

# Thermowell with Clamping Ring Connection

Solid drilled for screwing-in  
for plain stems

Model  
SK2

## Application

Thermowells are being applied to protect thermometer stems against process-related chemical and / or mechanical loads. Furthermore a thermowell, which remains at the measuring point, enables the unproblematic dismantling of the thermometer for maintenance or repair.

## Standard Versions

For plain thermometer stems, our models A1 or B1

### Construction Type

Solid drilled, that means completely manufactured of one piece, for high loads by the process (flows, pressures, temperatures and vibrations).

### Process Connection E

Male thread G ½ B or G ¾ B  
½" NPT or ¾" NPT

Details see reverse side.

### Connection to Thermometer Stem

Clamping ring fitting 1.4571 (316 stainless steel)

### 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 of connection to thermometer E and internal diameter d1, see reverse side.

### Total Length L (Standard)

110, 170, 260 mm

Details and installation length U1 see reverse side.

### Material

1.4571 (316 stainless steel)

### Process Temperature / Process Pressure

Maximum allowed process temperature: 600 °C

Maximum allowed process pressure: 100 bar

Concrete process conditions (medium, flow rate, pressure, temperature) and the thermowell version (dimensions, material) could cause a reduction of the above mentioned maximum allowed values, see **load diagram DIN 43 772**.

We can make a **thermowell calculation** for your concrete field of application (see special version and options) upon request.



## Special Versions and Options among others

- Process connections M 20 x 1.5 (instead G ½ B) or M 27 x 2 (instead G ¾ B) others upon request
- Other thermowell-Ø upon request
- Other thermowell- / installation lengths L / U1 upon request
- Other materials upon request
- Thermowell free of grease and oil
- Coating adjusted to medium and medium temperature upon request
- Test report 2.1
- Inspection certificate 2.2
- Test certificate 3.1 for the material (copy of the material quality certificate of the basic material with re-stamping certificate)
- Test certificate 3.1 for the pressure test (max. installation length U1= 300 mm, pressure test with extrinsic water, max. 250 bar, 3 minutes)
- Thermowell calculation for the concrete case of application with certificate

## Ordering Information

Model	SK2
Process Connection E	G ½ B or G ¾ B; ½" NPT or ¾" NPT
Internal-Ø d1	7, 9, 11, 13 or 14 mm
Total length	L
Installation length	U1
Material	1.4571

Example: SK2, E=G ½ B, d1=11, L= 170, U1=142, 1.4571



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**8.8141**

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# Dimensions, Lengths, corresponding Thermometer Stems

## Dimensional Data (mm)

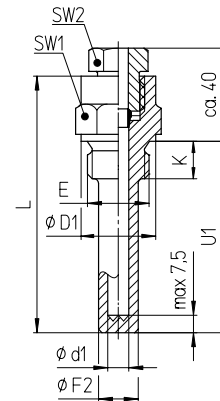
SK2

Process connection: cylindrical thread

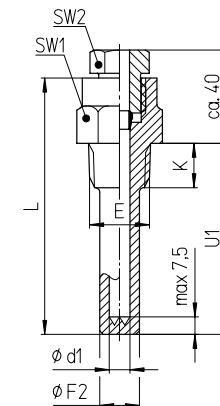
### Thermowell Diameter and Connection Dimensions

E	d1	F2	D1	K	SW1	SW2
G 1/2 B (M 20x1.5)	7	17	26 (25)	14	27	22
	9					
	11					
G 3/4 B (M 27x2)	7	19	32	16	32	
	9					
	13					
	14					
1/2"NPT <sup>1)</sup>	7	17	-	19	27	
	9					
	11					
3/4"NPT <sup>1)</sup>	7	17	-	19	27	
	9					
	13					
	14					

<sup>1)</sup> Norm designation 1/2 - 14 NPT, resp. 3/4 - 14 NPT



Process connection: conical thread



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

### Standard thermowell lengths, suitable stem lengths L

Standard thermowell length		Suitable stem length
Total length	Install. length	Model A1 / B1
$L^{+1)}$	$U1^{+2)}$	
110	82	$\geq 117$
170	142	$\geq 177$
260	232	$\geq 267$

<sup>1)</sup>  $L = U1 + 28$  mm

### Other thermowell lengths

#### Calculation

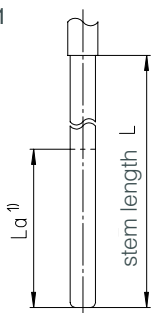
- Thermowell length when existent stem thermowell length  $L \leq L(\text{stem}) - 7$  mm
- Stem length when existent thermowell stem length  $L \geq L(\text{thermowell}) + 7$  mm

## Thermometer Stem

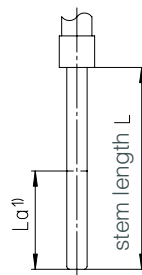
### Corresponding thermometer stem

Models A1 / B1  
plain stem,  
Form 1 DIN 13 190

Model A1

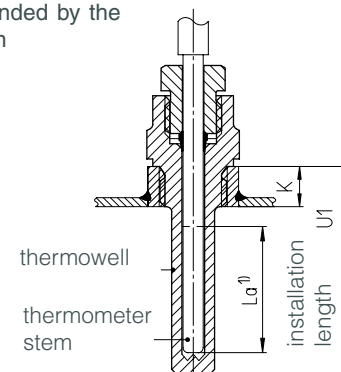


Model B1



### Installation example

The installation length  $U1$  of the thermowell has to be selected that the active length  $La$  is surrounded by the medium.  $U1 \geq La + K + 8$  mm



<sup>1)</sup>  $La$  = active stem length

The active stem length  $La$  can be found on the thermometer data sheets.

Technical changes, replacement of materials and errors excepted.