

425 Series Regulator

CRN OH 5216.5C

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.

Advanced 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 Advantage

Materials

Specifications

- *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

Body
316L stainless steel barstock

Bonnet
Chrome-plated brass barstock

Seat
PTFE

Filter
10 micron stainless steel multi-layer mesh

Diaphragm
316L stainless steel

Internal Seals
PTFE

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
¼" FPT

Helium Leak Integrity
1 x 10⁻⁹ scc/sec

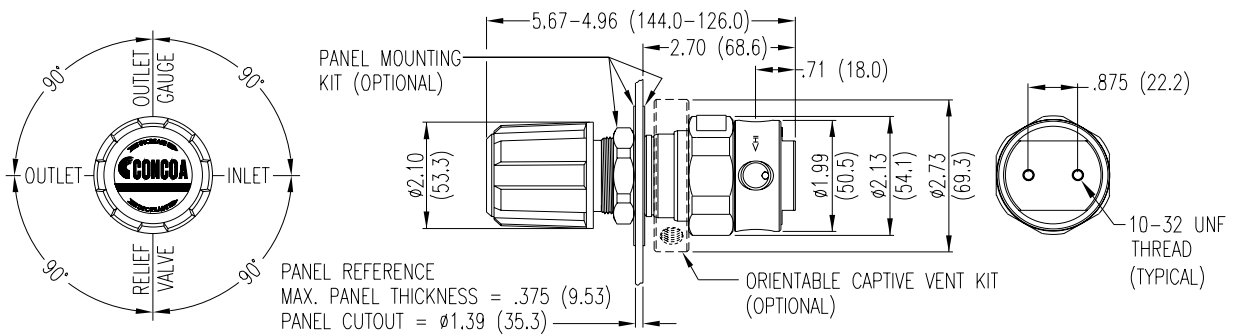
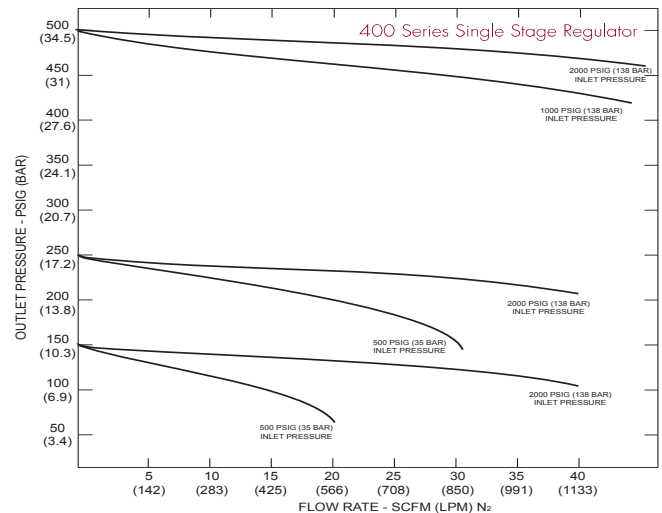
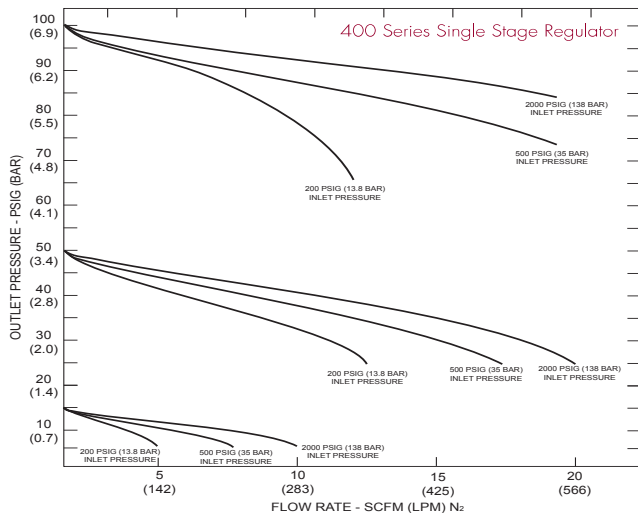
Cv
0.1 (Max outlet 50 PSIG or below)
0.2 (Max outlet above 50 PSIG)

Weight (425-2021-TF4)
2.58 lbs. (1.17 kg)

Controls Corporation of America, Inc.

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Flow Performance Curves



400 Series
Stainless Regulators

Ordering Information *(For information about how to use this table please see page 4.)*

425	A	B	C	D	-Inlet	Options
Series 425 Outlet Pressure 1: 0-15* 2: 0-50 3: 0-100 4: 0-250 5: 0-500** 7: 0-150 <i>*Not available with 4500 PSIG maximum inlet pressure</i> <i>**Standard assembly does not include relief valve</i>	Outlet Gauge 30"-0-30 PSIG 30"-0-100 PSIG 30"-0-200 PSIG 0-400 PSIG 0-1000 PSIG 30"-0-200 PSIG	Inlet Gauge 0: None	Outlet Assemblies 0: 1/4" FPT Port 1: 1/4" MPT 2: 1/4" Tube Fitting 3: Diaphragm Valve 1/4" Tube Fitting 4: Diaphragm Valve 1/4" MPT 5: Needle Valve 1/4" MPT 6: 1/8" Tube Fitting 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	Assembly/ Gauges 0: Bare Body 1: Standard Assembly (PSIG/kPa Gauges) 2: Standard Assembly (BAR/PSIG Gauges) 4: Cleanroom Assembly (PSIG/kPa Gauges) 5: Cleanroom Assembly (BAR/PSIG Gauges) 6: Mirror Image Assembly (PSIG/kPa Gauges) 7: Mirror Image Assembly (BAR/PSIG Gauges)	Inlet Connections 000: 1/4" FPT TF2: 1/8" Tube TF4: 1/4" Tube TF6: 3/8" Tube M06: 6mm Tube	Installed Options M: Protocol Station S: Stainless Steel Bonnet
<h3>Related Options</h3>		<ul style="list-style-type: none"> Panel Mount Kit (550-0002) Captured Vent Kit (550-0001) Helium Leak Certification (476-0002) 				