



# 400 Series Regulators

## 425 Series Regulator

Single Stage

316L Stainless Steel  
Barstock Body

Four-Port  
Configuration

316L Stainless Steel  
Diaphragm

The 425 Series regulators are intended for secondary pressure control of ultra-high purity and corrosive gases or as point-of-use pressure control in ultra-high purity gas distribution systems.

### Features

- 316L stainless steel barstock body  
Increased corrosion resistance
- Front and rear panel-mountable  
Versatile system configuration
- Pressure ranges 0-15 to 0-500 PSIG  
Broad range of applications
- 3000 PSIG inlet pressure rating  
Safe use with high pressure cylinders

### Typical Applications

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



425-2021 shown

### 400 Series Advantage

- Metal-to-metal diaphragm seal  
No possibility of gas contamination
- Capsule® seat  
Increased serviceability and life
- 316L stainless steel diaphragm  
No inboard diffusion
- Orientable captured vent capable  
Safety in any installation
- Low wetted surface area  
Minimal purge requirements
- Field-adjustable pressure limit  
Safeguard downstream equipment
- Pipe away relief valve  
Safely vents exhaust gases

### Materials

- Body  
316L stainless steel barstock
- Bonnet  
Chrome-plated brass barstock
- Seat  
PTFE
- Filter  
10 micron patented stainless steel  
multi-layer mesh
- Diaphragm  
316L stainless steel
- Internal Seals  
PTFE

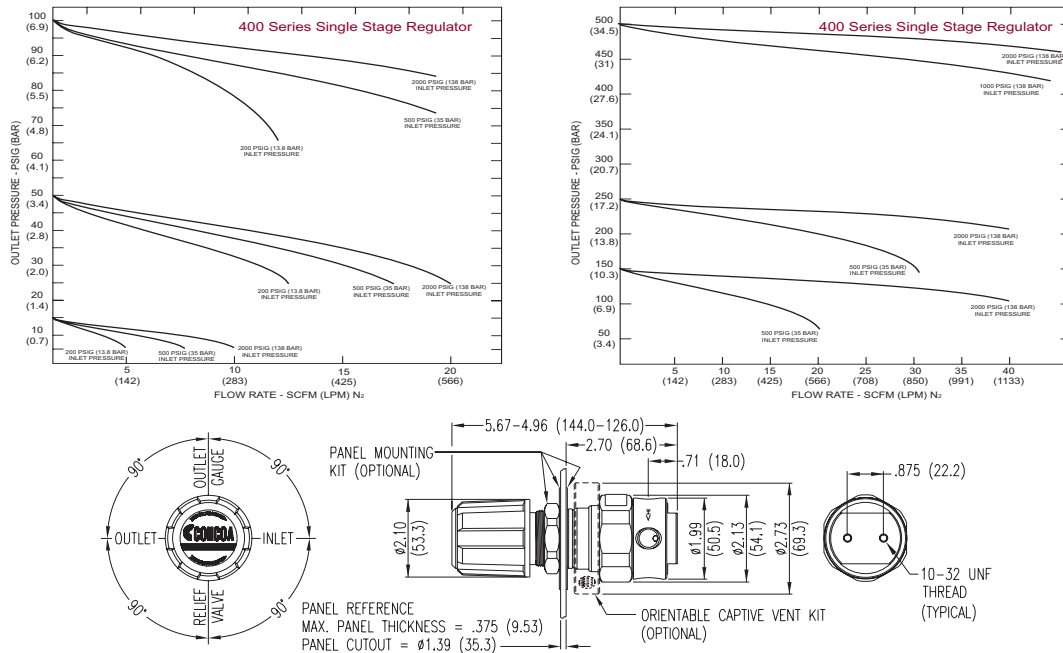
### Specifications

- Maximum Inlet Pressure  
3000 PSIG (210 BAR)
- Temperature Range  
-40°F to 140°F (-40°C to 60°C)
- Gauges  
2" diameter stainless steel
- Ports  
1/4" FPT
- Helium Leak Integrity  
1 x 10<sup>-9</sup> scc/sec
- Cv  
0.1 (Max outlet 50 PSIG or below)  
0.2 (Max outlet above 50 PSIG)
- Weight (425-2021-TF4)  
2.58 lbs. (1.17 kg)

# 400 Series Regulators



## Technical Information



400 Series

## Ordering Information

425	A	B	C	D	-Inlet	Options	
Series 425	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/ Gauges	Inlet Connections	Installed Options
	1: 0-15*	30"-0-30 PSIG	0: None	0: 1/4" FPT Port	0: Bare Body	000: 1/4" FPT	M: Protocol Station
	2: 0-50	30"-0-100 PSIG		1: 1/4" MPT	1: Standard Assembly (PSIG/kPa Gauges)	TF2: 1/8" Tube	Q: Protocol Purge Station
	3: 0-100	30"-0-200 PSIG		2: 1/4" Tube Fitting	2: Standard Assembly (BAR/PSIG Gauges)	TF4: 1/4" Tube	S: Stainless Steel Bonnet
	4: 0-250	0-400 PSIG		3: Diaphragm Valve 1/4" Tube Fitting	4: Cleanroom Assembly (PSIG/kPa Gauges)	TF6: 3/8" Tube	
	5: 0-500**	0-1000 PSIG		4: Diaphragm Valve 1/4" MPT	5: Cleanroom Assembly (BAR/PSIG Gauges)	M06: 6mm Tube	
	7: 0-150	30"-0-200 PSIG		5: Needle Valve 1/4" MPT	6: Mirror Image PSI/KPA Gauges		
				6: 1/8" Tube Fitting	7: Mirror Image BAR/PSI Gauges		
				7: 3/8" Tube Fitting			
				8: Diaphragm Valve 1/8" Tube Fitting			
				9: Diaphragm Valve 1/4" FPT			
				M: 6mm Tube Fitting			
				S: Diaphragm Valve 6mm Tube Fitting			
	*Not available with 4500 PSIG maximum inlet pressure						
	**Standard assembly does not include relief valve						

## Related Options

Stock No.	Description
550-0002	Panel Mount Kit
550-0001	Captured Vent Kit
476-0002	Helium Leak Certification