

603 Series Line Regulator

*ISOFLOW™ Seat
Design
High Flow
High Purity*



603-3011-TF8 shown

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*
UHP design

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

Applications

Laser Assist Gases
Air, Nitrogen, and Oxygen

Microbulk or Bulk Supply Systems

Membrane Systems Assist or Beam Purge

Nitrogen and Clean Dry Air with Requirements Greater than 1000 CFH

Bulk Beam Purge Supply
Nitrogen

Laser Welding Pipeline Shielding Gases
CO₂, Argon, Helium

Materials

Body
Brass barstock

Bonnet
Chrome-plated die cast zinc

Seat
PCTFE

Filter
40-micron 316L stainless steel mesh

Diaphragm
316L stainless steel

Internal Seals
PTFE

Specifications

Maximum Inlet Pressure
3,000 PSIG (210 BAR)

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

Gauge
2" diameter brass

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

Helium Leak Integrity
1 x 10⁻⁸ scc/sec

Cv
1.0

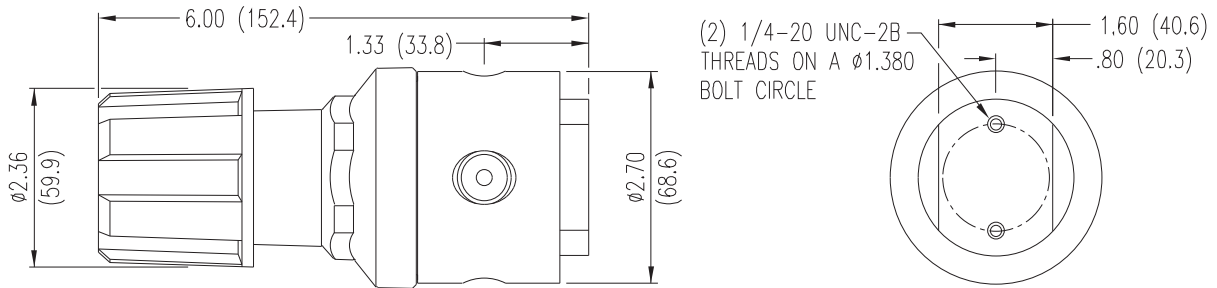
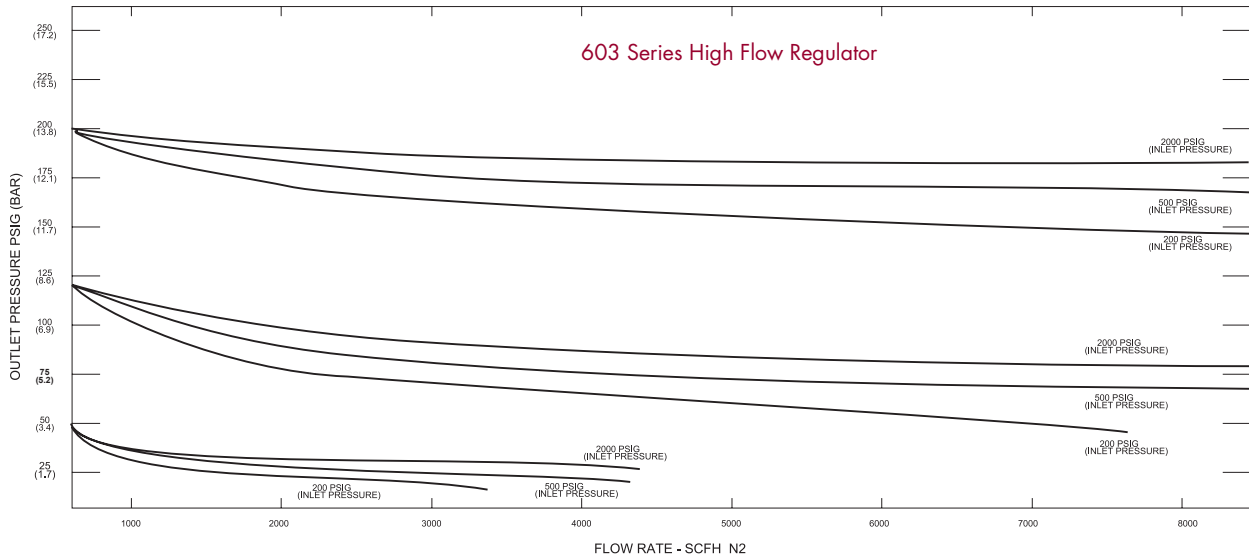
Weight
4.4 lbs. (2 kg)

Rear Panel Mountable

CONCOA

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Flow Performance Curves



ASSIST GAS SUPPLY

Ordering Information

603-	A		B	C	D	Inlet
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Connections
603	1: 0-15 PSIG 2: 0-40 PSIG 3: 0-120 PSIG 4: 0-200 PSIG 5: 0-250 PSIG	0-30 PSI 0-60 PSI 0-200 PSI 0-400 PSI 0-400 PSI	0: None	0: 1/2" FPT Port 1: 1/2" Tube Fitting P: 12mm Tube Fitting	1: Right Hand Inlet (PSI/kPa Gauges) 2: Right Hand Inlet (BAR/PSI Gauges) 6: Left Hand Inlet (PSI/kPa Gauges) 7: Left Hand Inlet (BAR/PSI Gauges)	000: 1/2" FPT M12: 12mm Tube Fitting TF8: 1/2" Tube Fitting

Related Options

Option	Order No.	Description
Laser Panels	See Page 9	Three Gas Panel delivery systems for the Laser Gases (Helium, Nitrogen and Carbon Dioxide)
Purge Devices	See Page 47	Tee and Straight Purge configurations to satisfy all requirements
Mounting Bracket	835-0204	Rear panel mount bracket kit