

# 493 SERIES REGULATORS



The 493 Series regulator provides primary pressure control of ultra-high purity and corrosive gases in applications requiring ultra-high pressures. Rather than a diaphragm, the regulator uses a robust piston assembly to ensure safe pressure control at high inlet pressures. Available with a variety of options installed at the factory, the CONCOA 493 Series regulator may be configured as a line regulation or a single station manifold with or without purge, low-pressure alarm, or multiple inlets.

## Typical Applications

- Airplane Strut Charging
- Research and Development Laboratories
- Chemical Manufacturing
- Aerospace Hydraulic Systems
- Pharmaceutical Manufacturing



493 3801-01-000 shown

## Features

**CAPSULE® Seat** increases serviceability and life

**Large Piston Sensor** controls pressure to 6000 PSIG (415 BAR)

**Low Wetted Surface Area** minimizes purge requirements

**Field-Adjustable Pressure Limit** safeguards downstream equipment

**Convolute Diaphragm** provides smooth pressure changes

**Front and Rear Panel-Mountable** allows easy installation

**Six Port Design** offers installation alternatives

**Pressure Ranges 0-750 to 0-6000 PSIG (0-50 to 0-415 BAR)** facilitates a broad range of applications

## Materials and Specifications

**Maximum Inlet Pressure (bare body):** 6000 PSIG (415 BAR)

**Body:** 316L Stainless steel barstock

**Bonnet:** 304 Stainless steel

**Gauges:** 2 1/2 in (63 mm) diameter stainless steel

**Seat:** PCTFE 3000 PSIG (210 BAR) and 4500 PSIG (310 BAR) inlet; PEEK 6000 PSIG (415 BAR) inlet option

**Filter:** 10-micron 316 stainless steel mesh

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

**Piston:** 316L stainless steel

**Cv:** 0.1 See *flow curves attached*

**Internal Seals:** FKM (encapsulated)

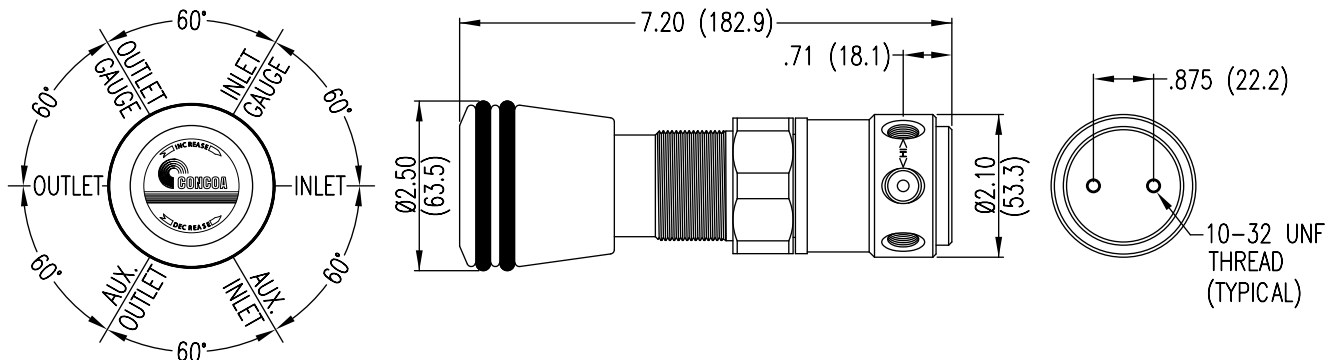
**Ports (bare body):** 1/4 in FNPT

**Conformances:** Cleanliness meets or exceeds CGA G-4.1; PED 2014/68/EU; ANSI/ASME B40.1; CRN OH5216

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## Installation Dimensions



## Ordering Information

493	A	B	C	D	-CON	Options		
Series	Outlet Pressure	Outlet Gauge	Inlet Maximum	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections	Installed Options
493	<b>1:</b> 0-750 PSIG (0-50 BAR)	0-1000 PSIG/ 0-70 BAR	<b>0:</b> 6000 PSIG (0-415 BAR)*	None	<b>0:</b> 1/4" FNPT	<b>0:</b> Bare body†	<i>CGA DIN 477 BS 341 and others available.</i>	<b>B:</b> Protocol alarm station with pressure switch gauges
	<b>2:</b> 0-1500 PSIG (0-100 BAR)	0-4000 PSIG/ 0-275 BAR	<b>3:</b> 3000 PSIG (210 BAR)	0-4000 PSIG/ 0-275 BAR	<b>1:</b> 1/4" MNPT	<b>1:</b> Standard assembly (PSIG/kPa gauges)		<b>C:</b> Protocol switchover station
	<b>3:</b> 0-2500 PSIG (0-170 BAR)	0-4000 PSIG/ 0-275 BAR	<b>8:</b> 5500 PSIG (379 BAR)	0-6000 PSIG/ 0-415 BAR	<b>2:</b> 1/4" tube fitting	<b>2:</b> Standard assembly (BAR/PSIG gauges)		<b>E:</b> Protocol alarm station with intrinsically safe transducer for hazardous environments
	<b>4:</b> 0-4500 PSIG (0-310 BAR)*	0-6000 PSIG/ 0-415 BAR	<b>9:</b> 6000 PSIG (415 BAR)	0-10,000 PSIG/ 0-700 BAR	<b>5:</b> Needle valve 1/4" MNPT	<b>6:</b> Mirror image (PSIG/kPa gauges)		<b>H:</b> Protocol switchover alarm station with pressure switch gauges
	<b>5:</b> 0-6000 PSIG (0-415 BAR)†	0-10,000 PSIG/ 0-700 BAR	<i>* Only valid if D=1 or 2 (outlet gauge specified).</i>		<b>6:</b> 1/8" tube fitting	<b>7:</b> Mirror image (BAR/PSIG gauges)		<b>J:</b> Protocol alarm station with standard transducer for non- hazardous environments
	<b>6:</b> 0-3500 PSIG (241 BAR)*	0-6000 PSIG/ 415 BAR			<b>7:</b> 3/8" tube fitting	<i>†B must be 3, 8 or 9 (maximum pressure specified).</i>		<b>K:</b> Protocol switchover alarm station with standard transducer for non-hazardous environments
	<i>*Not available with 3000 PSIG (210 BAR) maximum inlet pressure.</i>				<b>F:</b> Needle valve 1/4" tube fitting			<b>M:</b> Protocol station
	<i>†Only available with 6000 PSIG (415 BAR) maximum inlet pressure.</i>				<b>M:</b> 6mm tube fitting			<b>Q:</b> Protocol purge station*
					<i>Note: Outlet fittings and outlet valves are 316 stainless steel.</i>			<b>X:</b> Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
								<i>*3000 PSIG (210 BAR) maximum inlet only valid if B=3.</i>

## Related Options

Part No.	Description
830 6483	Panel Mount Kit for 492/493/1400 Series Regulators

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## Flow Curves for 493 Series

