



# 405 SINGLE STAGE BRASS LINE REGULATOR

The 405 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases or as point of use pressure control in high purity gas distribution systems.

## Highlighted Features

- Single Stage
- Brass Barstock Body
- Four Port Configuration
- 316L Stainless Steel Diaphragm

## Typical Applications

- ❖ Bulk gas distribution systems
- ❖ Gas and liquid chromatography
- ❖ High purity carrier gases
- ❖ Zero, span, and calibration gases
- ❖ High purity chamber pressurization
- ❖ Liquefied hydrocarbon gas control
- ❖ Control of cryogenic gases



Features	Materials	Specifications
<p><b>Metal-to-Metal Diaphragm Seal</b> No possibility of gas contamination</p> <p><b>CAPSULE® Seat</b> Increased serviceability and life</p> <p><b>Brass Barstock Body</b> Smooth surface finish</p> <p><b>Front and Rear Panel-Mountable</b> Versatile system configuration</p> <p><b>Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR)</b> Broad range of applications</p> <p><b>3000 PSIG (210 BAR) Inlet Pressure Rating</b> Safe use with high pressure cylinders</p> <p><b>Pipe Away Relief Valve</b> Safety vents exhaust gases</p>	<p><b>Body</b> Brass barstock</p> <p><b>Bonnet</b> Brass barstock</p> <p><b>Seat</b> PTFE</p> <p><b>Filter</b> 10 micron sintered bronze</p> <p><b>Diaphragm</b> 316L stainless steel</p> <p><b>Internal Seals</b> PTFE</p>	<p><b>Maximum Inlet Pressure</b> 3000 PSIG (210 BAR)</p> <p><b>Temperature R</b> -40°F to 140°F (-40°C to 60°C)</p> <p><b>Gauge</b> 2" (53mm) diameter chrome-plated</p> <p><b>Ports</b> 1/4" FPT</p> <p><b>Helium Leak Integrity</b> 1 x 10<sup>-9</sup> scc/sec</p> <p><b>Cv</b> 0.1 Max outlet 50 PSIG (3.5 BAR) or below 0.2 Max outlet above 50 PSIG (3.5 BAR) <i>Flow curves on pages to follow*</i></p> <p><b>Weight (405 2021-000)</b> 2.71 lbs. (1.23 kg)</p>

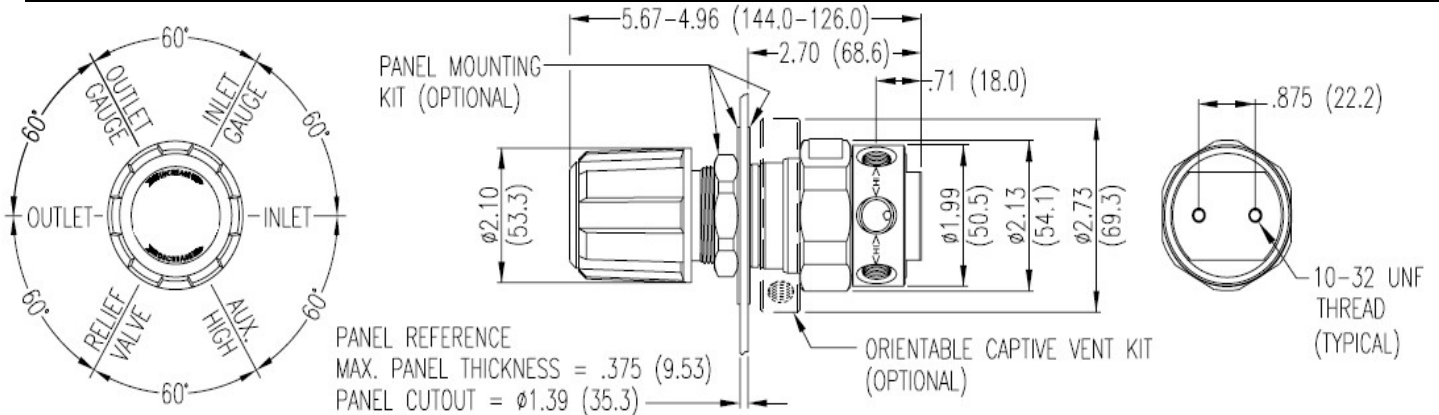
## Order Information

Model	A	B	C	D	-CON		
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Gauges	Inlet Connections	Installed Options
405	1: 0-15 PSIG (0-1 BAR)*	30"-0-30 PSIG/ -1-0-2 BAR	0: None	0: 1/4" FPT port	0: Bare body	000: 1/4" FPT	D: Deep purge*
	2: 0-50 PSIG (0-3.5 BAR)	30"-0-100 PSIG/ -1-0-7 BAR		1: 1/4" MPT	1: Cleanroom assembly (PSIG/kPa gauges)	TF2: 1/8" tube	M: Protocol station Q: Protocol purge station
	3: 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/ - 1-0-14 BAR		2: 1/4" tube fitting	2: Cleanroom assembly (BAR/PSIG gauges)	TF4: 1/4" tube	
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-27 BAR		3: Diaphragm valve 1/4" tube fitting	6: Mirror image (PSIG/kPa gauges)	TF6: 3/8" tube	
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/ 0-70 BAR		4: Diaphragm valve 1/4" MPT	7: Mirror image (BAR/PSIG gauges)	M06: 6mm	
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR		5: Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	
				6: 1/8" tube fitting			
	<i>**Standard assembly does not include relief valve</i>			7: 3/8" tube fitting 8: Diaphragm valve 1/8" tube fitting 9: Diaphragm valve 1/4" FPT			
				A: 3/8" BSP RH fitting B: Diaphragm valve 3/8" fitting C: 3/8" SP LH fitting D: 6mm brass hose barb (not available if A=4 or 5)			
				G: 1/8" stainless steel tube fitting H: 1/4" stainless steel tube fitting M: 6mm tube fitting S: Diaphragm valve 6mm tube fitting			

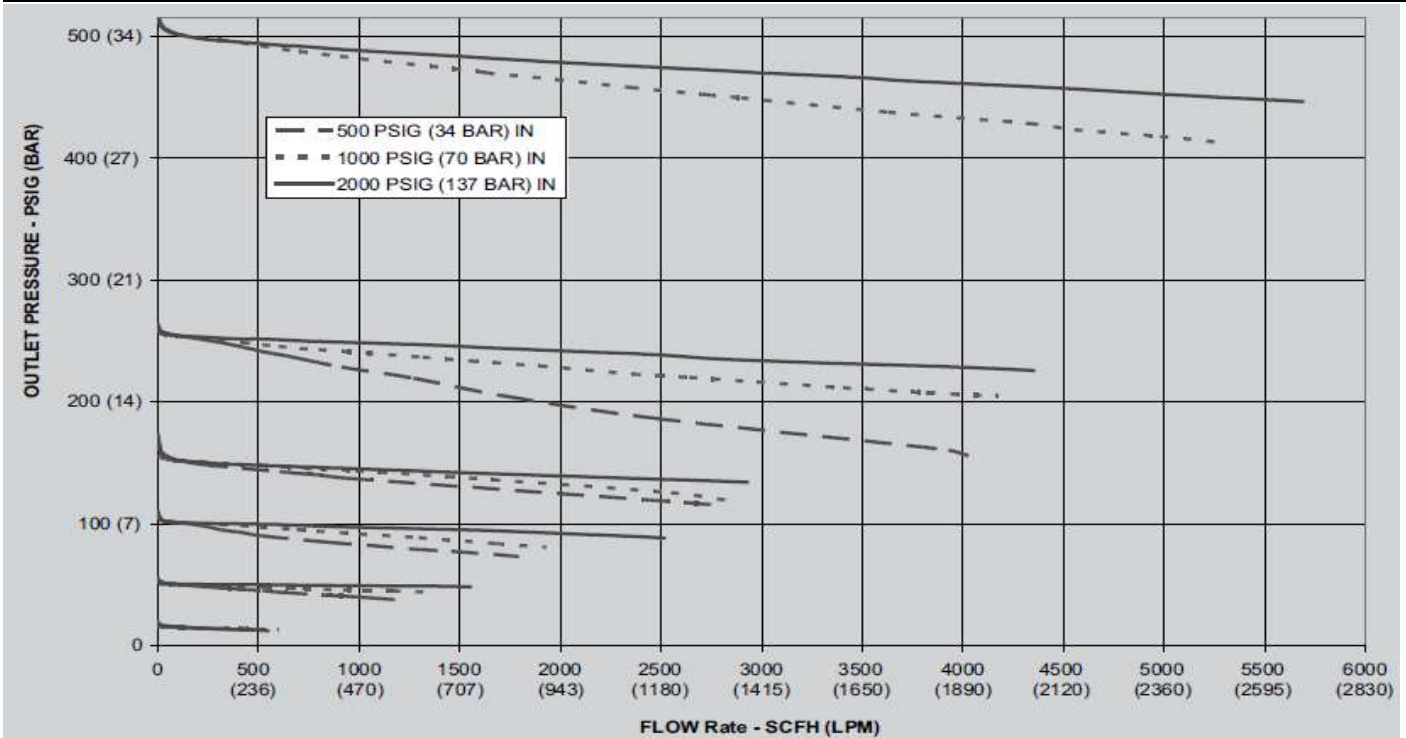
## Related Options

Part Number	Description
CON 550-0002	Panel mount kit
CON 550-0001	Captured vent kit
CON 476-0002	Helium leak certification

## Installation Dimensions



## 405 Regulator Flow Curves



Can't find what you need? We will be happy to assist you to find the right regulator to fit your needs.