

# 200 SERIES

DUAL STAGE REGULATORS

## Features

The 200 Series regulators are exclusively designed to maintain constant flow rates in order to provide increased calibration accuracy, even when cylinder pressure drops. A compact, lightweight, high purity, dual stage, pressure reducing regulator suitable for specialty, flammable, and industrial gasses.

Our 316L stainless steel diaphragm ensures gas purity and integrity.



## Applications

- ✓ Laboratories
- ✓ Medical
- ✓ Pharmaceutical
- ✓ Specialty gases

- ✓ Process analysers
- ✓ Petrochemical
- ✓ Metal fabrication
- ✓ Food and beverage

# Specifications

## Operating Parameters

Pressure rating per criteria of CGA E- 4; ASME B31; ASME BPVC

## Maximum Inlet Pressure

6000 psig / 415 Bar

## Maximum Outlet Pressure

2, 10, 25, 50, 100, 250, 500, 750, 1000 psig  
70, 175, 345, 690, 1725, 3450, 5170, 6895 kPa  
1, 2, 3.5, 7, 17.5, 35, 52, 70 Bar

## Design Proof Pressure

150% of rated pressure

## Leakage

Internal:Bubble tight  
External:Designed to meet  $< 2 \times 10^{-8}$  atm/cc He

## Operating Temperature

-40°F to 185°F / -40°C to 85°C

## Flow Capacity

0.03, 0.07, 0.24, 0.3, 0.35, 0.58

## Wetted Materials Body

Electrolysis Nickel Plated Brass, 316L Stainless Steel or Monel

## Seat

Tefzel, Peek, PCTFE [standard], Vespel

## Filter

10 micron 316L Stainless Steel

## Seal

Teflon, Viton

## Diaphragm

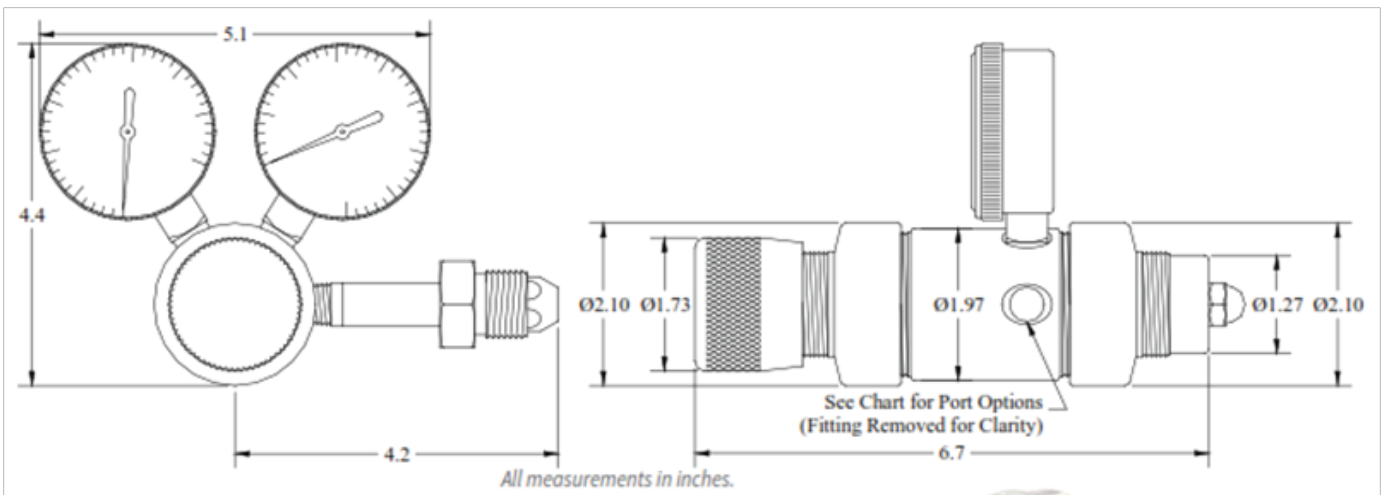
316L Stainless Steel with Tefzel Sealing Ring

## Spring Housing

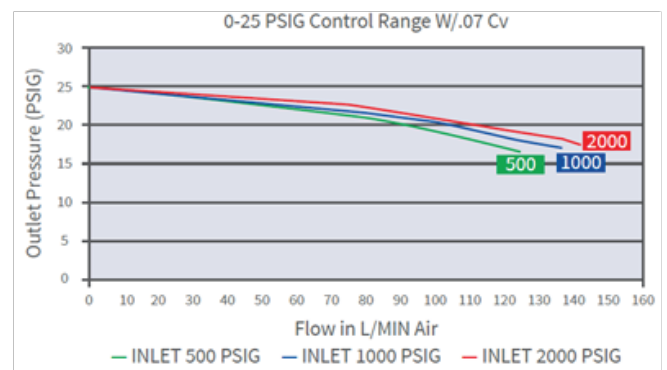
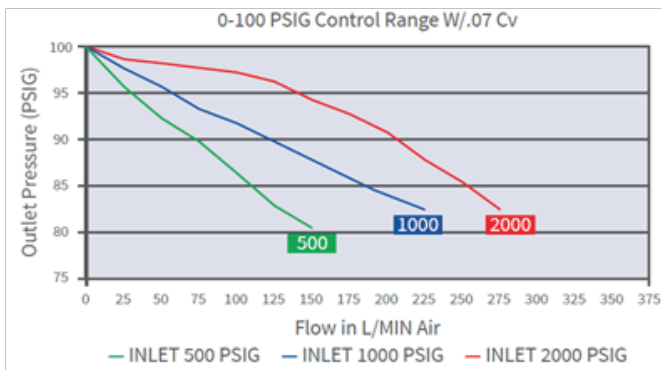
316L Stainless Steel, Electrolysis Nickel Plated Aluminium, Black Anodized Aluminium

## Remaining Parts

Inconel



# Performance Curves



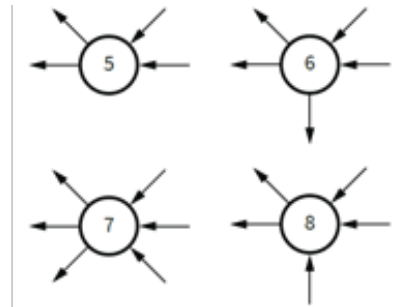
# Ordering Information

With a wide variety of body materials, porting options and inlet connections, regulators can be custom built to meet your specific requirements.

200	-	2	2	R5	B	1
Series	-	Body Material	Outlet Range	Porting	Connection	Gauges
200		1-Electroless Nickel	0 - 2 PSI	Add L or R	A - 1/8 "	1 - with gauges
		Plate Brass	1 - 10 PSI	to define	B - 1/4 "	2 - no gauges
		2-316L SS	2 - 25 PSI	inlet side	C - 3/8 "	
		3-Monel	3 - 50 PSI	( Left or Right)		
		4-Brass	4 - 100 PSI	followed by		
			5 - 250 PSI	configuration		
			6 - 500 PSI	in Chart A		
			7 - 750 PSI			
			8 - 1000 PSI			

## Standard Porting Configuration

(Chart A)



Longer delivery time for L5, L6 & L8.

-	2	A	Z	A	-	2	A	Z	1	-	330
-	1st Stage: Cv	Diaphragm	Seat	Cap	-	2nd Stage: Cv	Diaphragm	Seat	Cap	-	Inlet Connection
	1 - 0.03	A-316L SS	F - PCTFE	A - ENP AI		1 - 0.03	A-316L SS	F - PCTFE	1 - ENP AI		Insert 3 digit
	2 - 0.07	w/Tefzel Ring	[ standard]	B - 316L SS		2 - 0.07	w/Tefzel Ring	[ standard]	2 - 316L SS		portion of
	3 - 0.24		K - Peek	C - Anod A1		3 - 0.24		K - Peek	3 - Anod A1		CGA number
	4 - 0.30	B - 316LSS	P - Vespel	D - ENP A1 PM		4 - 0.30	B - 316LSS	P - Vespel	4 - ENP A1 PM		or 2 digits
	6 - 0.35	w/Teflon Shield	Z - Tefzel	E - 316L SS PM		6 - 0.35	w/Teflon Shield	Z - Tefzel	5 - 316L SS PM		from
	7 - 0.58			F - Anod A1 PM		7 - 0.58			6 - Anod A1 PM		AS2473.2.
				With Acorn Nut					With knob		

## Pressure and Temperature Rating for Seats

Code	Material	Pressure in PSI Minimum	Pressure in PSI Minimum	Temperature Maximum
F	PCTFE	10	3600	150°F
Z	TEFZEL	10	2400	150°F
K	PEEK	50	6000	150°F
K	PEEK	50	3600	500°F
P	VESPEL	25	6000	150°F
P	VESPEL	25	3600	500°F

## Special Options

04	Relief Valve (<150 psi)
15	Outlet Valve - packed
16	Outlet Valve - packless
71	Fine Adjust
73	Helium Leak Test
75	Relief Valve (150 psi +)