

403 Series Regulator

Single Stage
Brass Barstock Body
Four-Port Configuration
316L Stainless Steel
Diaphragm

Advanced Features

- Brass barstock body
Smooth surface finish
- Front and rear panel mountable
Versatile system configuration
- Pressure ranges 0-15 to 0-500 PSIG
Broad range of applications
- 3000 PSIG inlet pressure rating
Safe use with high pressure cylinders

Typical Applications

- Bulk gas distribution systems
- 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



403-1001 shown

The 403 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases or as point of use pressure control in high purity gas distribution systems.

400 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 vent exhaust gases
- *Delivery pressure range easily changed*
Maximum flexibility

Materials

Body
Brass barstock

Bonnet
Chrome Plated barstock

Seat
PTFE

Filter
10 micron sintered bronze

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)

Gauge
2" diameter chrome plated

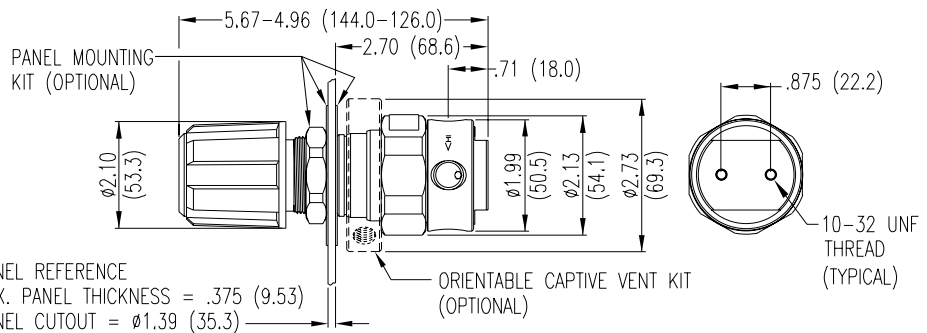
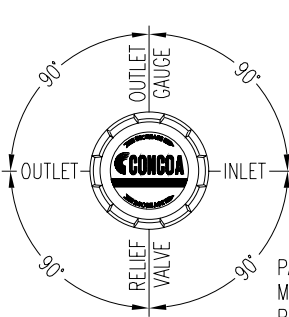
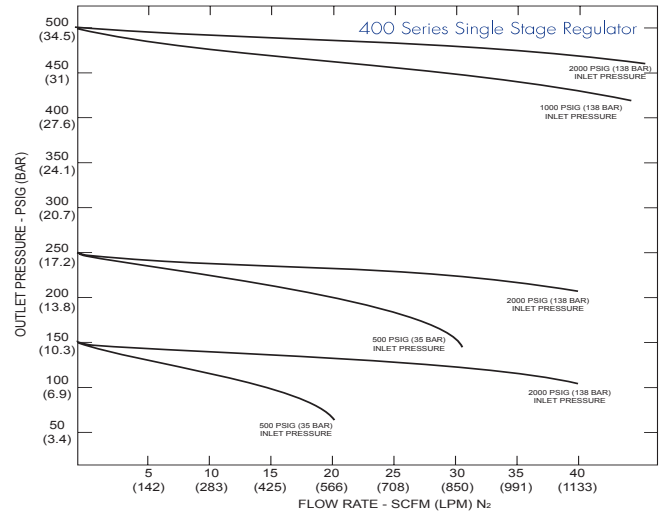
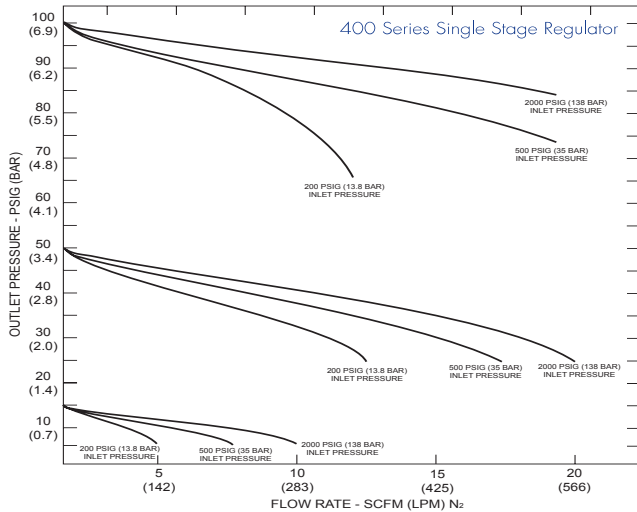
Ports
¼" FPT

Helium Leak Integrity
1 x 10⁻⁹ scc/sec

Cv
0.1 (Max outlet 50 PSIG or below)
0.2 (Max outlet above 50 PSIG)

Weight (403-2021-TF4)
2.71 lbs. (1.23 kg)

Flow Performance Curves



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

403	A		B	C	D	-Inlet	Options
Series 403	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/ Gauges	Inlet Connections	Installed Options
	1: 0-15	30"-0-30 PSIG	0: None	0: 1/4" FPT Port	0: Bare Body	000: 1/4" FPT	None
	2: 0-50	30"-0-100 PSIG		1: 1/4" MPT	1: Standard Assembly (PSIG/kPa Gauges)	TF2: 1/8" Tube	
	3: 0-100	30"-0-200 PSIG		2: 1/4" Tube Fitting	2: Standard Assembly (BAR/PSIG Gauges)	TF4: 1/4" Tube	
	4: 0-250	0-400 PSIG		3: Diaphragm Valve 1/4" Tube Fitting	4: Cleanroom Assembly (PSIG/kPa Gauges)	TF6: 1/8" Tube	
	5: 0-500**	0-1000 PSIG		4: Diaphragm Valve 1/4" MPT	5: Cleanroom Assembly (BAR/PSIG Gauges)	M06: 6mm Tube	
	7: 0-150	30"-0-200 PSIG		5: Needle Valve 1/4" MPT	6: Mirror Image Assembly (PSIG/kPa Gauges)		
	<i>**Standard assembly does not include relief valve</i>			6: 1/8" Tube Fitting	7: Mirror Image Assembly (BAR/PSIG Gauges)		
				7: 1/8" Tube Fitting			
				8: Diaphragm Valve 1/8" Tube Fitting			
				9: Diaphragm Valve 1/4" FPT			
				A: 1/8" BSP Right Hand Fitting			
				M: 6mm Tube Fitting			
				S: Diaphragm Valve 6mm Tube Fitting			

Related Options

- Panel Mount Kit (550-0002)
- Captured Vent Kit (550-0001)
- Helium Leak Certification (476-0002)