

# 44-2200 Series

## Regulators - Pressure Reducing

D44221731X012

### Specifications

For other materials or modifications, please consult TESCO M.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

##### Maximum Inlet Pressure

400, 3500 psig  
27.6, 241 bar

##### Outlet Pressure Ranges

0-25, 0-50, 0-100, 0-250, 0-500 psig  
0-1.7, 0-3.4, 0-6.9, 0-17.2, 0-34.5 bar

##### Design Proof Pressure

150% maximum rated

##### 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

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

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

##### Maximum Operating Torque

30 in-lbs / 3.4 N•m

##### Decaying Inlet Characteristic

**$C_v = 0.15$**

1.2 psig / 100 psig

0.08 bar / 6.9 bar

**$C_v = 0.06$**

0.75 psig / 100 psig

0.05 bar / 6.9 bar

#### MEDIA CONTACT MATERIALS

##### Body

316L Stainless Steel, Brass, Hastelloy®\* or Monel

##### Bonnet

300 Series Stainless Steel, Brass

##### Diaphragm

316 Stainless Steel, Elgiloy®

##### Seat

Teflon®

##### Remaining Parts

316 Stainless Steel, Brass, Hastelloy®\* or Monel

#### OTHER

##### Cleaning

CGA 4.1 and ASTM G93

##### Internal Volume

6 cc

##### Weight (without gauges)

2 lbs / 0.9 kg

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

Hastelloy® is a registered trademark of Haynes International, Inc.

Elgiloy® is a registered trademark of Elgiloy Corp.

\*Material to be Hastelloy® or equivalent per ASTM B 574



TESCOM 44-2200 Series is a compact, lightweight high purity single-stage regulator for specialty, flammable, and industrial gas flows of less than 5 SCFM / 141 SLPM. Its diffusion-resistant metal diaphragm seal ensures gas purity and integrity.

### Applications

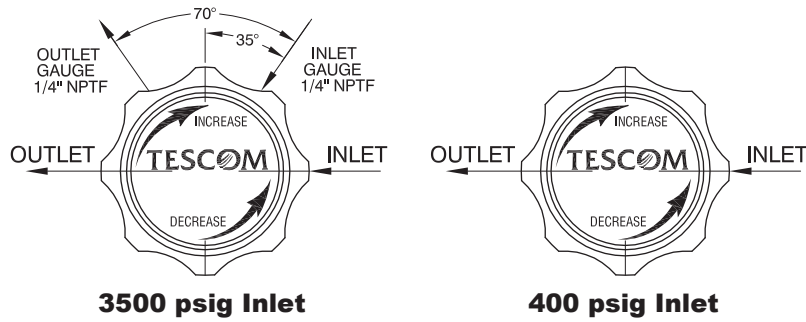
- Laboratory and point-of-use gas systems
- Sampling systems, zero, span and calibration analyzer gases
- Specialty and industrial gas cylinder regulator
- Chromatograph flame detector fuel supply

### Features and Benefits

- Compact
- Designed to minimize contamination and provide accurate regulation of any corrosive, non-corrosive, or toxic gas
- Brass model provides added economy for control of non-corrosive media
- Metal-to-metal diaphragm to body seal ensures minimum inboard and outboard leakage
- Convoluted diaphragm delivers excellent accuracy and long service life
- Panel mounting is available
- 300 Series Stainless Steel or Brass bonnet
- NACE compliant designs are available

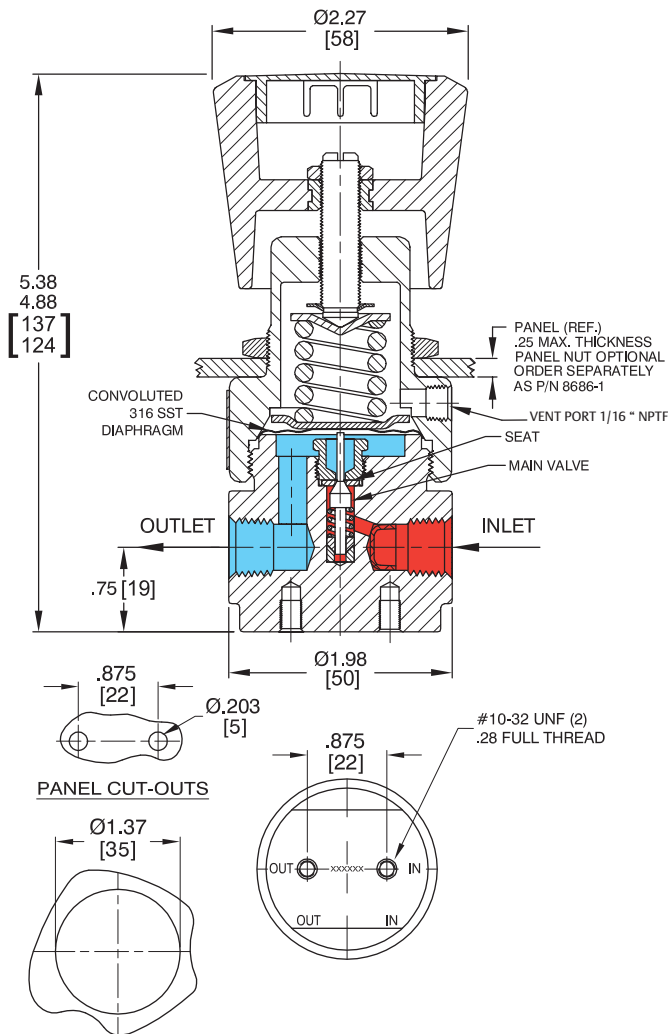
44-2200 Series Regulator Drawing

PORTING CONFIGURATION



3500 psig Inlet

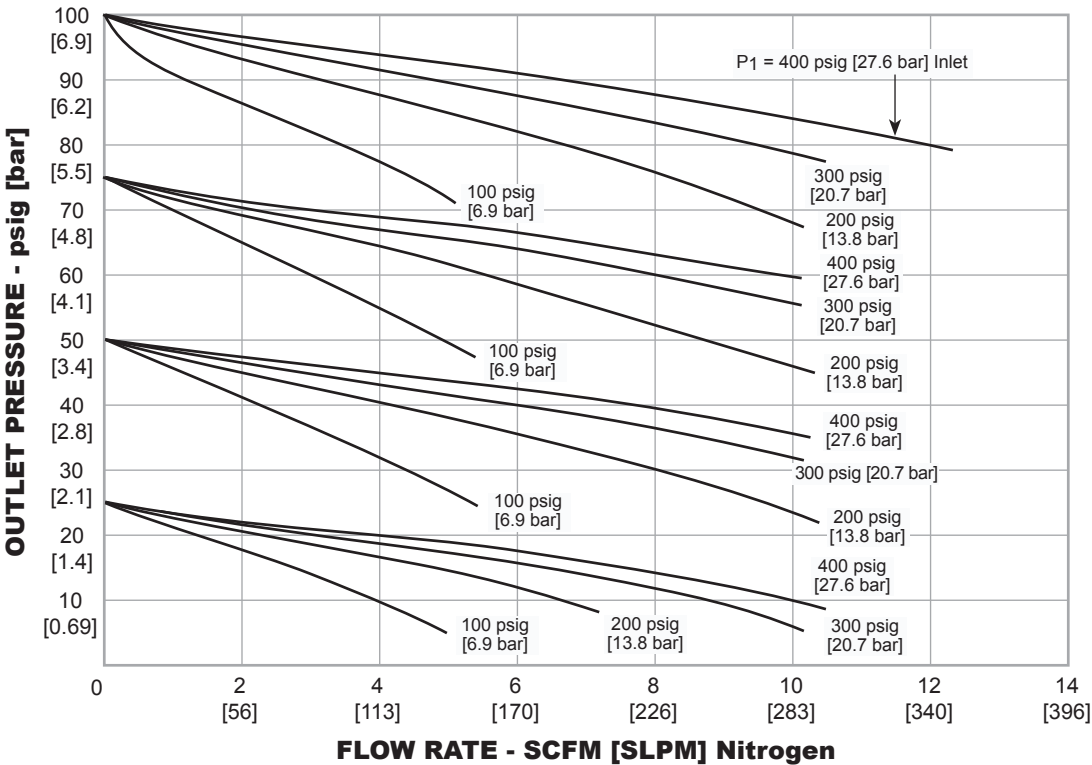
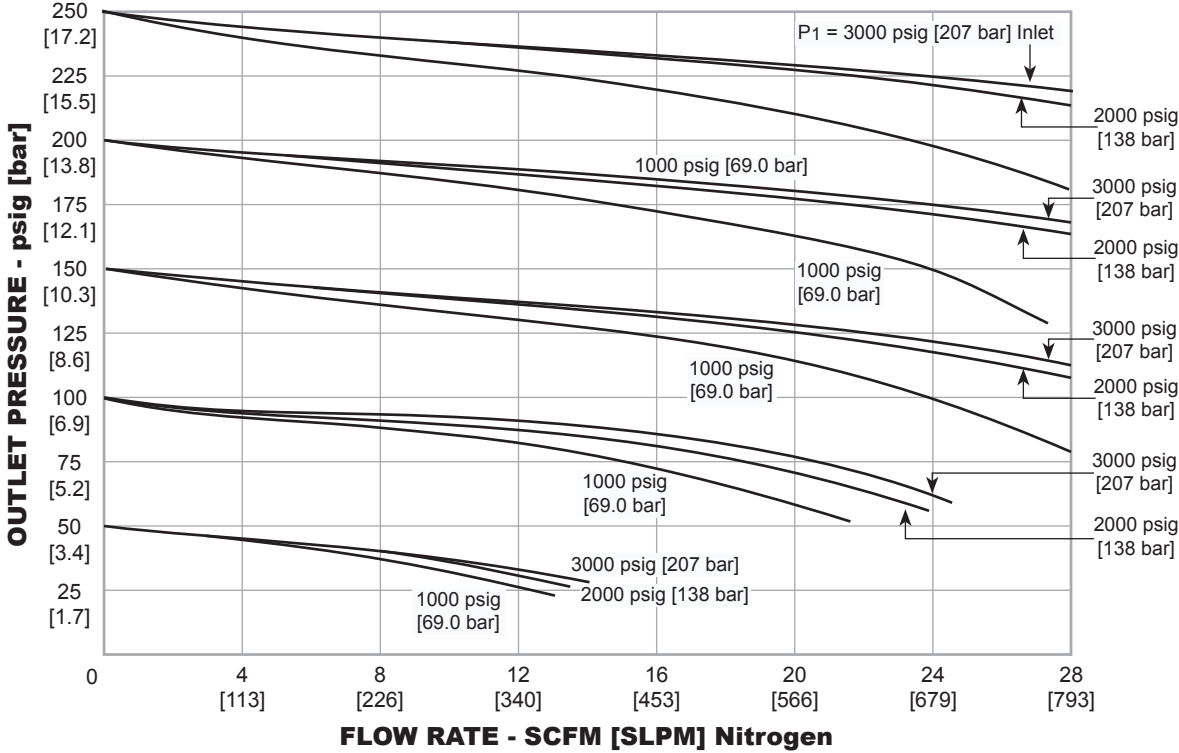
400 psig Inlet



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

### 44-2200 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](http://www.tescom.com).



## 44-2200 Series Regulator Part Number Selector

**Learn more about common options.**

For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

44-22      6                      0                      -                      2                      4                      1

BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE RANGES	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	INLET PRESSURE	FLOW CAPACITY	MODIFICATIONS
44-22	1 – Brass 5 – Hastelloy® 6 – 316L Stainless Steel 9 – Monel	0 – 0-25 psig 0-1.7 bar  1 – 0-50 psig 0-3.4 bar  2 – 0-100 psig 0-6.9 bar  3 – 0-250 psig 0-17.2 bar  4 – 0-500 psig 0-34.5 bar  <i>(with 3500 psig / 241 bar inlet only)</i>	2 – NPTF	4 – 1/4"	1 – 3500 psig 241 bar  2 – 400 psig 27.6 bar  <b>See porting configuration</b>	$C_v = 0.06$  $C_v = 0.15$	-010 – Outlet gauge port at 90°  -115 – High temperature (400°F / 205°C)  -118 – Hydraulic service outlet gauge ports at 70°

**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the *TESCOM Safety, Installation and Operation Precautions*.D44221731X012 © 2014, 2017 Emerson Process Management Regulator Technologies, Inc. All rights reserved. 08/2017.  
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