

## THERMAL GUARDIAN®

# ADVANCED DIAPHRAGM SEAL SYSTEM



## THERMAL GUARDIAN®



#### **Overview**

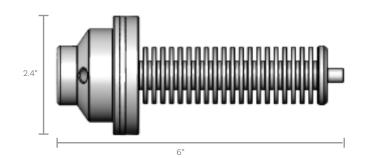
The THERMAL GUARDIAN® Diaphragm Seal is Haygor's newest patented technology. Allowing precise pressure measurement of ultra high temperature processes ranging up to 1200°F (650°C), the advanced patented design dissipates heat and acts as an additional temperature barrier between a standard diaphragm seal and the pressure instrument, protecting from extreme temperatures, yet still allowing for ultra-precise pressure measurement.

THERMAL GUARDIAN is uniquely designed and proven to perfectly complement without impacting performance, response time, or accuracy of the mating pressure instrument. The oil free design is filled with Haygor's proprietary liquid metal composed of multiple alloys including Galinstan®.

It can be installed with direct mount or capillary mount diaphragm seal systems, attached to gauge pressure or differential pressure and is available with all standard and exotic materials and secondary fill fluids.

Coupled with Haygor's complete lineup of diaphragm seals, the THERMAL GUARDIAN is the key to accurately measuring today's everchanging refining processes.

#### **Product Dimensions**



#### **Properties**

Body 316L Stainless Steel

**Internals** 

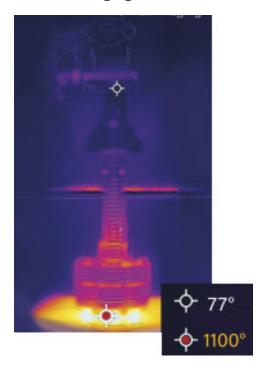
Physical State

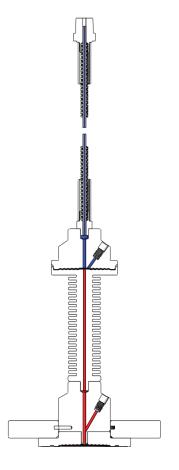
Appearance
Odor
Odorless

Melting Point
-19 °C

Boiling Point
1300 °C

#### Thermal Imaging





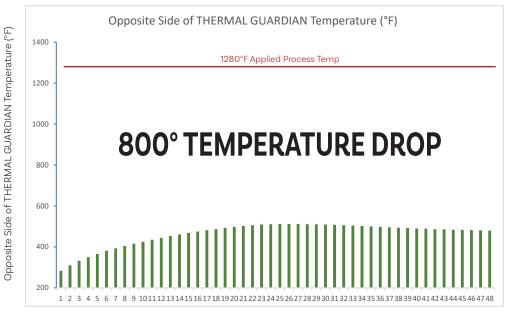
### THERMAL GUARDIAN®



#### THERMAL GUARDIAN® Thermal Heat Dissipation

Test Time = 48 hours

Constant Applied Process Temperature on 2.4" Standard Diaphragm = 1280°F (693°C) Ambient Temperature = 75°F (24°C)



Process Time (Hours)

#### Ordering THERMAL GUARDIAN®

Generally ordered as an option for ultra high temperature applications. Use **Option code HTG** as part of the Haygor HAF Direct mount or Remote mount diaphragm seal systems.

