

# Easytemp TMR31

## Compact thermometer

Compact, fast and precise for the measurement of process temperatures in common industries



from **€75.00**

Price as of 26.04.2022

More information and current pricing:

[www.endress.com/TMR31](http://www.endress.com/TMR31)

### Benefits:

- Small, compact design made entirely of stainless steel
- Extremely short response times
- Highly accurate even with short insertion lengths
- 4-wire, Pt100 or PC-programmable transmitter with 4 to 20 mA output
- Configuration and visualization with ReadWin® 2000 PC operating software, which is free of charge
- Breakdown information in event of sensor break or sensor short-circuit, adjustable as per NAMUR NE43
- Marine approval

### Specs at a glance

- **Accuracy** class A acc. to IEC 60751
- **Response time**  $t_{50} = 1 \text{ s}$   $t_{90} = 2 \text{ s}$
- **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 600,00 mm (23,62")

**Field of application:** With cost efficiency, optimal use of space, reliable operation, easy installation and commissioning the TMR31 fulfills the requirements of modern process measurement technology. Vibration-proof integrated thin-film sensors guarantee highest operational safety at the fastest response times.

### Features and specifications

## Thermometer

### Measuring principle

Resistance Temperature Detector

### Characteristic / Application

metric style  
compact temperature probe  
fast response time  
threaded process connection  
with or without neck

### Thermowell / protection tube

without (not intended to use with thermowell)

### Insert / probe

pipe version, isolated wires, not flexible

### Outer diameter protection tube / Insert

4,00 mm (0,16")  
6,00 mm (0,24")

### Max. immersion length on request

up to 600,00 mm (23,62")

### Material protection tube/ thermowell

1.4404 (316L)

### Process connection

male thread:

G1/4"  
G1/2"  
NPT1/4"  
NPT1/2"  
M14x1.5  
M18x1.5  
BSPT R1/2"

### Tip shape

straight

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## Thermometer

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**Surface roughness Ra**

0,8 µm (32 µin.)

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**Operating temperature range**

PT 100:

-50 °C ...200 °C

(-58 °F ...392 °F)

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**Max. process pressure (static)**

at 20 °C: 100 bar (1.450 psi)

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**Accuracy**

class A acc. to IEC 60751

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**Response time**

t50 = 1 s

t90 = 2 s

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**Integration head transmitter**

no (4...20mA Signal)

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**Certification**

Marine approval

UL 3111-1

EAC

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