

U.S. Style RTD-Assembly TH27



More information and current pricing:

www.de.endress.com/TH27

Benefits:

- Highest reliability in critical process monitoring
- Smart switch over for high measurement point availability
- Avoid plant shut down due to sensor breakdown, drifting, and corrosion
- Meets all hygienic standards
- Perfect match for all applications when integrated with head or field transmitter
- Reduced cost to install as all units arrive as a complete assembly
- 2 kV improved galvanic isolation for better signal and integrity

Specs at a glance

- **Accuracy** class A acc. to IEC 60751 class B acc. to IEC 60751
- **Response time** depending on configuration
- **Max. process pressure (static)** at 20 °C: 100 bar (1.450 psi)
- **Operating temperature range** PT 100: -50 °C ...200 °C (-58 °F ... 392 °F)
- **Max. immersion length on request** up to 2.743 mm (108,00")

Field of application: Typical processes in the food&pharmaceutical industry demand special functions such as fast response times and high accuracy of temperature measurement. With a reduced tip form, it is possible to realize best thermal response times. An optional head transmitter, with all common communication protocols, makes the device ready to use with enhanced measurement accuracy and reliability. The protection tube is made from a stainless steel barstock, which is able to withstand high operating pressures.

Features and specifications

Thermometer

Measuring principle

Thermometer

Characteristic / Application

US style
modular temperature assembly
hygienic design
hygienic process connection
incl. thermowell / protection tube (metal)

Thermowell / protection tube

bar stock (drilled)

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

1/2" (12,70 mm)

3/4" (19,05 mm)

Max. immersion length on request

up to 2.743 mm (108,00")

Material protection tube/ thermowell

1.4404 (316L)

Process connection

hygienic:
clamp connections TRI-Clamp / Micro-Clamp

Tip shape

straight

reduced

Surface roughness Ra

0,8 µm (32 µin.)

Operating temperature range

PT 100:

-50 °C ...200 °C

(-58 °F ... 392 °F)

Thermometer

Max. process pressure (static)

at 20 °C: 100 bar (1.450 psi)

Accuracy

class A acc. to IEC 60751

class B acc. to IEC 60751

Response time

depending on configuration

Integration head transmitter

yes (4 ... 20 mA; HART; PROFIBUS PA; FOUNDATION
FIELDBUS)

Ex - approvals

CSA

FM/CSA IS

FM IS

Certification

3A

FDA

ASME BPE 2002

SIL (transmitter only)

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