## 44-1300 Series

## 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 or 316 Stainless Steel

### Seat, Main Valve

CTFE (Except: 44-13X2-XXX2, Teflon®)

#### Seat. Vent Valve

**Teflon®:** 300 and 600 psig / 20.7 and 41.4 bar outlet **CTFE:** 1000 and 1500 psig / 69.0 and 103 bar outlet

#### O-Rings

Viton-A®

## Back-up Rings

Teflon®

#### Gaskets

CTFE

#### **Remaining Parts**

300 Series Stainless Steel, 17-4, 17-7 Stainless Steel, Teflon® and Brass

#### **OTHER**

#### Cleaning

CGA 4.1 and ASTM G93

### Weight (without gauges)

6.25 lbs / 2.8 kg

- 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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**SPRING LOADED** 

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

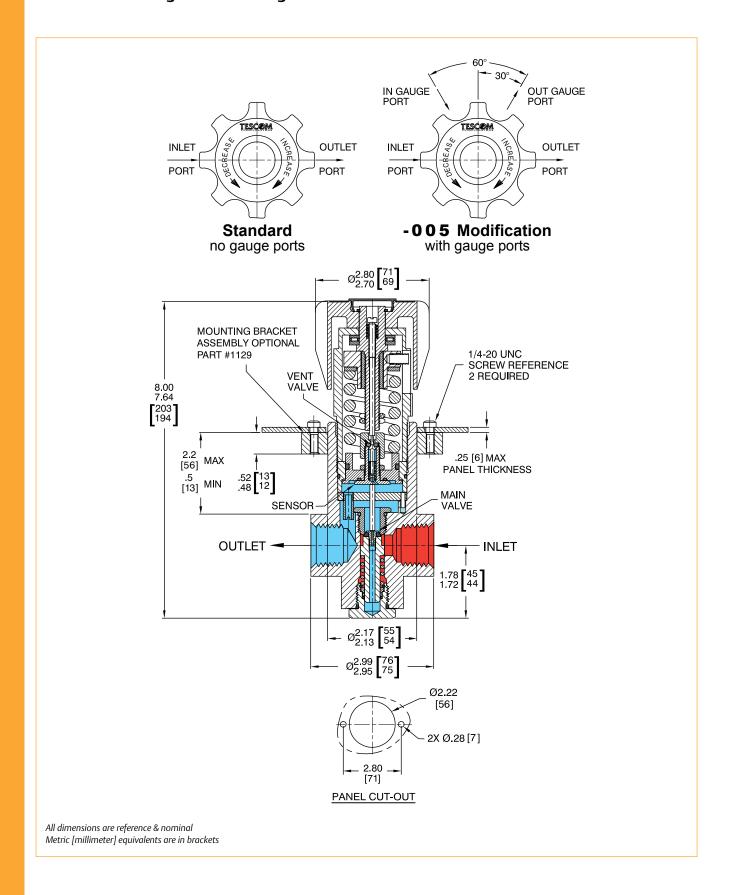
## **Features and Benefits**

- 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)



## **TESCOM**

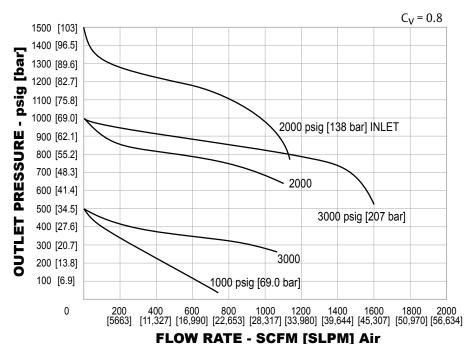
## 44-1300 Series Regulator Drawing



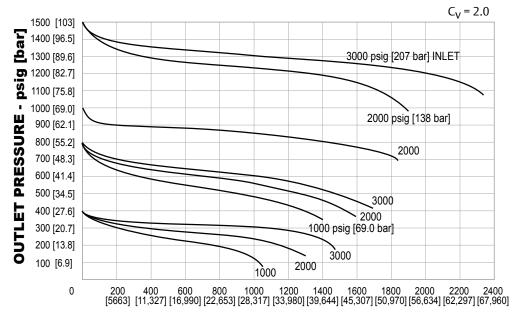


## 44-1300 Series Regulator Flow Charts

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.



TEOW NATE - OOI III [OEF III] AII



FLOW RATE - SCFM [SLPM] Air





# 44-1300 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:

44-13 1 3 -	2	08	1
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BASIC SERIES	BODY MATERIAL	INLET PRESSURE	OUTLET PRESSURE RANGE	PORT TYPE	PORT SIZE	MAIN VALVE	OPTIONS
44-13	<ul> <li>1 - Brass</li> <li>2 - 303     Stainless     Steel</li> <li>6 - 316     Stainless     Steel</li> </ul>	3750 psig 259 bar 4500 psig 310 bar 4500 psig 310 bar	2 – 0-300 psig 0-20.7 bar 3 – 0-600 psig 0-41.4 bar 5 – 0-1000 psig 0-69.0 bar 6 – 0-1500 psig 0-103 bar 7 – 0-2500 psig 0-172 bar	1 - SAE 2 - NPTF 3 - MS33649 9 - BSPP	'	1 - 1/4° C <sub>V</sub> = 0.8 2 - 3/8° C <sub>V</sub> = 2.0	<ul> <li>- 056 Modification – 6000 or 5000 psig / 414 or 345 bar inlet pressure with 2500 psig / 172 bar outlet pressure</li> <li>- 002 Modification – Non-venting, no gauge ports</li> <li>- 019 Modification – Non-venting with gauge ports</li> </ul>

