

## Specifications

For other materials or modifications, please consult TESCO.

### 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

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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

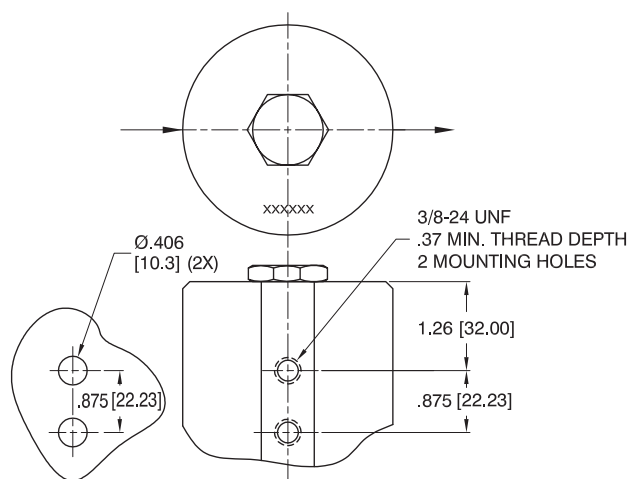
### Features and Benefits

- 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

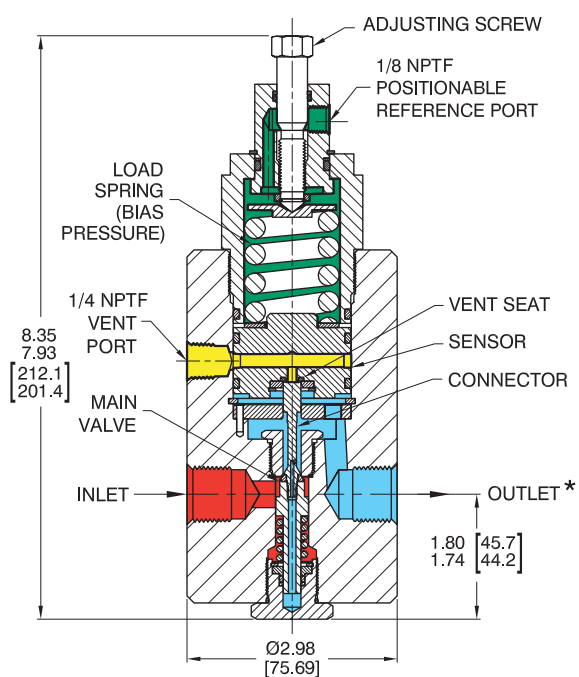
# 44-4000 SERIES

## 44-4000 Series Regulator Drawings

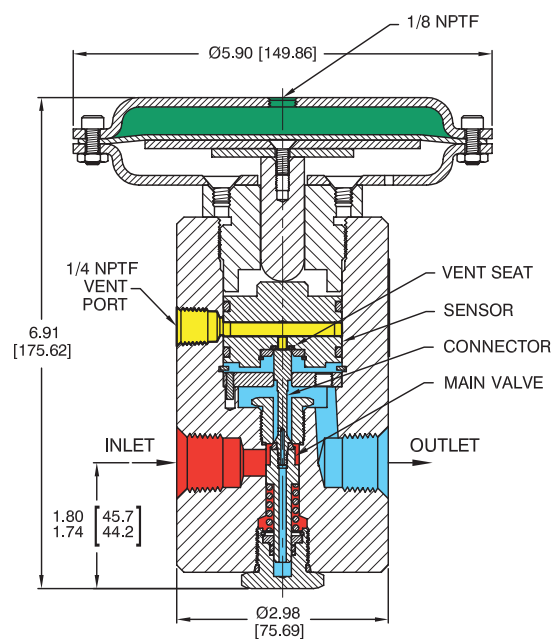
### PANEL MOUNT DIMENSIONS



### DOME LOAD/SPRING BIAS



### AIR LOAD

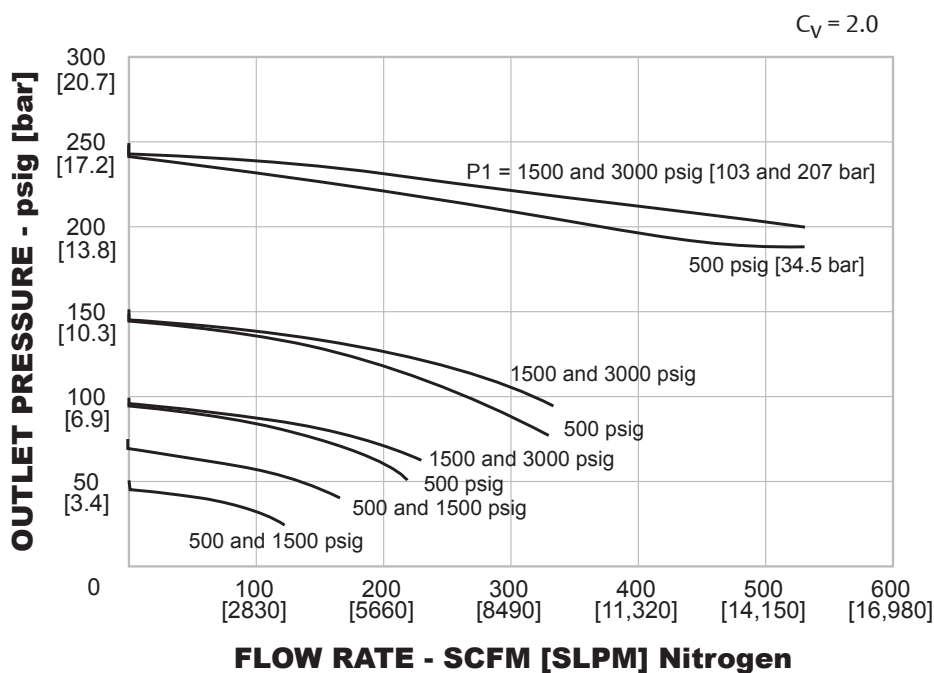
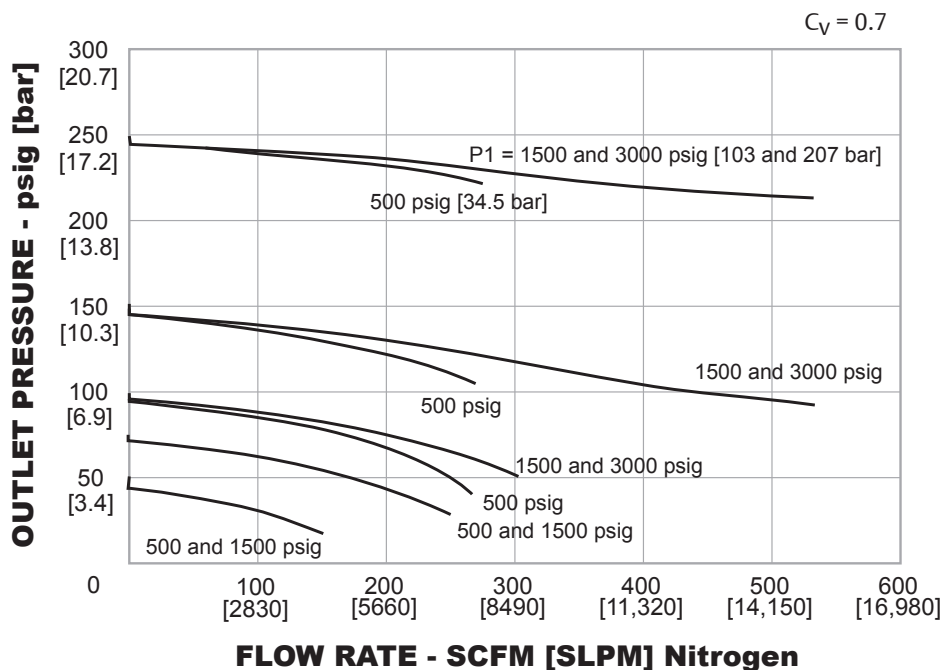


All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

\*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](http://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:

### DOMESTIC LOAD/SPRING BIAS

44-40	1	9	E				2	12		
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	0 – BSP	8 – 1/2"	2.98"	-002 – C <sub>V</sub> = 2.0
	2 – 303 Stainless Steel	6.9 bar				-26°C to 74°C				
	6 – 316 Stainless Steel	2 – 200 psig	PCTFE	PCTFE	-40°F to 165°F					
	9 – Chrome-plated Brass	13.8 bar	M – Ethylene Propylene			-40°C to 74°C				
		3 – 350 psig		PCTFE	PCTFE	0°F to 165°F				
		24.1 bar			-17°C to 74°C					
		4 – 120-150 psig	P – FFKM, Perfluoroelastomer (Kalrez®)	Polyimide (Vespel®)	Polyimide (Vespel®)	-15°F to 400°F -26°C to 204°C				
		8.3-10.3 bar (maximum)								
		9 – 0-15 psig	V – FKM (Viton®-A)							
		0-1.0 bar								

### AIR LOAD

44-40		1	9	E				2	12	
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 41.4 bar	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	9 – 1500 psig 103 bar		PCTFE	PCTFE	-15°F to 165°F -26°C to 74°C				
	6 – 316 Stainless Steel		E – FKM (Viton®-A)	PCTFE	PCTFE	-40°F to 165°F -40°C to 74°C				
			M – Ethylene Propylene	PCTFE	PCTFE	0°F to 165°F -17°C to 74°C				
			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.

