

# iTHERM TM402

## Imperial Hygienic Thermometer, US style

For standard hygienic and aseptic applications  
in the Food & Beverages and Life Sciences  
industries



More information and current pricing:

[www.de.endress.com/TM402](http://www.de.endress.com/TM402)

### Benefits:

- Excellent value for money and fast delivery
- User-friendly and reliable from product selection to maintenance
- International certification: hygiene standards as per 3-A<sup>®</sup>, EHEDG, ASME BPE, FDA, TSE Certificate of Suitability
- Wide range of process connections

### Specs at a glance

- **Accuracy** class A acc. to IEC 60751
- **Response time** depending on configuration
- **Max. process pressure (static)** at 20 °C: 40 bar (580 psi)
- **Operating temperature range** PT100: -50 °C ... 200 °C (-58 °F ... 392 °F)
- **Max. immersion length on request** up to 15.5" (317,5mm)  
others on request

**Field of application:** This iTHERM thermometer has been designed to meet the basic requirements of the Food & Beverages and Life Sciences industries at the best price. It offers a variety of versions within a clearly segmented standard product. The result: Time and cost savings by simple and fast product selection. The device uses basic technology with features such as a fixed, non-replaceable insert, a wide range of process connections and international certification at an excellent value for money.

### Features and specifications

---

## Thermometer

**Measuring principle**

Resistance Temperature Detector

---

**Characteristic / Application**

imperial style  
hygienic applications  
aseptic applications  
hygienic process connections  
with neck

---

**Thermowell / protection tube**

without (direct immersion)

---

**Insert / probe**

without exchangeable insert

---

**Outer diameter protection tube / Insert**

1/4" (6,35 mm)  
3/8" (9,53 mm)

---

**Max. immersion length on request**

up to 15.5" (317,5mm)  
others on request

---

**Material protection tube/ thermowell**

316L

---

**Process connection**

Triclamp  
Clamp-connections according to  
ISO2852  
G3/4" Liquiphant  
G1" Liquiphant  
Varivent

---

**Tip shape**

straight  
reduced

---

---

**Thermometer****Surface roughness Ra**

30 µin (0,76 µm)

15 µin (0,38 µm)

---

**Operating temperature range**

PT100:

-50 °C ... 200 °C

(-58 °F ... 392 °F)

---

**Max. process pressure (static)**

at 20 °C: 40 bar (580 psi)

---

**Accuracy**

class A acc. to IEC 60751

---

**Response time**

depending on configuration

---

**Integration head transmitter**

yes (4 ... 20 mA, HART)

---

**Certification**

SIL (transmitter only)

---

More information [www.de.endress.com/TM402](http://www.de.endress.com/TM402)