

## Specifications

For other materials or modifications, please consult TESCOM.

### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

#### Maximum Inlet Pressure

- 50 mm Hg absolute - 15 psig / 1 bar
- 50 mm Hg absolute - 50 psig / 3.4 bar
- 50 mm Hg absolute - 100 psig / 6.9 bar
- 50 mm Hg absolute - 150 psig / 10.3 bar

#### Design Proof Pressure

150% maximum rated

#### Leakage

**Internal:** Bubble-tight

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

#### Ambient Operating Temperature

-40°F to 165°F / -40°C to 74°C

#### Flow Capacity

$C_v = 0.04$

$C_v = 0.30$  (optional)

#### Maximum Operating Torque

25 in-lbs / 2.8 N•m

### MEDIA CONTACT MATERIALS

#### Body

316 Stainless Steel

#### Bonnet

Electroless Nickel Plated Brass

#### Seat

PTFE

#### Spring Main Valve and Bias

316 Stainless Steel

#### Diaphragm

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 de Nemours and Company.



TESCOM 44-4700 Series is an extremely sensitive, high purity, backpressure 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

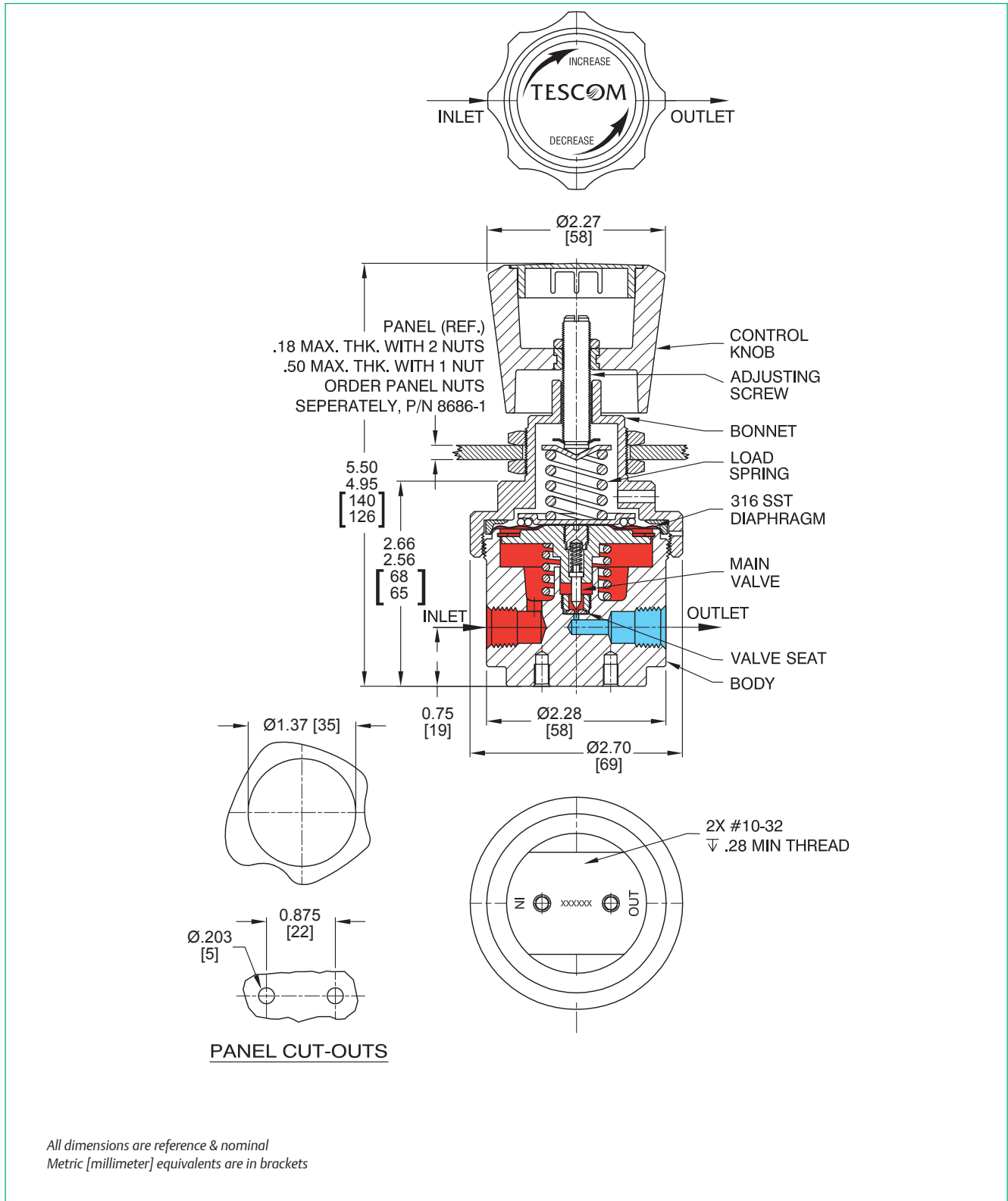
- Analytical systems
- Sample systems
- Pilot plants

### Features and Benefits

- 316 Stainless Steel diaphragm provides metal-to-metal sealing integrity and good sensitivity
- Large sensing seat area ratio provides a low crack-to-reseat pressure differential and excellent repeatability
- Negative spring bias for vacuum systems
- Adjustable stop limits maximum outlet pressure
- NACE compliant designs are available

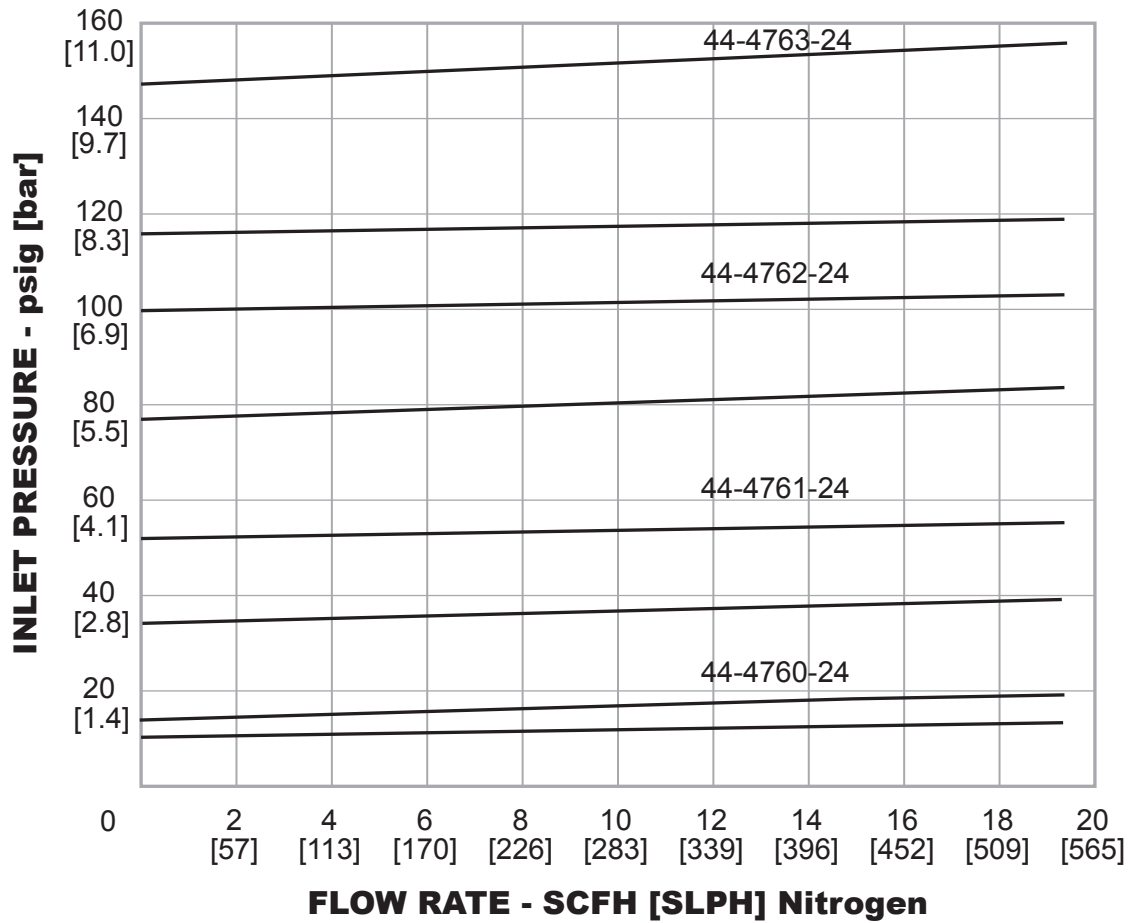
# 44-4700 SERIES

## 44-4700 Series Regulator Drawing



44-4700 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 TESCO catalog or on [www.tescom.com](http://www.tescom.com).



## 44-4700 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:

44-47	6	0	-	2	4	
BASIC SERIES	BODY MATERIAL	INLET PRESSURE RANGES <sup>1</sup>		INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	OPTIONS
44-47	6 – 316 Stainless Steel	0 – 50 mm Hg absolute - 15 psig / 1 bar 1 – 50 mm Hg absolute - 50 psig / 3.4 bar 2 – 50 mm Hg absolute - 100 psig / 6.9 bar 3 – 50 mm Hg absolute - 150 psig / 10.3 bar		1 – SAE 2 – NPTF 3 – MS33649 H – HPIC	4 – 1/4" 6 – 3/8"	-501 – C <sub>v</sub> = 0.30
		<div style="border: 1px solid black; padding: 2px; width: fit-content;"> <sup>1</sup>. 28" Hg = 50 mm Hg absolute         </div>				