

Thermowell DIN 43 772 Forms 6 and 7

Solid drilled for screwing-in
for stem with male thread

Models
SF6 / SF7

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

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

SF6: G ½ B or G ¾ B;

SF7: ½" NPT or ¾" NPT

Details see reverse side.

Connection to Thermometer Stem N

Male thread 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
Ø 14 mm	suitable for stem-Ø	dF 13 mm

Available combinations of the connections E + N and internal diameter d1, see reverse side.

Total length L (normed Length)

110, 170, 260, 410 mm

Details and installation length U1 see reverse side.

Materials

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

- Other combinations:
Process connection E / connection to thermometer stem N:
SF6: M 20 x 1.5 M 20 x 1.5
M 27 x 2 M 20 x 1.5
M 27 x 2 M 27 x 2
Others, also for SF7, upon request
- Suitable connection screw fitting, see data sheet 8.8201
- Suitable neck tube, see data sheet 8.8301
- 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	SF6 or SF7
Process connection E	SF6: G ½ B or G ¾ B; SF7: ½" NPT or ¾" NPT
Connection to thermometer stem N	G½ or G¾
Internal-Ø d1	7, 9, 11, 13 or 14 mm
Total length	L
Installation length	U1
Material	1.4571 or 1.7335

Examples: SF6, E=G½B, N=G½, d1=11, L= 170, U1=142, 1.4571
SF7, E=½" NPT, N=G½, d1=11, L=170, U1=142, 1.4571



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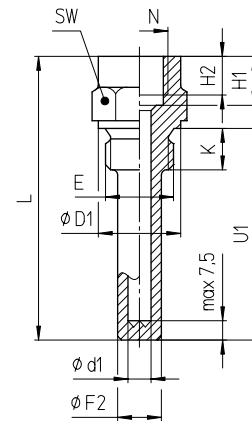
Dimensions, Lengths, corresponding Thermometer Stems

Dimensional Data (mm)

SF6

Thermowell Diameter and Connection Dimensions

E	N	d1	F2	D1	H1	H2	K	SW			
G ½ B (M20x1.5)	G ½ (M20x1.5)	7	17	26 (25)	19	15	14	27			
		9									
		11									
G ¾ B (M27x2)		7	19	32			22		17	16	32
		9									
		11									
	13	22									
	14										
	14										

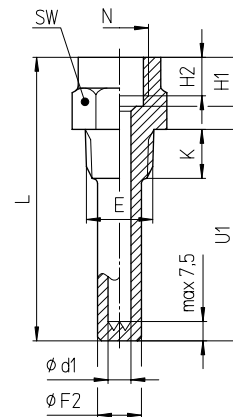


SF7

Thermowell Diameter and Connection Dimensions

E	N	d1	F2	H1	H2	K	SW	
½" NPT ¹⁾	G ½	7	17	19	15	19	27	
		9						
		11						
¾" NPT ¹⁾		7	19					22
		9						
		11						
	13							
14								

¹⁾ Norm designation ½ - 14 NPT, resp. ¾ - 14 NPT



Thermowell Total Length, Installation Length and Thermometer Stem Length

Normed thermowell length, suitable stem length L

Normed thermowell length		Suitable stem length		
Total length	Install. length	Model A4 / B4	Model A4.1 / B4.1	
L ⁺¹⁾	U1 ⁺²⁾	G ½ B	G ¾ B ²⁾	G ½ B, G ¾ B ²⁾
110	82	83	80	102
170	142	143	140	162
260	232	233	230	252
410	382	383	380	402

¹⁾ L = U1 + 28 mm

²⁾ not for model SF7

Not normed thermowell lengths

Calculation

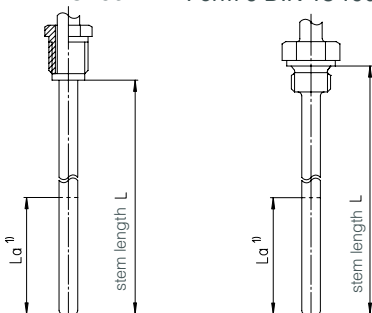
- Thermowell length when existent stem
stem model A4/B4
thermowell length $L = L(\text{stem}) + H1 + 8 \text{ mm}$
stem model A4.1/B4.1
thermowell length $L = L(\text{stem}) + 8 \text{ mm}$
- Stem length when existent thermowell
stem model A4/B4
stem length $L = L(\text{thermowell}) - H1 - 8 \text{ mm}$
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 13 190

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



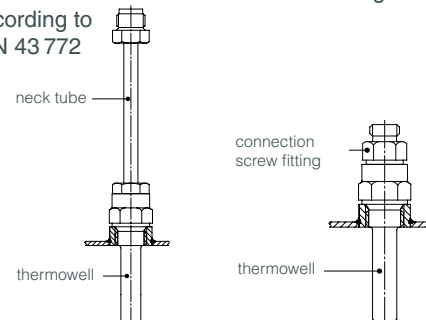
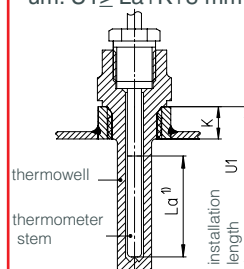
¹⁾ La = active stem length

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

Installation example

Combinations with neck tube HR for stem A3 / B3 neck tube dimensions according to DIN 43 772

Combinations with connection screw fitting AV1



Technical changes, replacement of materials and errors excepted.