

TESCOM™ Pressure Reducing Regulators

Specifications

For other materials or modifications, please consult contact your Emerson sales representative.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

Standard 3500 psig / 241 bar / 24,132 kPa
Optional 6000 psig / 414 bar / 41,370 kPa

Maximum Outlet Pressure

0-25, 0-50, 0-100, 0-250, 0-500 psig
0-1.7, 0-3.4, 0-6.9, 0-17.2, 0-34.5 bar
0-172, 0-345, 0-690, 0-1724, 0-3448 kPa

Design Proof Pressure

150% maximum rated

Leakage

Bubble-tight
Diaphragm 2×10^{-8} atm cc/sec He

Ambient Temperatures for Section A and B

Supply Voltage (VAC) & Heater Watts (W)	Min Ambient Temperature	Max Ambient Temperature
100 W at 120 VAC, 400 W at 240 VAC	-40 °F (-40°C)	185 °F (85°C) ①
		149 °F (65 °C) ②

① Regulator body max ambient temperature.

② Electrical housing max ambient temperature.

Heater Temperature Analog Output

4-20 mA signal for monitoring heater coil temperature

Flow Capacity

Cv 0.02

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel or Nickel Alloy (Hastelloy®)

Diaphragm and Spring

Cobalt Chrome Nickel Alloy (Elgiloy®), Nickel Alloy (Hastelloy®)

Seat

VespeI®

Remaining Parts

316 Stainless Steel or Nickel Alloy (Hastelloy®)

OTHER

Connections

NPTF, TUBE STUB

Cleaning

CGA 4.1 and ASTM G93

Weight

Electric: 6.3 lbs / 2.9 kg
Steam: 3.1 lbs / 1.4 kg



ELECTRIC VERSION HAZLOC CERTIFIED INTEGRAL ASSEMBLY

TESCOM 44-6800 Series Vaporizing Regulator is a key component of sample conditioning systems for gas chromatograph analyzers that ensure the delivery of single-phase vapor samples to the analyzer. With a high tolerance for voltage spikes and high ambient temperatures, this regulator is designed for worldwide applications.

Applications

- Analyzer systems for oil and gas, petrochemical, and chemical applications

Features and Benefits

- Installation Flexibility - Option to separate regulator body from electrical housing
- For worldwide use: Designed for 100-240 VAC, 50/60 Hz
- TR CU, CSA, ATEX and IECEx Certification to T3 (200°C) Rating
- 4-20 mA analog output for remote temperature monitoring and data acquisition
- Optional LED temperature display
- Optional panel mounting
- Advanced heat transfer technology
- PID heater control
- NACE MR0175/ISO 15156
- Enclosure rated NEMA 4, IP65

VespeI® is a registered trademark of E.I. du Pont de Nemours and Company. Elgiloy® is a registered trademark of Elgiloy Corp. Hastelloy® is a registered trademark of Haynes International, Inc. Monel® is a registered trademark of Special Metals Corporation. Dursan® is a registered trademark of SilcoTek Corporation. SilcoNert® is a registered trademark of SilcoTek Corporation.



STEAM VERSION

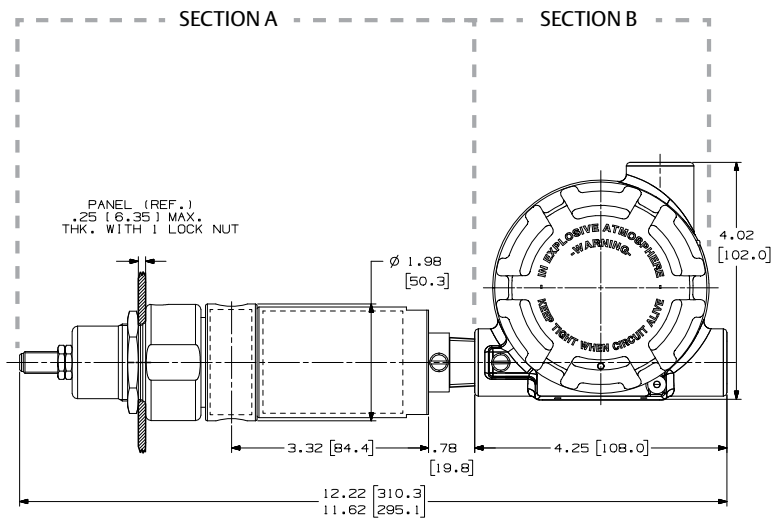
ELECTRIC VERSION HAZLOC CERTIFIED TWO-PIECE ASSEMBLY

TR000059ENUS-01_04-20

44-6800 SERIES

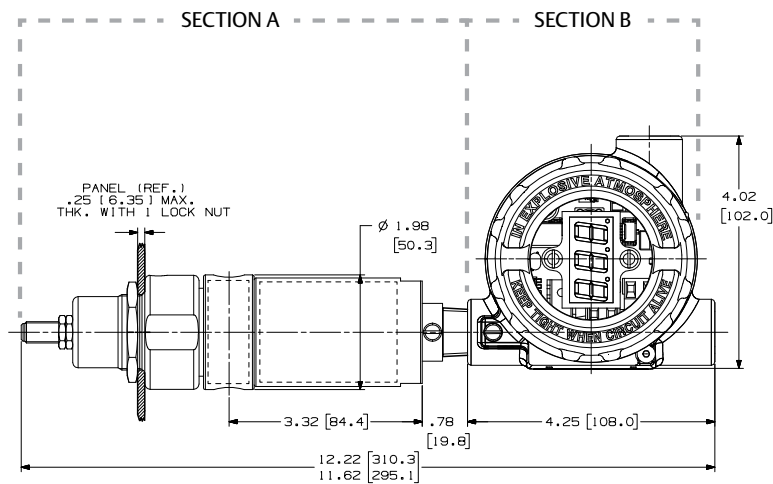
44-6800 Series Regulator Drawing

ELECTRIC MODEL

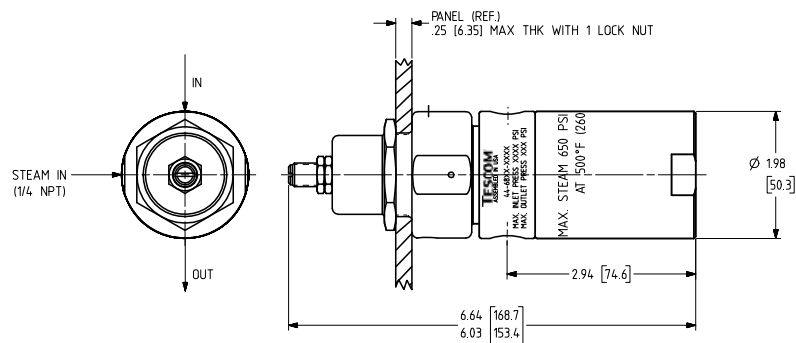


Note: Spring loaded, screw driver adjust. Panel mounting nut not included - order separately with part number 8686-1

ELECTRIC MODEL with LED Display and glass cover



STEAM MODEL



Note: Steam in at 90° to process connections (same plane).

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

44-6800 Series Regulator Part Number Selector

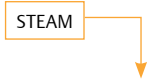
i Learn more about common options.
For modifications, repair kits and accessories, contact factory.

Example for selecting a part number:

ELECTRIC VERSION

44-68	6				1	D		2	4
BASIC SERIES	MATERIAL				OUTLET PRESSURE RANGE	HEATER		INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE
	BODY	DIAPHRAGM	SPRING	REMAINING PARTS		120 VAC	240 VAC		
44-68	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig 0-1.7 bar 0-172 kPa	D – 100 WATTS 0.83 amps	400 WATTS 1.67 amps	2 – NPTF	4 – 1/4"
	6 – 316 Stainless Steel	Elgiloy®	Elgiloy®	316 Stainless Steel					
	F – SST Dursan® Coated	Elgiloy®	Elgiloy®	316 Stainless Steel					
	G – 316 SST SilcoNert® Coated	Elgiloy®	Elgiloy®	316 Stainless Steel					
						For applications that require higher than 0.5 SCFM, operate using 240 VAC.			

1	E	0
INLET PRESSURE	OPTIONS	INLET AND OUTLET PORT SIZE
1 – 6000 psig 414 bar 41370 kPa	E – Solid Cover without Display E1 – Glass Cover with LED Display E2 – Solid Cover with LED Display	0 – No Gauge Ports LH Inlet 1 – No Gauge Ports RH Inlet
2 – 3500 psig 241 bar 24132kPa	E3 – Separable Regulator and Enclosure (Solid Cover/No LED) (4 Feet) E4 – Separable Regulator and Enclosure (Glass Cover/LED) (4 Feet) E5 – Separable Regulator and Enclosure (Solid Cover/LED) (4 Feet)	2 – No Gauge Ports RH Inlet at 90° 3 – LH Inlet with 1/4 NPT Gauge Port at 90° 4 – RH Inlet with 1/4 NPT Gauge Port at 90° 5 – LH Inlet with 1/4 NPT Gauge Port at 70° 6 – RH Inlet with 1/4 NPT Gauge Port at 70°



STEAM MODEL

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44-68	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig 0-1.7 bar 0-172 kPa	2 – NPTF T – Tube Stub	4 – 1/4"	1 – 6000 psig 414 bar 41,370 kPa	2 – 3500 psig 241 bar, 24,130 kPa
	6 – 316 Stainless Steel	Elgiloy®	Elgiloy®	316 Stainless Steel					
	F – SST Dursan® Coated	Elgiloy®	Elgiloy®	316 Stainless Steel					
	G – 316 SST SilcoNert® Coated	Elgiloy®	Elgiloy®	316 Stainless Steel					
						For applications that require higher than 0.5 SCFM, operate using 240 VAC.			