

# 44-4000 Series

## Regulators - Pressure Reducing

D44401631X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Inlet Pressure**

6000 psig / 414 bar

**Outlet Pressure Ranges**

50-1500 psig / 3.4-103 bar

**Design Proof Pressure**

150% maximum operating

**Leakage**

Bubble-tight

**Operating Temperature**

See Part Number Selector

**Flow Capacity**

**Main Valve:**  $C_V = 0.7$  ( $C_V = 2.0$  optional)

**Vent Valve:**  $C_V = 0.35$

#### MEDIA CONTACT MATERIALS

**Body**

303 Stainless Steel, 316 Stainless Steel, Brass, Chrome-plated Brass

**Main Valve Seat**

CTFE, Vespel®

**O-Ring**

Buna-N, Viton®, Ethylene Propylene, Kalrez®

**Gasket**

CTFE, Vespel®

**Back-up Ring**

Teflon®

**Trim**

300 Series Stainless Steel, 17-4 PH Stainless Steel, Brass

#### OTHER

**Cleaning**

CGA 4.1 and ASTM G93

**Weight**

8 lbs / 3.6 kg

Teflon®, Viton®, Kalrez®, and Vespel® are registered trademarks of E.I. du Pont de Nemours and Company.



TESCOM 44-4000 dome loaded, spring biased regulator is designed for pressure tracking applications to maintain a constant differential pressure. Venting allows for pressure tracking increases and decreases.

#### Application

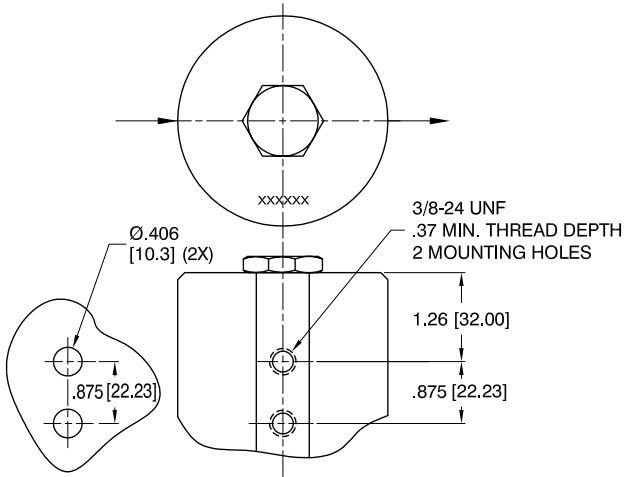
- Diving applications for emergency breathing air

#### Features and Benefits

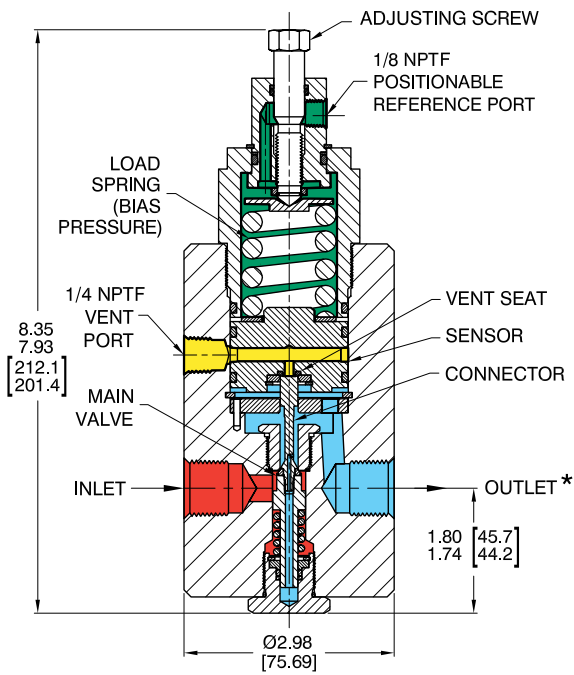
- High flow:  $C_V = 0.7$  or  $2.0$  (optional)
- Piston sensed
- Adjustable bias pressure ranges are available
- Venting (captured)
- Compatible with Tescom's Air Actuators and ER3000 Electropneumatic Controllers

### 44-4000 Series Regulator Drawings

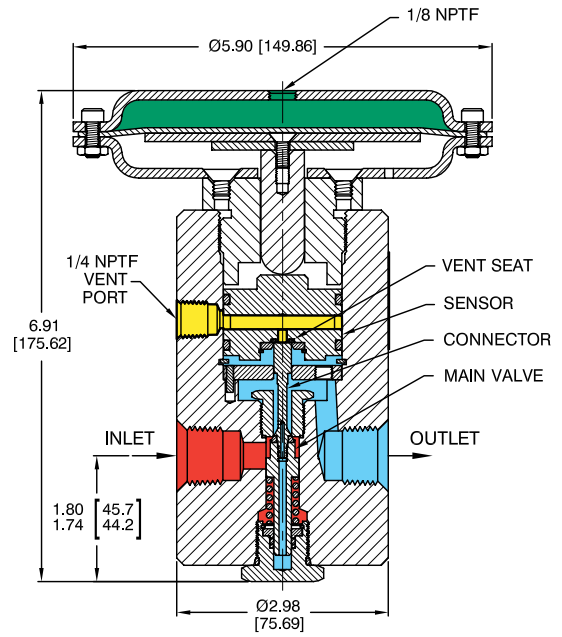
#### PANEL MOUNT DIMENSIONS



#### DOME LOAD/SPRING BIAS



#### AIR LOAD

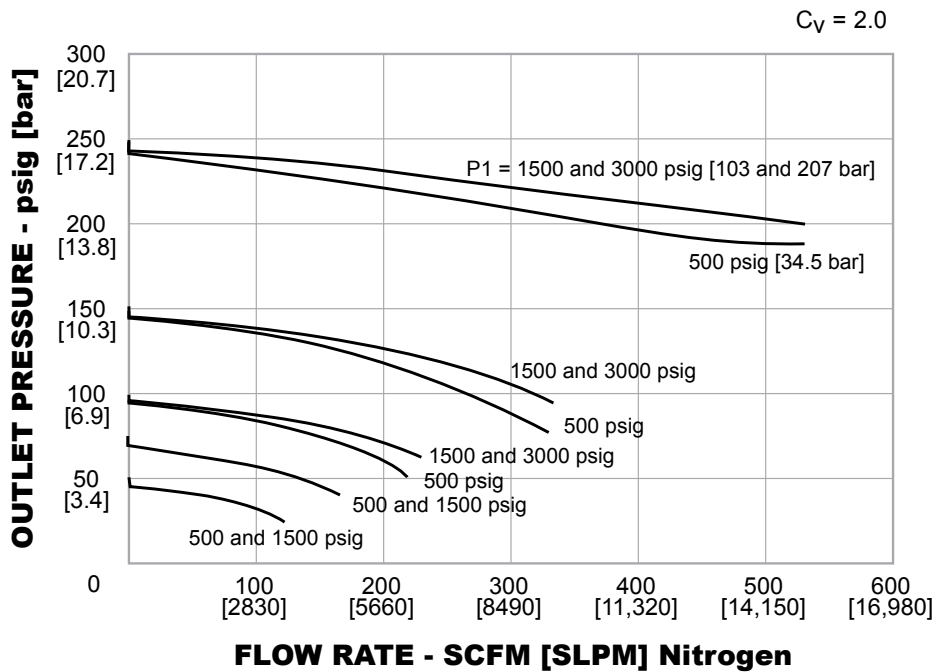
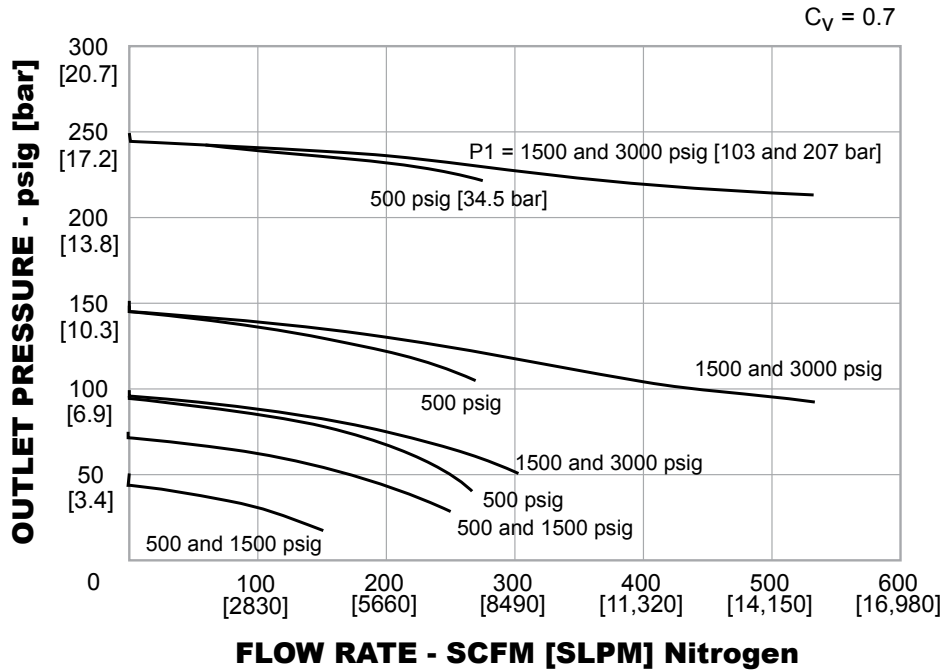


All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

\*NOTE: Outlet pressure equals bias spring setting plus reference pressure.

### 44-4000 Series Regulator Flow Charts

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).



## 44-4000 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:

### DOME LOAD/SPRING BIAS

BASIC SERIES	BODY MATERIAL	MAXIMUM BIAS PRESSURE	SOFT GOODS				INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	DIA. 'A'	MODIFICATION OPTION
			O-RING	SEAT	GASKET	TEMPERATURE				
44-40	1 – Brass 2 – 303 Stainless Steel 6 – 316 Stainless Steel 9 – Chrome-plated Brass	1 – 100 psig 6.9 bar 2 – 200 psig 13.8 bar 3 – 350 psig 24.1 bar 4 – 120-150 psig 8.3-10.3 bar (maximum) 9 – 0-15 psig 0-1.0 bar	E – Viton® M – Ethylene Propylene P – Kalrez® V – Viton®	CTFE CTFE CTFE Vespel®	CTFE CTFE CTFE Vespel®	-15°F to 165°F -26°C to 74°C -40°F to 165°F -40°C to 74°C 0°F to 165°F -17°C to 74°C -15°F to 400°F -26°C to 204°C	0 – BSP 1 – SAE 2 – NPTF 3 – MS33649	8 – 1/2" 12 – 3/4" NPTF 3/4" SAE	2.98" 2.98" 3.48"	-002 – C <sub>v</sub> = 2.0

### AIR LOAD

BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE	SOFT GOODS				INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	MODIFICATION OPTIONS
			O-RING	SEAT	GASKET	TEMPERATURE			
44-40	1 – Brass 2 – 303 Stainless Steel 6 – 316 Stainless Steel	8 – 600 psig 41.4 bar 9 – 1500 psig 103 bar	A – Buna-N E – Viton® M – Ethylene Propylene P – Kalrez® V – Viton®	CTFE CTFE CTFE CTFE Vespel®	CTFE CTFE CTFE CTFE Vespel®	-40°F to 165°F -40°C to 74°C -15°F to 165°F -26°C to 74°C -40°F to 165°F -40°C to 74°C 0°F to 165°F -17°C to 74°C -15°F to 400°F -26°C to 204°C	0 – BSP 1 – SAE 2 – NPTF 3 – MS33649	8 – 1/2" 12 – 3/4"	-014 – Air ratio, Venting C <sub>v</sub> = 0.7 -015 – Air ratio, Venting C <sub>v</sub> = 2.0



**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*.