Regulators - Pressure Reducing

Specifications

For other materials or modifications, please consult TESCOM.

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 ≤ 2 x 10^{.8} atm cc/sec He

Maximum Operating Torque 10 in-lbs / 1.0 N•m

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 (Eligiloy®) 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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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.

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 TESCOM customer support further assistance.



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44-3400 Series Regulator Drawing





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 TESCOM catalog or on www.tescom.com.



FLOW RATE - SCFM [SLPM] Nitrogen



44-3400 Series Regulator Part Number Selector

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

Example for selecting a part number:

44-34	6					2	S	2	4
BASIC SERIES	MATERIALS								
	BODY	DIAPHRAGM	SPRING	FRICTION SLEEVE (OUTER)	REMAINING PARTS	OUTLET PRESSURE RANGES	SEAT	OUTLET PORT TYPE	OUTLET PORT SIZE
44-34	 1 – Brass 6 – 316 Stainless Steel 9 – Nickel Alloy (Monel[®]) 	316 Stainless Steel 316 Stainless Steel Cobalt Chrome Nickel Alloy (Eligiloy®)	316 Stainless Steel 316 Stainless Steel Cobalt Chrome Nickel Alloy (Eligiloy®)	316 Stainless Steel 316 Stainless Steel PTFE	316 Stainless Steel/Brass 316 Stainless Steel Nickel Alloy (Monel®)	 0 - 0 to 25 psig 0 to 1.7 bar 1 - 0 to 50 psig 0 to 3.4 bar 2 - 0 to 100 psig 0 to 6.9 bar 3 - 0 to 150 psig 0 to 10.3 bar 4 - 0 to 250 psig 0 to 17.2 bar 	S – PTFE	2 – NPTF	4 – 1/4"

