312 Series Regulator

Dual Stage

Chrome-Plated Brass Barstock Body

Four-Port Configuration

316L Stainless Steel Diaphragm



312-2331 shown

The 312 Series regulators are intended for primary pressure control of non-corrosive, high purity or liquefied gases for applications requiring constant pressure control and delivery regardless of supply pressure variations.

Typical Applications

- *EPA Protocol gases*
- *Gas and liquid chromatography*
- *High purity carrier gases*
- *Zero, span, and calibration gases*
- *High purity chamber pressurization*

Advanced Features

- *Chrome-plated brass barstock body*
  Smooth surface finish
- *10 micron filtration in both stages*
  Fail-safe seat performance
- *Pressure ranges 0-15 to 0-250 psig*
  Broad range of applications

300 Advantage

- *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
- *Convoluted diaphragm*
  Smooth pressure changes
- *Compact design*
  Easily transported and integrated into systems

Materials

Body
Chrome-plated brass barstock

Bonnet
Chrome-plated die cast zinc

Seat
PTFE
PCTFE with 4500 psig inlet option

Filter
10 micron sintered bronze

Diaphragm
316L stainless steel

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)

Gauges
2" diameter chrome-plated

Ports
¼" FPT

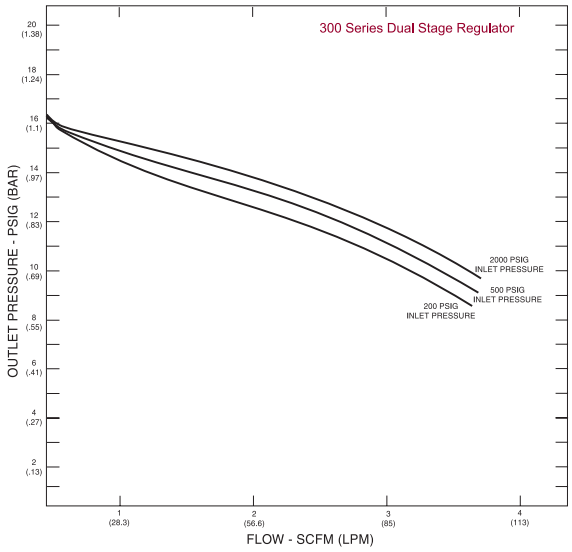
Helium Leak Integrity
1 x 10^{-8} scc/sec

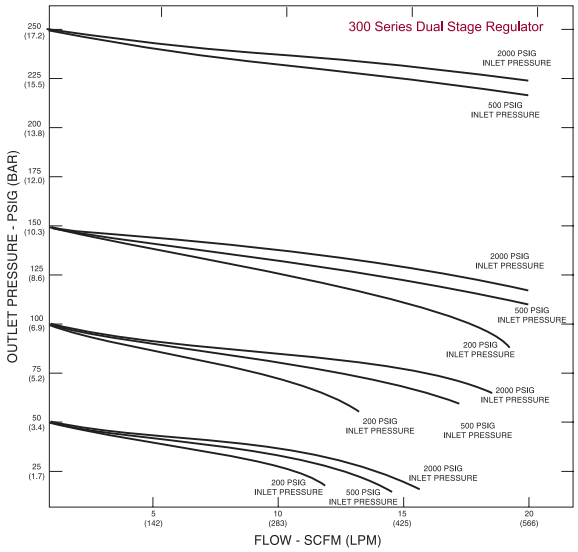
Cv
0.1

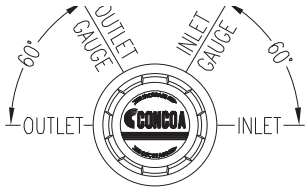
Weight (312-2331-58)
4.4 lbs. (1.98 kg)

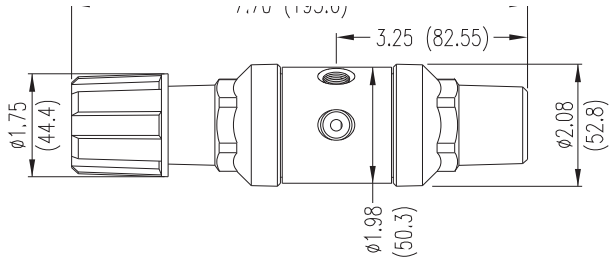
CRN OH 5216.5C

Flow Performance Curves









Ordering Information *(For information about how to use this table please see page 4.)*

312	A	B	C	D	-Inlet	Options
Series 312	**Outlet Pressure** / **Outlet Gauge** 1: 0-15 / 30"-0-30 psig 2: 0-50 / 30"-0-100 psig 3: 0-100 / 30"-0-200 psig 4: 0-250 / 0-400 psig 7: 0-150 / 30"-0-200 psig	**Inlet Gauge** 0: None 3: 0-4000 psig 5: 0-1000 psig 6: 0-300 psig 7: 0-400 psig 8: 0-6000 psig* **Maximum inlet pressure 4500 psig (310 BAR) with PCTFE Seat Capsule*	**Outlet Assemblies** 0: ¼" FPT Port 1: ¼" MPT 2: ¼" Tube Fitting 3: Diaphragm Valve ¼" Tube Fitting 4: Diaphragm Valve ¼" MPT 5: Needle Valve ¼" MPT 6: ⅛" Tube Fitting 7: ⅜" Tube Fitting 8: Diaphragm Valve ⅛" Tube Fitting 9: Diaphragm Valve ¼" FPT A: ⅜" BSP Right Hand Fitting M: 6mm Tube Fitting S: Diaphragm Valve 6mm Tube Fitting	**Assembly/ Gauges** 0: Bare Body 1: Standard Assembly (psig/kPa Gauges) 2: Standard Assembly (BAR/psig Gauges)	**Inlet Connections** 000: ¼" FPT TF2: ⅛" Tube TF4: ¼" Tube TF6: ⅜" Tube M06: 6mm Tube CGA DIN 477 BS 341 and others available	**Installed Options** A: Protocol Alarm Station (110V) B: Protocol Alarm Station (220V) C: Protocol Switchover Station G: Protocol Switchover Station with Alarm (110V) H: Protocol Switchover Station with Alarm (220V) M: Protocol Station T: Tee Purge* **Not available with 4500 psig max inlet pressure*