



# 300 Series Regulators

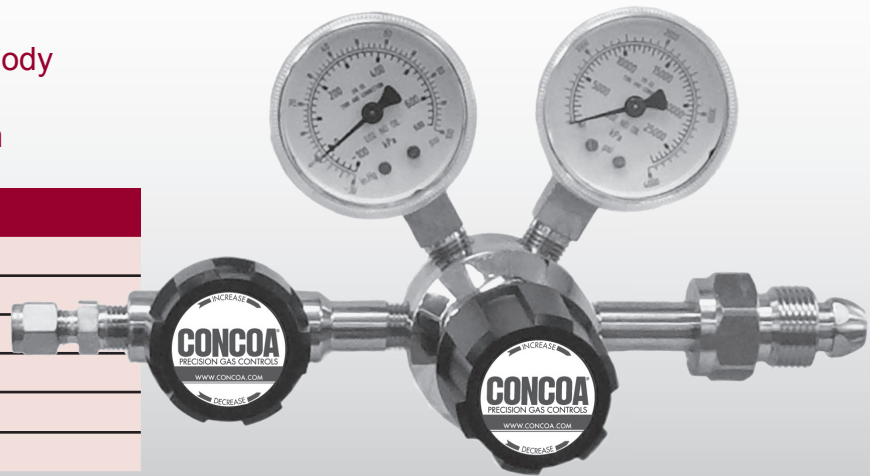
# 322 SERIES

The 322 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.

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

## Typical Applications

- Gas and liquid chromatography
- High purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization
- Liquefied hydrocarbon gas control
- Control of cryogenic gases



322 2331-580 shown

## Features

- CAPSULE® Seat**  
Increased serviceability and life
- 316L Stainless Steel Diaphragm**  
No inboard diffusion
- Low Wetted Surface Area**  
Minimal purge requirements
- Field-Adjustable Pressure Limit**  
Safeguard downstream equipment
- Convolute Diaphragm**  
Smooth pressure changes
- Compact Design**  
Easily transported and integrated into systems
- 316L Stainless Steel Barstock Body**  
Increased corrosion resistance
- Rear Panel-Mountable**  
Easy installation
- Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-35 BAR)**  
Broad range of applications

## Materials

- Body**  
316L stainless steel barstock
- Bonnet**  
Chrome-plated die-cast zinc
- 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

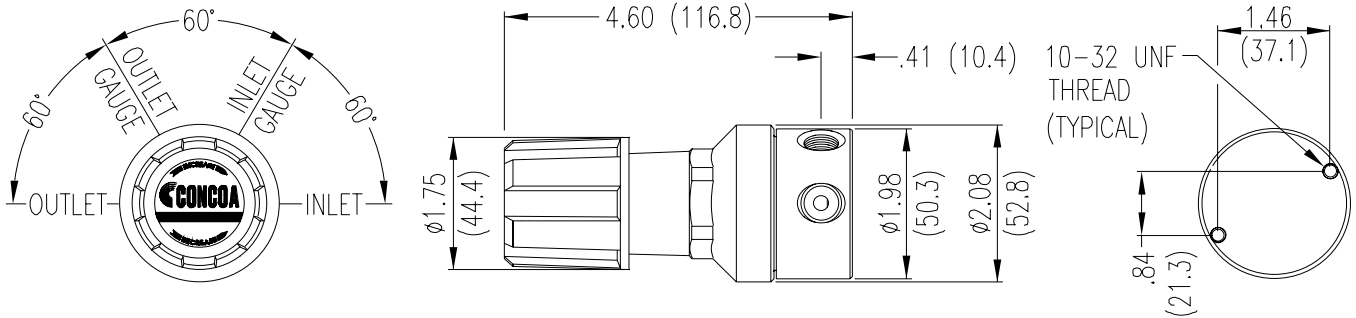
## Specifications

- 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  
Chrome-plated brass case  
Stainless steel internals
- Ports**  
1/4" FPT
- Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
- Cv**  
0.1  
*See page 188 for flow curves*
- Weight (322 2331-580)**  
3.0 lbs. (1.34 kg)

# 300 Series Regulators



## Installation Dimensions



300 SERIES

## Ordering Information

322	A	B	C	D	-CON	Options	
Series 322	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections	Installed Options
	<b>1:</b> 0-15 PSIG (0-1 BAR)*	30"-0-30 PSIG/ -1-0-2 BAR	<b>0:</b> None	<b>0:</b> 1/4" FPT port	<b>0:</b> Bare body	<b>000:</b> 1/4" FPT	<b>B:</b> Protocol alarm station (110/220 VAC)
	<b>2:</b> 0-50 PSIG (0-3.5 BAR)	30"-0-100 PSIG/ -1-0-7 BAR	<b>3:</b> 0-4000 PSIG/ 0-310 BAR	<b>1:</b> 1/4" MPT	<b>1:</b> Standard assembly (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube	<b>C:</b> Protocol switchover station
	<b>3:</b> 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	<b>5:</b> 0-1000 PSIG/ 0-70 BAR	<b>3:</b> Diaphragm valve 1/4" tube fitting		<b>TF6:</b> 3/8" tube	<b>H:</b> Protocol switchover station with alarm (110/220 VAC)
	<b>4:</b> 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-14 BAR	<b>6:</b> 0-300 PSIG/ 0-21 BAR	<b>4:</b> Diaphragm valve 1/4" MPT		<b>M06:</b> 6mm tube	<b>M:</b> Protocol station
	<b>5:</b> 0-500 PSIG (0-34 BAR)	0-1000 PSIG/ 0-70 BAR	<b>7:</b> 0-400 PSIG/ 0-27 BAR	<b>5:</b> Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	<b>Q:</b> Protocol purge station*
	<b>7:</b> 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	<b>8:</b> 0-6000 PSIG/ 0-405 BAR*	<b>6:</b> 1/8" tube fitting			<b>T:</b> Tee purge*
	<i>*Not available with 4500 PSIG (310 BAR) maximum inlet pressure</i>		<b>G:</b> 0-4000 PSIG/ 0-275 BAR†	<b>7:</b> 3/8" tube fitting			<i>*Not available with 4500 PSIG (310 BAR) max inlet pressure</i>
		<i>*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE Seat CAPSULE®</i>		<b>8:</b> Diaphragm valve 1/8" tube fitting			
		<i>†Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE®</i>		<b>9:</b> Diaphragm valve 1/4" FPT			
				<b>M:</b> 6mm tube fitting			
				<b>S:</b> Diaphragm valve 6mm tube fitting			

## Related Options

Order No.	Description
835 0204	Rear Panel mount kit

