

# TT511

## Industrial thermowell

For Oil & Gas applications. Vanstone type, design with collar flange



More information and current pricing:

[www.be.endress.com/TT511](http://www.be.endress.com/TT511)

### Benefits:

- Solid thermowell, made of drilled bar stock material.
- Fulfillment of various, industry specific requirements with a standard product. Flexible selection of immersion length and thermowell geometry according to the process specifications.
- In accordance with Shell specification: S.38.113 rev.D and S.38.114 rev.D
- Exact thermowell stress calculation ensuring safe plant operation.
- Vanstone design with outstanding cost effectiveness: Reuse of the flange if the thermowell has to be replaced, flexible selection of the flange material as well as reduced spare parts and storing concept.

### Specs at a glance

- **Max. process pressure (static)** depending on process connection up to 2500 lbs
- **Maximum standard immersion length** 500 mm (19,69")
- **Max. immersion length on request** 500 mm (19,69")

**Field of application:** It is a specially designed thermowell for thermometer installation. The thermowell shaft and the process connection flange are not interconnected. For installation, the collar of the thermowell is fitted between two flanges; on the one hand it is fitted onto the thermowell and on the other hand it is bolted to the connection nozzle on the process side. Many different flange versions are available to secure the unit to the permanently installed nozzle flange. It is machined from solid bar stock.

### Features and specifications

## Thermowell

**Measuring principle**

Bar stock Thermowell

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**Characteristic / Application**

metric style

Vanstone type

with collar flange

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**Head connection**

thread:

1/2" NPT

without connection

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**Maximum standard immersion length**

500 mm (19,69")

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**Max. immersion length on request**

500 mm (19,69")

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**Thermowell****Process connection**

Collar flange

ASME 1 1/2" 150

ASME 1 1/2" 300

ASME 1 1/2" 400

ASME 1 1/2" 600

ASME 1 1/2" 900

ASME 1 1/2" 1500

ASME 2" 150

ASME 2" 300

ASME 2" 400

ASME 2" 600

ASME 2" 900

ASME 2" 1500

DN25 PN40

DN25 PN100

DN50 PN40

DN50 PN63

DN50 PN160

DN80 PN40

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**Thermowell root diameter**

30 mm (1,18")

20 mm (0,79")

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**Medium contact material**

1.4401 (316)

1.4571 (316Ti)

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**Wetted part finishing (Ra)**

&lt;= 1,6 µm (63.00µin)

&lt;= 0,8 µm (31.50 µin) or roughened to Ra=6

(0.24µm)

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**Tip shape**conical or tapered

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Thermowell

**Temperature range**

-200...700°C (-328...1.292 °F)

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**Max. process pressure (static)**

depending on process connection up to 2500 lbs

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**Max. process pressure at 400 °C**

depends on process connection

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