

422 Series Regulator

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

The 422 Series regulators are intended for primary pressure control of ultra-high purity and corrosive gases in applications where minor fluctuations in outlet pressure due to diminishing inlet supply can be tolerated.



422-3331 shown

Typical Applications

- 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

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

400 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
PCTFE with 4500 psig inlet option

Filter
10 micron stainless steel multi-layer mesh

Diaphragm
316L stainless steel

Internal Seals
PTFE

Specifications

Maximum Inlet Pressure
3000 psig (210 BAR)
4500 psig (310 BAR) optional

Temperature Range
-40°F to 140°F (-40°C to 60°C)

Gauges
2" diameter stainless steel

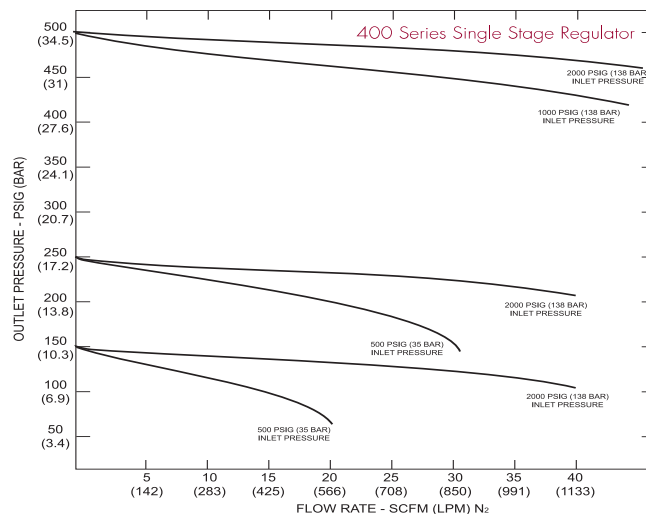
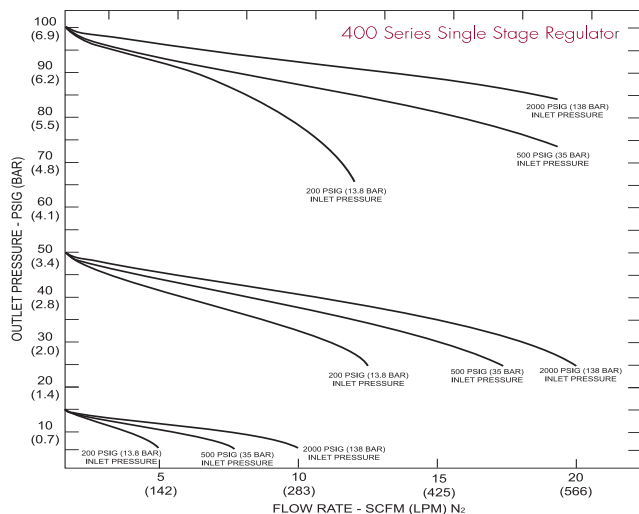
Ports
¼" FPT

Helium Leak Integrity
1 x 10⁻⁹ scc/sec

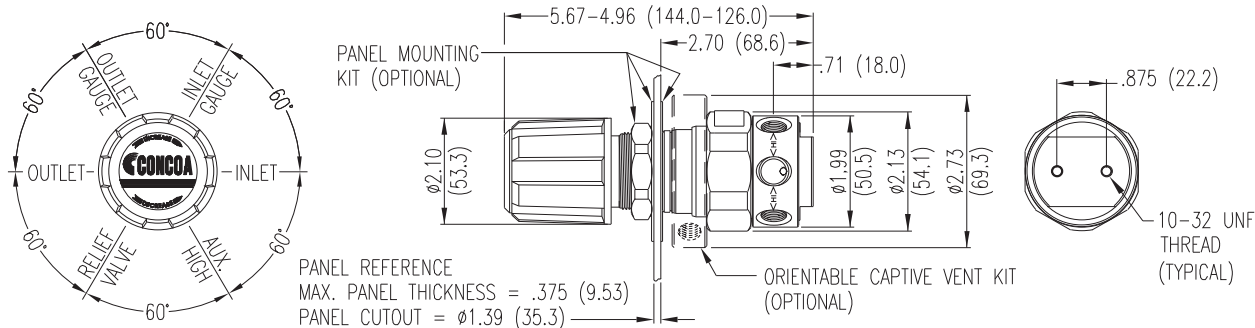
Cv
0.1

Weight (422-2331-580)
3.8 lbs. (1.73 kg)

Flow Performance Curves



400 Series
Stainless Regulators



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

422	A	B	C	D	-Inlet	Options
Series 422 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 3: 0-4000 psig 5: 0-1000 psig 6: 0-300 psig 7: 0-400 psig 8: 0-6000 psig* <i>*Maximum inlet pressure 4500 psig (310 BAR) with PCTFE Seat Capsule</i>	Outlet Assemblies 0: ¼" FPT Port 1: ¼" MPT 2: ¼" Tube Fitting 3: Diaphragm Valve ¼" Tube Fitting 4: Diaphragm Valve ¼" MPT 5: Needle Valve ¼" MPT 6: ⅛" Tube Fitting 7: ⅜" Tube Fitting 8: Diaphragm Valve ⅛" Tube Fitting 9: Diaphragm Valve ¼" 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 PSI/ KPA 7: Mirror Image BAR/ PSI Gauges	Inlet Connections 000: ¼" FPT TF2: ⅛" Tube TF4: ¼" Tube TF6: ⅜" Tube M06: 6mm Tube CGA DIN 477 BS 341 and others available	Installed Options A: Protocol Alarm Station (110V) B: Protocol Alarm Station (220V) C: Protocol Switchover Station D: Deep Purge* G: Protocol Switchover Station with Alarm (110V) H: Protocol Switchover Station with Alarm (220V) M: Protocol Station R: Glass Coated S: Stainless Steel Bonnet <i>*Not available with 4500 psig max inlet pressure</i>
Related Options		- Panel Mount Kit (550-0002) - Captured Vent Kit (550-0001) - Helium Leak Certification (476-0002) - Passivation for Fluorine Service				