

# 44-2300 Series

## Regulators - Relief / Backpressure

D44231774X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Controlled Pressure Ranges**

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

**Design Proof Pressure**

150% maximum rated

**Leakage**

**Internal:** Bubble-tight

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

**Operating Temperature**

-40°F to 140°F / -40°C to 60°C

**Flow Capacity**

$C_v = 0.08$

**Maximum Operating Torque**

30 in-lbs / 3.4 N•m

#### MEDIA CONTACT MATERIALS

**Body**

316 Stainless Steel, Brass, or Monel

**Bonnet**

300 Series Stainless Steel, Brass

**Seat**

CTFE

**Diaphragm**

316 Stainless Steel or Elgiloy®

**Remaining Parts**

316 Stainless Steel, Monel (for Monel body)

#### OTHER

**Cleaning**

CGA 4.1 and ASTM G93

**Weight (without gauges)**

2 lbs / 0.9 kg

Elgiloy® is a registered trademark of Elgiloy Corp.



TESCOM 44-2300 Series is a compact, lightweight, single-stage backpressure regulator for specialty, flammable, and industrial gas flows of less than 4 SCFM / 113 SLPM. Diffusion-resistant metal diaphragm seal ensures gas purity and integrity.

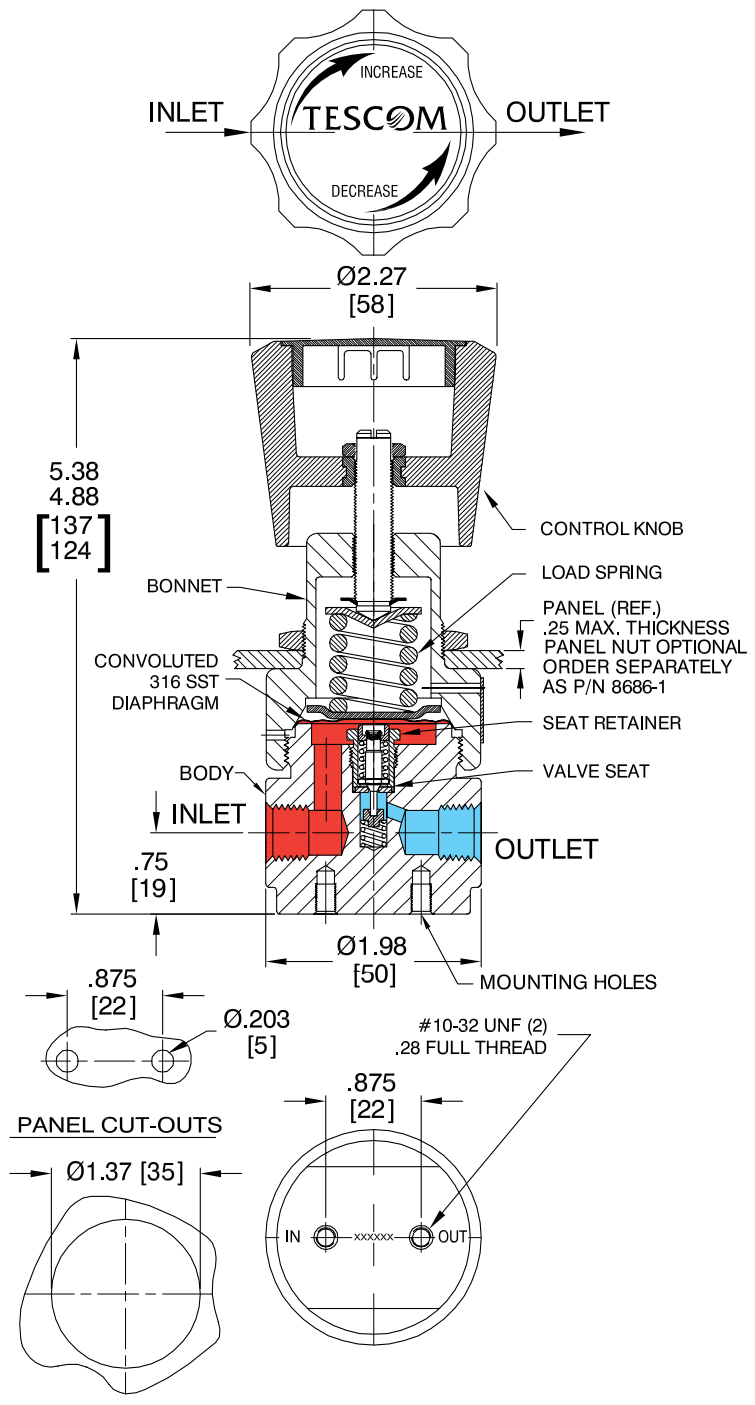
#### Applications

- Analytical systems
- Gas sampling
- Pilot plants
- OEM packages
- R & D laboratories

#### Features and Benefits

- Reduces contamination and provides accurate regulation of corrosive or non-corrosive gases
- Convoluted metal-to-metal sealed diaphragm
- Close pressure differential between crack and reseal
- Compact and economical
- Dome loading is optional
- Panel mounting is available

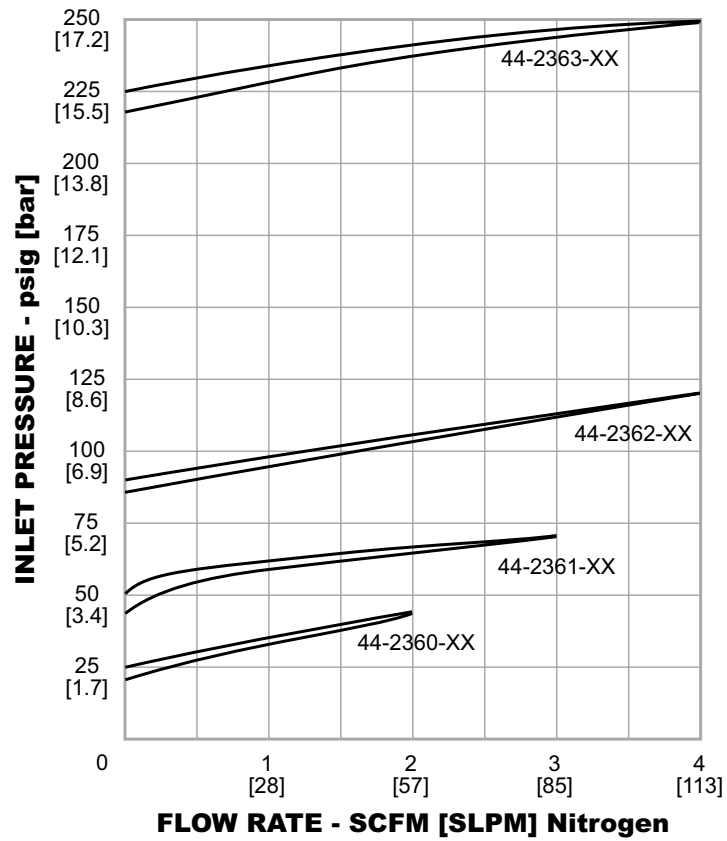
44-2300 Series Regulator Drawing



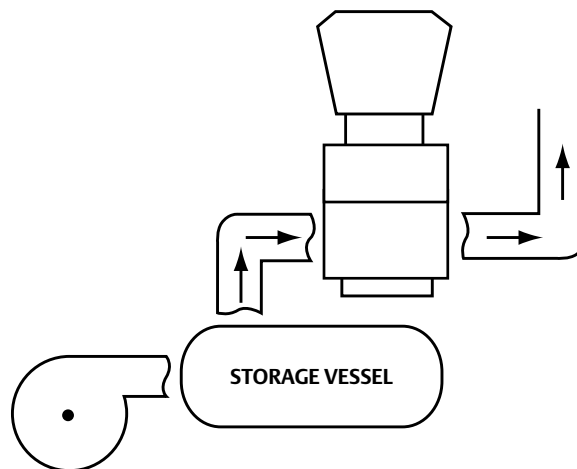
All dimensions are reference & nominal  
 Metric [millimeter] equivalents are in brackets

## 44-2300 Series Regulator Flow Chart

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).



## 44-2300 Typical Application



## 44-2300 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:*

44-23		6			3	-	2	4
BASIC SERIES	BODY MATERIAL	DIAPHRAGM	SPRING	REMAINING PARTS	CONTROLLED PRESSURE RANGES	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	
44-23	1 – Brass	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	0 – 0-25 psig 1.7 bar	2 – NPTF	4 – 1/4"	
	6 – 316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	1 – 0-50 psig 3.4 bar			
	9 – Monel	Elgiloy®	Elgiloy®	Monel	2 – 0-100 psig 6.9 bar			
					3 – 0-250 psig 17.2 bar			



**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*.

D44231774X012 © 2012 Emerson Process Management Regulator Technologies, Inc. All rights reserved. 05/2012.  
 Tescom, Emerson Process Management, and the Emerson Process Management design are marks of one of the Emerson Process Management group of companies. All other marks are the property of their respective owners.