

44-5000 Series

Regulators - Pressure Reducing

D44501795X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

120, 400, 3500 psig / 8.3, 27.6, 241 bar

Outlet Pressure Ranges

50 mm Hg absolute - 15 psig / 1.0 bar

50 mm Hg absolute - 25 psig / 1.7 bar

50 mm Hg absolute - 50 psig / 3.4 bar

50 mm Hg absolute - 100 psig / 6.9 bar

Design Proof Pressure

150% maximum pressure

Leakage

Internal: Bubble-tight

External: Design to meet: $\leq 2 \times 10^{-8}$ atm cc/sec He

Operating Temperature

-40°F to 165°F / -40°C to 74°C

Flow Capacity

120 psig / 8.3 bar Inlet: $C_v = 0.24$

400 psig / 27.6 bar Inlet: $C_v = 0.15$

3500 psig / 241 bar Inlet: $C_v = 0.06$

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel or Brass

Diaphragm

316 Stainless Steel

Seat

Teflon®

Spring

316 Stainless Steel

Friction Sleeves (400 and 3500 psig / 27.6 and 241 bar inlet only)

Inner: Teflon®

Outer: 316 Stainless Steel

Remaining Parts

316 Stainless Steel (Brass for Brass Bodies)

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight (without gauges)

2 lbs / 0.9 kg

Teflon® is a registered trademark of E.I du Pont de Nemours and Company.



TESCOM 44-5000 Series is a compact, lightweight, high purity absolute single-stage regulator for specialty, corrosive, and pyrophoric gases. Diffusion-resistant metal-to-metal diaphragm seal ensures gas purity and integrity. Excellent for sub-atmospheric outlet pressures.

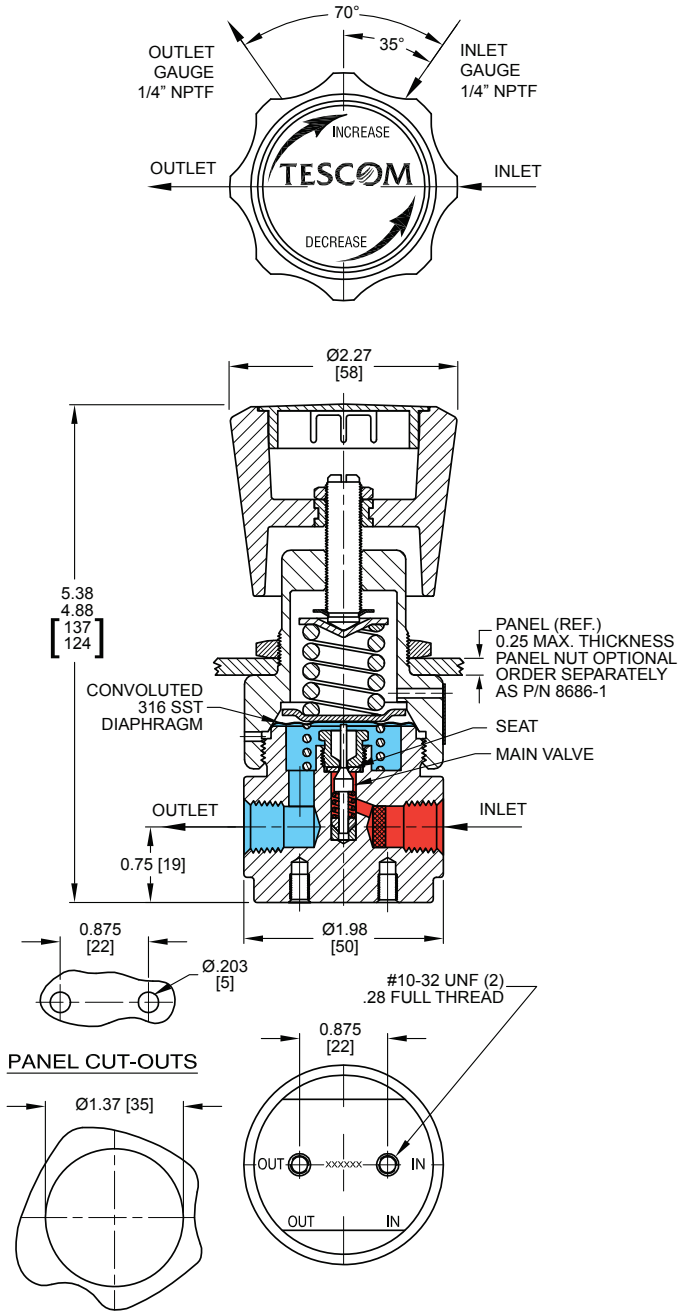
Applications

- Gas chromatograph sampling systems
- Delivery system cylinder regulator
- Low vapor pressure hydrocarbon gases

Features and Benefits

- Economical sub-atmospheric pressure control
- Compact size
- Three inlet pressure ratings allow adaptation to specific use
- Four outlet pressure ranges are available
- Panel mounting is available (requires panel nut 8686-1)
- Variety of porting options are available
- NACE compliant designs are available

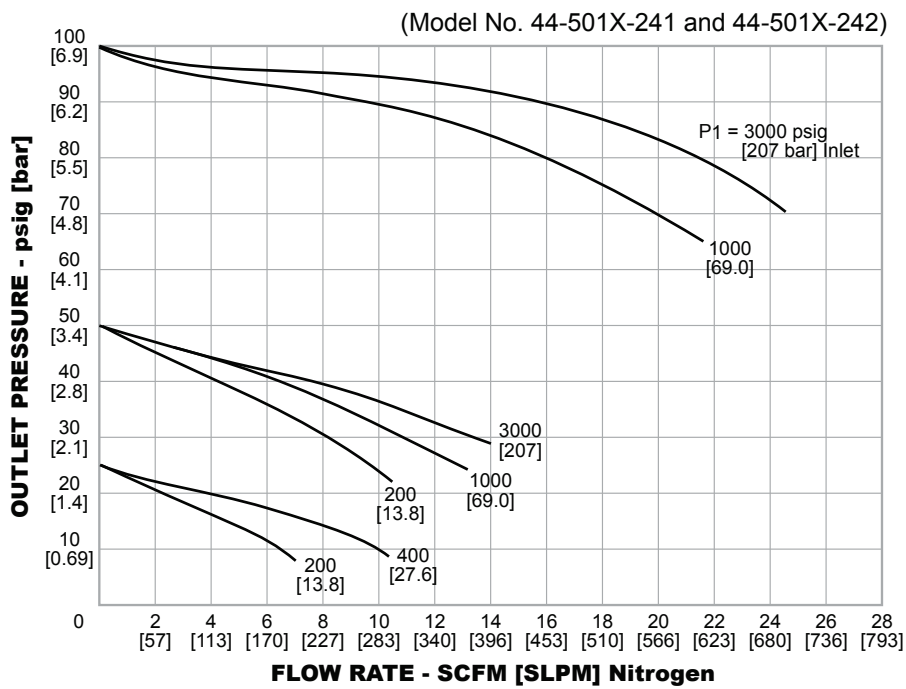
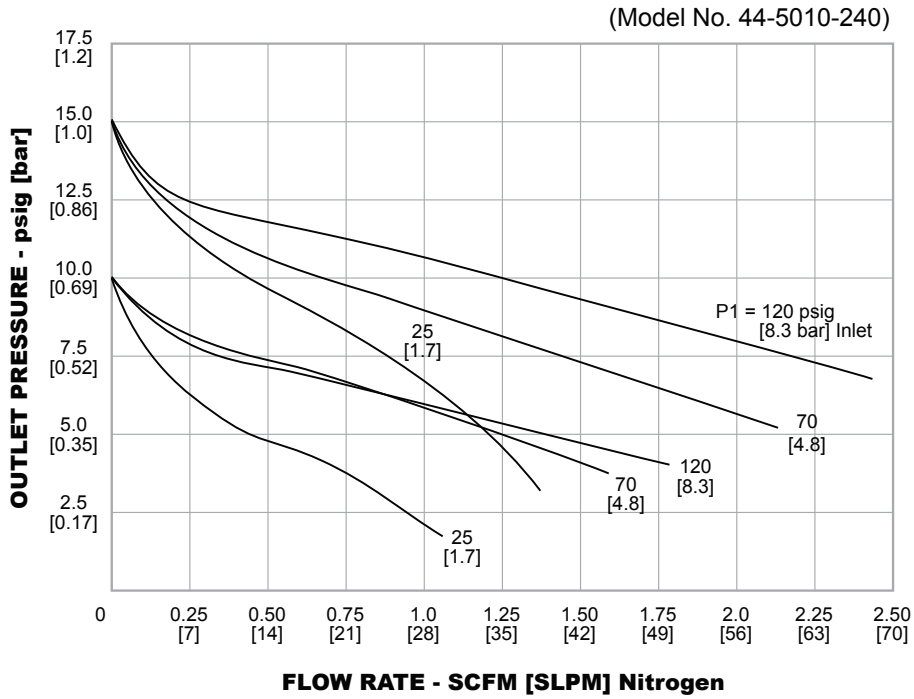
44-5000 Series Regulator Drawing



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

44-5000 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.



44-5000 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:

BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE RANGES ¹	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	MAXIMUM INLET PRESSURE	FLOW CAPACITY
44-50	1 – Brass 6 – 316 Stainless Steel	0 – 50 mm Hg absolute - 15 psig / 1.0 bar 1 – 50 mm Hg absolute - 25 psig / 1.7 bar 2 – 50 mm Hg absolute - 50 psig / 3.4 bar 3 – 50 mm Hg absolute - 100 psig / 6.9 bar 1. 28" Hg = 50 mm Hg absolute	2 – NPTF 3 – MS33649	4 – 1/4"	0 – 120 psig 8.3 bar 1 – 3500 psig 241 bar 2 – 400 psig 27.6 bar	C _v = 0.24 C _v = 0.06 C _v = 0.15