

# 44-4600 Series

## Regulators - Pressure Reducing

D44461776X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

##### Inlet Pressure Range

Atmospheric to 400 psig / 27.6 bar

##### Outlet Pressure Range

50 mm Hg absolute - 15 psig / 1.0 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 165°F / -40°C to 74°C

##### Flow Capacity

$C_v = 0.24$

##### Maximum Operating Torque (handknob)

30 in-lbs / 3.4 N•m

#### MEDIA CONTACT MATERIALS

##### Body

316 Stainless Steel

##### Diaphragm

316 Stainless Steel

##### Seat

Teflon®

##### Spring (main valve)

Elgiloy®

##### Spring (bias)

316 Stainless Steel

##### Remaining Parts

316 Stainless Steel

#### OTHER

##### Cleaning

CGA 4.1 and ASTM G93

##### Weight (without gauges)

2.75 lbs / 1.2 kg

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

Elgiloy® is a registered trademark of Elgiloy Corp.



TESCOM 44-4600 Series is an extremely sensitive, high purity, single-stage regulator for specialty, flammable and industrial gases for low pressure and sub-atmospheric pressure control. Diffusion-resistant metal diaphragm seal ensures gas purity and leak integrity.

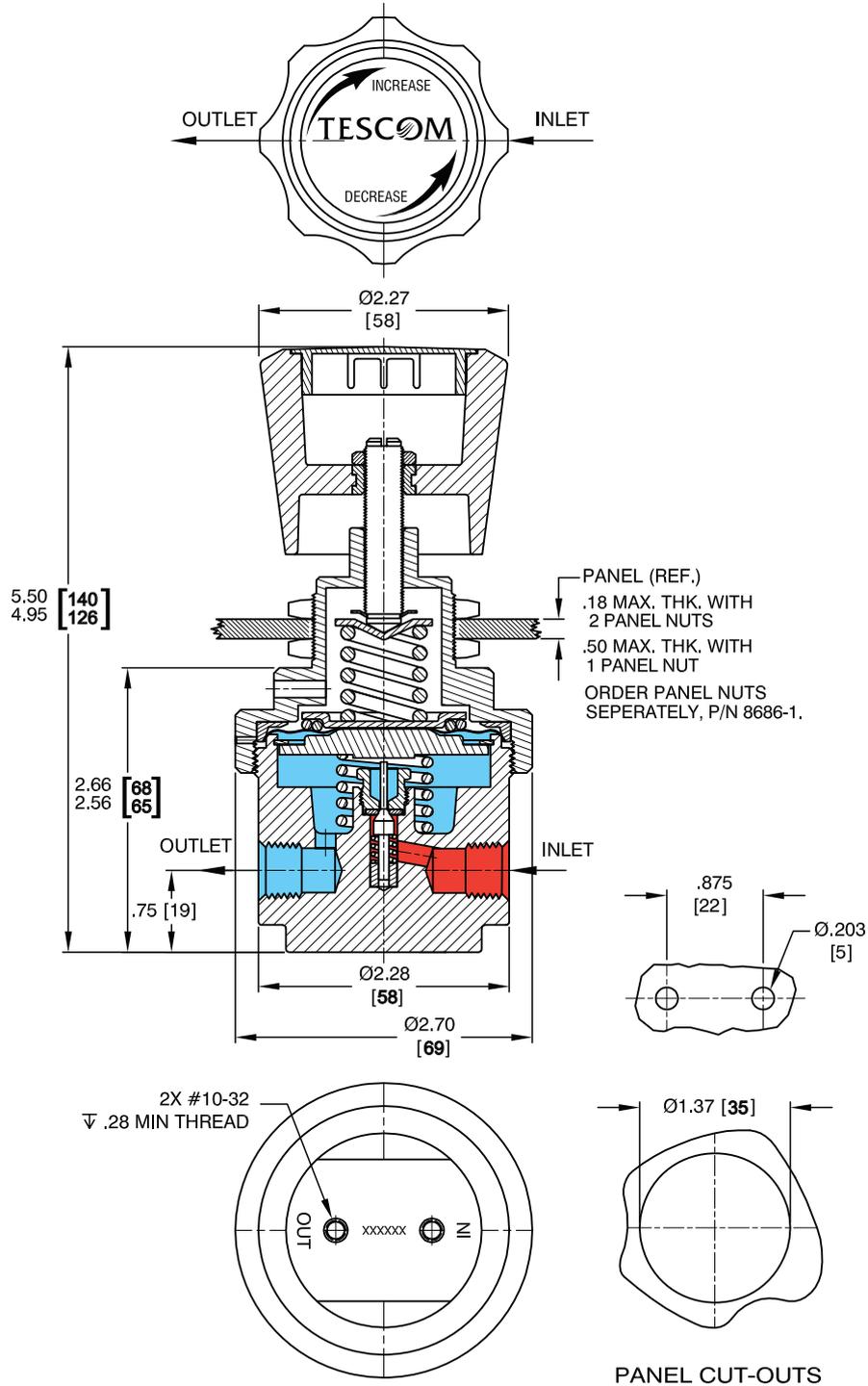
### Applications

- Analytical systems
- Sample systems
- Process systems
- Pilot plants
- Calibration

### Features and Benefits

- Optional 3500 psig / 241 bar maximum inlet
- Metal-to-metal sealed diaphragm
- Adjustable stop limits maximum outlet pressure
- 316 Stainless Steel construction
- Available in dome or air load

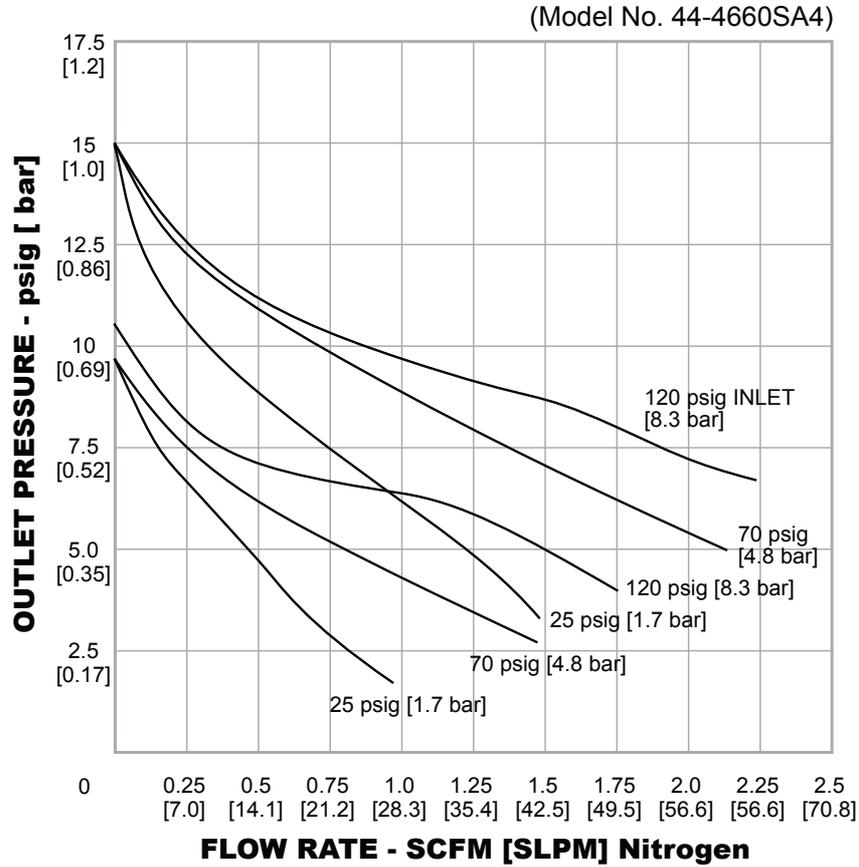
44-4600 Series Regulator Drawing



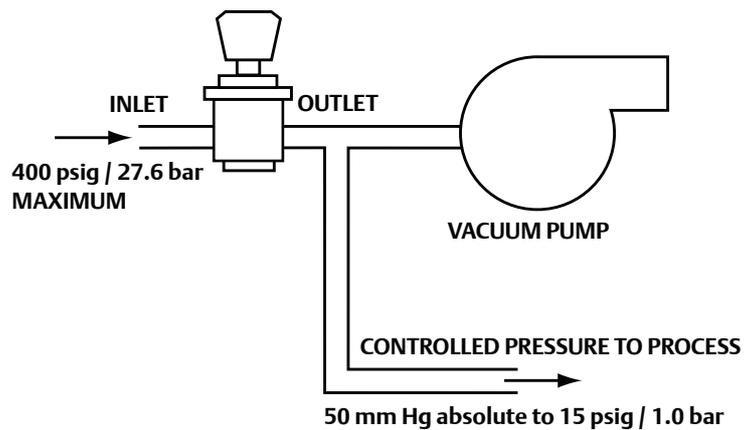
All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

### 44-4600 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).



### 44-4600 Series Typical Application



## 44-4600 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:

**44-46      6                      0                      S                      2                      4      -                      See Number Below**

BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE RANGE <sup>1</sup>	SOFT GOODS	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	MODIFICATIONS
44-46	6 – 316 Stainless Steel	0 – 50 mm Hg absolute - 15 psig / 1.0 bar  <span style="border: 1px solid black; padding: 2px;">1. 28" Hg = 50 mm Hg absolute</span>	S- Teflon®	2 – NPTF	4 – 1/4"	-001 – One 1/4" gauge port at 90° -002 – Two 1/4" gauge ports at 60° (Spring) -019 – 3500 psig / 241 bar maximum inlet pressure C <sub>v</sub> = 0.06