

15 Series

Regulators - Pressure Reducing

D15XX1858X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

300 psig / 20.7 bar

Outlet Pressure Ranges

130 and 150 psig / 9.0 and 10.3 bar

Design Proof Pressure

150% maximum rated

Certified Maximum Inboard Leak Rate

Diaphragm: 1×10^{-9} atm cc/sec He

Seat: 1×10^{-6} atm cc/sec He

Operating Temperature

-20°F to 150°F / -29°C to 65°C

Flow Capacity

Diaphragm: $C_v = 8.0$

Bellows: $C_v = 14.0$



TESCOM 15 Series is designed for ultra high flow applications of up to 28,300 SLPM. The 15 Series is an ultra high purity, 10 R_a, bulk gas pressure reducing regulator. Inlet of 300 psig / 20.7 bar, outlet up to 150 psig / 10.3 bar. Electronically controlled option is available.

MEDIA CONTACT MATERIALS

Body

316L Stainless Steel

Diaphragm or Bellows

316L Stainless Steel

Seat

PCTFE or Teflon®

Seal

Viton®

Remaining Parts

316L Stainless Steel

Application

- Facility Bulk Gas Delivery

Features and Benefits

- Diaphragm sensing element maintains very accurate downstream pressure
- 10 R_a microinch internal surface finishes with full internal electropolish
- 316L Stainless Steel bar stock construction
- Two loading options available: Spring/wrench-adjust and air-actuated
- Two sensing options available: Diaphragm and bellows (bellows sensing element expands flow capability beyond 1200 SCFM / 33,960 SLPM)
- Compatible with ER3000 Electronic Controller

OTHER

Connections

Tube extensions

Cleaning

DI water electronic grade cleaned

Weight

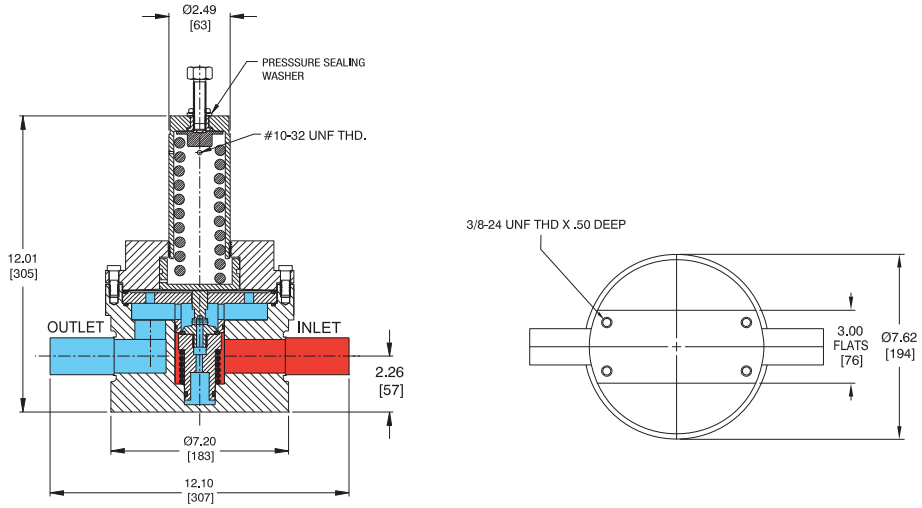
55 lbs / 24.9 kg

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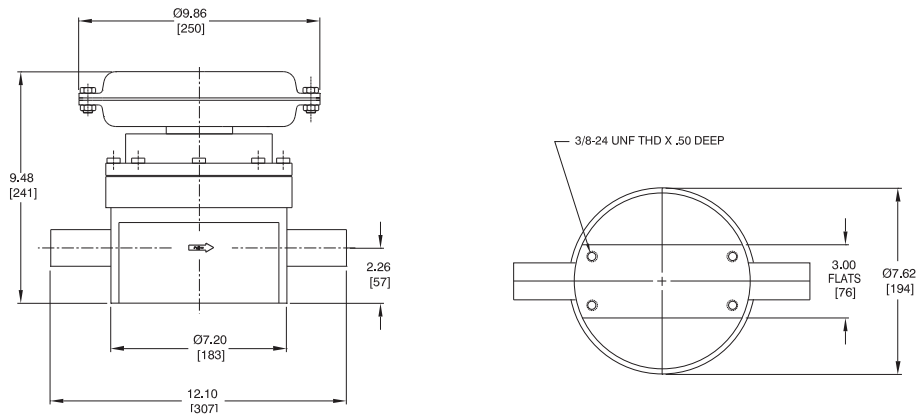
Supplied mounting holes must be used for attachment of regulator to a support structure. Support structure for tube extensions, components or accessories attached to regulator is the responsibility of the system integrator.

15 Series Regulator Drawing

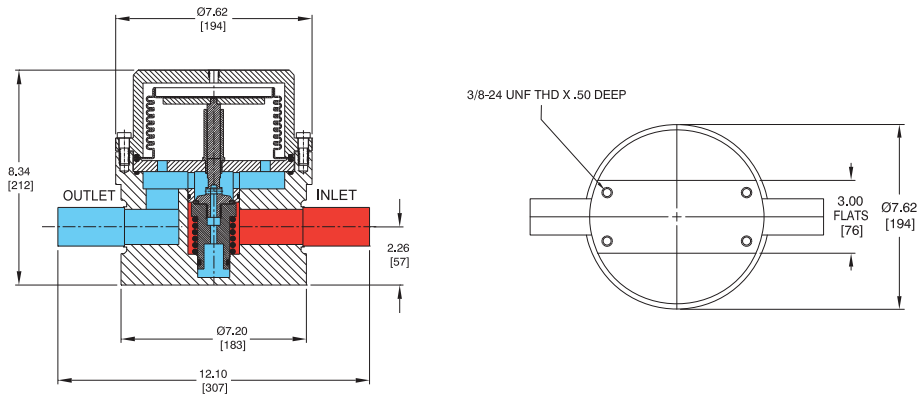
SPRING LOADED - DIAPHRAGM SENSED



AIR ACTUATED - DIAPHRAGM SENSED



AIR ACTUATED - BELLOWS SENSED

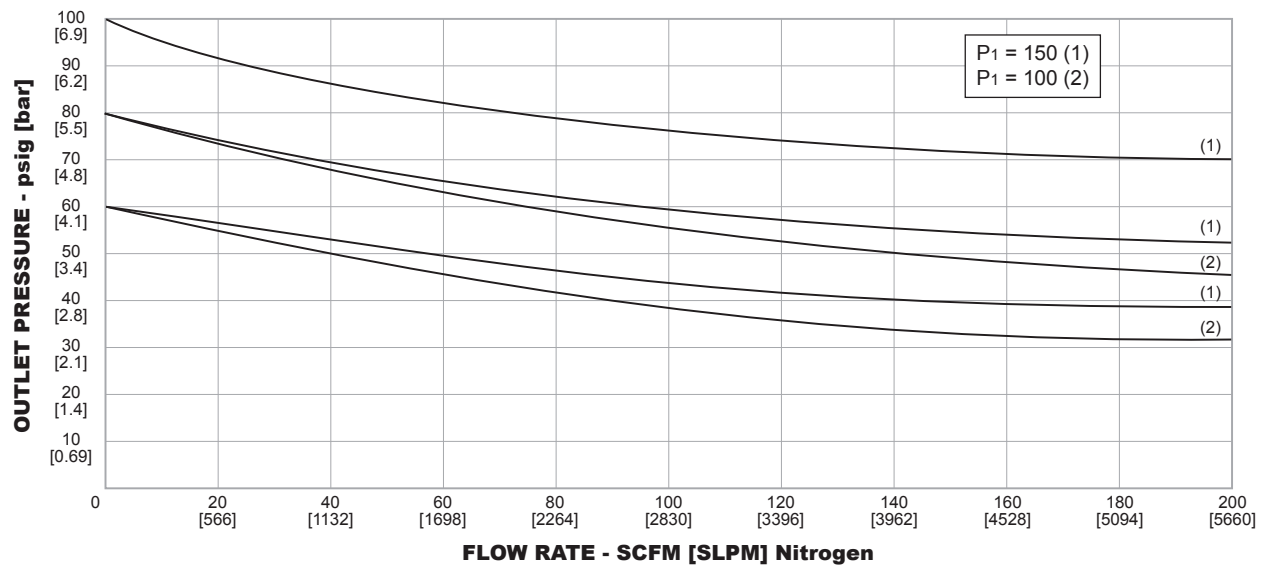


All dimensions are reference & nominal
Metric [millimeter] equivalents are in bracket

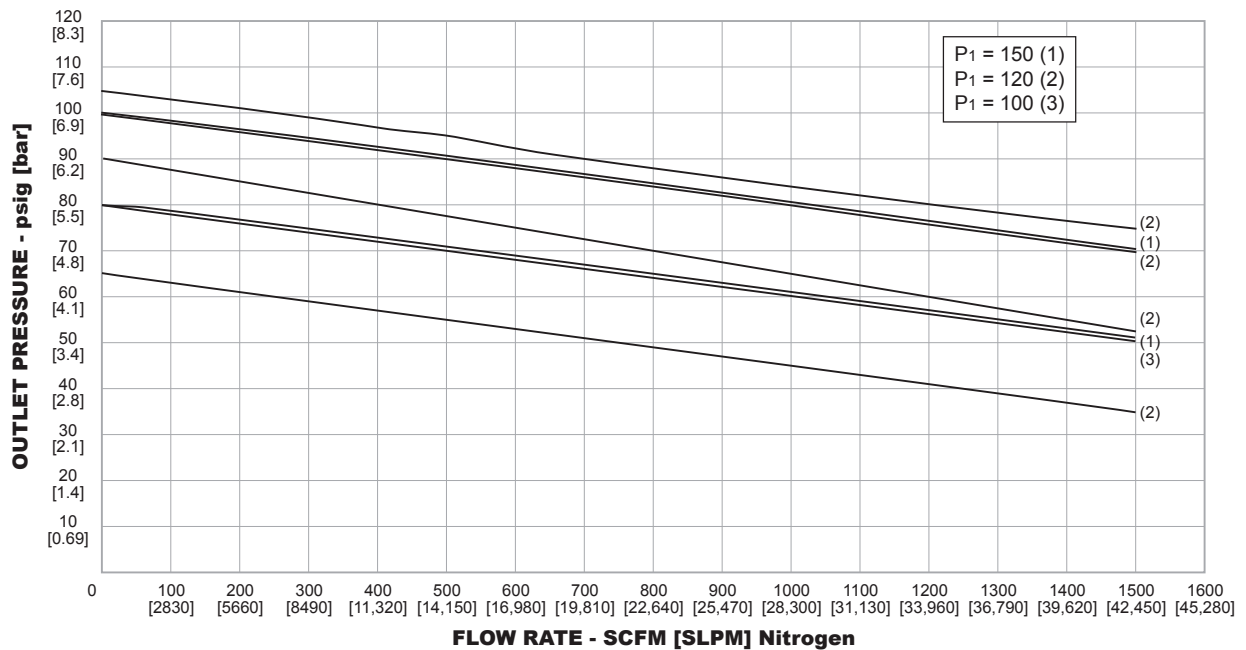
15 Series Regulator Flow Charts

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.

SPRING LOADED - DIAPHRAGM SENSED AND AIR ACTUATED - DIAPHRAGM SENSED



AIR ACTUATED - BELLOWS SENSED



15 Series Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

15	1	2	T	V	1	66	Z	
BASIC SERIES	INLET PRESSURE	OUTLET PRESSURE	SEAT MATERIAL	SEAL MATERIAL	ADJUSTMENT METHOD	INLET AND OUTLET PORT SIZE AND TYPE	END-TO-END DIMENSIONS	OPTIONS (choose only one)
15	1 – 300 psig 20.7 bar	1 – 150 psig 10.3 bar 2 – 130 psig 9.0 bar	K – PCTFE T – Teflon®	V – Viton®	1 – Spring Loaded Diaphragm Sensed 2 – Air Actuated Diaphragm Sensed 3 – Air Actuated Bellows Sensed	UU – 3/4" Tubes VV – 1" Tubes 66 – 1-1/2" Tubes SS – 2" Tubes	12.10" 12.10" 12.10" 12.10"	Z – None T – Test Report (typical) C – Certification of Conformance