

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

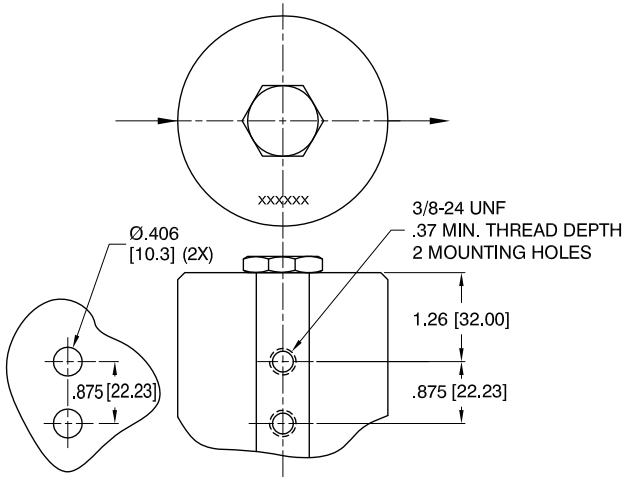
- Diving applications for emergency breathing air

Features and Benefits

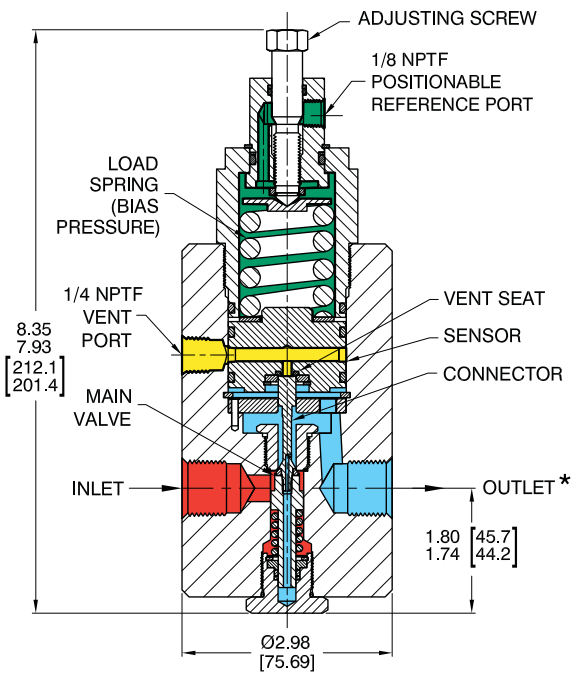
- High flow: $C_v = 0.7$ or 2.0 (optional)
- Piston sensed
- Adjustable bias pressure ranges are available
- Venting (captured)
- Compatible with Tescom's Air Actuators and ER3000 Electropneumatic Controllers

44-4000 Series Regulator Drawings

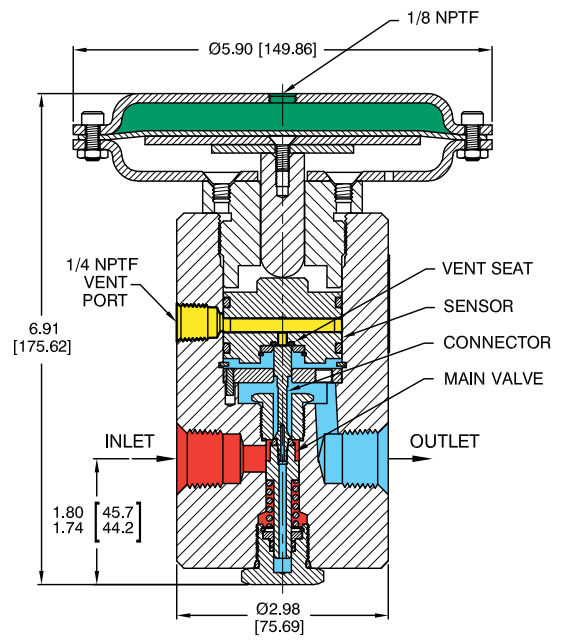
PANEL MOUNT DIMENSIONS



DOME LOAD/SPRING BIAS



AIR LOAD

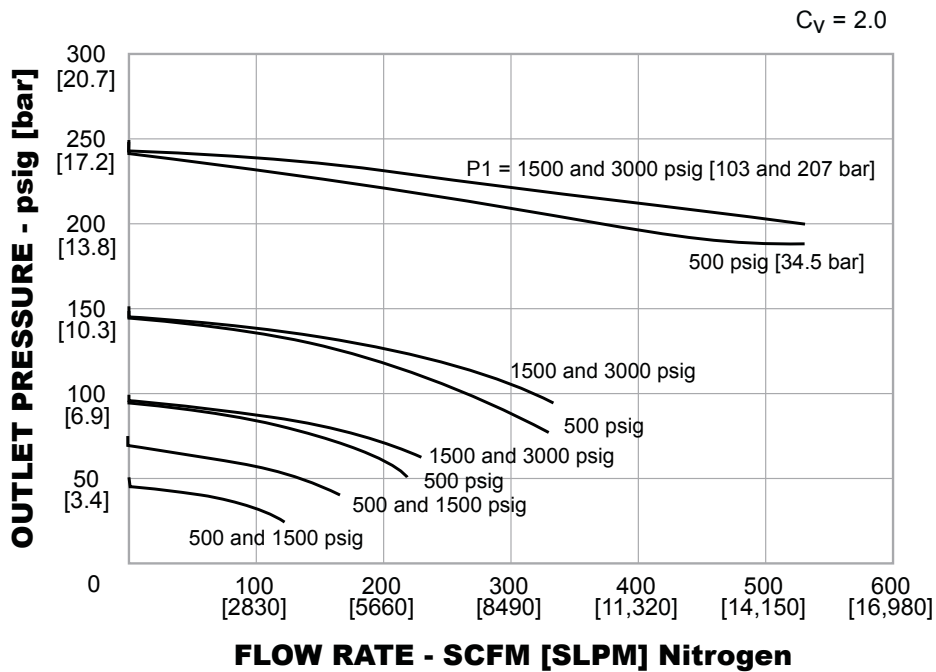
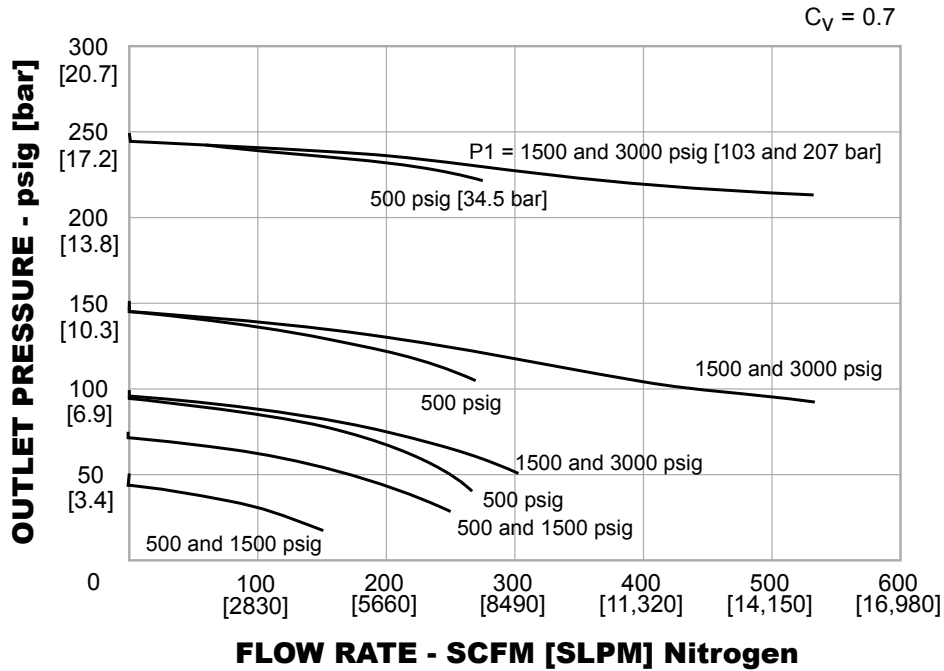


All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

*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

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 _v = 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 _v = 0.7 -015 – Air ratio, Venting C _v = 2.0