

TW10

Protection tube

Designed for use in the fine chemicals industry and generally for almost all industrial processes



Benefits:

- Tip of the protection tube with a reduced diameter or tapered for a faster response time
- Customized immersion length
- Surface finishing $Ra < 0.8 \mu m$
- SS 316L/1.4404, SS 316Ti/1.4571 and Hastelloy C for the "wetted" parts
- The common threaded process connections are supplied as standard; others are available on request
- Material certification (3.1.B)
- Test with penetrant liquids on welds

Specs at a glance

- **Max. process pressure (static)** 50 bar (725 psi)
- **Maximum standard immersion length** 4.000 mm (157,48")
- **Max. immersion length on request** 10.000 mm (393,7")

Field of application: This protection tube is an important component for temperature measurement points for almost all industrial processes, especially for fine chemicals industries. It is used to protect the measuring insert or sensor elements from aggressive process media, high pressures and flow rates from the temperature sensor itself and thereby enables the thermometer to be exchanged during operation.

Features and specifications

More information and current pricing:

www.endress.com/TW10

Thermowell

Measuring principle

Fabricated Thermowell

Characteristic / Application

metric style

DIN 43772 Form 2G/3G

threaded process connection
with neck

Head connection

external thread:

M24 x 1.5

1/2" NPT

Maximum standard immersion length

4.000 mm (157,48")

Max. immersion length on request

10.000 mm (393,7")

Process connection

thread:

G1/2"

G1/2"

G3/4"

G1"

1/2" NPT

3/4" NPT

R1/2"

R3/4"

R1"

M20 x 1.5

Thermowell root diameter

9 mm (0,35")

11 mm (0,43")

12 mm (0,47")

15 mm (0,59")

Thermowell

Medium contact material

1.4404 (316L)
1.4571 (316Ti)
2.4816 (Alloy 600)
2.4819 (Alloy C276)

Wetted part finishing (Ra)

< 0.8 µm (31.50 µin)

Tip shape

straight
reduced
tapered

Temperature range

-200...1.100 °C (-328...2.012 °F)

Max. process pressure (static)

50 bar (725 psi)

Max. process pressure at 400 °C

depends on process connection

More information www.endress.com/TW10