



425 SINGLE STAGE STAINLESS STEEL LINE REGULATOR

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.

Highlighted Features

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

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



Features	Materials	Specifications
<p>Metal-to-Metal Diaphragm Seal No possibility of gas contamination</p> <p>CAPSULE® Seat Increased serviceability and life</p> <p>316L Stainless Steel Barstock Body Increased corrosion resistance</p> <p>Front and Rear Panel-Mountable Versatile system configuration</p> <p>Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR) Broad range of applications</p> <p>3000 PSIG (210 BAR) Inlet Pressure Rating Safe use with high pressure cylinders</p> <p>Pipe Away Relief Valve Safety vents exhaust gases</p>	<p>Body 316L stainless steel barstock</p> <p>Bonnet Chrome-plated brass barstock</p> <p>Seat PTFE</p> <p>Filter Patented 10 micron 316 mesh</p> <p>Diaphragm 316L stainless steel</p> <p>Internal Seals PTFE</p>	<p>Maximum Inlet Pressure 3000 PSIG (210 BAR)</p> <p>Temperature Range -40°F to 140°F (-40°C to 60°C)</p> <p>Gauge 2" (53mm) diameter stainless steel</p> <p>Ports 1/4" FPT</p> <p>Helium Leak Integrity 1 x 10⁻⁹ scc/sec</p> <p>Cv 0.1 (Max outlet 50 PSIG/1 BAR or below) 0.2 (Max outlet above 50 PSIG/3.5 BAR)</p> <p><i>Flow curves on pages to follow</i></p> <p>Weight (425 2021-TF4) 2.58 lbs. (1.17 kg)</p>

Order Information

Model	A	B	C	D	-CON	OPTIONS	
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Inlet Connections	Installed Options
425	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	M: Protocol station
	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	Q: Protocol purge station
	3: 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/ -1-0-14 BAR		2: 1/4" tube fitting 3: Diaphragm valve 1/4" tube fitting	2: Cleanroom assembly (BAR/PSIG gauges)	TF4: 1/4" tube	S: Stainless steel bonnet
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-27 BAR		4: Diaphragm valve 1/4" MPT	6: Mirror image (PSIG/kPa gauges)	TF6: 3/8" tube	
	5: 0-500 PSIG (0-34 BAR) ¹	0-1000 PSIG/ 0-70 BAR		5: Needle valve 1/4" MPT 6: 1/8" tube fitting 7: 3/8" tube fitting	7: Mirror image (BAR/PSIG gauges)	M06: 6mm	
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR		8: Diaphragm valve 1/8" tube fitting 9: Diaphragm valve 1/4" FPT M: 6mm tube fitting S: Diaphragm valve 6mm tube fitting			

Notes: ¹ Standard assembly does not include relief valve

Related Options

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

