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**
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) | Max Ambient Temperature |
|---|---|
| 100 W at 120 VAC, 400 W at 240 VAC | 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®)

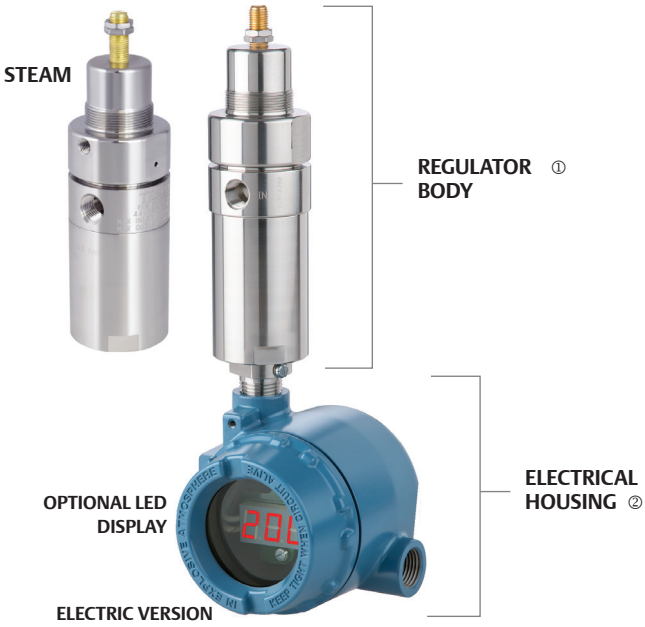
**Remaining Parts**
316 Stainless Steel or Nickel Alloy (Hastelloy®)

### 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




TESCOM 44-6800 Series Vaporizing Regulator is a key component of analyzer systems that ensures sample quality. With a high tolerance for voltage spikes and high ambient temperatures, this regulator is designed for worldwide applications.

## Applications

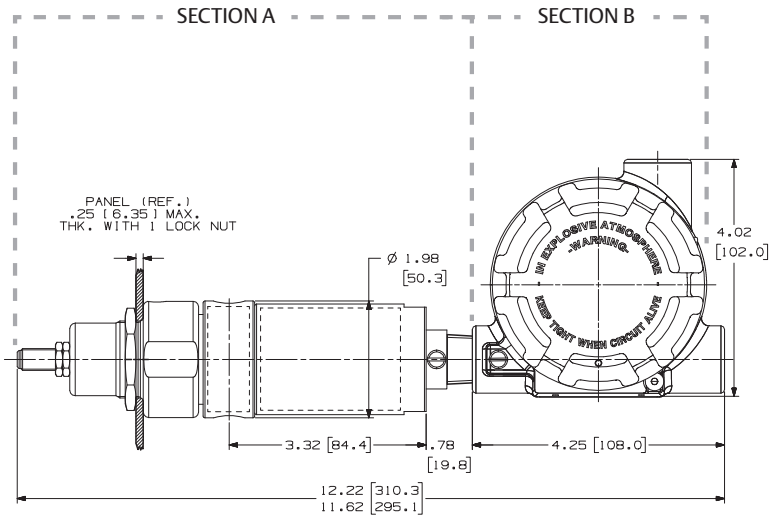
- Analyzer systems for oil and gas, petrochemical, and chemical applications

## Features and Benefits

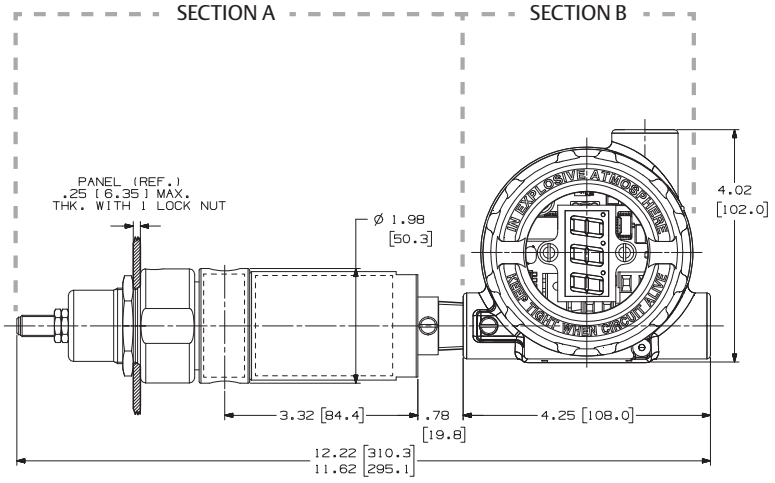
- Installation Flexibility - Option to separate regulator body from electrical housing
- For worldwide use: Designed for 100-240 VAC, 50/60 Hz
- CSA, ATEX and IECEX Certification to T3 (200°C) Rating
- 4-20 mA analog output for remote temperature monitoring and data acquisition
- Optional LED temperature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

## 44-6800 Series Regulator Drawing

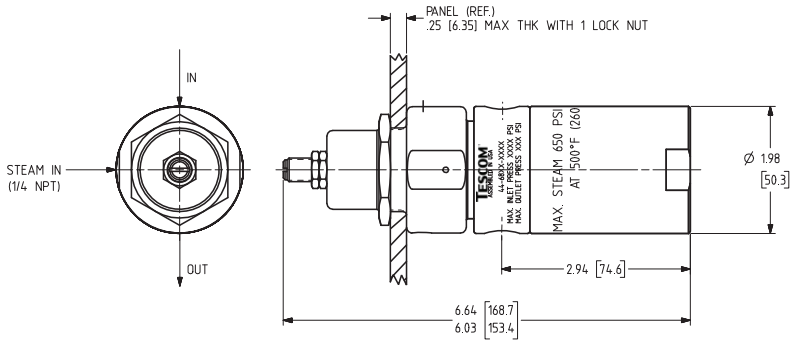
**ELECTRIC MODEL**




**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*



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## 44-6800 Series Regulator Part Number Selector

**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®<br>**6** – 316 Stainless Steel<br>**F** – SST Dursan® Coated<br>**G** – 316 SST SilcoNert® Coated | Hastelloy®<br>Elgiloy®<br>Elgiloy®<br>Elgiloy® | Elgiloy®<br>Elgiloy®<br>Elgiloy®<br>Elgiloy® | Hastelloy®<br>316 Stainless Steel<br>316 Stainless Steel<br>316 Stainless Steel | **0** – 0-25 psig 0-1.7 bar 0-172 kPa<br>**1** – 0-50 psig 0-3.4 bar 0-345 kPa<br>**2** – 0-100 psig 0-6.9 bar 0-690 kPa<br>**3** – 0-250 psig 0-17.2 bar 0-1724 kPa<br>**4** – 0-500 psig 0-34.5 bar 0-3448 kPa | **D** – 100 WATTS 0.83 amps | 400 WATTS 1.67 amps | **2** – NPTF<br>**T** – Tube Stub | **4** – 1/4" |

| 1 | E | 0 |
|---|---|---|

| INLET PRESSURE | OPTIONS | INLET AND OUTLET PORT SIZE |
|---|---|---|
| **1** – 6000 psig 414 bar 41370 kPa<br>**2** – 3500 psig 241 bar 24132kPa | **E-** – Solid Cover without Display<br>**E1** – Glass Cover with LED Display<br>**E2**– Solid Cover with LED Display<br>**E3** – Separable Regulator and Enclosure (Solid Cover/No LED) (4 Feet)<br>**E4** – Separable Regulator and Enclosure (Glass Cover/LED) (4 Feet)<br>**E5** – Separable Regulator and Enclosure (Solid Cover/LED) (4 Feet) | **0** – No Gauge Ports LH Inlet<br>**1** – No Gauge Ports RH Inlet<br>**2** – No Gauge Ports RH Inlet at 90°<br>**3** – LH Inlet with1/4 NPT Gauge Port at 90°<br>**4** – RH Inlet with1/4 NPT Gauge Port at 90°<br>**5** – LH Inlet with1/4 NPT Gauge Port at 70°<br>**5** – RH Inlet with1/4 NPT Gauge Port at 70° |

STEAM

**STEAM MODEL**

| 44-68 | 6 | 1 | -2 | 4 | 1 | S |
|---|---|---|---|---|---|---|

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