

iTHERM TrustSens TM372

Self-calibrating temperature sensor

100% compliance, 0% effort Hygienic compact RTD thermometer, US style



Thông tin thêm và mức tính giá hiện tại:

www.apsc.endress.com/TM372

Lợi ích:

- Risk and cost reduction thanks to self-calibration and **Heartbeat Technology**
- No production downtime due to an automated and fully traceable inline self-calibration
- Automatized documentation, memory for 350 calibration points. Printable calibration certificate - audit proof.
- Automated 4 to 20 mA loop check for saving time and increasing safety in your process. **See how iTHERM TrustSens can perform a fully automated loop check in five easy steps. The video shows the device set up and benefits for your process.**
- Elimination of non-conformities or undetected failures
- International certifications and approvals:
 - EHEDG, ASME BPE, FDA, 3-A, 1935/2004, 2023/2006, 10/2011, CE CRN, CSA General Purpose
- Highest accuracy of measuring point through sensor-transmitter matching

Tổng quan về thông số kỹ thuật

- **Response time** $t_{50} = 2,5$ s $t_{90} = 9,5$ s
- **Max. process pressure (static)** at 20 °C: 40 bar (580 psi)
- **Operating temperature range** PT 100: -40 °C ...160 °C (-40 °F ... 320 °F)
- **Max. immersion length on request** up to 28" (711 mm) others on request

Phạm vi ứng dụng: The award-winning smart temperature probe with integrated HART® transmitter and Heartbeat Technology features the world's first RTD sensor unit capable of fully automated in-situ self-

calibration. It effectively eliminates the risk of undetected non-conformities, reduces production downtime and increases product safety and process efficiency in applications of the food & beverage and life sciences industries. The device is fully compliant to FDA 21 CFR Part 11 regulations and GMP rules.

Tín năng và thông số kỹ thuật

Thermometer

Measuring principle

Resistance Temperature Detector

Characteristic / Application

self-calibrating

imperial style

compact temperature probe

hygienic design

hygienic process connection

Thermowell / protection tube

without

incl. thermowell

incl. T-/ellbow thermowell

Insert / probe

pipe version, isolated wires, not flexible

Outer diameter protection tube / Insert

1/4" (6,35 mm)

3/8" (9,53 mm)

1/2" (12,7 mm)

Thermometer

Max. immersion length on request

up to 28" (711 mm)

others on request

Material protection tube/ thermowell

316L

Process connection

Weld-in adapter

Tri-clamp

Clamp-connections according to
ISO2852

G3/4" Liquiphant

G1" Liquiphant

Varivent

T- and corner pieces

Tip shape

straight

reduced

Surface roughness Ra

30 µin (0,76 µm)

15 µin (0,38 µm)

15 µin (0,38 µm) electropolished

Thermometer

Operating temperature range

PT 100:

-40 °C ...160 °C

(-40 °F ...320 °F)

Max. process pressure (static)

at 20 °C: 40 bar (580 psi)

Response time

t₅₀ = 2,5 s

t₉₀ =9,5s

Integration head transmitter

no (4...20mA Signal)

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