

# 601 SERIES Resonator Gas Supply

## 601 SERIES REGULATOR



The 601 Series Dual-stage Regulator was designed with beam-mode quality in mind. The 601 offers M<sup>2</sup> technology that virtually eliminates atmospheric contamination during a cylinder change. Low level moisture and hydrocarbon contents yield a more stable emission and higher resonator efficiencies.

### Advanced Features

<b>MACHINED BRASS BARSTOCK BODY</b>	Smooth surface finish
<b>LOW WETTED SURFACE AREA</b>	Minimal purge requirements
<b>CONVOLUTED 316L DIAPHRAGM</b>	No inboard diffusion
<b>OPTIONAL INTEGRAL PURGE</b>	Eliminates atmospheric contamination
<b>10-MICRON FILTRATION IN BOTH STAGES</b>	Reduces particle contamination
<b>OPTIONAL CGA CHECK VALVE</b>	Minimizes atmosphere exposure
<b>OPTIONAL PRESSURE CYCLE PURGE</b>	Eliminates dead-space contaminate
<b>CAPSULE® SEAT</b>	Increase serviceability and life

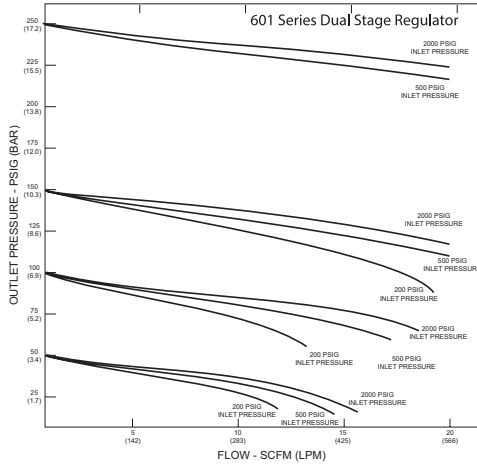
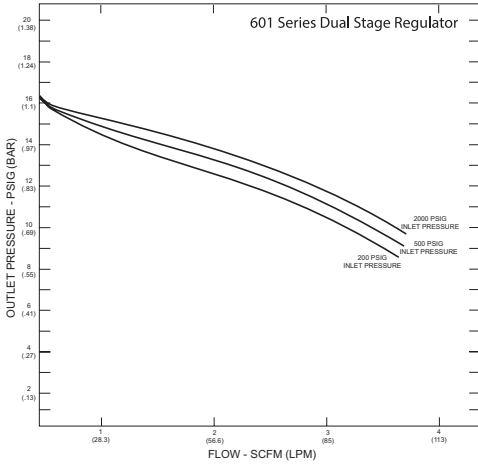
6012324-01-320 shown

Applications	Materials	Specifications
<b>Laser Pure Resonator Gases</b> Helium Nitrogen Carbon Dioxide	<b>Bodies</b> Machined brass barstock	<b>Maximum Inlet Pressure</b> 3000 PSIG (210 BAR) 4500 PSIG (310 BAR)
<b>Laser Mixed Resonator Gases</b> Three gas premix Four gas premix Five gas premix	<b>Bonnet</b> Chrome-plated die cast zinc	<b>Temperature Range</b> -40°F to 140°F (-40°C to 60°C)
<b>Laser Purging Gases</b> Zero Air Nitrogen	<b>Seats</b> PTFE	<b>Gauges</b> 2" (50mm) diameter dual-scale
<b>Maintenance</b> Nitrogen	<b>Filters</b> 10-micron sintered bronze	<b>Helium Leak Integrity</b> 1 x 10 <sup>-8</sup> scc/sec
	<b>Diaphragm</b> 316L stainless steel	<b>Cv</b> 0.1
		<b>Weight</b> 4.8 lbs. (2.16 kg)

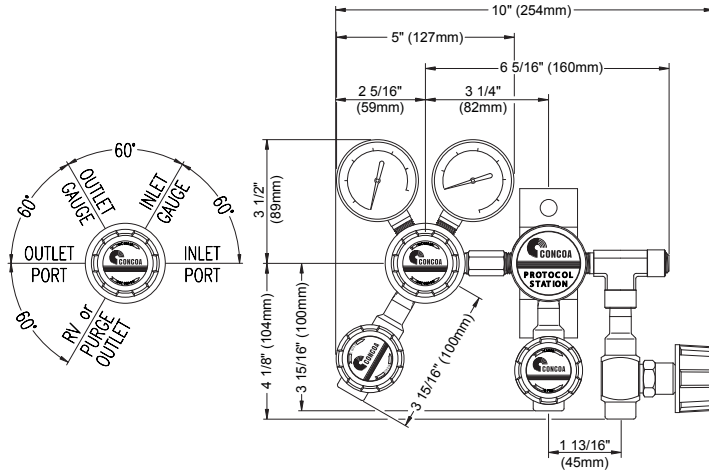
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## Flow Performance Curves



## Installation Dimensions



Shown with optional purge and laser gas switchover station.

## Ordering Information

601 Series	A	B	C	D	CON	Options	
601	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Inlet	Installed Options
	1: 0-50 PSIG (0-3.5 BAR)	0-100 PSIG (0-7 BAR)	0: None	0: 1/4" FPT port	1: Standard assembly (PSIG/kPA gauges)	000: 1/4" FPT	B: Laser gas alarm station†
	2: 0-100 PSIG (0-7 BAR)	0-200 PSIG (0-14) BAR	3: 0-4000 PSIG (0-275 BAR)	1: 1/4" MPT	2: Standard assembly (BAR/PSIG gauges)	TF2: 1/8" tube	C: Laser gas switchover station
	3: 0-150 PSIG (0-10 BAR)	0-200 PSIG (0-14) BAR	8: 0-6000 PSIG (0-405 BAR)	2: 1/4" tube fitting	3: Integral purge (PSI/kPA gauges)	TF4: 1/4" tube	M: Laser gas station
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG (0-27 BAR)		6: 3/8" tube fitting	4: Integral purge (BAR/PSIG gauges)	TF6: 3/8" tube	N: Regulator CGA check valve*
				7: 3/8" BSP right hand fitting	5: Integral purge with fitting* (PSIG/kPA gauges)	M06: 6mm tube	P: Inlet pressure cycle purge†
				A: 3/8" BSP right hand fitting	6: Integral purge with fitting* (BAR/PSIG gauges)	CGA DIN 477 BS 341 and others available	*Valid with CGA cylinder connections
				M: 6mm tube fitting	8: Integral purge with muffler (PSIG/BAR gauges)*		†Not valid with 4500 PSIG (300 BAR) max inlet
					9: Integral purge with muffler (BAR/PSIG gauges)		

\*Fitting matches outlet assembly