

## iTHERM ModuLine TT131

### Welded thermowell for a variety of industrial applications



More information and current pricing:

[www.be.endress.com/TT131](http://www.be.endress.com/TT131)

#### Benefits:

- Modular configuration according to DIN 43772
- iTHERM QuickNeck: cost and time savings thanks to simple, tool-free recalibration of the insert
- Extension, immersion length and total length can be chosen according to process requirements
- Wide choice of dimensions, materials and process connections available
- Specially designed tip for fast response times

#### Specs at a glance

- **Max. process pressure (static)** Depending on configuration up to 100 bar
- **Maximum standard immersion length** 4.500 mm (177")
- **Max. immersion length on request** 4.500 mm (177")

**Field of application:** This thermowell designed according to DIN 43772 guarantees a high resistance to most industrial process environments. It is made from pipe or tube and is available in a wide range of diameters and materials. A specially designed thermowell tip ensures fast response times for a more efficient process control. Oversheaths in PTFE or tantalum can withstand extremely corrosive process conditions. It is offered with a variety of process connections: flanges, threads, weld-in or compression fittings.

#### Features and specifications

Thermowell

Measuring principle

Fabricated Thermowell

## Thermowell

**Characteristic / Application**

metric style  
according to DIN 43772  
process connection threaded, flanged, compression  
fitting  
with neck

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**Head connection**

external thread:  
M24 x 1.5, 1/2" NPT, G1/2  
Female thread:  
M20 x 1.5, 1/2" NPT, G1/2  
QuickNeck

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**Maximum standard immersion length**

4.500 mm (177")

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**Max. immersion length on request**

4.500 mm (177")

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**Thermowell****Process connection**

Thread:

G3/8", G1/2", G3/4", G1"

NPT1/2", NPT3/4", NPT 1"

M18x1.5, M20x1.5, M27x2, M33x2

R1/2", R3/4"

Cap-nut:

M20x1.5, G1/2", G3/4"

Compression fitting:

NPT1/2", G1/2", G1"

Flansche:

DN15 PN40 B1, C

DN25 PN20, PN40, PN100 B1, B2, C

DN40 PN40 B1

DN50 PN40 B1

ASME 1" 150 RF

ASME 1" 300 RF

ASME 1 1/2" 150 RF

ASME 2" 150 RF

ASME 2" 300 RF

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**Thermowell root diameter**

9x1,25 mm

11x2 mm

12x2,5 mm

14x2 mm

16x3,5 mm

1/4" SCH80

1/2" SCH80

1/2" SCH40

## Thermowell

**Medium contact material**

316 (1.4401)  
316L (1.4404)  
316Ti (1.4571)  
Alloy 600 (2.4816)  
Alloy C276 (2.4819)  
Alloy 446 (1.4749)  
Alloy 321 (1.4541)  
Sheath PTFE  
Sheath Tantal

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**Wetted part finishing (Ra)**

< 1.6 µm (63.00 µin)

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**Tip shape**

straight  
reduced  
tapered  
optimized for quick response times

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**Temperature range**

-200...1.100 °C (-328...2.012 °F)

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**Max. process pressure (static)**

Depending on configuration up to 100 bar

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**Max. process pressure at 400 °C**

Depending on configuration

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