



400 Series Regulators

427 Series Regulator

Single Stage

316L Stainless Steel Barstock Body

Two-Port Configuration

Face Seal Connections

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.

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

400 Series Advantage

- 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
- Pipe away relief valve
Safely vents exhaust gases

Materials

- Body
316L stainless steel barstock
- Bonnet
Chrome-plated brass barstock
- Seat
PTFE
- Filter
10 micron patented stainless steel
multi-layer mesh
- Diaphragm
316L stainless steel
- Internal Seals
PTFE

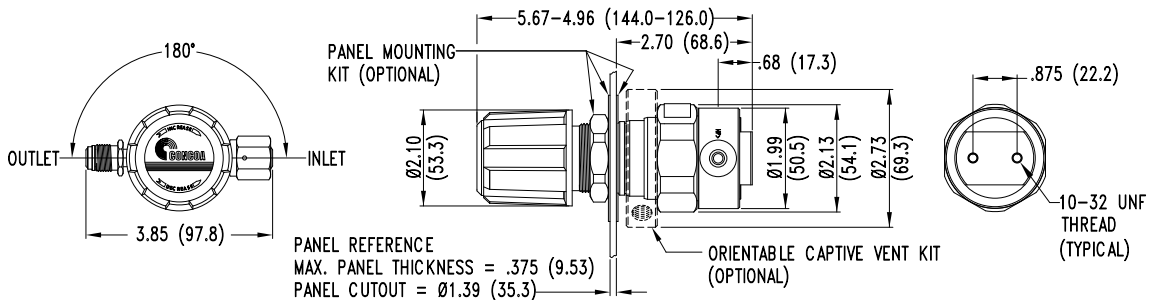
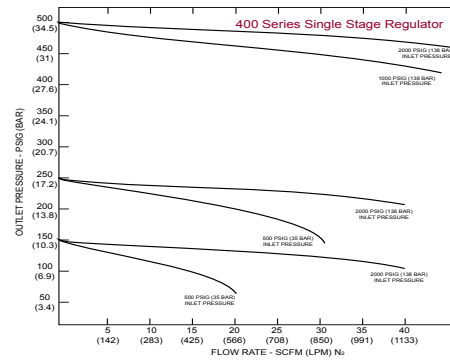
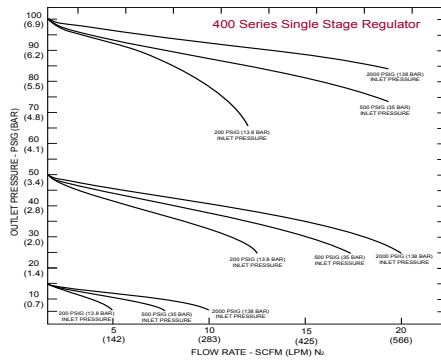
Specifications

- Maximum Inlet Pressure
3000 PSIG (210 BAR)
- Temperature Range
-40°F to 140°F (-40°C to 60°C)
- Ports
1/4" 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

400 Series Regulators



Technical Information



Ordering Information

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

Related Options

Options	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 pipes vented gases to 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 x 10 ⁻⁹ cc/sec
Passivation	550-0003	Passivation for fluorine service
0.01 micron filter	580-2001	Attached at outlet for low particle count gases (with ¼" VCR® connections only)