



400 Series Regulators

435 SERIES

The 435 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.

- Single Stage
- Rear Entry
- Brass Barstock Body
- Five Port Configuration
- 316L Stainless Steel Diaphragm



435 2021-000 shown

Typical Applications

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

Features

- Metal-to-Metal Diaphragm Seal**
No possibility of gas contamination
- CAPSULE® Seat**
Increased serviceability and life
- Brass Barstock Body**
Smooth surface finish
- Front and Rear Panel-Mountable**
Versatile system configuration
- Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR)**
Broad range of applications
- 3000 PSIG (210 BAR) Inlet Pressure Rating**
Safe use with high pressure cylinders
- Pipe Away Relief Valve**
Safely vents exhaust gases

Materials

- Body**
Brass barstock
- Bonnet**
Brass barstock
- Seat**
PTFE
- Filter**
10 micron sintered bronze
- Diaphragm**
316L stainless steel
- Internal Seals**
PTFE

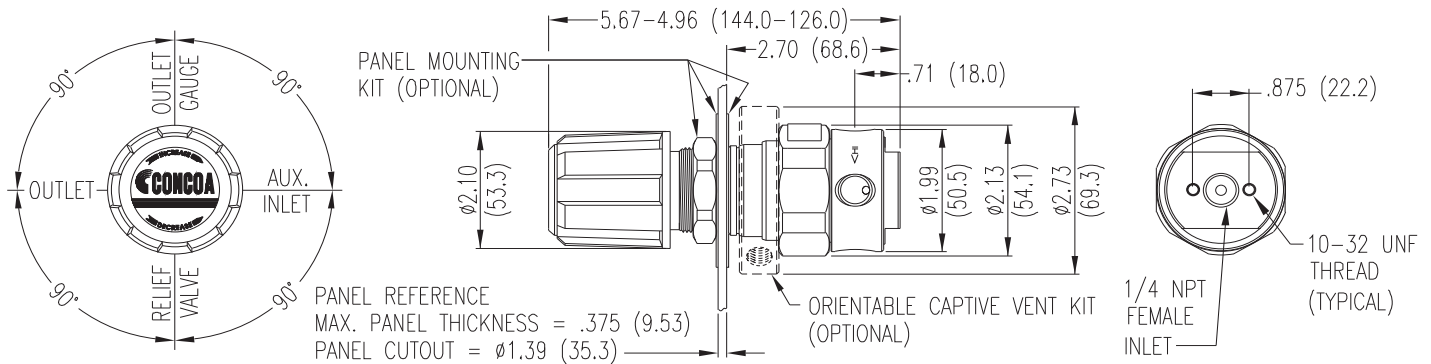
Specifications

- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Gauge**
2" (53mm) diameter brass
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁹ scc/sec
- Cv**
0.1 (Max outlet 50 PSIG/3.5 BAR or below)
0.2 (Max outlet above 50 PSIG/3.5 BAR)
See page 203 for flow curves
- Weight (435 2021-000)**
2.70 lbs. (1.22 kg)

400 Series Regulators



Installation Dimensions



Ordering Information

435	A	B	C	D	-CON	Options	
Series 435	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/ Gauges	Inlet Connections	Installed Options
	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	None
	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	
	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		TF6: 3/8" tube	
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/ 0-70 BAR		4: Diaphragm valve 1/4" MPT		M06: 6mm tube	
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR		5: Needle valve 1/4" MPT			
	<i>*Standard assembly does not include relief valve</i>			6: 1/8" tube fitting			
				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" tube fitting			
				C: 3/8" BSP 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

Order No.	Description
550 0002	Panel mount kit
550 0001	Captured vent kit
476 0002	Helium Leak certification

Regulator Flow Curves



Flow Curves for 403, 405, 425, 435, 445 Series

