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 psiq / 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 Temperature¹

-15°F to 220°F / -26°C to 104°C

Flow Capacity²

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

- 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

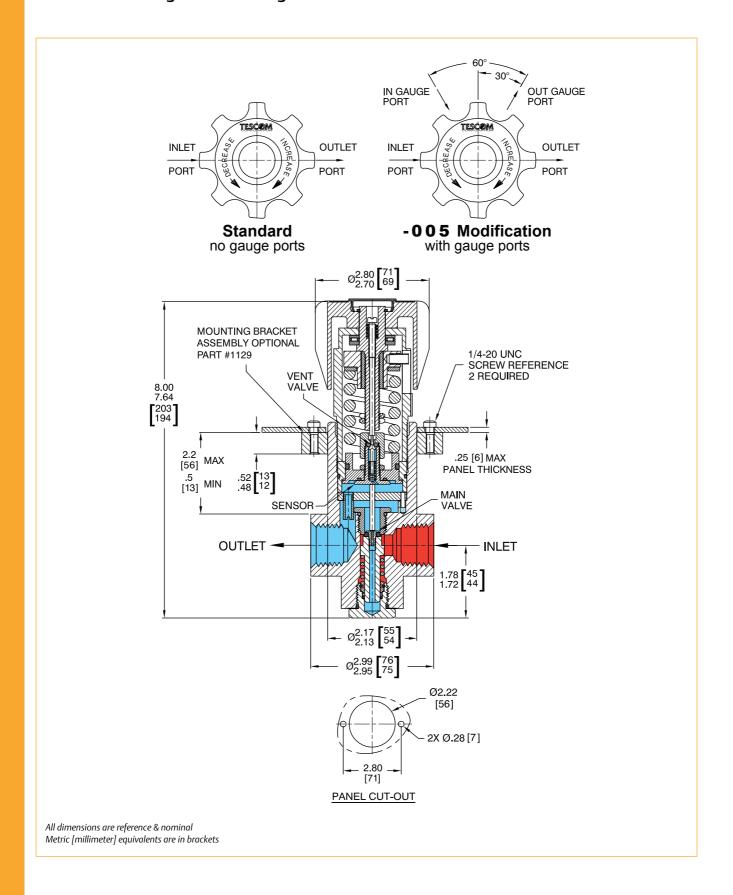
Features and Benefits

- 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

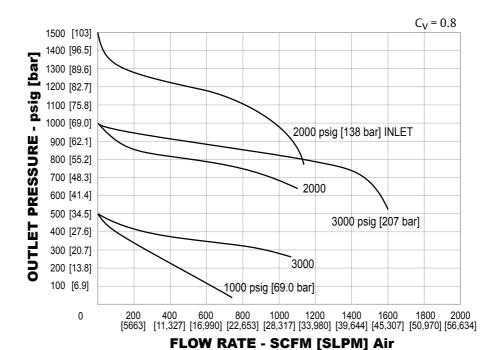
44-1300 Series Regulator Drawing





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.



 $C_{V} = 2.0$ 1500 [103] 1400 [96.5] 1300 [89.6] 3000 psig [207 bar] INLET 1200 [82.7] 1100 [75.8] 1000 [69.0] 1000 [69.0] **OUTLET PRESSURE** 2000 psig [138 bar] 900 [62.1] 800 [55.2] 2000 700 [48.3] 600 [41.4] 500 [34.5] 3000 400 [27.6] 2000 1000 psig [69.0 bar] 300 [20.7] 200 [13.8] 3000 100 [6.9] 2000 1000 0 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	J8 1	08	- 2	3	1	44-13
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BASIC SERIES	BODY MATERIAL	INLET PRESSURE	OUTLET PRESSURE RANGE	PORT TYPE	PORT SIZE	MAIN VALVE	OPTIONS
44-13	 1 - Brass 2 - 303 Stainless Steel 6 - 316 Stainless Steel 	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 _V = 0.8 2 - 3/8° C _V = 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

