

# iTHERM TT412

## Imperial Hygienic Thermowell, US Style

Designed for hygienic and aseptic applications in the Food & Beverages and Life Sciences industries



More information and current pricing:

[www.be.endress.com/TT412](http://www.be.endress.com/TT412)

### Benefits:

- iTHERM QuickNeck – cost and time savings thanks to simple, tool-free recalibration of the insert used
- All common hygienic process connections
- International certification: hygiene standards as per 3-A, EHEDG, ASME BPE, FDA, TSE Certificate of Suitability
- Fast response time owing to reduced tips with thin walls
- State of the art Tee and Elbow elements, without welds and dead legs and with best in class hygienic design

### Specs at a glance

- **Max. process pressure (static)** 40 bar (580 psi)
- **Maximum standard immersion length** 48" (1.219 mm)

**Field of application:** Best applicable for use in hygienic or aseptic pipes and containers or tanks even with very small immersion lengths. It meets increased protection requirements of the temperature sensor regarding physical and chemical effects. Ideally suited to all measuring points that require regular re-calibration by simply replacing the insert in closed processes.

### Features and specifications

Thermowell

**Measuring principle**

Fabricated Thermowell

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## Thermowell

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### Characteristic / Application

imperial style  
hygienic/aseptic design (3-A®, EHEDG, ASME BPE, FDA)  
hygienic process connections  
QuickNeck for easy and cost saving recalibration

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### Head connection

QuickNeck  
NPT1/2

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### Maximum standard immersion length

48" (1.219 mm)

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### Process connection

weld in adaptor  
clamp connections acc. to ISO2852  
thread acc. to ISO 228 for liquiphant adaptor APV Inline Varivent  
T- and corner pieces DIN11865

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### Thermowell root diameter

1/4" (6,35 mm)  
3/8" (9,525 mm)  
1/2" (12,7mm)

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### Medium contact material

316L

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### Wetted part finishing (Ra)

< 30 µinch (0,76 µm)  
< 15 µinch(0,38 µm)  
< 15 µinch (0,38 µm) electropolished

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### Tip shape

straight  
reduced

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## Thermowell

**Temperature range**

-200...650 °C (-328...1.202 °F)

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**Max. process pressure (static)**

40 bar (580 psi)

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**Max. process pressure at 400 °C**

depends on process connection

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