## **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 psiq 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:**  $C_V = 0.06$ **400** psiq / **27.6** bar Inlet:  $C_V = 0.15$ 

## **Maximum Operating Torque**

30 in-lbs / 3.4 N•m

### MEDIA CONTACT MATERIALS

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

PTFE

## **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 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

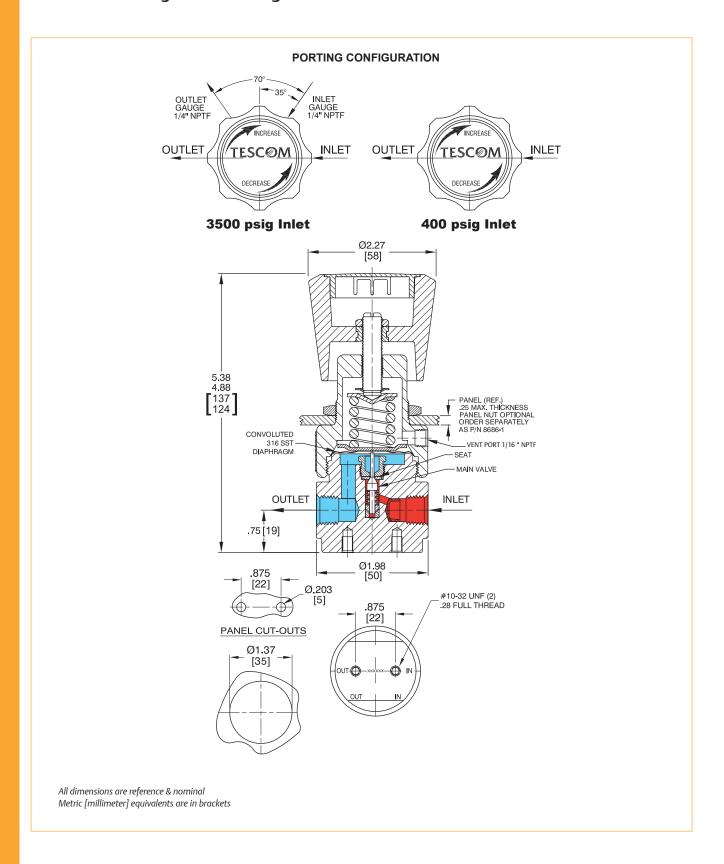
When choosing a regulator and control pressure, decaying inlet characteristic must be considered when the supply pressure is expected to change. The decaying inlet characteristic of a pressure reducing regulator is commonly known as the increase in control pressure due to the decrease in supply pressure. 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.



# 44-2200 SERIES

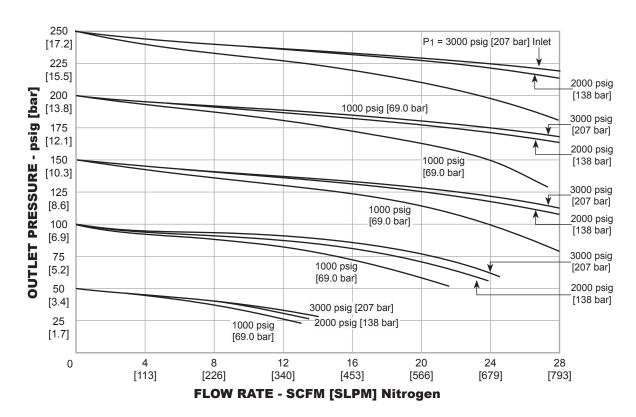
# 44-2200 Series Regulator Drawing

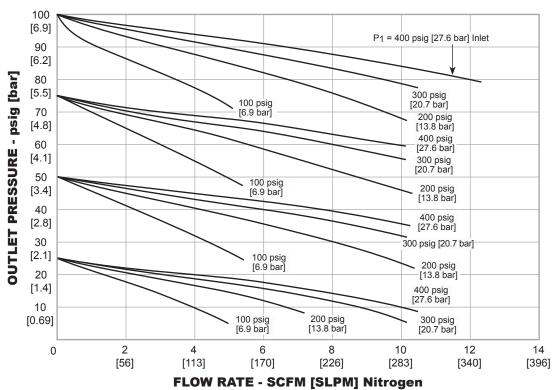




# 44-2200 Series Regulator Flow Charts

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.





# 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.

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 – Nickel Alloy (Hastelloy®) 6 – 316L Stainless Steel 9 – Nickel Alloy (Monel®)	3 - 0-250 psig 0-17.2 bar 4 - 0-500 psig 0-34.5 bar (with 3500 psig / 241 bar	2 – NPTF	<b>4</b> – 1/4°	1 – 3500 psig 241 bar 2 – 400 psig 27.6 bar See porting con	C <sub>V</sub> = 0.06  C <sub>V</sub> = 0.15  Infiguration	-010 – Outlet gauge port at 90°  -115 – High temperature (400°F / 205°C)  -118 – Hydraulic service outlet gauge ports at 70°
		(with 3500 psig / 241 bar inlet only)					