



400 Series Regulators

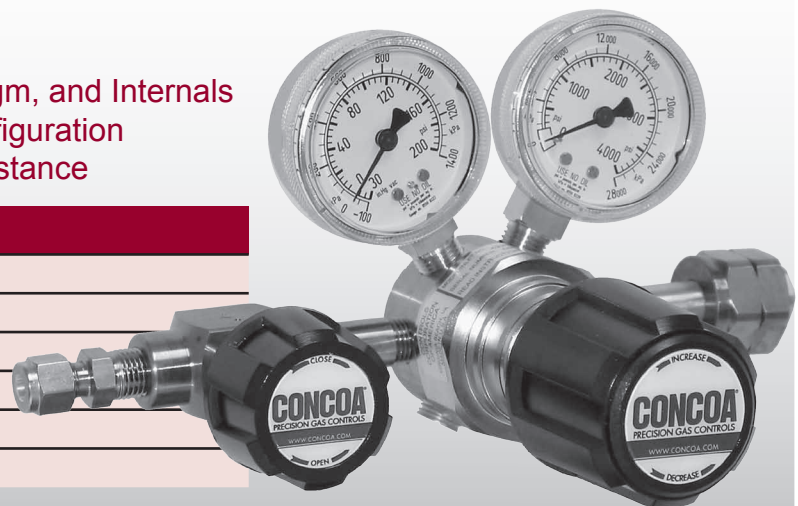
420 SERIES

The 420 Series SilcoNert™ regulators are intended for primary pressure control of reactive or corrosive calibration mixtures or pure gases in applications where an extremely inert wetted finish is required. The proprietary non-reactive amorphous silicon finish is significantly more inert than 316L stainless steel and ideally suited for Hydrogen Sulfide, reduced Sulfur, Mercury and PPM to PPB calibration mixtures.

- Single Stage
- SilcoNert 1020 Barstock Body, Diaphragm, and Internals
- Six Port Configuration or Four Port Configuration
- Inert Surface Finish and Corrosion Resistance

Typical Applications

- Reactive calibration standard
- Emissions monitoring
- Hydrogen sulfide PPM to PPB standards
- Mercury standards
- Sulfur mixtures
- Corrosive service



420 3331-330 shown

Features

- Metal-to-Metal Diaphragm Seal**
No possibility of gas contamination
- CAPSULE® Seat**
Increased serviceability and life
- SilcoNert 1020 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

Materials

- Body**
SilcoNert 1020
- Bonnet**
SilcoNert 1020
- Seat**
PTFE
- Filter**
SilcoNert 1020 10 micron mesh
- Diaphragm**
SilcoNert 1020
- 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)
- Gauge**
2" (53mm) diameter stainless steel (bourdon tube not SilcoNert 1020)
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁹ scc/sec
- Cv**
0.1 (Max outlet 50 PSIG/3.5 BAR or below)
0.2 (Max outlet above 50 PSIG/3.5 BAR)
See page 202 for flow curves
- Weight (420 3331-330)**
3.8 lbs. (1.73 kg)

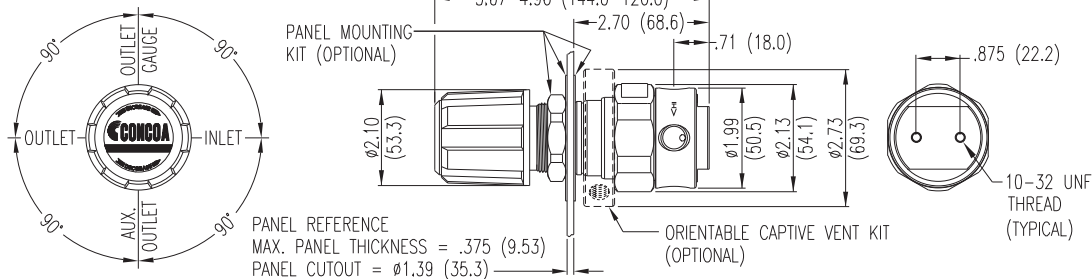
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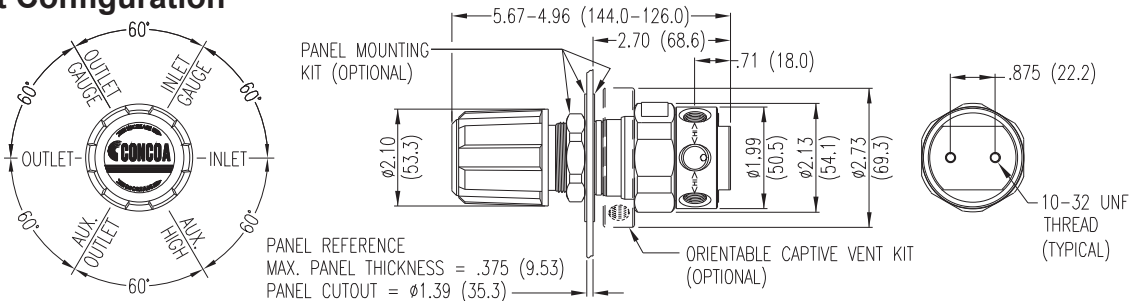


Installation Dimensions

Four Port Configuration



Six Port Configuration



Ordering Information

420	A	B	C	D	-CON	Options	
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Inlet Connections	Installed Options
420	1: 0-15 PSIG (0-1 BAR)*	30"-0-30 PSIG/ -1-0-2 BAR)	0: None	0: 1/4" FPT port	0: Six-port 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	2: 1/4" tube fitting	1: Six-port 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	3: Diaphragm valve 1/4" tube fitting	2: Six-port cleanroom assembly (BAR/PSIG gauges)	TF4: 1/4" tube	E: Protocol alarm station with intrinsically safe transducer for hazardous environments
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-27 BAR)	6: 0-300 PSIG/ 0-21 BAR	6: 1/8" tube fitting	6: Six-port mirror image (PSIG/kPa gauges)	M06: 6mm tube	H: Protocol switchover alarm station with pressure switch gauges
	5: 0-500 PSIG (0-34 BAR)	0-1000 PSIG/ 0-70 BAR	7: 0-400 PSIG/ 0-27 BAR	8: Diaphragm valve 1/8" FPT	7: Six-port mirror image (BAR/PSIG gauges)	CGA DIN 477 BS 341 and others available	J: Protocol alarm station with standard transducer for non hazardous environments
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR)	8: 0-6000 PSIG/ 0-415 BAR*	9: Diaphragm valve 1/4" FPT	A: Four-port bare body		K: Protocol switchover alarm station with standard transducer for non hazardous environments
	<i>*Not available with 4500 PSIG (310 BAR) maximum inlet pressure</i>	<i>*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE Seat CAPSULE®</i>		M: 6mm tube fitting	B: Four-port cleanroom assembly (PSIG/kPa gauges)		M: Protocol station
				S: Diaphragm valve 6mm tube fitting	C: Four-port cleanroom assembly (BAR/PSIG)		Q: Protocol purge station*
					D: Four-port mirror image (PSIG/kPa gauges)		X: Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
					E: Four-port mirror image (BAR/PSIG gauges)		<i>*Not available with 4500 PSIG (310 BAR) max inlet pressure</i>

Related Options

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



Regulator Flow Curves

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

