

# 603 SERIES

**Assist**  
Gas Supply

## 603 SERIES LINE REGULATOR

The 603 Series regulators are intended for secondary pressure control of pipeline applications with requirements up to 250 PSIG (17 BAR).



### Advanced Features

<b>HIGH FLOW DELIVERY REGULATOR</b>	ISOFLOW™ seat design
<b>40-MICRON INTERNAL FILTER</b>	Limits possibility of gas contamination
<b>BALANCE STEM SEAT</b>	Eliminates decaying inlet pressure fluctuation
<b>STAINLESS STEEL DIAPHRAGM</b>	Ultra high purity design

6033011-01-580 shown

### Applications

#### Laser Assist Gases

Air  
Nitrogen  
Oxygen

#### Microbulk or Bulk Supply Systems

#### Membrane Systems Assist or Beam Purge

#### Nitrogen and Clean Dry Air with Requirements Greater than 1000 CFH

#### Laser Welding Pipeline Shielding Gases

Carbon Dioxide  
Argon  
Helium

### Materials

#### Body

Brass barstock

#### Bonnet

Chrome-plated die cast zinc

#### Seat

PTFE

#### Filter

40-micron 316L stainless steel mesh

#### Diaphragm

316L stainless steel

#### Internal Seals

PTFE

### Specifications

**Maximum Inlet Pressure**  
3000 PSIG (210 BAR)

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

**Gauges**  
2" diameter brass

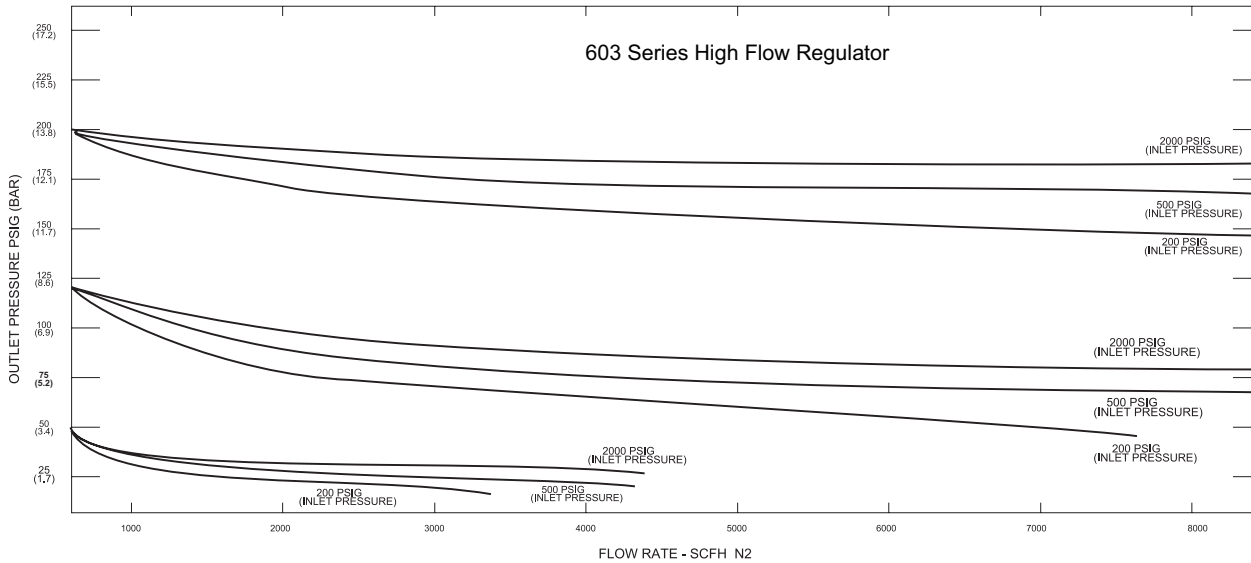
**Ports**  
½" FPT (inlet/outlet)  
¼" FPT (gauges)

**Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec

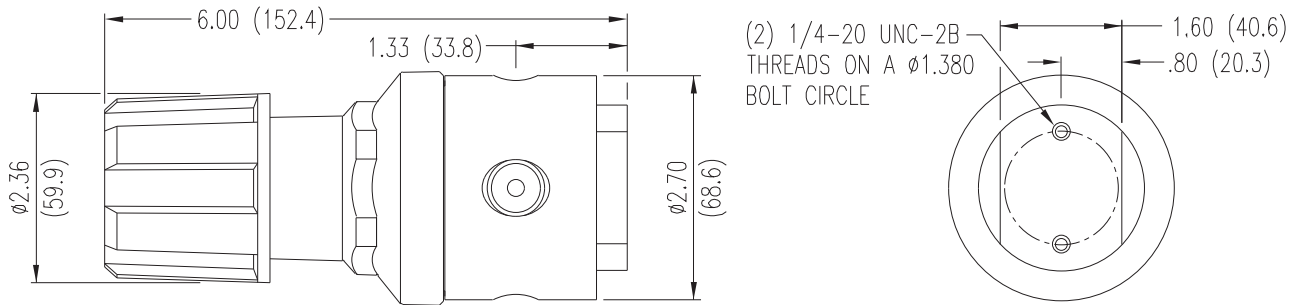
**Cv**  
1.0

**Weight**  
4.4 lbs. (2 kg)

## Flow Performance Curves



## Installation Dimensions



## Ordering Information

603	A	B	C	D	Inlet	
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Connection
603	1: 0-15 PSIG (0-1 BAR)	0-30 PSIG (0-2 BAR)	0: None	0: 1/2" FPT port	1: Right hand inlet (PSIG/kPA gauges)	000: 1/2" FPT
	2: 0-40 PSIG (0-2.8 BAR)	0-60 PSIG (0-4 BAR)		1: 1/2" stainless steel compression tube fitting	2: Right hand inlet (BAR/PSIG gauges)	M12: 12mm stainless steel compression tube fitting
	3: 0-120 PSIG (0-8 BAR)	0-200 PSIG (0-14 BAR)		P: 12mm stainless steel compression tube fitting	6: Left hand inlet (PSIG/kPA gauges)	TF8: 1/2" stainless steel compression tube fitting
	4: 0-200 PSIG (0-14 BAR)	0-400 PSIG (0-27 BAR)			7: Left hand inlet (BAR/PSIG gauges)	
	5: 0-250 PSIG (0-17 BAR)	0-400 PSIG (0-27 BAR)				

## Related Options

Option	Series	Description
Laser Panels	See Page 7	Three Gas Panel delivery systems for the Laser Gases (Helium, Nitrogen and Carbon Dioxide)
Purge Devices	See Page 49	Tee and Straight Purge configurations to satisfy all requirements
Mounting Bracket	8350204	Rear panel mounting kit