TW11
Protection tube for temperature sensors

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

More information and current pricing:
www.endress.com/TW11

Benefits:

- Tip of the thermowell with a reduced diameter or tapered for a faster response time
- Customized immersion length
- Surface finishing Ra < 0.8 µm
- SS 316L/1.4404 and SS 316Ti/1.4571 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

Thermowell

Measuring principle
Fabricated Thermowell

Characteristic / Application
metric style
DIN 43772 Form 2/3
threaded process connection
without 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:
G3/8"
G1/2"
G3/4"
1/2" NPT
3/4" NPT
R1/2"
R3/4"
R1"
M20 x 1.5

Thermowell

Thermowell root diameter
9 mm (0,35")
11 mm (0,43")
12 mm (0,47")
14 mm (0,55")
15 mm (0,59")

Medium contact material
1.4401 (316)
1.4404 (316L)
1.4571 (316Ti)

Wetted part finishing (Ra)
< 0.8 ìm (31.50 ìin)

Tip shape
straight
reduced
tapered

Temperature range
-200...700 °C (-328...1.292 °F)

Max. process pressure (static)
50 bar (725 psi)

Max. process pressure at 400 °C
depends on process connection

More information **www.endress.com/TW11**