

U.S. Style RTD-Assembly TH18



More information and current pricing:

www.th.endress.com/TH18

Benefits:

- Meets 3-A sanitary standards
- Based on ASME, BPE 2002 Standard for Bio-Pharma equipment
- Simplified model structure: Competitively priced, offers great value. Easy to order and reorder. A single model number includes sensor and transmitter assembly for a complete point solution
- One source shopping for temperature measurement solutions. World class transmitter with integrated sensor offering.
- Improved galvanic isolation on most devices (2 kV)
- All iTEMP transmitters provide long term stability ≤ 0.05 % per year

Specs at a glance

- **Accuracy** class A acc. to IEC 60751
- **Response time** 63% $t_r = 2,0$ s
- **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 4.877 mm (192,00")

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 very small probe diameter 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. Different dimensions of a MicroClamp process connection provide optimal use of space for the installation.

Features and specifications

Thermometer

Measuring principle

Resistance Temperature Detector

Thermometer

Characteristic / Application

US style
modular temperature assembly
hygienic design
hygienic process connection

Thermowell / protection tube

without (not intended to use with thermowell)

Insert / probe

mineral insulated (MI), flexible

Outer diameter protection tube / Insert

5/32" (3,97 mm)

Max. immersion length on request

up to 4.877 mm (192,00")

Material protection tube/ thermowell

1.4404 (316L)

Process connection

hygienic:
clamp connections TRI-Clamp / Micro-Clamp

Tip shape

straight

Surface roughness Ra

0,5 µm (20 µin.)

Operating temperature range

PT 100:
-50 °C ... 200 °C
(-58 °F ... 392 °F)

Max. process pressure (static)

at 20 °C: 100 bar (1.450 psi)

Thermometer

Accuracy

class A acc. to IEC 60751

Response time

63% rt = 2,0 s

Integration head transmitter

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

Ex - approvals

FM IS

CSA IS

FM/CSA IS

CSA

Certification

FDA

3A

ASME BPE 2003

SIL (transmitter only)

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