



# 300 Series Regulators

# 322 SERIES

The 322 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
- Four Port Configuration
- 316L Stainless Steel Diaphragm

## Typical Applications

Gas and liquid chromatography

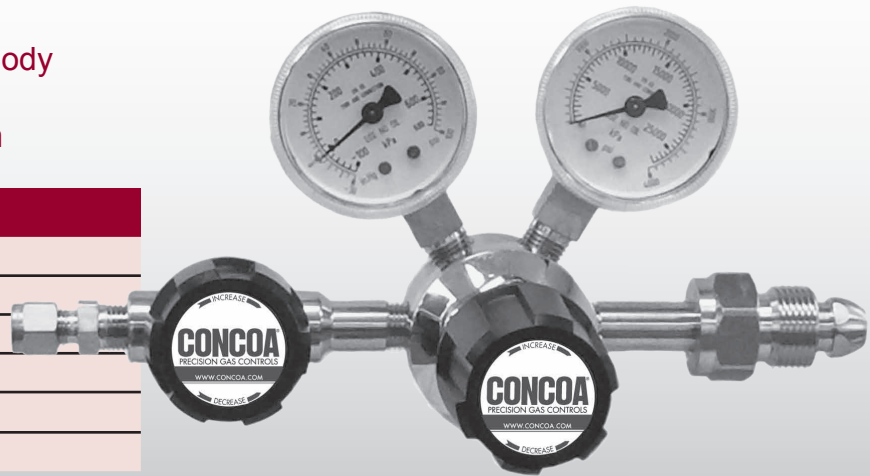
High purity carrier gases

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

### Convolutd 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 202 for flow curves

### Weight (322 2331-580)

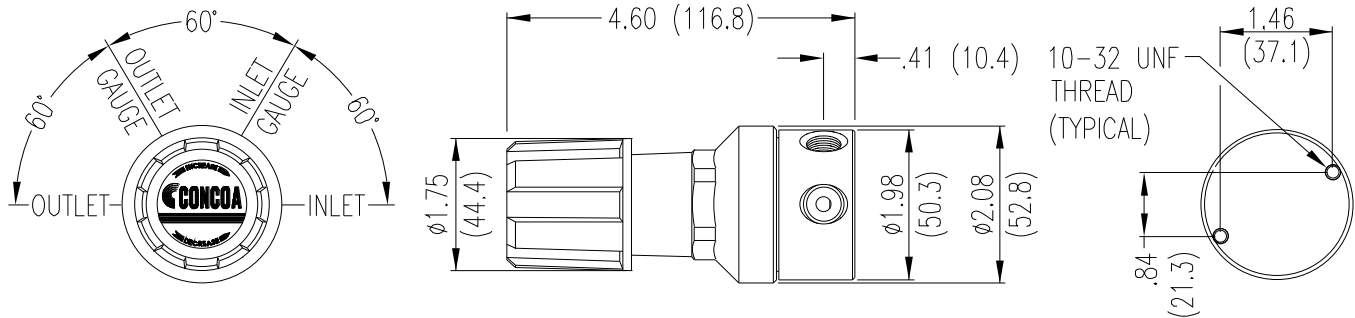
3.0 lbs. (1.34 kg)

CRN 0H5216.5R1

# 300 Series Regulators



## Installation Dimensions



## 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 with pressure switch gauges
	<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>2:</b> 1/4" tube fitting	<b>2:</b> Standard assembly (BAR/PSIG gauges)	<b>TF4:</b> 1/4" tube	<b>E:</b> Protocol alarm station with intrinsically safe transducer for hazardous environments
	<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>3:</b> Diaphragm valve 1/4" tube fitting		<b>TF6:</b> 3/8" tube	<b>H:</b> Protocol switchover alarm station with pressure switch gauges
	<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>4:</b> Diaphragm valve 1/4" MPT		<b>M06:</b> 6mm tube	<b>J:</b> Protocol alarm station with standard transducer for non hazardous environments
	<b>7:</b> 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	<b>8:</b> 0-6000 PSIG/ 0-415 BAR*	<b>5:</b> Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	<b>K:</b> Protocol switchover alarm station with standard transducer for non hazardous environments
	*Not available with 4500 PSIG (310 BAR) maximum inlet pressure		<b>G:</b> 0-4000 PSIG/ 0-275 BAR <sup>†</sup>	<b>6:</b> 1/8" tube fitting			<b>M:</b> Protocol station
			*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE Seat CAPSULE®	<b>7:</b> 3/8" tube fitting			<b>Q:</b> Protocol purge station*
			<sup>†</sup> Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE	<b>8:</b> Diaphragm valve 1/8" tube fitting			<b>T:</b> Tee purge*
				<b>9:</b> Diaphragm valve 1/4" FPT			<b>X:</b> Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
				<b>M:</b> 6mm tube fitting			*Not available with 4500 PSIG (310 BAR) max inlet pressure
				<b>S:</b> Diaphragm valve 6mm tube fitting			

## Related Options

Order No.	Description
835 0204	Rear panel mount kit

REGULATORS



# Regulator Flow Curves

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

