

# 44-3400 Series

## Regulators - Pressure Reducing

D44341802X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Inlet Pressure**

3500 psig / 241 bar

**Outlet Pressure Ranges**

0-25, 0-50, 0-100, 0-150, 0-250 psig  
0-1.7, 0-3.4, 0-6.9, 0-10.3, 0-17.2 bar

**Design Outlet Proof Pressure**

150% of maximum rated pressure

**Operating Temperature**

-40°F to 165°F / -40°C to 74°C

**Flow Capacity**

$C_v = 0.05$

**Leakage**

**Internal:** Bubble-tight

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

**Maximum Operating Torque**

10 in-lbs / 1.0 N•m

**Decaying Inlet Characteristic**

**0.04 change:** 100 psig / 6.9 bar inlet

#### MEDIA CONTACT MATERIALS

**Body**

316 Stainless Steel, Brass or Monel

**Bonnets**

300 Series Stainless Steel or Brass

**Diaphragms**

316 Stainless Steel or Elgiloy®

**Seats**

Teflon®

**Friction Sleeve (inner)**

Teflon®

**Remaining Parts**

316 Stainless Steel and Brass (for Brass models)

#### OTHER

**Connections**

1/4" NPTF inlet, outlet and gauge port

**Cleaning**

CGA 4.1 and ASTM G93

**Weight (without gauges)**

3 lbs / 1.4 kg

Elgiloy® is a registered trademark of Elgiloy Corp.

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



TESCOM 44-3400 Series is a compact, lightweight high purity two-stage cylinder regulator for specialty, corrosive and pyrophoric gases less than 5 SCFM / 141 SLPM. Diffusion-resistant metal-to-metal diaphragm seal ensures gas purity and integrity.

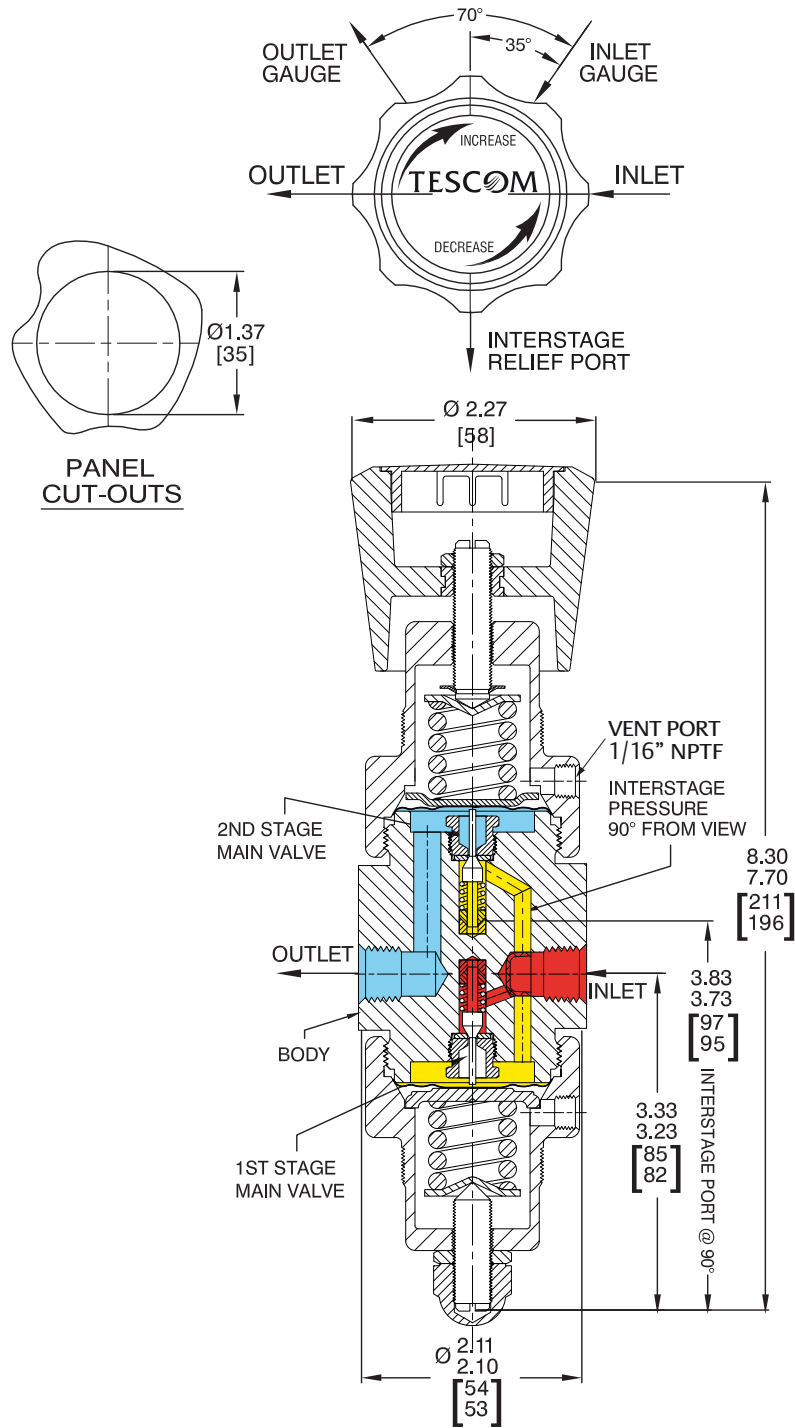
#### Application

- High pressure gas cylinders for specialty and industrial gases used with analyzers, lasers, and laboratory applications

#### Features and Benefits

- Provides a continuous, accurate outlet pressure regardless of inlet pressure fluctuations
- Offers a decaying inlet characteristic of 0.04 psig / 3 mbar per 100 psig / 6.9 bar change in inlet pressure
- Features a unique metal-to-metal diaphragm to body seal
- Diaphragms are convoluted for greater accuracy and sensitivity
- Available in 316 Stainless Steel, Brass or Monel
- NACE compliant designs are available

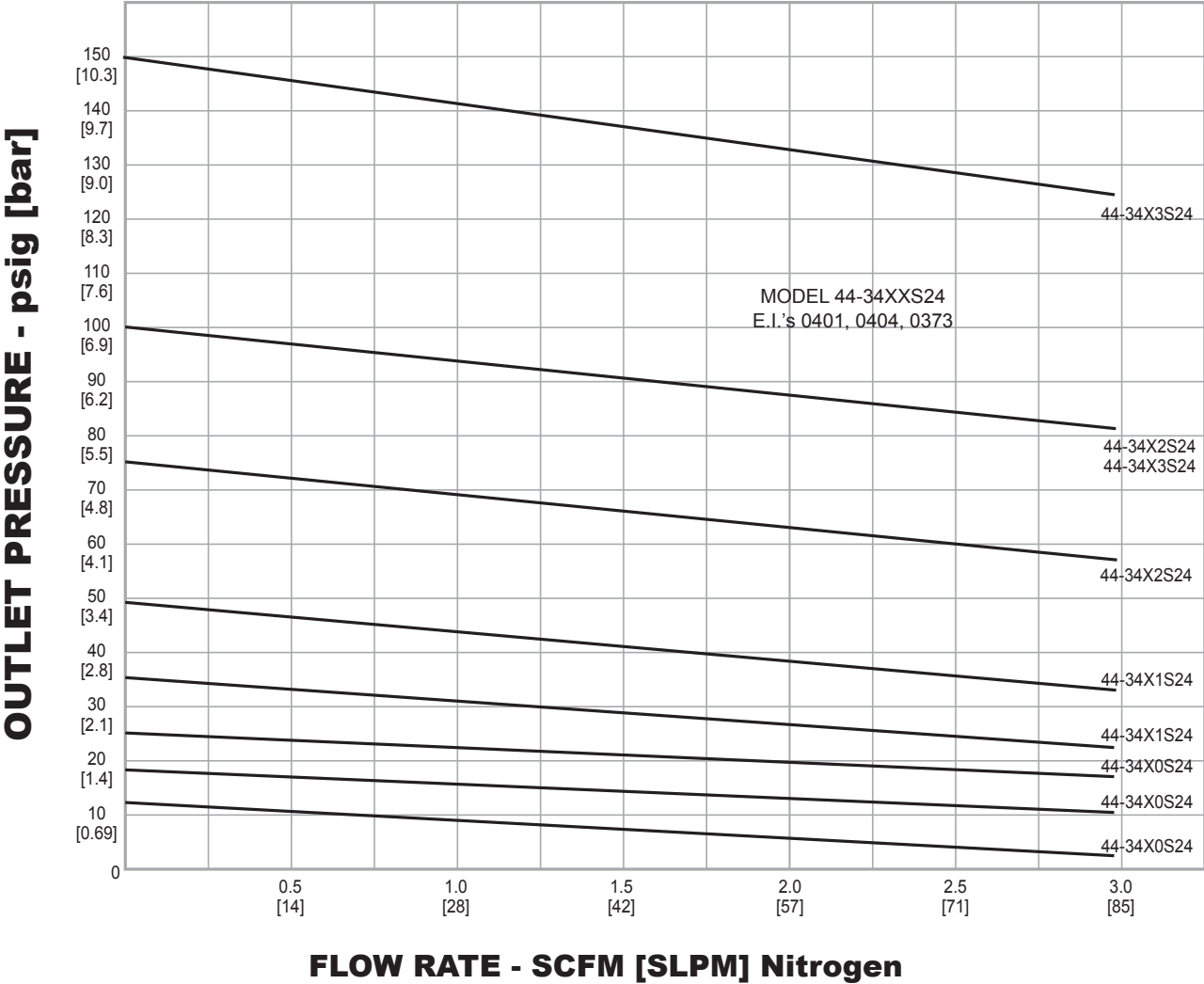
44-3400 Series Regulator Drawing



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

### 44-3400 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).



### 44-3400 Series Regulator Part Number Selector



#### Learn more about common options.

For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

**44-34                                  6                                  2                                  S                                  2                                  4**

BASIC SERIES	MATERIALS					OUTLET PRESSURE RANGES	SEAT	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE
	BODY	DIAPHRAGM	SPRING	FRICTION SLEEVE (OUTER)	REMAINING PARTS				
44-34	1 – Brass	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel/Brass	0 – 0 to 25 psig 0 to 1.7 bar	S – Teflon®	2 – NPTF	4 – 1/4"
	6 – 316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	1 – 0 to 50 psig 0 to 3.4 bar			
	9 – Monel	Elgiloy®	Elgiloy®	Teflon®	Monel	2 – 0 to 100 psig 0 to 6.9 bar 3 – 0 to 150 psig 0 to 10.3 bar 4 – 0 to 250 psig 0 to 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*.

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