

## Regulators - Pressure Reducing

D44341802X012

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

**MEDIA CONTACT MATERIALS****Body**

316 Stainless Steel, Brass or Nickel Alloy (Monel®)

**Bonnets**

300 Series Stainless Steel or Brass

**Diaphragms**

316 Stainless Steel or Cobalt Chrome Nickel Alloy (Elgiloy®)

**Seats**

PTFE

**Friction Sleeve (inner)**

PTFE

**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

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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

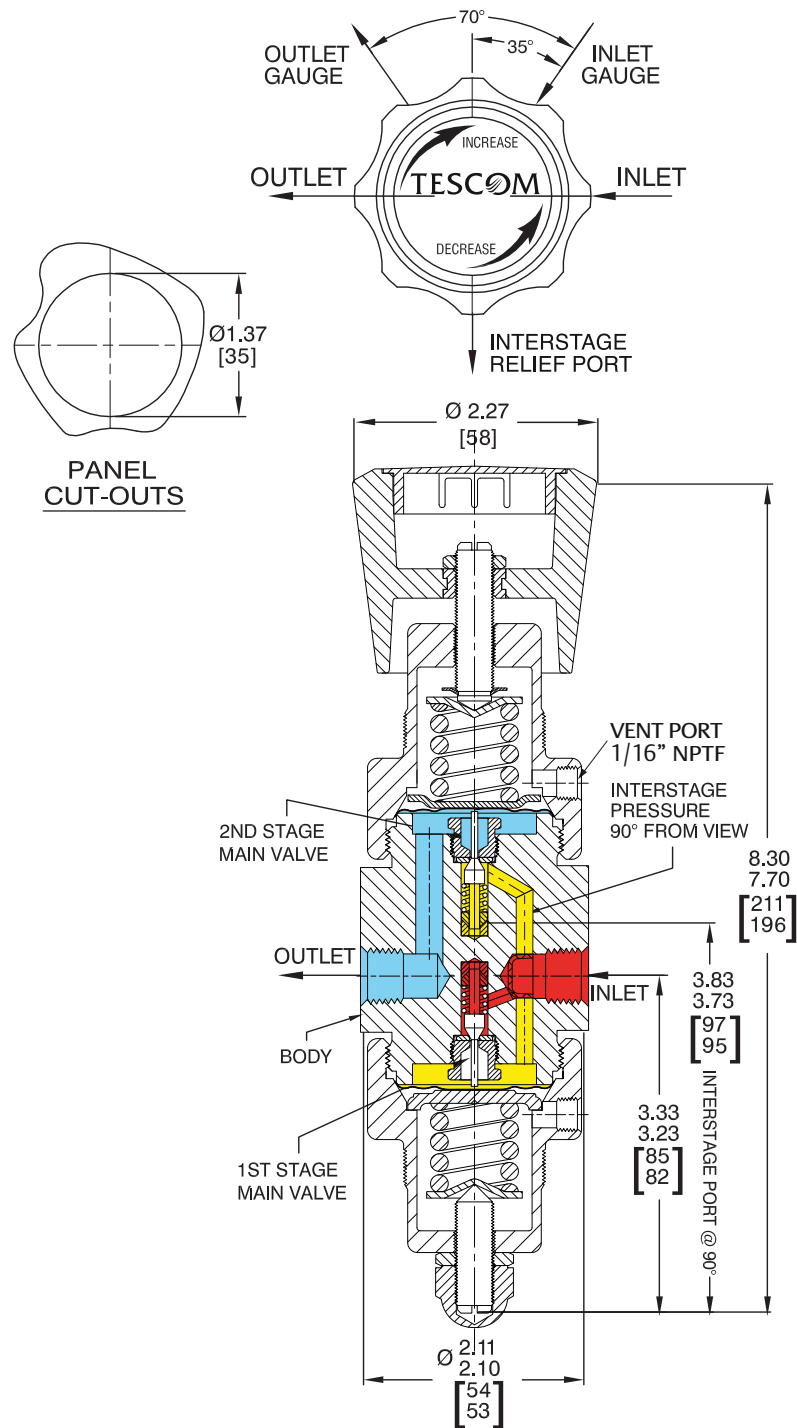
**NOTE:**

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 TESCO customer support further assistance.

## 44-3400 SERIES

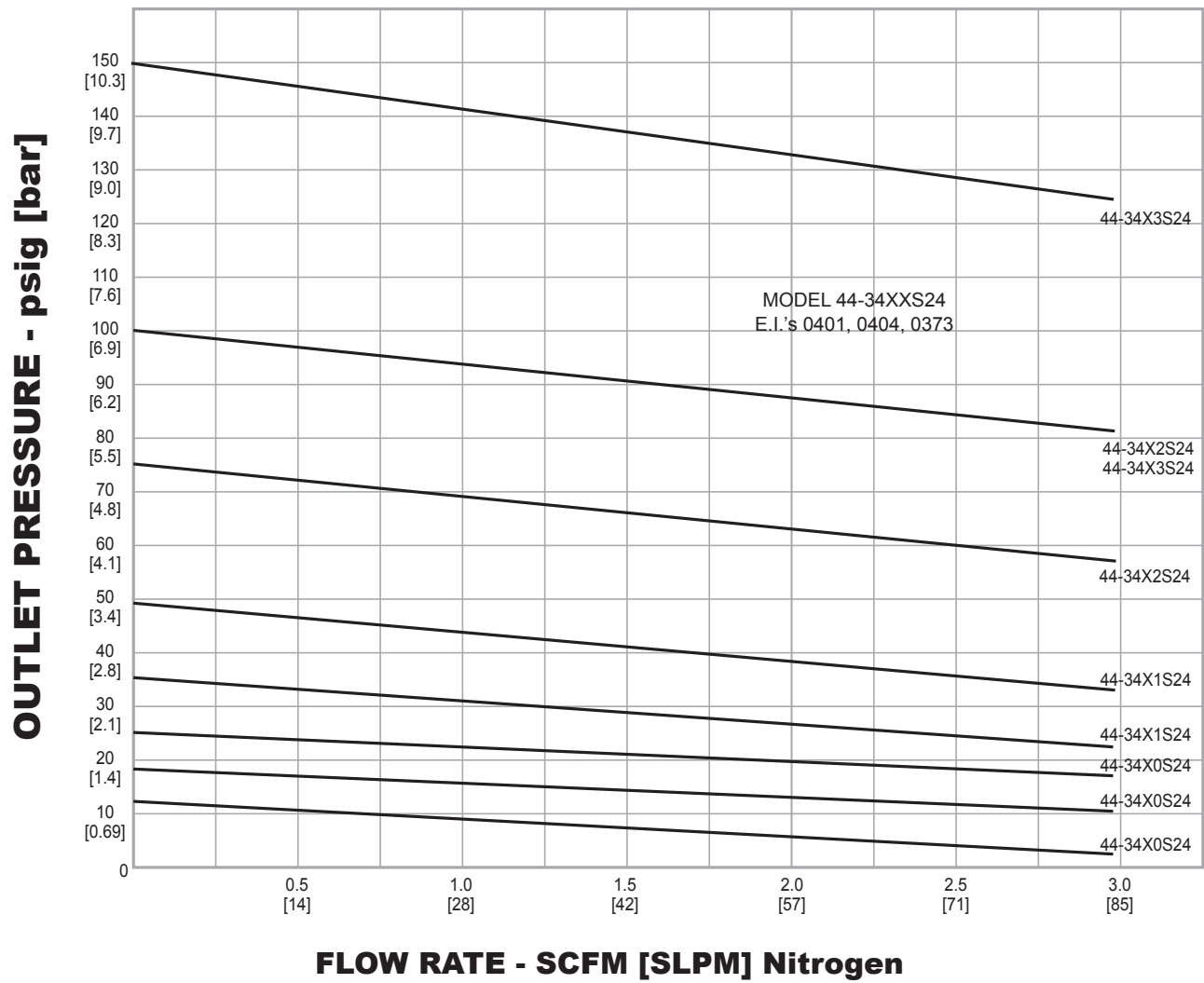
### 44-3400 Series Regulator Drawing



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

### 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 – PTFE	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 – Nickel Alloy (Monel®)	Cobalt Chrome Nickel Alloy (Elgiloy®)	Cobalt Chrome Nickel Alloy (Elgiloy®)	PTFE	Nickel Alloy (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			

