### **Regulators - Pressure Reducing**

D44130549X012

#### **Specifications**

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure Stainless Steel Body 4500 psig / 310 bar 6000 psig / 414 bar available Brass Body 3750 psig / 259 bar 5000 psig / 345 bar available

Outlet Pressure Ranges 0-300, 0-600, 0-1000 and 0-1500 psig 0-20.7, 0-41.4, 0-69.0 and 0-103 bar 0-2500 psig / 0-172 bar available

**Design Proof Pressure** 150% of rated pressure

Leakage Bubble-tight

**Operating Temperature**<sup>1</sup> -15°F to 220°F / -26°C to 104°C

Flow Capacity<sup>2</sup> 1/4" Main Valve: C<sub>V</sub> = 0.8 3/8" Main Valve: C<sub>V</sub> = 2.0

#### MEDIA CONTACT MATERIALS

#### Body

Brass, 303 Stainless Steel or 316 Stainless Steel

Seat, Main Valve PCTFE (Except: 44-13X2-XXX2, PTFE)

Seat, Vent Valve PTFE: 300 and 600 psig / 20.7 and 41.4 bar outlet

PCTFE: 1000 and 1500 psig / 69.0 and 103 bar outlet O-Rings

FKM (Viton<sup>®</sup>-A)

Back-up Rings PTFE

Gaskets PCTFF

#### **Remaining Parts**

300 Series Stainless Steel, 17-4 PH Stainless Steel, 17-7 Stainless Steel, PTFE and Brass

#### OTHER

Cleaning

### CGA 4.1 and ASTM G93

Weight (without gauges) 6.25 lbs / 2.8 kg

- 1. For extended temperatures from -40°F to 400°F / -40°C to 204°C, consult TESCOM.
- A secondary pressure drop due to the outlet cross-hole can significantly affect the rated flow capacity. Flow curves should be used for critical sizing applications.

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TESCOM 44-1300 Series is a high pressure, high flow pressure reducing regulator that offers a venting and balanced valve design. The 44-1300 Series provides  $C_V = 0.8$  and 2.0. Dome and air load options are available.

#### Applications

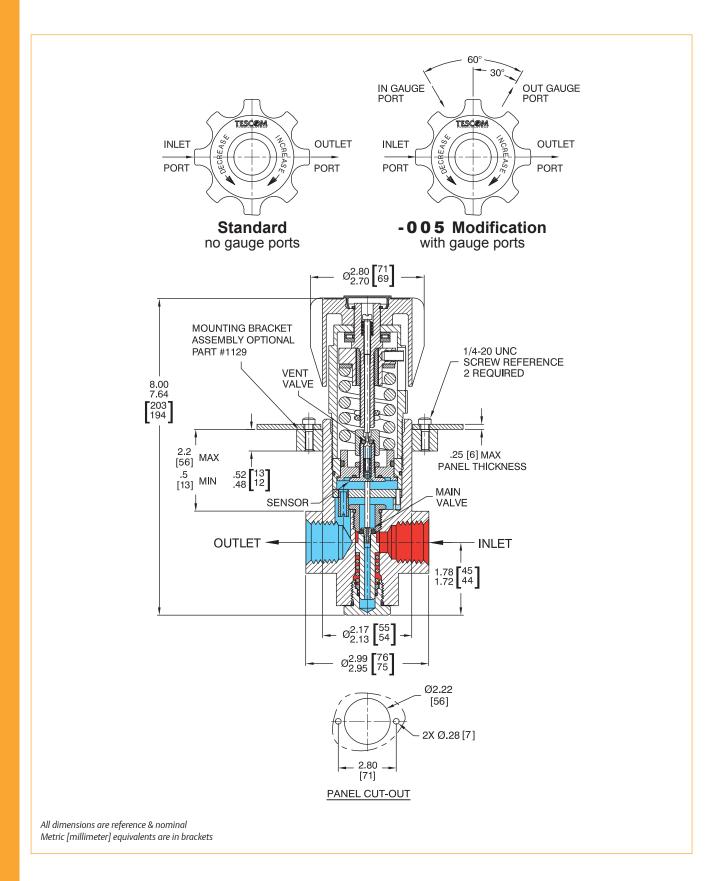
- Commercial diving breathing air
- Special gas mix regulation hard suit diving
- High pressure tube trailer gas reduction

#### **Features and Benefits**

- Large piston sensor gives excellent sensitivity
- Balanced valve design ensures stable downstream pressure
- Large handknob provides fast low-torque pressure settings
- Venting is standard
- Available with gauge ports
- Dome and air loaded models are available (non-venting only)
- Flanged end connections available

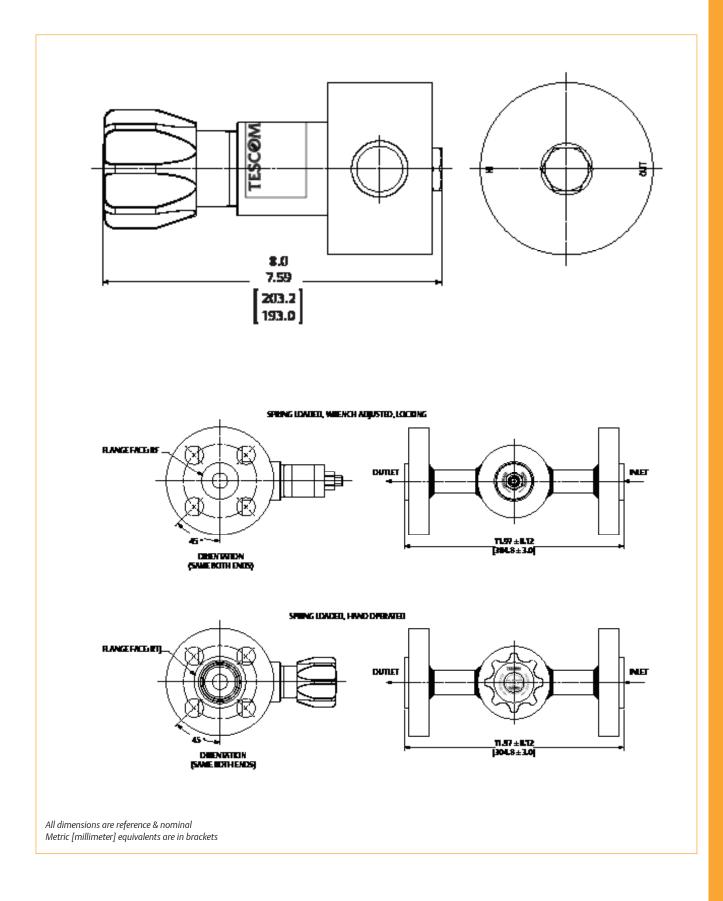


# 44-1300 Series Regulator Drawing





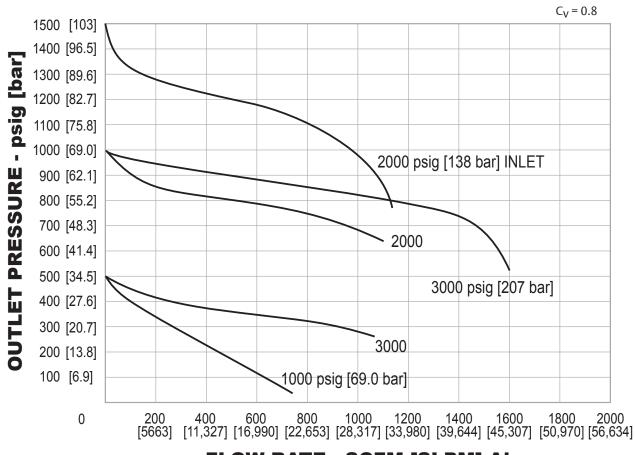
### 44-1300 Series Regulator with Flanges Drawing





### 44-1300 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.

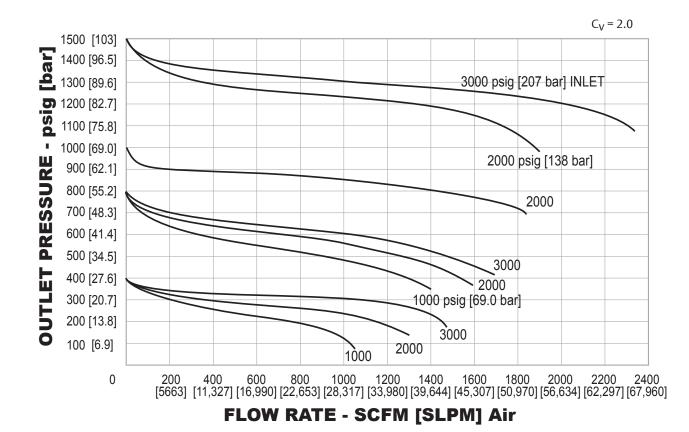






### 44-1300 Series Regulator Flow Charts

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EMERSON 149



# 44-1300 Series Regulator Part Number Selector

(i) Learn more about common options. For modifications, repair kits and accessories, contact factory.

Threaded End Connector Part Number Selection:

44-13	1		3	- 2	08	1	
BASIC SERIES	body Material	INLET PRESSURE	OUTLET PRESSURE RANGE	PORTTYPE	PORT SIZE	MAIN VALVE	OPTIONS
44-13	<ol> <li>Brass</li> <li>303 Stainless Steel</li> <li>316 Stainless Steel</li> </ol>	3750 psig 259 bar 4500 psig 310 bar 4500 psig 310 bar	<ul> <li>2 - 0.300 psig 0.20.7 bar</li> <li>3 - 0.600 psig 0.41.4 bar</li> <li>5 - 0.1000 psig 0.69.0 bar</li> <li>6 - 0.1500 psig 0.103 bar</li> <li>7 - 0.2500 psig 0.172 bar</li> <li>(-056 Mod only)</li> </ul>	1 – SAE 2 – NPTF 3 – MS33649 9 – BSPP		<b>1</b> - 1/4" C <sub>V</sub> = 0.8 <b>2</b> - 3/8" C <sub>V</sub> = 2.0	<ul> <li>- 002 Modification – Non-venting, no gauge ports</li> <li>- 005 Modification – Venting with gauge ports</li> <li>- 019 Modification – Non-venting with gauge ports</li> <li>- 056 Modification – 6000 or 5000 psig / 414 or 345 bar inlet pressure with 2500 psig / 172 bar outlet pressure</li> <li>- 183 Modification – Corrosion Resistant Top Works</li> </ul>

