

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

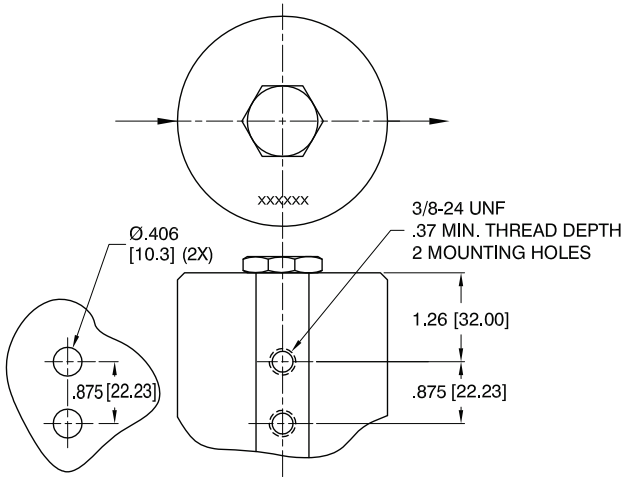
- Diving applications for emergency breathing air

Features and Benefits

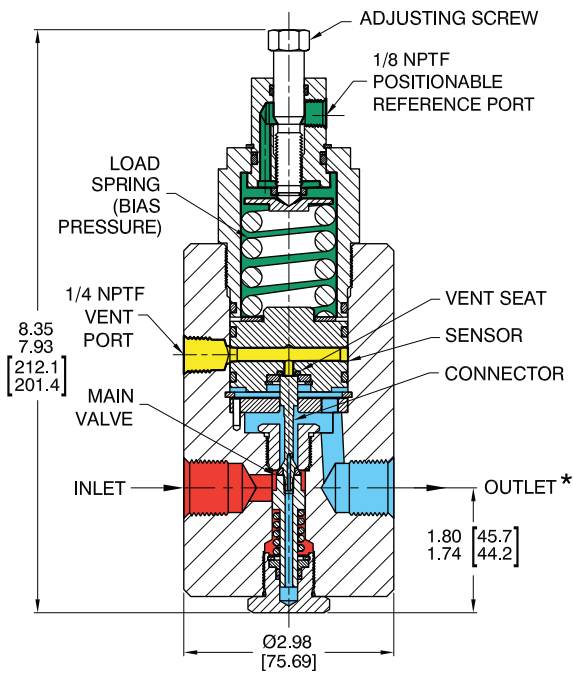
- High flow: $C_V = 0.7$ or 2.0 (optional)
- Piston sensed
- Adjustable bias pressure ranges are available
- Venting (captured)
- Compatible with Tescom's Air Actuators and ER3000 Electropneumatic Controllers

44-4000 Series Regulator Drawings

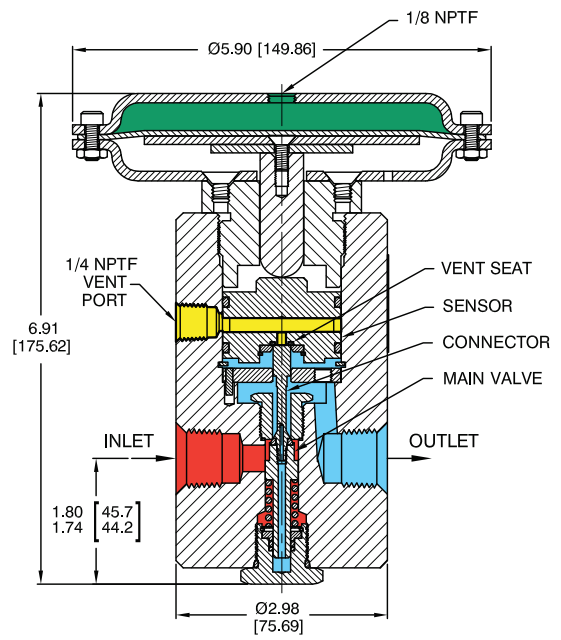
PANEL MOUNT DIMENSIONS



DOME LOAD/SPRING BIAS



AIR LOAD

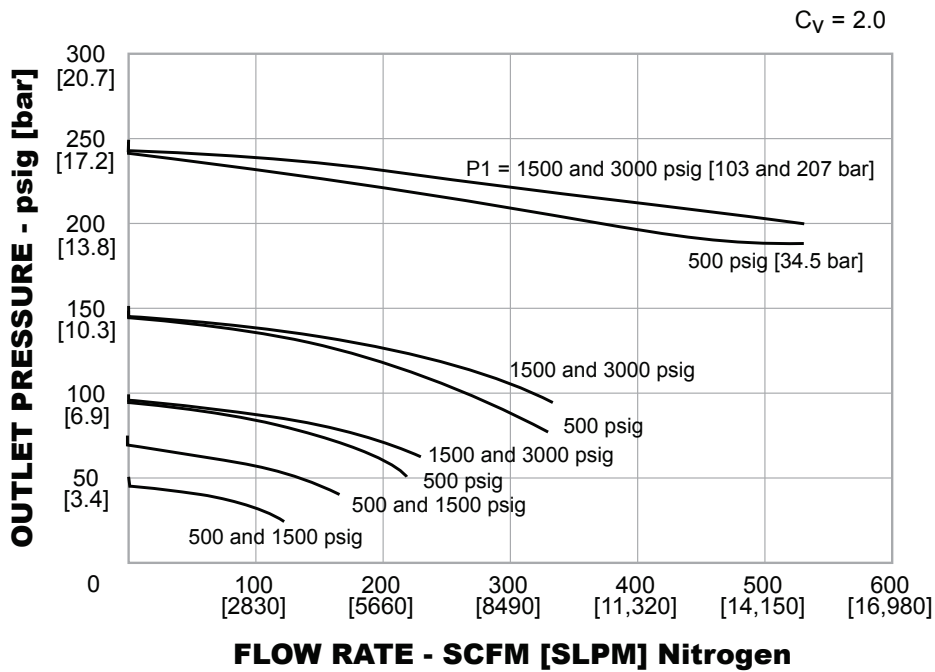
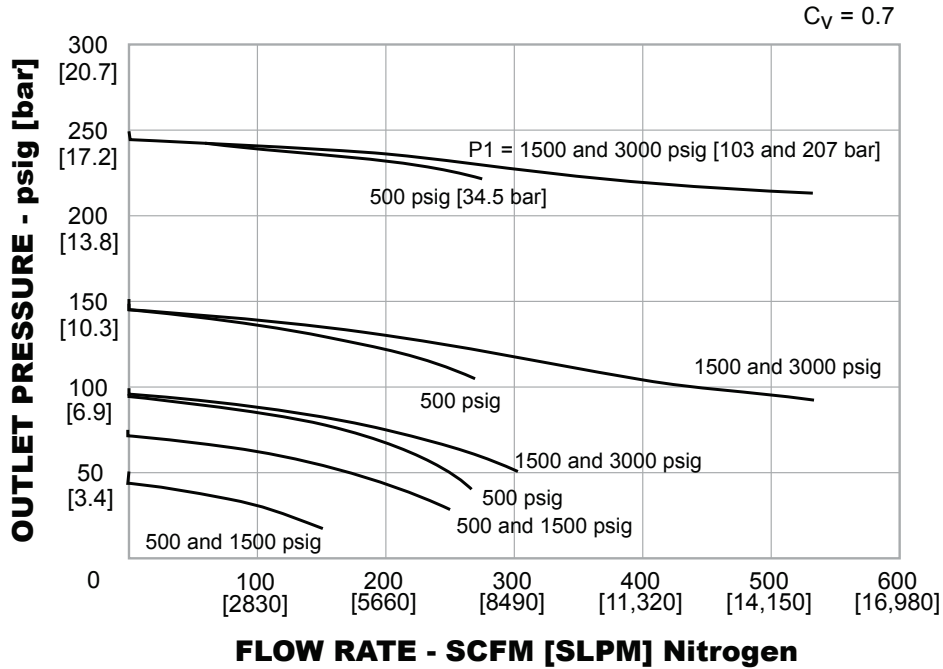


All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

*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.



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

44-40	1	9	E				2	12	DIA. 'A'	MODIFICATION OPTION
			O-RING	SEAT	GASKET	TEMPERATURE				
44-40	1 – Brass	1 – 100 psig	E – Viton®	CTFE	CTFE	-15°F to 165°F	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 _v = 2.0
	2 – 303 Stainless Steel	6.9 bar								
	6 – 316 Stainless Steel	13.8 bar	M – Ethylene Propylene	CTFE	CTFE	-40°F to 165°F				
	9 – Chrome-plated Brass	24.1 bar	P – Kalrez®	CTFE	CTFE	0°F to 165°F				
		8.3-10.3 bar (maximum)	V – Viton®	Vespel®	Vespel®	-15°F to 400°F				
	0-15 psig	0-1.0 bar								

AIR LOAD

44-40	1	9	E				2	12	MODIFICATION OPTIONS
			O-RING	SEAT	GASKET	TEMPERATURE			
44-40	1 – Brass	8 – 600 psig	A – Buna-N	CTFE	CTFE	-40°F to 165°F	0 – BSP 1 – SAE 2 – NPTF 3 – MS33649	8 – 1/2" 12 – 3/4"	-014 – Air ratio, Venting C _v = 0.7 -015 – Air ratio, Venting C _v = 2.0
	2 – 303 Stainless Steel	41.4 bar	E – Viton®	CTFE	CTFE	-15°F to 165°F			
	6 – 316 Stainless Steel	103 bar	M – Ethylene Propylene	CTFE	CTFE	-26°C to 74°C			
			P – Kalrez®	CTFE	CTFE	-40°F to 165°F			
			V – Viton®	Vespel®	Vespel®	0°F to 165°F			