

Specifications

For other materials or modifications, please 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/41,370kPa

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 2x10⁻⁸ 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, Nickel Alloy (Hastelloy®), or Inert coating options

Diaphragm and Spring

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

Seat

Vespe®

Remaining Parts

316 Stainless Steel, Nickel Alloy (Hastelloy®), or Inert coating options

Other

Connections

NPTF, TUBE STUB

Cleaning

CGA 4.1 and ASTM G93

Weight

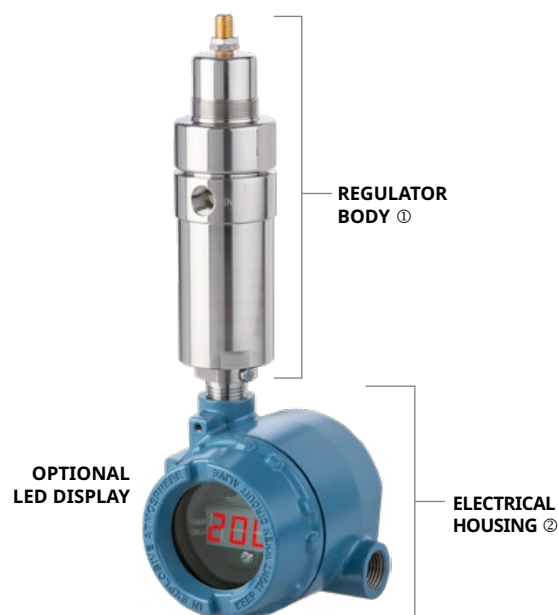
Electric: 6.3 lbs / 2.9 kg Steam: 3.1 lbs / 1.4 kg



**STEAM
VERSION**



**ELECTRIC VERSION HAZLOC
CERTIFIED TWO-PIECE ASSEMBLY**



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

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Hastelloy® is a registered trademark of Haynes International, Inc.

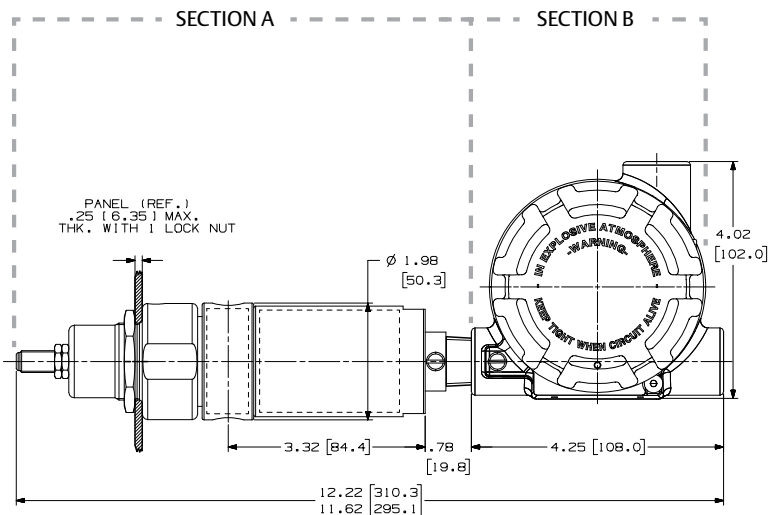
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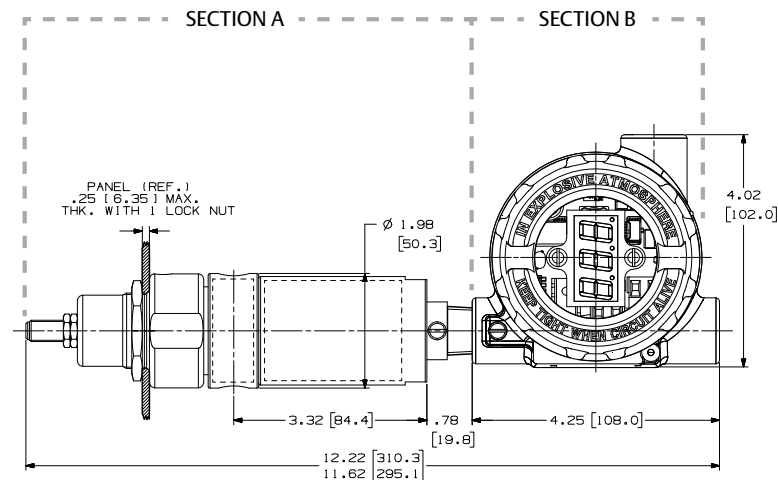
44-6800 Series Regulator Drawing

ELECTRIC MODEL

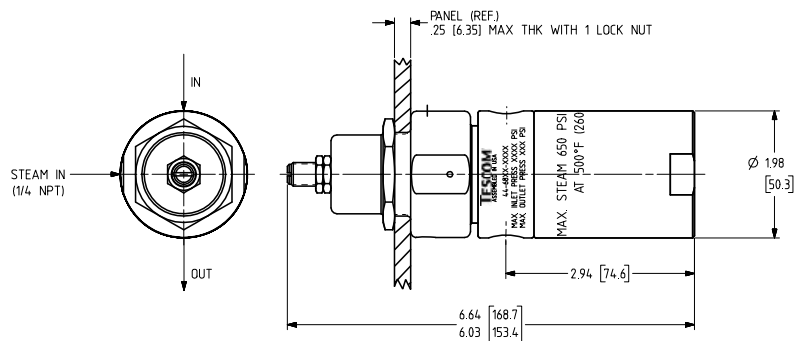


Note: Spring loaded, screw driver adjust. Panel mounting nut not included - order separately with part number 8686-1

ELECTRIC MODEL with LED Display and glass cover



STEAM MODEL



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

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

44-6800 Series Regulator Part Number Selector

Example for selecting a part number:

ELECTRIC VERSION 44-68

BASIC SERIES	6				1	D		2	4
	BODY	DIAPHRAGM	SPRING	REMAINING PARTS	OUTLET PRESSURE RANGE	120 VAC	240 VAC	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT TYPE
44-68	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig	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	0-1.7 bar				
	F – 316 SST Dursan® Coated	Elgiloy®	Elgiloy®	316 SST Dursan® Coated	0-172 kPa				
	G – 316 SST SilcoNert® Coated	Elgiloy®	Elgiloy®	316 SST SilcoNert® Coated	1 – 0-50 psig				
					0-3.4 bar				
					0-345 kPa				
					2 – 0-100 psig				
					0-6.9 bar				
					0-690 kPa				
					3 – 0-250 psig				
					0-17.2 bar				
					0-1724 kPa				
					4 – 0-500 psig				
					0-34.5 bar				
					0-3448 kPa				

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	0 – No Gauge Ports LH Inlet
	E1 – Glass Cover with LED Display	1 – No Gauge Ports RH Inlet
	E2 – Solid Cover with LED Display	2 – No Gauge Ports RH Inlet at 90°
2 – 3500 psig 241 bar 24132kPa	E3 – Separable Regulator and Enclosure (Solid Cover/No LED) (4 Feet)	3 – LH Inlet with 1/4 NPT Gauge Port at 90°
	E4 – Separable Regulator and Enclosure (Glass Cover/LED) (4 Feet)	4 – RH Inlet with 1/4 NPT Gauge Port at 90°
	E5 – Separable Regulator and Enclosure (Solid Cover/LED) (4 Feet)	5 – LH Inlet with 1/4 NPT Gauge Port at 70°
		6 – RH Inlet with 1/4 NPT Gauge Port at 70°

STEAM MODEL 44-68

BASIC SERIES	6				1	-2	4	1	S
	BODY	DIAPHRAGM	SPRING	REMAINING PARTS	OUTLET PRESSURE RANGE	INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	INLET PRESSURE	
44-68	5 – Hastelloy®	Hastelloy®	Elgiloy®	Hastelloy®	0 – 0-25 psig	2 – NPTF T – Tube Stub	4 – 1/4"	1 – 6000 psig 414 bar 41,370 kPa	
	6 – 316 Stainless Steel	Elgiloy®	Elgiloy®	316 Stainless Steel	0-1.7 bar				
	F – 316 SST Dursan® Coated	Elgiloy®	Elgiloy®	316 SST Dursan® Coated	0-172 kPa				
	G – 316 SST SilcoNert® Coated	Elgiloy®	Elgiloy®	316 SST SilcoNert® Coated	1 – 0-50 psig				
					0-3.4 bar			2 – 3500 psig	
					0-345 kPa			241 bar,	
					2 – 0-100 psig			24,130 kPa	
					0-6.9 bar				
					0-690 kPa				
					3 – 0-250 psig				
					0-17.2 bar				
					0-1724 kPa				
					4 – 0-500 psig				
					0-34.5 bar				
					0-3448 kPa				

STEAM →