</b> 0-15 psi	<b>00</b> No Gauge	<b>00</b> No Gauge	<b>000</b> No Inlet Fittings	<b>00</b> No Outlet Fittings	<b>A</b> No Options
<b>LGL510 Acetylene</b>	<b>02</b> 870 psi	<b>02</b> 0-22 psi		<b>03</b> Bar/PSI	<b>001</b> 1/8" Compression Tube Brass	<b>01</b> 1/8" Compression Tube Brass	<b>L</b> Compliance Certificate
		<b>03</b> 0-50 psi		Plated Brass	<b>003</b> 1/4" Compression Tube Brass	<b>03</b> 1/4" Compression Tube Brass	<b>*</b> Line regulators are supplied with no Relief Valve
		<b>04</b> 0-90 psi			<b>008</b> 1/4" NPT Male Brass Chrome Plated	<b>08</b> 1/4" NPT Male Brass Chrome Plated	
		<b>05</b> 0-150 psi				<b>32</b> DRK Diffusion Resistant Shut-Off Valve 1/4" NPT Female Brass Chrome Plated	
					<b>33</b> DRK Diffusion resistant Shut-Off Valve 1/8" Tube Brass Chrome Plated		
					<b>34</b> DRK Diffusion resistant Shut-Off Valve 1/4" Tube Brass Chrome Plated		
					<b>36</b> DRK Diffusion resistant Shut-Off Valve 1/4"NPT Male Brass Chrome Plated		
					<b>39</b> Control Valve 1/4"NPT Male Brass Chrome Plated		
					<b>40</b> Control Valve 1/8" Compression Tube Brass Chrome Plated		
					<b>41</b> Control Valve 1/4" Compression Tube Brass Chrome Plated		

Rules: **LGL500** 1) Model number for delivery pressures 22 up to 150 psi  
**LGL510 Acetylene** 1) Model number for 15 psi delivery pressure only (Acetylene regulator) Inlet Fitting CGA 510 only and 360 psi inlet pressure