

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

HIGH FLOW DELIVERY REGULATOR ISOFLOW™ seat design

40-MICRON INTERNAL FILTER Limits possibility of gas contamination

BALANCE STEM SEAT Eliminates decaying inlet pressure fluctuation

STAINLESS STEEL DIAPHRAGM 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 10⁻⁸ scc/sec

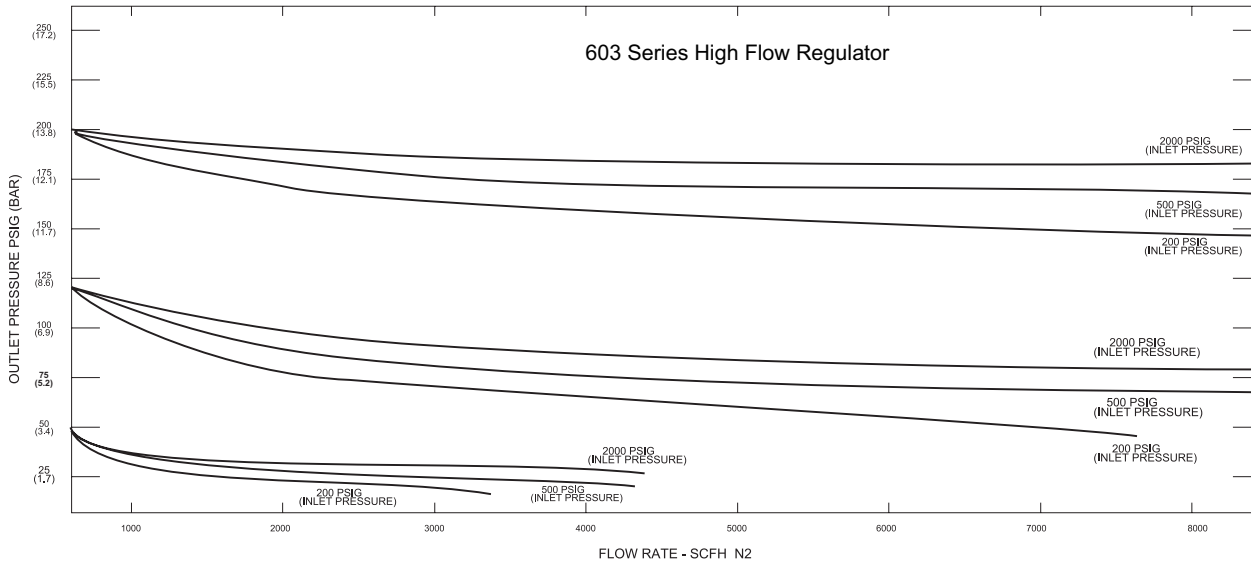
Cv

1.0

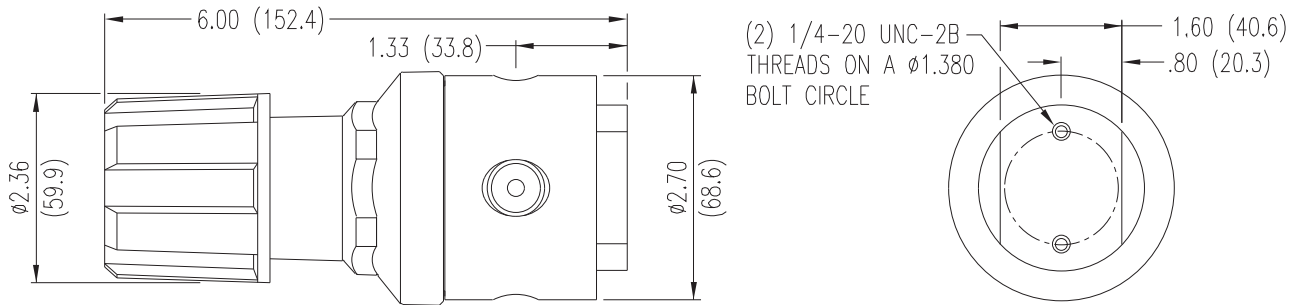
Weight

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