# **Proudly Distributed By**



# 44-2200 SERIES

D44221731X012

**Regulators - Pressure Reducing** 

**Specifications** For other materials or modifications, please consult TESCOM.

**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 ≤ 2 x 10 <sup>-8</sup> atm cc/sec He
Operating Temperature
-40°F to 165°F / -40°C to 74°C
Flow Capacity
3500 psig / 241 bar Inlet: C <sub>V</sub> = 0.06
400 psig / 27.6 bar Inlet: C <sub>V</sub> = 0.15
Maximum Operating Torque
30 in-lbs / 3.4 N•m

### MEDIA CONTACT MATERIALS

Body

316L Stainless Steel, Brass, Nickel Alloy (Hastelloy®)\* or Nickel Alloy (Monel®) Bonnet

300 Series Stainless Steel, Brass

Diaphragm

316 Stainless Steel, Cobalt Chrome Nickel Alloy (Eligiloy®) Seat

## PTFF

**Remaining Parts** 

316 Stainless Steel, Brass, Nickel Alloy (Hastelloy®)\* or Nickel Alloy (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 Hastellov® 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

### NOTE:

When choosing a regulator and control pressure, decaying inlet characteristic must be considered when the supply pressure is expected to change. The decaying inlet characteristic of a pressure reducing regulator is commonly known as the increase in control pressure due to the decrease in supply pressure. It is important to make sure this effect does not cause the control pressure to exceed the pressure rating of the unit's outlet or that of the downstream system.

For more information on decaying inlet, please refer to the Technical Information section of the product catalog and/or contact the TESCOM customer support further assistance.



Visit our website at emerson.com or contact us at (800) 447-1250

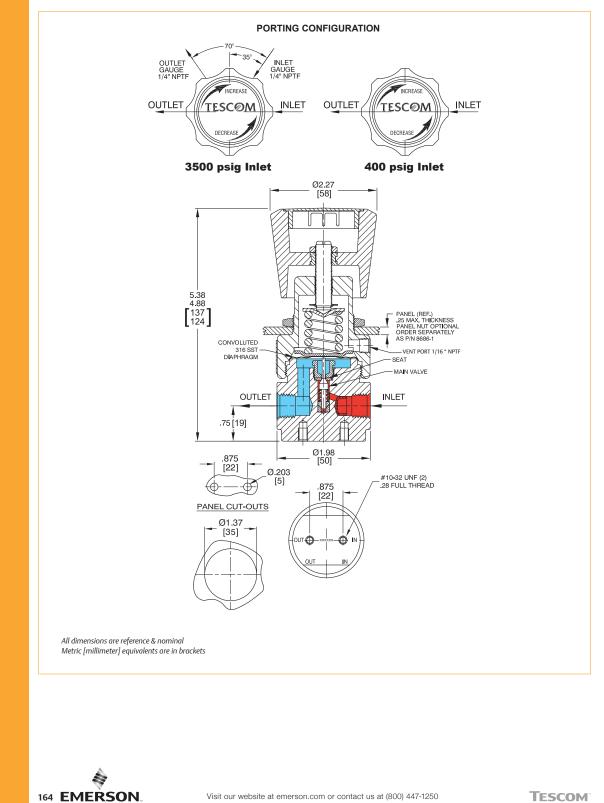




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## 44-2200 Series Regulator Drawing



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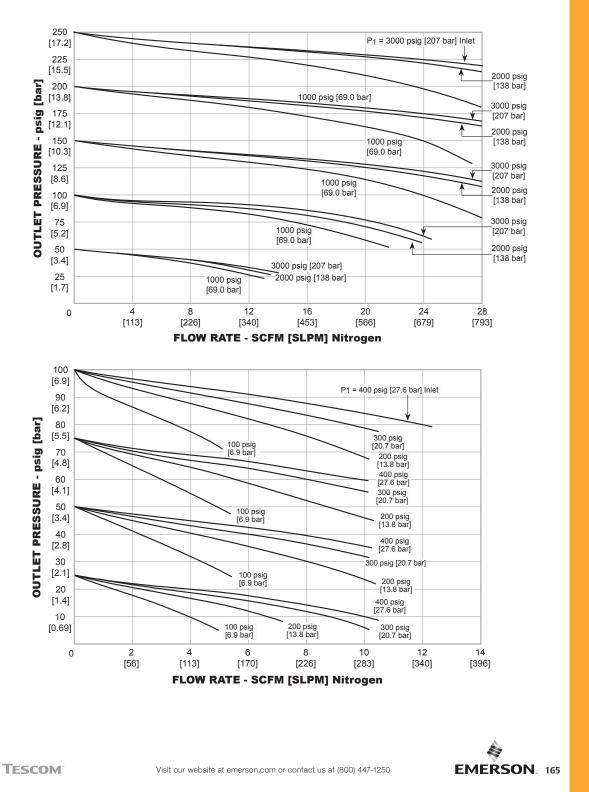




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## 44-2200 Series Regulator Flow Charts

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.



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# 44-2200 SERIES

# 44-2200 Series Regulator Part Number Selector

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

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

Example for selecting a part number:



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