

Specifications

For other materials or modifications, please consult TESCO M.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

3500 psig / 241 bar

Outlet Pressure Ranges

0-25, 0-50, 0-100, 0-150, 0-250 psig
0-1.7, 0-3.4, 0-6.9, 0-10.3, 0-17.2 bar

Design Outlet Proof Pressure

150% of maximum rated pressure

Operating Temperature

-40°F to 165°F / -40°C to 74°C

Flow Capacity

$C_v = 0.05$

Leakage

Internal: Bubble-tight

External: Design to meet $\leq 2 \times 10^{-8}$ atm cc/sec He

Maximum Operating Torque

10 in-lbs / 1.0 N•m



TESCOM 44-3400 Series is a compact, lightweight high purity two-stage cylinder regulator for specialty, corrosive and pyrophoric gases less than 5 SCFM / 141 SLPM. Diffusion-resistant metal-to-metal diaphragm seal ensures gas purity and integrity.

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel, Brass or Nickel Alloy (Monel®)

Bonnets

300 Series Stainless Steel or Brass

Diaphragms

316 Stainless Steel or Cobalt Chrome Nickel Alloy (Elgiloy®)

Seats

PTFE

Friction Sleeve (inner)

PTFE

Remaining Parts

316 Stainless Steel and Brass (for Brass models)

OTHER

Connections

1/4" NPTF inlet, outlet and gauge port

Cleaning

CGA 4.1 and ASTM G93

Weight (without gauges)

3 lbs / 1.4 kg

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Application

- High pressure gas cylinders for specialty and industrial gases used with analyzers, lasers, and laboratory applications

Features and Benefits

- Provides a continuous, accurate outlet pressure regardless of inlet pressure fluctuations
- Offers a decaying inlet characteristic of 0.04 psig / 3 mbar per 100 psig / 6.9 bar change in inlet pressure
- Features a unique metal-to-metal diaphragm to body seal
- Diaphragms are convoluted for greater accuracy and sensitivity
- Available in 316 Stainless Steel, Brass or Monel
- NACE compliant designs are available

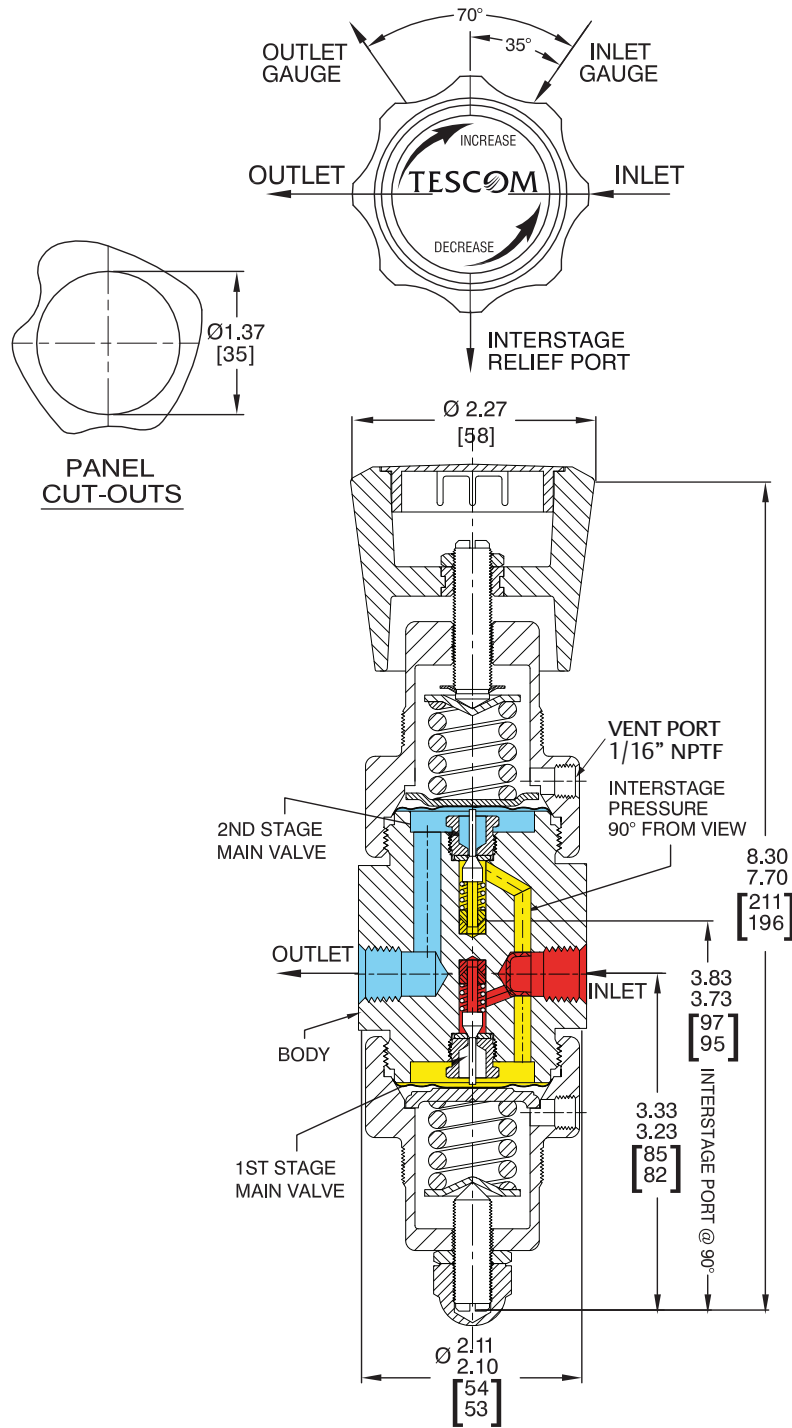
NOTE:

When choosing a regulator and control pressure, decaying inlet characteristic must be considered when the supply pressure is expected to change. The decaying inlet characteristic of a pressure reducing regulator is commonly known as the increase in control pressure due to the decrease in supply pressure. It is important to make sure this effect does not cause the control pressure to exceed the pressure rating of the unit's outlet or that of the downstream system.

For more information on decaying inlet, please refer to the Technical Information section of the product catalog and/or contact the TESCO M customer support further assistance.

44-3400 SERIES

44-3400 Series Regulator Drawing



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

44-3400 Series Regulator Flow Chart

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCO catalog or on www.tescom.com.

