

# Thermowell with Clamping Ring Connection

**SK2**

Solid drilled for screwing-in  
For plain stems

## Application

Amongst others, thermowells are used to protect the thermometer stem from process-related chemical and/or mechanical loads. In addition, a thermowell remaining at the measuring point allows for easy dismantling of the thermometer for maintenance or repair.

## Standard Versions

For plain thermometer stems, our models A1 and B1

## Construction Type

Solid drilled, i.e. made completely out of one piece, for high process-related loads (flows, pressures, temperatures and vibrations)

## Process Connection E

Male thread

G ½B or G ¾B

½" NPT or ¾" NPT

Details see page 2

## Connection to Thermometer Stem

Clamping ring fitting stainless steel 316Ti (1.4571)

## Internal Diameter d1

Ø 7 mm	suitable for stem Ø dF 6 mm
Ø 9 mm	suitable for stem Ø dF 8 mm
Ø 11 mm	suitable for stem Ø dF 10 mm
Ø 13 mm	suitable for stem Ø dF 12 mm
Ø 14 mm	suitable for stem Ø dF 13 mm

Available combinations for process connection E and internal diameter d1, see page 2

## Total Length L (Standard)

110, 170, 260 mm

Details and installation length U1 see page 2

## Material

Stainless steel 316Ti (1.4571)

## Process Temperature/Process Pressure

Maximum permissible process temperature: 600 °C

Maximum permissible process pressure: 100 bar

The specific process conditions (medium, flow rate, pressure, temperature) and the thermowell version (dimension, material) might cause a reduction of the aforementioned maximum permissible values, see **load diagrams DIN 43 772**.

Upon request, we perform a **thermowell calculation** for your individual case (see Special Versions and Options).



## Special Versions and Options

- Process connections: M20x1.5 (instead of G ½B) or M27x2 (instead of G ¾B) others upon request
- Other thermowell Ø upon request
- Other thermowell lengths/installation lengths L/U1 upon request
- Other materials upon request
- Thermowell free of grease and oil
- Certificate of compliance with the order 2.1
- Test report 2.2
- Inspection certificate 3.1 for the material
- Inspection certificate 3.1 for the pressure test
- Thermowell calculation for the specific case of application with certificate

## Ordering Information

Please specify in your order:

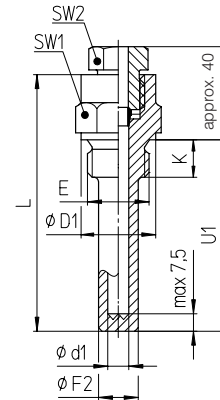
<b>Model</b>	SK2
<b>Process connection E</b>	G ½B or G ¾B ½" NPT or ¾" NPT
<b>Internal diameter d1</b>	7, 9, 11, 13 or 14 mm
<b>Total length L</b>	e.g. 170
<b>Installation length U1</b>	e.g. 142
<b>Material</b>	1.4571
<b>Example:</b>	<b>SK2, E=G ½B, d1=11, L=170, U1=142, 1.4571</b>

# Dimensional Data, Length Specifications, Corresponding Thermometer Stems

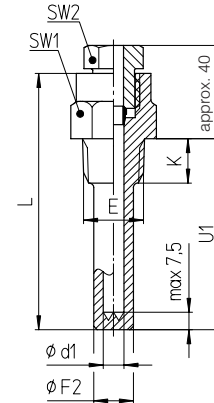
Dimensional Data (mm)						
SK2						
Thermowell Diameter and Fitting Dimensions						
E	d1	F2	D1	K	SW1	SW2
G ½ B (M20x1.5)	7	17	26 (25)	14	27	22
	9					
	11					
G ¾ B (M27x2)	7	17	32	16	32	22
	9					
	11					
	13					
½" NPT <sup>1)</sup>	7	17	-	19	27	22
	9					
	11					
¾" NPT <sup>1)</sup>	7	17	-	19	27	22
	9					
	11					
	13					
	14					

## Process Connection

### Cylindrical thread



### Conical thread



## Total Length Thermowell, Installation Length and Length Thermometer Stem

Standard thermowell lengths, suitable stem lengths L		
Thermowell Length (Standard)		Suitable Stem Length
Total length	Installation length	Model A1/B1
$L^{+1,2)}$	$U1^{+2)}$	
110	82	$\geq 117$
170	142	$\geq 177$
260	232	$\geq 267$

## Other thermowell length

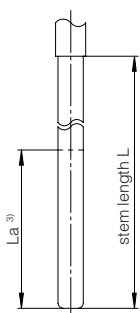
### Calculation

- Thermowell length if stem is existent thermowell length  $L \leq L(\text{stem}) - 7 \text{ mm}$
- Stem length if thermowell is existent stem length  $L \geq L(\text{thermowell}) + 7 \text{ mm}$

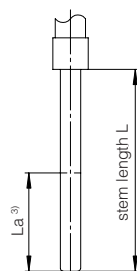
## Thermometer Stem

models A1/B1  
plain stem  
form 1 DIN EN 13 190

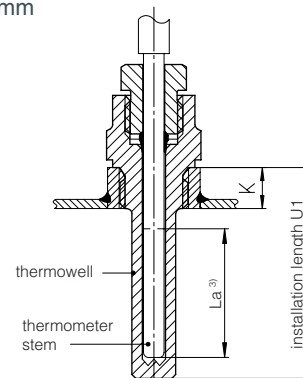
model A1



model B1



the installation length  $U1$  of the thermowell has to be selected so that the active stem length  $La$  is surrounded by the medium  $U1 \geq La + K + 8 \text{ mm}$



<sup>1)</sup> standard designation ½ - 14 NPT or ¾ - 14 NPT

<sup>2)</sup>  $L = U1 + 28 \text{ mm}$

<sup>3)</sup>  $La$  = active stem length. The active stem length  $La$  can be found in the thermometer data sheets.