

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 ultrahigh 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 vent exhaust gases
- *Delivery pressure range easily changed*
Maximum flexibility

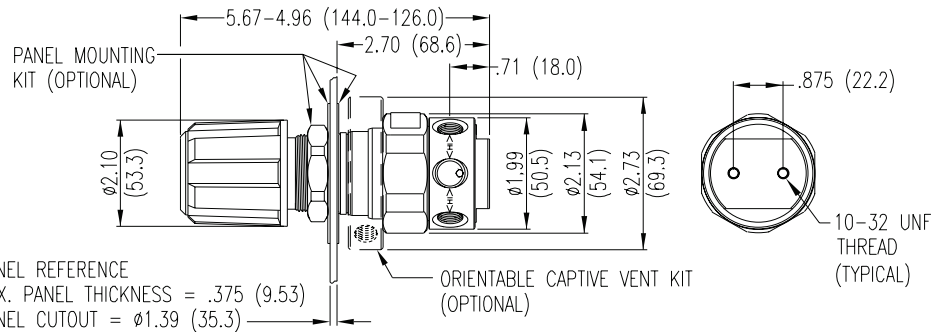
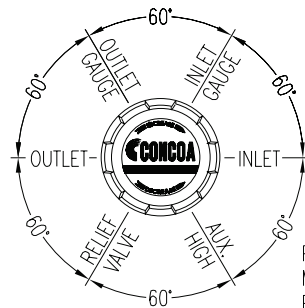
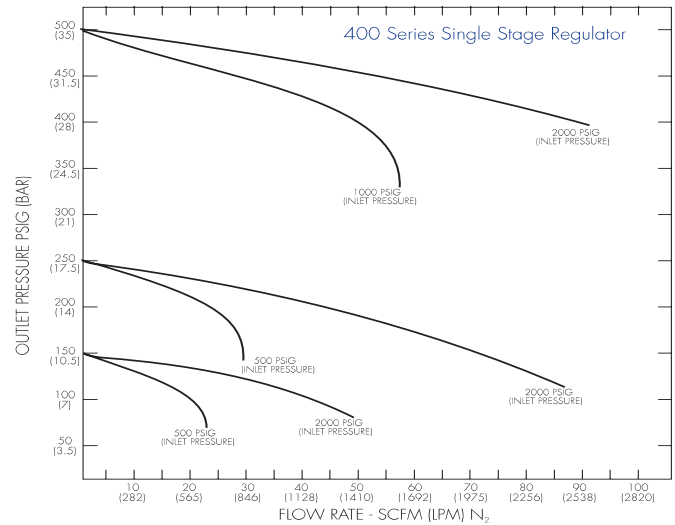
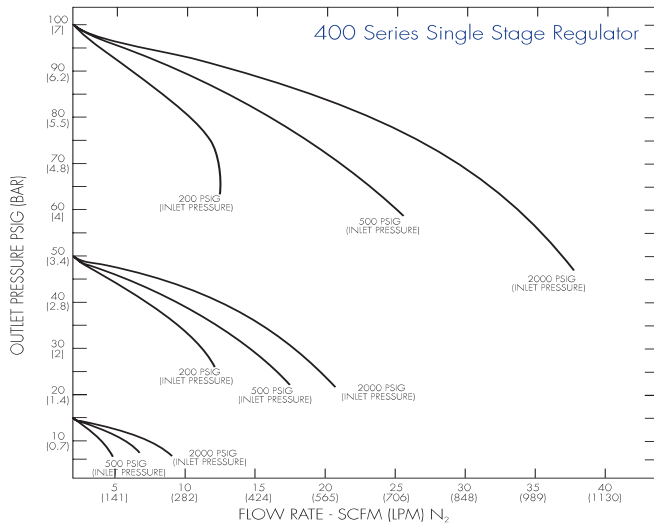
Materials

- Body*
316L stainless steel barstock
- Bonnet*
Chrome-plated brass barstock
- Seat*
PTFE
PCTFE with 4500 PSIG inlet option
- Filter*
10 micron multi-layer mesh
- Diaphragm*
316L stainless steel
- Internal Seals*
PTFE

Specifications

- Maximum Inlet Pressure*
3000 PSIG (210 BAR)
4500 PSIG (300 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



PANEL REFERENCE
 MAX. PANEL THICKNESS = .375 (9.53)
 PANEL CUTOUT = ϕ 1.39 (35.3)

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>	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 (300 BAR) with PCTFE Seat Capsule</i>	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 A: 3/8" BSP Right Hand Fitting 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)	Inlet Connections 000: 1/4" FPT TF2: 1/8" Tube TF4: 1/4" Tube TF6: 3/8" 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 S: SS Bonnet
Related Options		<ul style="list-style-type: none"> Panel Mount Kit (550-0002) Captured Vent Kit (550-0001) Helium Leak Certification (476-0002) Passivation for Fluorine Service (550-0003) 					