

# Solid Machined, Weld-in Type Model SI400S

WIKA Data Sheet TW 90.85

## Applications

- Petrochemical, On/Offshore, plant engineering
- For high process loads

## Special Features

- Design for use of exotic material
- International standard

## Description

### Thermowell material

Stainless steel 316 L (1.4404) , 316 Ti (1.4571)  
A105, A182 Grade F11, A182 Grade F22, A182 Grade F91

### Prozess connection

Ø 26.7 mm, Ø 33.4 mm, Ø 38.1 mm, Ø 48.3 mm

### Instrument connection

½" NPT female

### Bore size

Ø 6,6 mm / Ø 8,5 mm

### Insertion length $U_1$

To customer spezification

### Connection lenght $T$

To customer spezification (minimum 45 mm)

### Total length $L$

Insertion length  $U_1$  + connection lenght  $T$



Thermowell, Weld-in Type Model SI400S

### Maximum process temperature <sup>1)</sup>

600 °C for thermowell material 316 Ti (1.4571)

### Maximum process pressure (static) <sup>1)</sup>

150 bar for thermowell material 316 Ti (1.4571)

1) Ratings depends on below parameters:

- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)

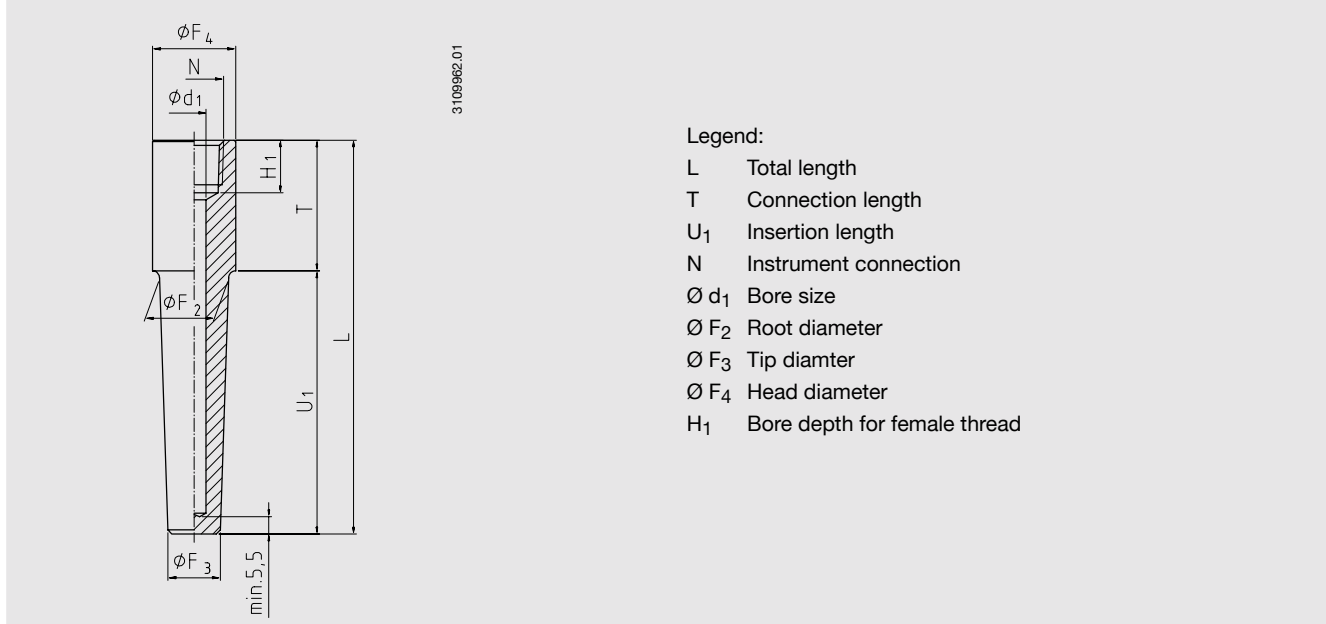
## Optional extras

- Other dimensions and materials
- Quality certificates
- Wake frequency calculations according to ASME PTC 19.3 are recommended in critical applications. WIKA offer this as an engineering service.

Following process data are necessary for the calculation:

- Process pressure (in bar or psi)
- Process temperature (in °C or °F)
- Flow rate (in m/s)
- Density (in kg/m<sup>3</sup>)
- Dimensions and material of thermowell

## Dimensions in mm



Legend:

- L Total length
- T Connection length
- U<sub>1</sub> Insertion length
- N Instrument connection
- Ø d<sub>1</sub> Bore size
- Ø F<sub>2</sub> Root diameter
- Ø F<sub>3</sub> Tip diameter
- Ø F<sub>4</sub> Head diameter
- H<sub>1</sub> Bore depth for female thread

Dimensions in mm					Weight in kg	
Ø F <sub>4</sub>	N	Ø F <sub>2</sub>	Ø F <sub>3</sub>	Ø d <sub>1</sub>	L = 150 mm	L = 610 mm
26.7	½" NPT	19	16	6.6 or 8.5	0.4	1.1
33.4	½" NPT, ¾" NPT	25	19	6.6 or 8.5	0.6	1.9
38.1	½" NPT, ¾" NPT	25	19	6.6 or 8.5	0.7	2.0
48.3	½" NPT, ¾" NPT	38	19	6.6 or 8.5	1.2	3.5

## Suitable stem lengths of mechanical thermometers

Design of connection	Stem length l <sub>1</sub>
S / 4 / 5	l <sub>1</sub> = L - 10 mm or l <sub>1</sub> = U <sub>1</sub> + T - 10 mm

## Ordering information

Model / Material / Head diameter / Instrument connection / Bore size / Insertion length U<sub>1</sub> / Connection length T / Optional extras required

Änderungen und den Austausch von Werkstoffen behalten wir uns vor.

Die beschriebenen Geräte entsprechen in ihren Konstruktionen, Maßen und Werkstoffen dem derzeitigen Stand der Technik.



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