

## 2V6 Thermocouple Vacuum Gauge

Part Number: **2-2111-0XX**



### Operating Specifications

Operating Range	1*10 <sup>-3</sup> Torr to 1 Torr
Analog Output	Controller-dependent
Maximum Filament Temperature	250 °C
Mounting Orientation	Any
Calibration Medium	Dry air or nitrogen
Overpressure	300 PSIG
Analog Output Resolution	Controller-dependent
Operating Temperature	0 °C to 50 °C
Storage Temperature	-40 °C to 85 °C
Maximum Bakeout Temperature	100 °C
Response Time	1 s
Accuracy	
1 to 10 mTorr	±1 mTorr
10 to 1000 mTorr	±5% of reading

### Physical Characteristics

Electrical Connections	Octal male
Exterior Material	Stainless Steel
Header Material	Nickel Plated Kovar
Weight	60 g (0.13 lbs.) (1/8" NPT)
Height	76 mm (3.0")
Width	32 mm (1.25")

### Key Features and Benefits

- Competitively priced
- Compact, robust design
- Excellent resolution and repeatability
- Minimal sensor to sensor output variation
- Excellent customer support

### Applications and Industries

- Liquefied Natural Gas (LNG), Industrial Gas, Cryogenics

### Ordering Information

Part Number	Description
2-2111-001	1/8" (0.125") NPT Stainless Steel
2-2111-011	1/2" Straight Stainless Steel

### Compatible Vacuum Controller

Part Number	Description
2-3001-105	VacuGuard™, 2A/DV4/DV6 cable, battery, case
2-3001-106	VacuGuard™, 2A/DV4/DV6 cable, battery, case, battery charger

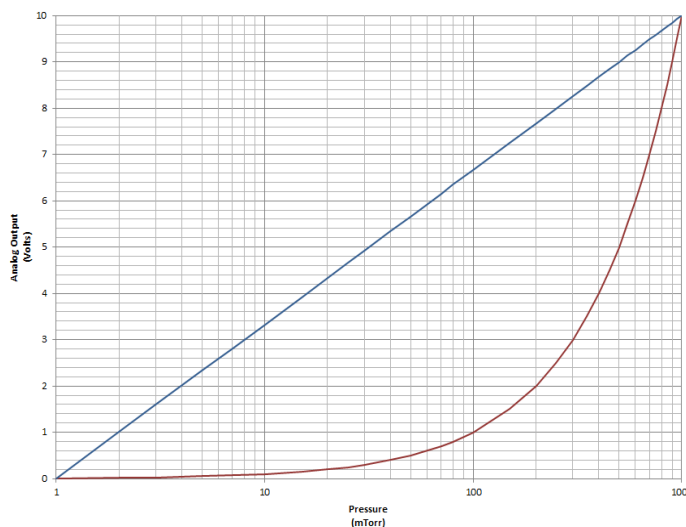
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### Description

The **2V6 Thermocouple Vacuum Gauge** is a direct replacement for the Teledyne-Hastings DV-6M vacuum gauge. No adjustments are needed when used with appropriate Televac®, Teledyne Hastings, VRC, or Varian instruments and controllers. These thermocouple vacuum gauges are a robust solution and can withstand overpressure of up to 300 PSI.

The ideal vacuum controller to read from the 2V6 is the Televac® **VacuGuard™ Portable Vacuum Controller**. The VacuGuard™ is a low-cost digital instrument is fully self-contained and powered by a 1.5-volt battery. It will operate the 2V6, as well as our Televac® **2A Thermocouple**, **2A VacuMini**, and **2A NASA Mini** vacuum gauge.

### Analog Output Behavior



### Materials Exposed to Vacuum

Gold  
Glass  
304L/316L Stainless Steel  
Tophet  
Cupron

### Ratings and Compliance

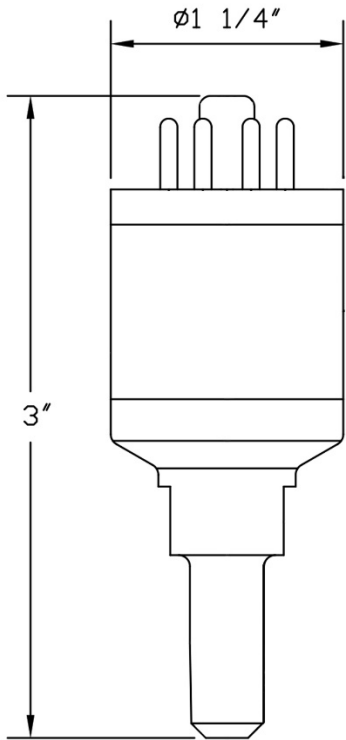
- RoHS compliant

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### Dimensional Drawing



### Additional Documentation

AN3010	<a href="#">Torr Scientific/Torr Decimal/mTorr/Micron Conversions</a>
AN3015	<a href="#">Recommended Practices for Vacuum Calibration</a>
AN3020	<a href="#">Vacuum Terminology Reference</a>
Resource	<a href="#">Televac® Tolerances</a>

### Company Information

#### Specialty manufacturing services that promise precision -

For more than 85 years, Fredericks has specialized exclusively in tilt and vacuum measurement products. Today, our precise manufacturing processes produce the most accurate and advanced products on the market, ensuring perfection every time. A true specialty service provider, we are willing and eager to put our experience and capabilities to good use, helping OEMs achieve even the most complex designs.

#### High performance products designed and manufactured with pride -

Fredericks is a global provider and U.S. manufacturer and designer of high-performance tilt and vacuum measurement products. Built to last, our products are made with state-of-the-art sensing technology, proven processes, and an intrinsic passion for the trade. Offering simple integration and quality and safety benchmarks, our customers benefit not just from standard-setting reliability, but from our commitment to competitive pricing and performance.

#### A partnership that prioritizes uptime, lead time, and service -

Fredericks guarantees customer satisfaction and our 'not too big, not too small' operation is what enables us to offer a true partnership experience. Our dedicated representatives and engineers offer exceptionally responsive service and some of the fastest lead times in the industry, knowing that uptime is the key to your success. With anytime-access to our leadership team and solutions that enhance your products, you will feel the Fredericks difference.

#### Vacuum measurement tools built for the toughest jobs -

Fredericks' world-class vacuum sensors, gauges, and control instrumentation are engineered for the most demanding applications and environments. Our patented Televac® and ETI vacuum brands feature cold-cathode technology, thermocouple and convection gauges, and precision-manufactured hot ionization gauges. Dedicated solely to vacuum gauging and calibration services, we provide industrial heating, national laboratories, cryogenics, and industrial gas applications, among many others, with fast lead times and industry-leading performance. Covering the entire practical vacuum range, our products deliver rapid response vacuum readings and superior sensitivity.

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