

# 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:  $C_v = 0.8$   
3/8" Main Valve:  $C_v = 2.0$

### 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

1. For extended temperatures from -40°F to 400°F / -40°C to 204°C, consult TESCOM.

2. 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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DOME LOADED

SPRING LOADED

AIR 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.

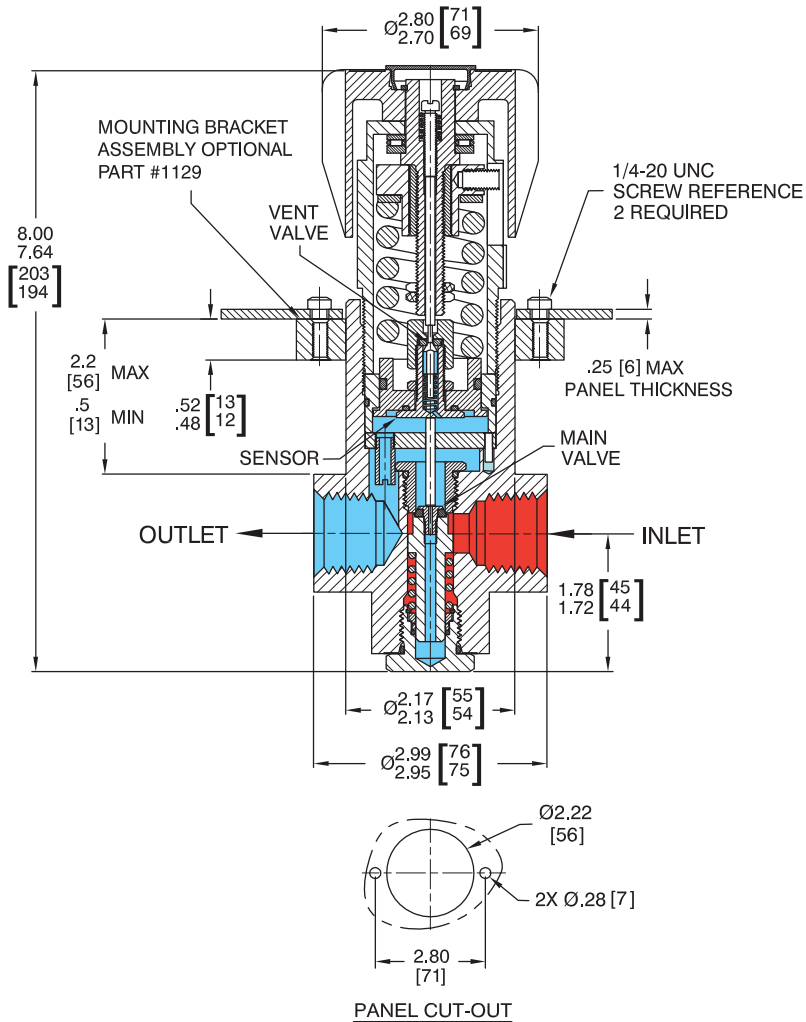
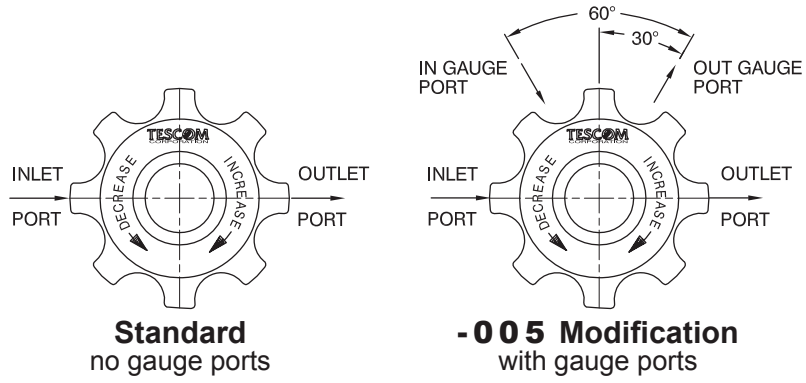
## Applications

- 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)

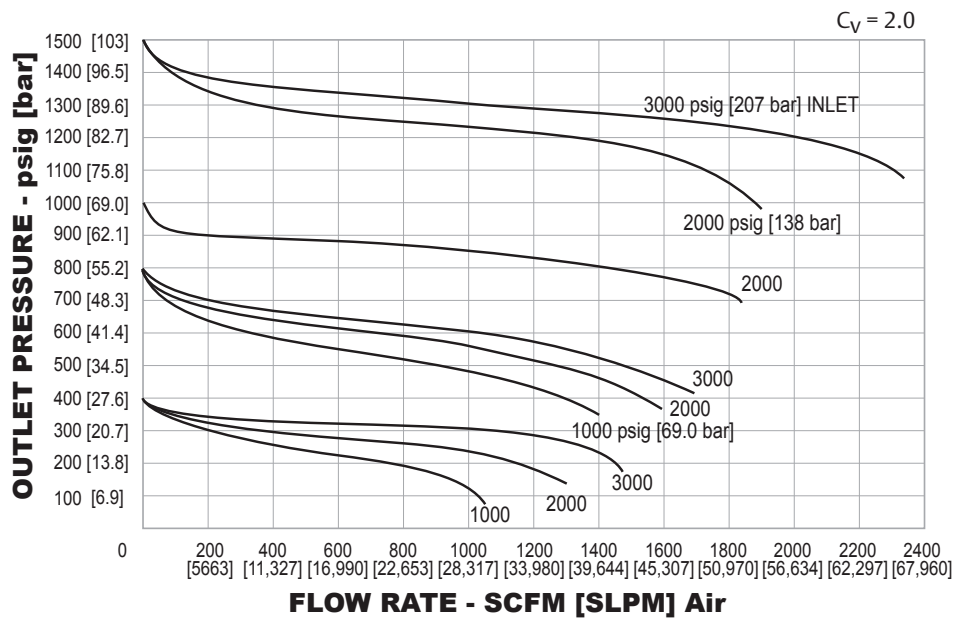
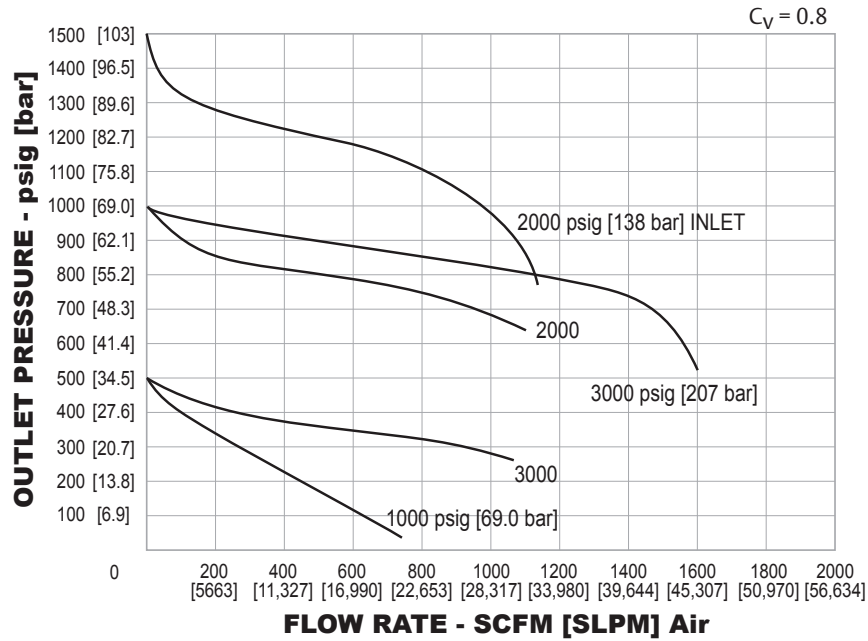
44-1300 Series Regulator Drawing



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

### 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](http://www.tescom.com).



## 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**

BASIC SERIES	BODY MATERIAL	INLET PRESSURE	OUTLET PRESSURE RANGE	PORT TYPE	PORT SIZE	MAIN VALVE	OPTIONS
44-13	1 – Brass	3750 psig 259 bar	2 – 0-300 psig 0-20.7 bar	1 – SAE	08 – 1/2" 12 – 3/4"	1 – 1/4" C <sub>v</sub> = 0.8 2 – 3/8" C <sub>v</sub> = 2.0	-056 Modification – 6000 or 5000 psig / 414 or 345 bar inlet pressure with 2500 psig / 172 bar outlet pressure  -002 Modification – Non-venting, no gauge ports -019 Modification – Non-venting with gauge ports
	2 – 303 Stainless Steel	4500 psig 310 bar	3 – 0-600 psig 0-41.4 bar	2 – NPTF			
	3 – MS33649		5 – 0-1000 psig 0-69.0 bar	3 – BSPP			
	6 – 316 Stainless Steel	4500 psig 310 bar	6 – 0-1500 psig 0-103 bar				
			7 – 0-2500 psig 0-172 bar (-056 Mod only)				