

# **Thermowells**

# **Solid Machined, Screwed Connection**

## per International Standard • Model SI710G

#### **Thermometers**

## **Application**

The thermowells model SI710G are screw-fitted into the process. They are suitable for high process loads, that might occur as a result of flow, temperature and process pressure influences or vibrations.

#### Standard features

#### Thermowell material

Stainless steel 316L Stainless steel 316Ti

# Process connection

½ NPT, ¾ NPT, 1 NPT

## Instrument connection

Female thread 1/2 NPT

#### Bore size

Ø6,6 mm, Ø8,5 mm

#### Insertion length U

2 ¼ ", 4 ½ " or 7 ½ " 75, 100, 150 or 200 mm

#### Total length L

Insertion length + 1 ¾" (if dimensions in inches)
Insertion length + 50 mm (if dimensions in mm)

## Maximum process temperature 1)

600°C

### Maximum process pressure (static) 1)

150 bar

### **Optional extras**

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

Following process data are necessary for the calculation:

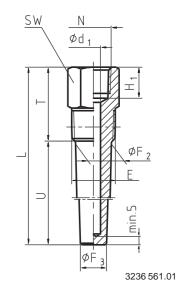
- Process pressure (in bar or psi)
- Process temperature (in °C or °F)
- Flow rate (in m/s)
- Density (in kg/m³)
- Dimensions and material of thermowell
- 1) Ratings depends on below parameters:
  - Process medium
  - Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)



# Dimensions



Dimensions in mm									Weight in kg	
E	N	Ø d <sub>1</sub>	Ø F <sub>2</sub>	ØF <sub>3</sub>	H <sub>1</sub>	Т	SW	U = 2 ½ "	U = 7 ½ "	
½ NPT	½ NPT	6.6	16	13	19	1 ¾ " or 50 mm	27	0.200	0.360	
		8.5						0.190	0.320	
¾ NPT		6.6	22	16				0.310	0.560	
		8.5						0.300	0.520	
1 NPT		6.6	27				36	0.500	0.840	
		8.5		19				0.510	0.880	



#### Legend:

E Process connection

H<sub>1</sub> Bore depth for female thread

L Total length

N Instrument connection

SW Across flats

Γ Connection length

U Insertion length

 $Ød_1$  Bore size

 $\emptyset \, \mathsf{F}_2 \,$  Root diameter of thermowell

 $ØF_3$  Tip diameter of thermowell

## Suitable stem lengths of mechanical thermometers

#### Dial thermometers

Design of connection	Connection length T	Stem length I <sub>1</sub>			
S/4/5	T = 1 ¾ " (approx. 45 mm)	I <sub>1</sub> = L - ½ "	or	I <sub>1</sub> = U + 1 ½ "	
3/4/5	T = 50 mm	I <sub>1</sub> = L - 5 mm	or	I <sub>1</sub> = U + 45 mm	

## **Ordering information**

State: Model / Material / Process connection / Instrument connection / Bore size / Insertion length U / Optional extras required

Specifications and dimensions given in this leaflet are correct at the time of printing.

Modifications may take place and materials specified may be replaced by others without prior notice.



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