

427 Series Regulator

CRN OH 5216.5C

Single Stage
316L Stainless Steel
Barstock Body
Two-Port
Configuration
Face Seal
Connections

Advanced Features

- *Butt-welded Face Seal connections*
Highest leak integrity available
- *316L stainless steel barstock body*
Increased corrosion resistance
- *Front and rear panel-mountable*
Versatile system configuration
- *3000 PSIG inlet pressure rating*
Safe use with high pressure cylinders
- *Pressure ranges 0-15 to 0-500 PSIG*
Broad range of applications

Typical Applications

- *Semiconductor process gases*
- *Gas and liquid chromatography*
- *Ultra-high purity carrier gases*
- *Zero, span and calibration gases*
- *Liquefied hydrocarbon gas control*
- *Control of cryogenic gases*



427-4004 shown

The 427 Series regulators are intended for secondary pressure control of the highest purity gases or as point of use pressure control in high purity gas distribution systems.

400 Advantage

Materials

Specifications

- *Metal-to-metal diaphragm seal*
No possibility of gas contamination
- *Capsule® seat*
Increased serviceability and life
- *316L stainless steel diaphragm*
No inboard diffusion
- *Orientable captured vent capable*
Safety in any installation
- *Low wetted surface area*
Minimal purge requirements
- *Field-adjustable pressure limit*
Safeguard downstream equipment

Body
316L stainless steel barstock

Bonnet
Chrome-plated brass barstock

Seat
PTFE

Filter
10 micron stainless steel multi-layer mesh

Diaphragm
316L stainless steel

Internal Seals
PTFE

Maximum Inlet Pressure
3000 PSIG (210 BAR)

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

Ports
¼" FSC*

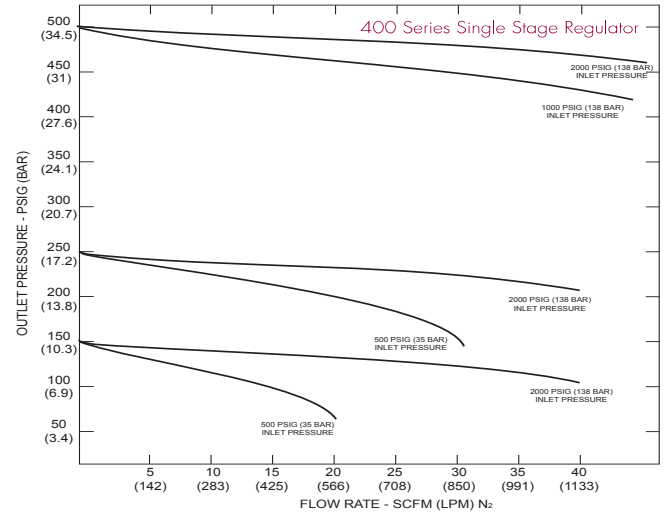
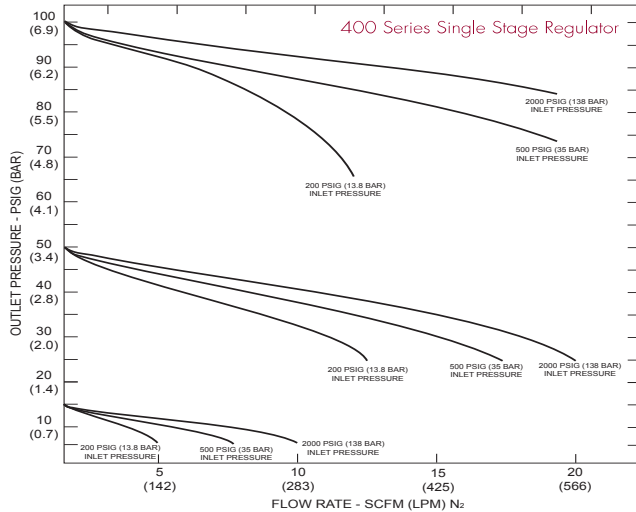
Helium Leak Integrity
1 x 10⁻⁹ scc/sec

Cv
0.1

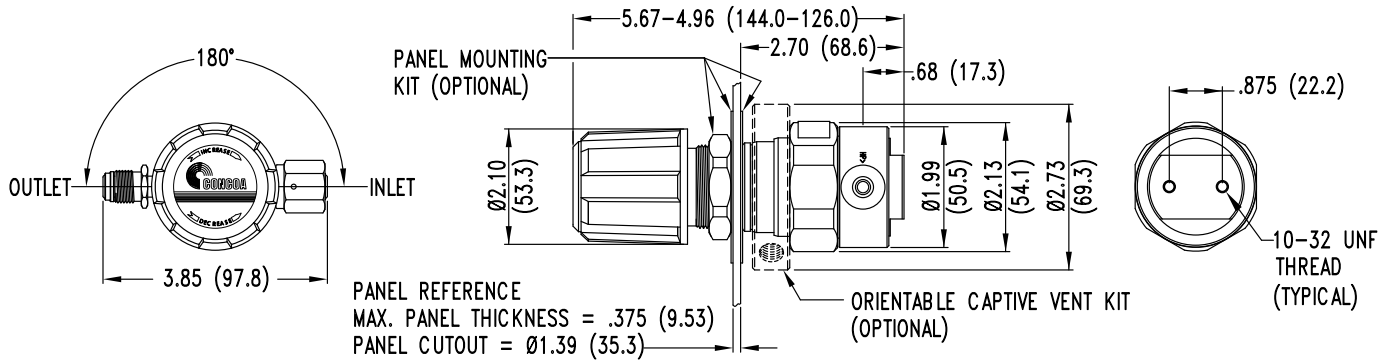
Weight (427-1002)
2.24 lbs. (1.02 kg)

*FSC=Face Seal Connection

Flow Performance Curves



400 Series
Face Seal Regulators



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

427	A	B	C	D
Series 427	Outlet Pressure 1: 0-15 PSIG 2: 0-30 PSIG 3: 0-50 PSIG 4: 0-100 PSIG 5: 0-250 PSIG 6: 0-500 PSIG 7: 0-150 PSIG	Outlet Gauge 0: None	Inlet Gauge 0: None	Connections 1: FFSC in/MFSC out 2: MFSC in/MFSC out 3: MFSC in/FFSC out 4: FFSC in/FFSC out FSC - Face Seal Connection

Related Options

Option	Order No.	Description
Panel Mount Kit	550-0002	To mount the regulator using bonnet threads. Material: Nickel-plated brass
Captured Vent Kit	550-0001	360° orientation for easy piping of vented gases to a safe location in the event of diaphragm failure. Material: Nickel-plated brass
Helium Leak Certification	476-0002	Inboard Helium leak certification to less than 1×10^{-9} scc/sec
Passivation	550-0003	Regulator preconditioned in actual gas usage (required for some fluoridated compounds)
0.01 micron filter	580-2001	Attached at outlet for low particle count gases (with 1/4" VCR® connections only)