



400 Series Regulators

422 SERIES

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.

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



422 3331-580 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

Features

- Metal-to-Metal Diaphragm Seal**
No possibility of gas contamination
- CAPSULE® Seat**
Increased serviceability and life
- 316L Stainless Steel Barstock Body**
Increased corrosion resistance
- 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
- Pipe Away Relief Valve**
Safely vents exhaust gases

Materials

- Body**
316L stainless steel barstock
- Bonnet**
Chrome-plated brass barstock
- Seat**
PTFE
PCTFE with 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) inlet option
- Filter**
Patented 10 micron 316 mesh
- Diaphragm**
316L stainless steel
- Internal Seals**
PTFE

Specifications

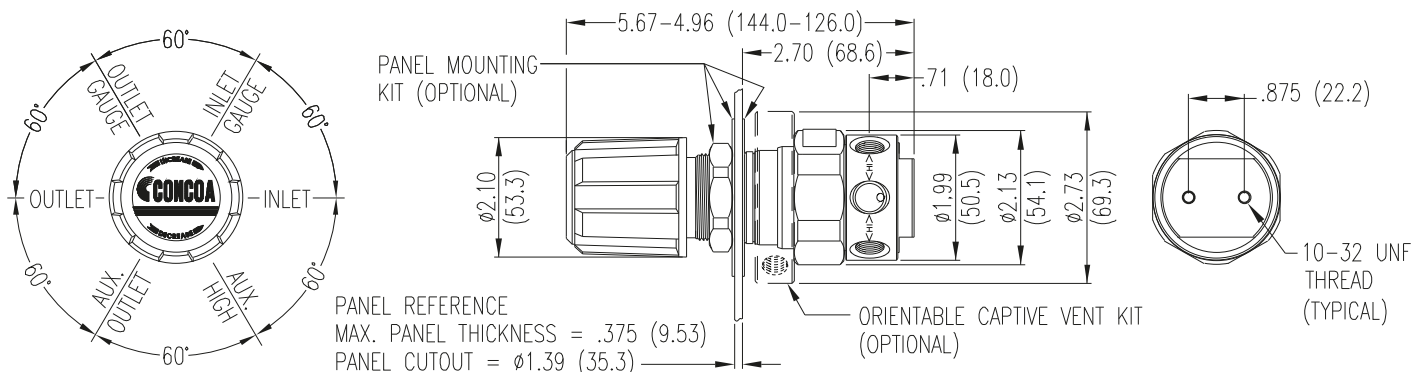
- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
3500 PSIG (240 BAR) optional
4500 PSIG (310 BAR) optional
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Gauges**
2" (53mm) diameter stainless steel
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁹ scc/sec
- Cv**
0.1
See page 202 for flow curves
- Weight (422 3331-580)**
3.8 lbs. (1.73 kg)

CRN 0H15806.5R1

400 Series Regulators



Installation Dimensions



Ordering Information

422	A	B	C	D	-CON	Options	
Series 422	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	B: Protocol alarm station with pressure switch gauges
	2: 0-50 PSIG (0-3.5 BAR)	30"-0-100 PSIG/ -1-0-7 BAR	3: 0-4000 PSIG/ 0-275 BAR	1: 1/4" MPT	1: Cleanroom assembly (PSIG/kPa gauges)	TF2: 1/8" tube	C: Protocol switchover station
	3: 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	5: 0-1000 PSIG/ 0-70 BAR	2: 1/4" tube fitting	2: Cleanroom assembly (BAR/PSIG gauges)	TF4: 1/4" tube	D: Deep purge*
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-27 BAR	6: 0-300 PSIG/ 0-21 BAR	3: Diaphragm valve 1/4" tube fitting	6: Mirror image (PSIG/kPa gauges)	TF6: 3/8" tube	E: Protocol alarm station with intrinsically safe transducer for hazardous environments
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/ 0-70 BAR	7: 0-400 PSIG/ 0-27 BAR	4: Diaphragm valve 1/4" MPT	7: Mirror image (BAR/PSIG gauges)	M06: 6mm tube	H: Protocol switchover alarm station with pressure switch gauges
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	8: 0-6000 PSIG* 0-400 BAR	5: Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	J: Protocol alarm station with standard transducer for non hazardous environments
	*Not available with 4500 PSIG (310 BAR) maximum inlet pressure	G: 0-4000 PSIG/ 0-275 BAR†	6: 1/8" tube fitting	7: 3/8" tube fitting			K: Protocol switchover alarm station with standard transducer for non hazardous environments
	**Standard assembly does not include relief valve	*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®	7: 3/8" tube fitting	8: Diaphragm valve 1/8" tube fitting			M: Protocol station
		†Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE	8: Diaphragm valve 1/8" tube fitting	9: Diaphragm valve 1/4" FPT			Q: Protocol purge station*
			9: Diaphragm valve 1/4" FPT	M: 6mm tube fitting			S: Stainless steel bonnet
			M: 6mm tube fitting	S: Diaphragm valve 6mm tube fitting			X: Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
			S: Diaphragm valve 6mm tube fitting				*Not available with 4500 PSIG (310 BAR) max inlet pressure

Related Options

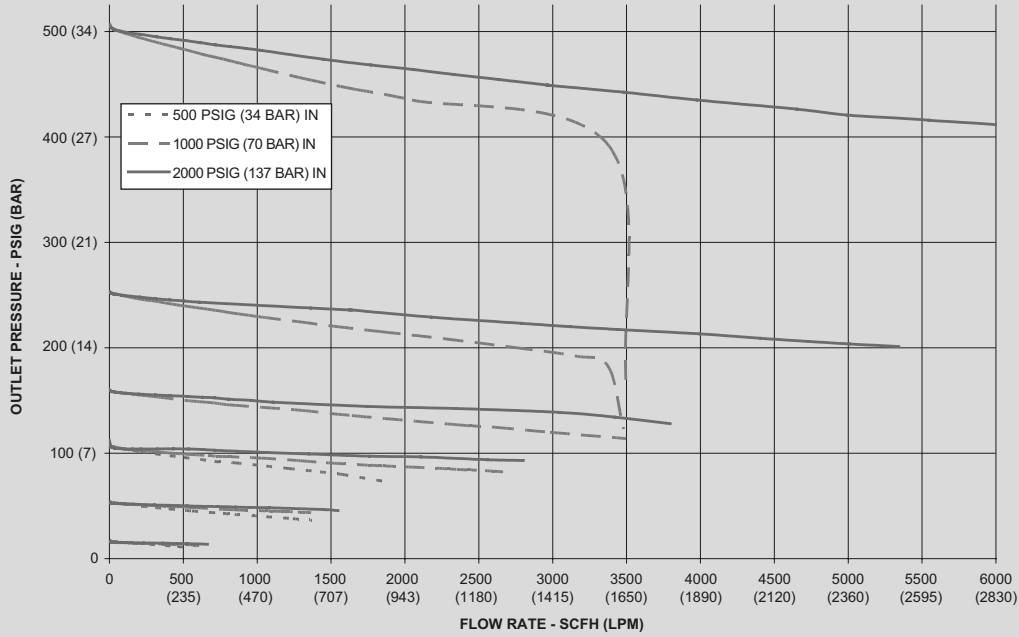
Order No.	Description
550 0002	Panel mount kit
550 0001	Captured vent kit
476 0002	Helium Leak certification

REGULATORS



Regulator Flow Curves

Flow Curves for 302, 304, 305, 307, 322, 324, 327, 401, 402, 408, 420, 422, 426, 427, 428, 429 Series



Flow Curves for 312, 315, 332, 411, 412, 414, 415, 430, 432 Series

