

Thermowell DIN 43 772 Form 4

Solid drilled
for stem with male thread

Model
SF4

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 dismounting of the thermometer for maintenance or repair.

Standard Versions

For thermometer stem with male thread, turnable or rigid, our models A4, B4, A4.1 und B4.1

Construction Type

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

Process Connection

For welding
Details see reverse side

Connection to Thermometer Stem N

Female thread M18 x 1.5, G ½ or G ¾
Details see reverse side.

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

Available combinations for the connection to thermometer stem N and female diameter d1, see reverse side.

Total length L (normed length)

110, 140, 170, 200, 260, 410 mm
Details and installation length U see reverse side.

Material

1.4571 (316 stainless steel) or 1.7335 (13 CrMo 4-5)

Process Temperature / Process Pressure

Maximum allowed process temperature: 500 °C
Maximum allowed process pressure: 150 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 diagrams 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

- Connection thread to thermometer stem N M 20 x 1.5 (instead of G½), others upon request
- Suitable connection screw fitting, see data sheet 8.8201
- Suitable neck tube and suitable welding piece, see data sheet 8.8301
- Other thermowell-Ø upon request
- Other thermowell- / installation lengths L / U 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 U= 300 mm, pressure test with internal water, max. 150 bar, 3 minutes)
- Thermowell calculation for the concrete case of application with certificate

Ordering Information

Model	SF4
Connection to thermometer stem N	M 18 x 1,5; G½ or G¾
Internal-Ø d1	7, 9, 11 or 13 mm
Total length	L
Installation length	U
Material	1.4571 or 1.7335

Example: SF4, N=G¾, d1=11, L= 170, U=133, 1.4571



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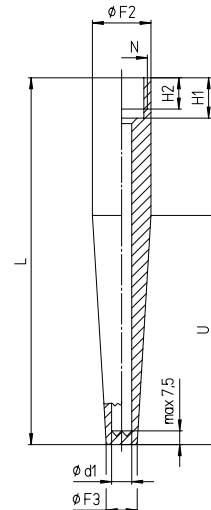
Dimensions, Lengths, corresponding Thermometer Stems

Dimensional Data (mm)

SF4

Thermowell Diameter and Connection Dimensions

F2	N	d1	F3	H1	H2
24 h 7	M 18x1.5	7	12,5	16	13
26 h 7	G ½ (M20x1.5)	9	15	19	15
		11	17		
32 h11	G ¾	13	19	22	17



Thermowell Total Length, Installation Length and Thermometer Stem Length

Normed thermowell lengths, suitable stem length L

Normed thermowell length Total length L ⁺²	Install. length U ⁺²	Suitable stem length			
		Model A4 / B4		Model A 4.1 / B 4.1	
		M 18 x 1.5	G ½ B	G ¾ B	G ¾ B, G ½ B, M 18x1.5
110	65	86	83	80	102
	73				
140	65	116	113	110	132
170	133	146	143	140	162
200	65	176	173	170	192
	125				
260	125	236	233	230	252
410	275	386	383	380	402

Not normed thermowell length

Calculation

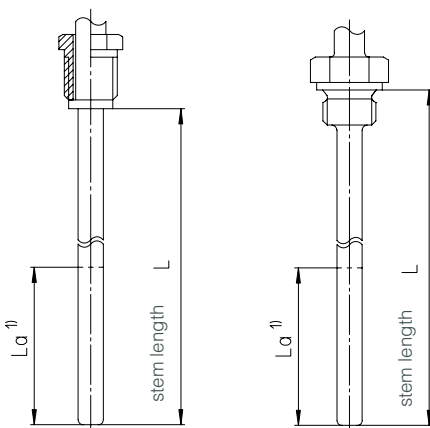
- Thermowell length when existent stem
stem model A4/B4
thermowell length $L = L(\text{stem}) + H1 + 8 \text{ mm}$
stem model A4.1/B4.1
thermowell length $L = L(\text{stem}) + 8 \text{ mm}$
- Stem length when existent thermowell
stem model A4/B4
stem length $L = L(\text{neck tube}) - H1 - 8 \text{ mm}$
stem model A4.1/B4.1
stem length $L = L(\text{thermowell}) - 8 \text{ mm}$

Thermometer Stem

Corresponding thermometer stem

Models A4 / B4
male thread,
turnable
Form 4 DIN EN 13 190

Models A4.1 / B4.1
male thread,
rigid
Form 6 DIN EN 13 190

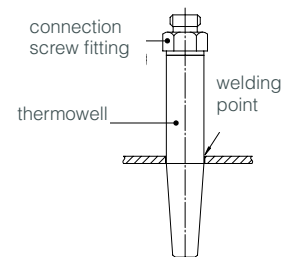
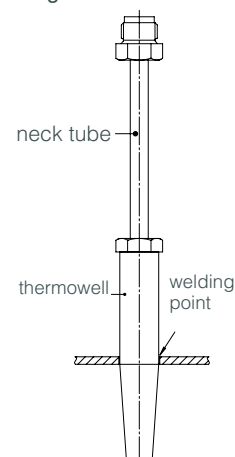
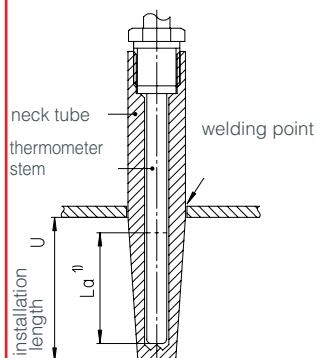


Installation examples

The installation length U of the thermowell has to be selected that the active length La is surrounded by the medium.

Combination with neck tube
HR for stem A3 / B3
neck tube dimension according to DIN 43 772

Combination with
connection screw
fitting AV1



¹⁾La = active length

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

Technical changes, replacement of materials and errors excepted.