

Thermowell for Clamping the Stem

SK3.B

Fabricated, threaded
For plain bimetal 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 dismounting of the thermometer for maintenance or repair.

Standard Versions

For plain bimetal stems, our model B1

Construction Type

Fabricated, i.e. screw fitting welded to thermowell, for low process-related loads (flows, pressures, temperatures and vibrations)

Process Connection E

Male thread G ½ B
Details see page 2

Connection to Thermometer Stem

With lateral retaining screw

Internal Diameter d1

Ø 7 mm (0.28") suitable for stem Ø dF 6 mm (0.24")
Ø 9 mm (0.35") suitable for stem Ø dF 8 mm (0.31")

Total Length (Standard)

72, 100, 112, 160, 250 mm (2.83, 3.94, 4.41, 6.3, 9.84")
Details and installation length U1 see page 2

Material

Stainless steel 316Ti (1.4571)

Process Temperature/Process Pressure

Maximum permissible process temperature: 500 °C (932 °F)
Maximum permissible process pressure: 25 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

- Other process connections upon request
- Other thermowell Ø upon request
- Other thermowell lengths/installation lengths L/U1 upon request
- Other materials upon request
- Certificate of compliance with the order 2.1
- Test report 2.2
- Inspection certificate 3.1 for the material upon request
- Inspection certificate 3.1 for the pressure test upon request
- Thermowell calculation for the specific case of application with certificate

Ordering Information

Please specify in your order:

Model	SK3.B
Process connection E	G ½ B
Internal diameter d1	7 or 9 mm
Total length L	e.g. 100
Installation length U1	e.g. 88
Material	1.4571

Example: SK3.B, d1=9, L=100, U1=88, 1.4571

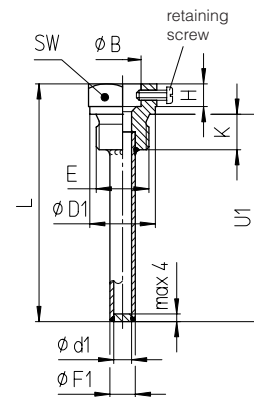
Dimensional Data, Length Specifications, Corresponding Thermometer Stems

Dimensional Data (mm/inch)

SK3.B

Thermowell Diameter and Fitting Dimensions

E	d1	F1	D1	B	H	K	SW
G ½B	7	12	26	14.5	9	14	27
	0.28	0.47					
	9	14	1.02	0.57	0.35	0.55	1.06
	0.35	0.55					



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 B1
$L^{+1)}$	$U1^{+2)}$	
72	60	57
2.83	2.36	2.24
100	88	85
3.94	3.46	3.35
112	100	97
4.42	3.94	3.82
160	148	145
6.3	5.83	5.71
250	238	235
9.84	9.37	9.25

Other thermowell length

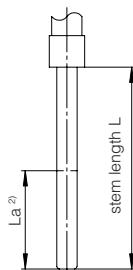
Calculation

- Thermowell length if stem is existent
thermowell length $L = L(\text{stem}) + 15 \text{ mm (0.59")}$
- Stem length if thermowell is existent
stem length $L = L(\text{thermowell}) - 15 \text{ mm (0.59")}$

Thermometer Stem

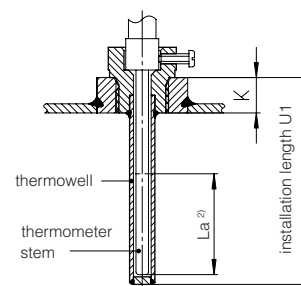
Corresponding thermometer stems

models B1
plain stem
form 1 DIN EN 13 190



Installation example

the installation length U1 of the thermowell has to be selected so that the active stem length La is surrounded by the medium
 $U1 \geq La + K + 5 \text{ mm (0.2")}$



¹⁾ $L = U1 + 12 \text{ mm (0.47")}$

²⁾ La = active stem length. The active stem length La can be found in the thermometer data sheets.