

## 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

PTFE

#### Spring (main valve)

Cobalt Chrome Nickel Alloy (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

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SPRING LOADED



DOME LOADED



AIR LOADED

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

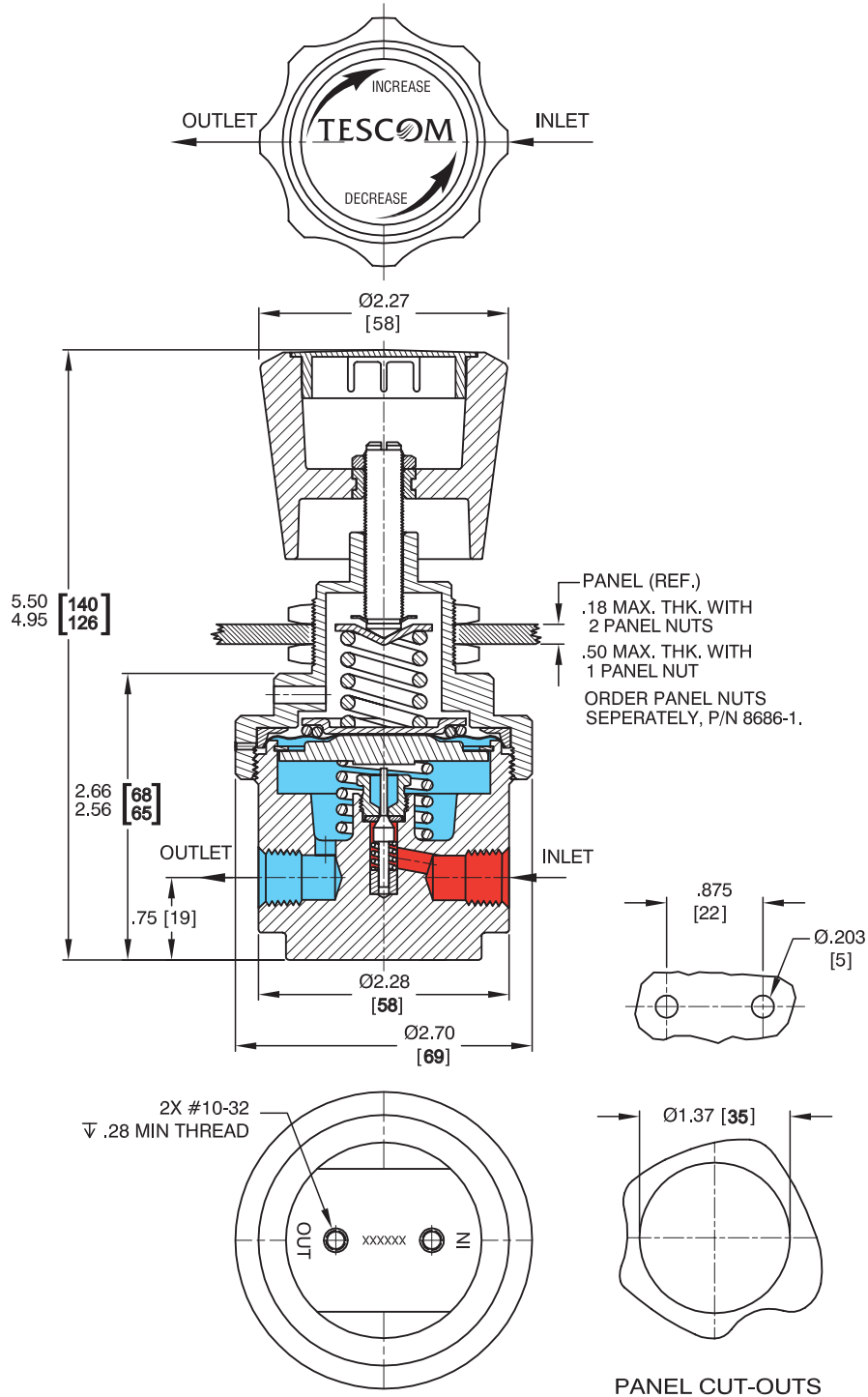
- Analytical systems
- Sample systems
- Process systems
- Pilot plants
- Calibration

### 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

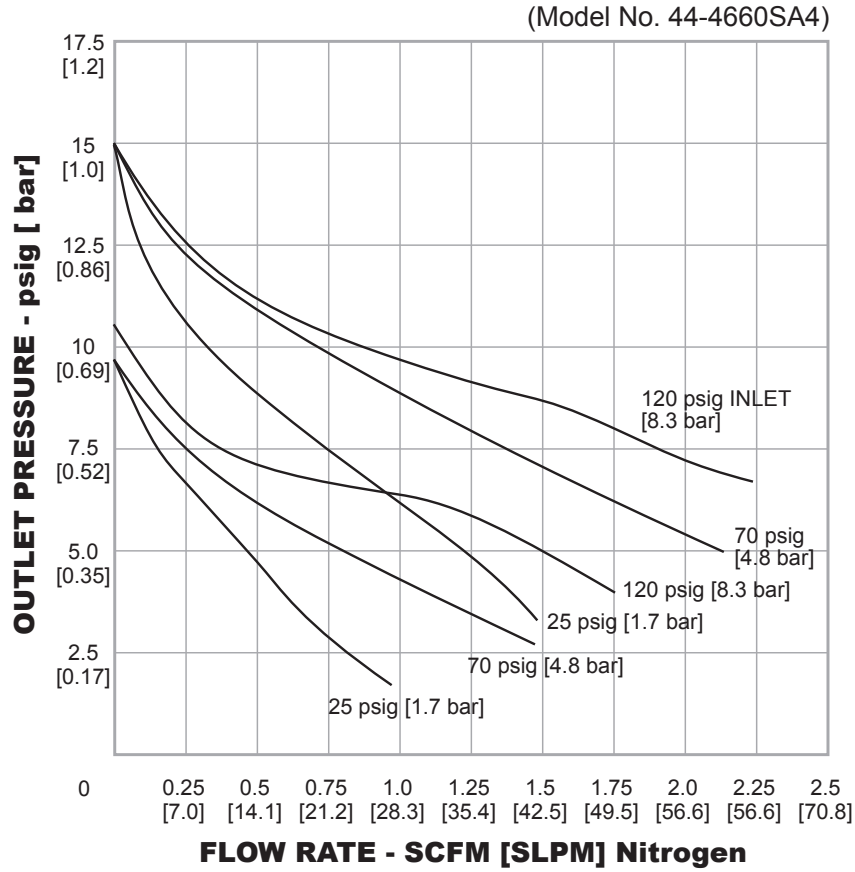
## 44-4600 Series Regulator Drawing



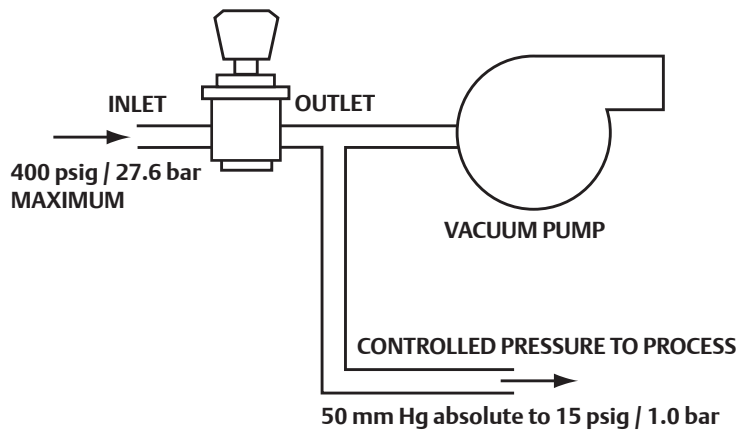
All dimensions are reference & nominal  
 Metric [millimeter] equivalents are in brackets

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.



44-4600 Series Typical Application



# 44-4600 SERIES

## 44-4600 Series Regulator Part Number Selector



**Learn more about common options.**

For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

**44-46      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	S - PTFE	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

1. 28" Hg = 50 mm Hg absolute