

## 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**

PCTFE, Polyimide (Vespel®)

**O-Ring**

Nitrile, Buna-N, FKM (Viton®-A), Ethylene Propylene, ETFE (Tefzel®)

**Gasket**

PCTFE, Polyimide (Vespel®)

**Back-up Ring**

PTFE

**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

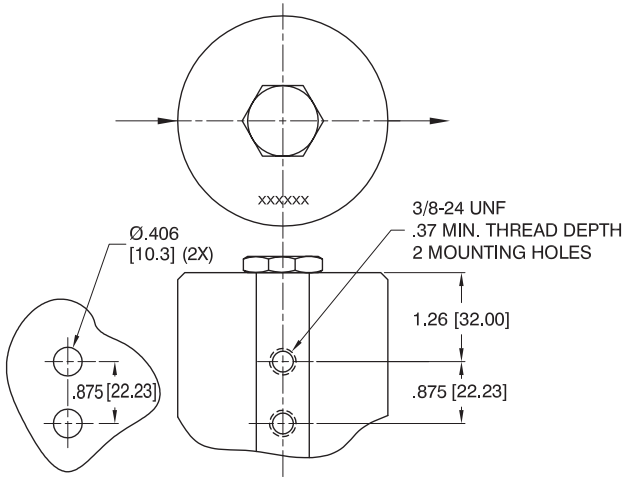
### Features and Benefits

- 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 ER5000 Electropneumatic Controllers

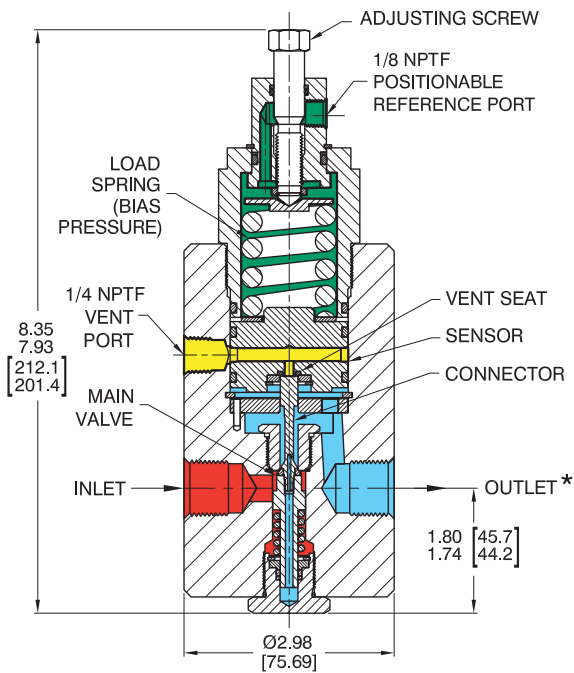
# 44-4000 SERIES

## 44-4000 Series Regulator Drawings

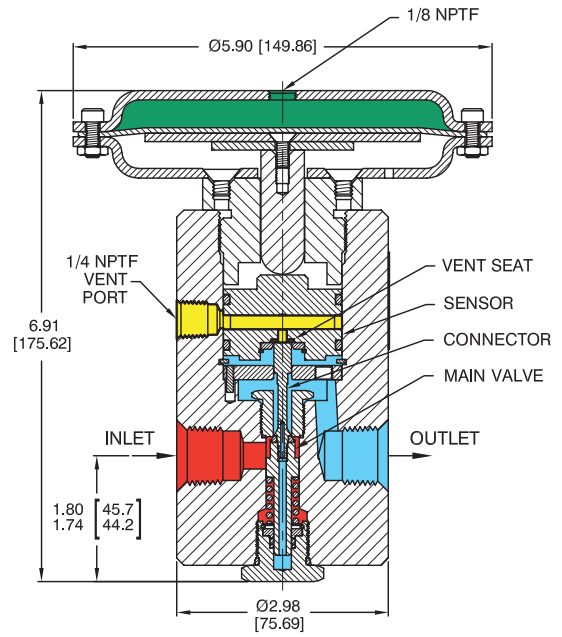
### PANEL MOUNT DIMENSIONS



### DOME LOAD/SPRING BIAS



### AIR LOAD

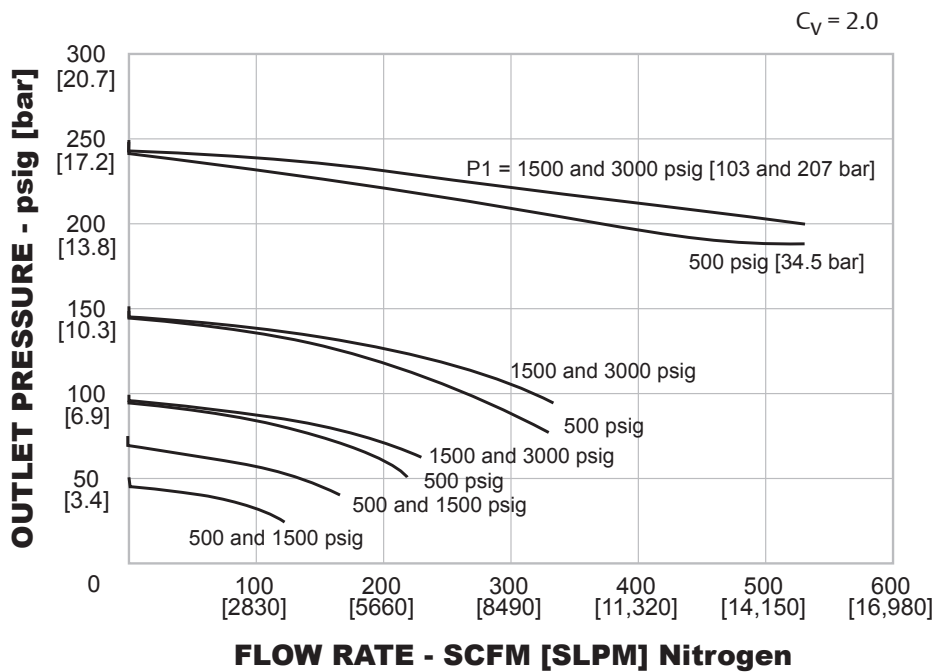
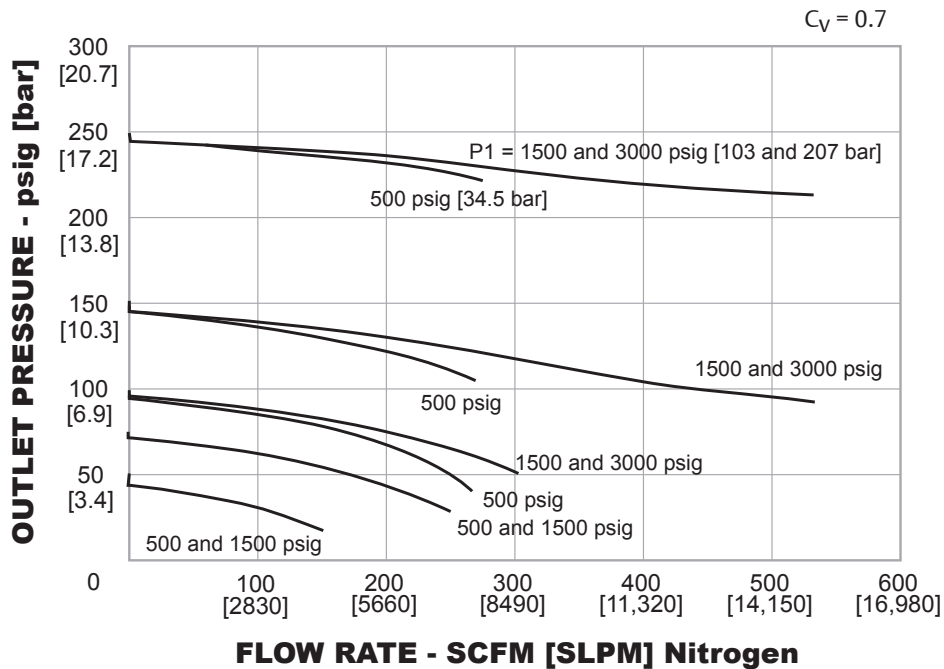


All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

\*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 TESCO catalog or on www.tescom.com.



# 44-4000 SERIES

## 44-4000 Series Regulator Part Number Selector



**Learn more about common options.**

For modifications, repair kits and accessories, contact factory.

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	1 – 100 psig	E – FKM (Viton®-A)	PCTFE	PCTFE	-15°F to 165°F -26°C to 74°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
	2 – 303 Stainless Steel	6.9 bar		PCTFE	PCTFE	-40°F to 165°F -40°C to 74°C				
	6 – 316 Stainless Steel	13.8 bar	M – Ethylene Propylene	PCTFE	PCTFE	0°F to 165°F -17°C to 74°C				
	9 – Chrome-plated Brass	24.1 bar		P – FFKM, Perfluoroelastomer (Kalrez®)	Polyimide (Vespel®)	Polyimide (Vespel®)				
		4 – 120-150 psig 8.3-10.3 bar (maximum)	V – FKM (Viton®-A)							
	9 – 0-15 psig 0-1.0 bar									

### 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	8 – 600 psig	A – Nitrile, Buna-N	PCTFE	PCTFE	-40°F to 165°F -40°C to 74°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
	2 – 303 Stainless Steel	41.4 bar		PCTFE	PCTFE	-15°F to 165°F -26°C to 74°C			
	6 – 316 Stainless Steel	103 bar	E – FKM (Viton®-A)	PCTFE	PCTFE	-40°F to 165°F -40°C to 74°C			
				M – Ethylene Propylene	PCTFE	PCTFE			
			P – FFKM, Perfluoroelastomer (Kalrez®)	Polyimide (Vespel®)	Polyimide (Vespel®)	-15°F to 400°F -26°C to 204°C			
		V – FKM (Viton®-A)							

\* Brass body is limited to +200 °F (93 °C) maximum.