

Thermowell DIN 43 772 Form 8

Fabricated for screwing-in
for stem with union nut

Model
SF8

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 union nut, our models A3 and B3

Construction Type

Fabricated, that means screw fitting welded to thermowell, for low to medium loads by the process (flows, pressures, temperature 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 N

Male thread G ½ B or G ¾ B
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 of the connections E + N and internal diameter d1, see reverse side.

Total Length L (normed Length)

101, 138, 198, 288, 438 mm
Details and installation length U1 see reverse side.

Material

1.4571 (316 stainless steel)

Process Temperature / Process Pressure

Maximum allowed process temperature: 500 °C
Maximum allowed process pressure: 40 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:
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 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 upon request
- Test certificate 3.1 for the pressure test upon request

Ordering Information

Model	SF8
Process Connection E	G ½ B or G ¾ B; ½" NPT or ¾" NPT
Connection to thermometer stem N	G ½ B or G ¾ B
Internal-Ø d1	7, 9, 11 or 13 mm
Total length	L
Installation length	U1
Material	1.4571

Examples: SF8, E=G½B, N=G¾B, d1=11, L=138, U1=110, 1.4571



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8.8130

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Dimensions, Lengths, corresponding Thermometer Stems

Dimensional Data (mm)

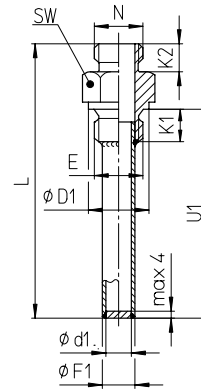
SF8

Thermowell Diameter and Connection Dimensions

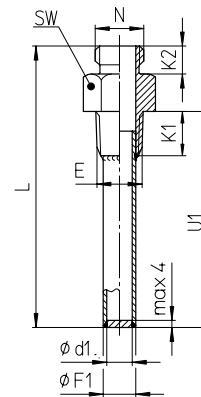
E	N	d1	F1	D1	K1	K2	SW
G ½ B (M20x1,5)	G ½ B (M20x1,5)	7	12	26 (25)	14	12	27
		9	14				
		11	14				
G ¾ B (M27x2)	G ¾ B (M27x2)	7	12	32	16	12	32
		9	14				
		11	14				
	G ¾ B (M27x2)	7	12			14	
		9	14				
		11	14				
½" NPT ¹⁾	G ½ B	7	12	-	19	12	27
		9	14				
		11	14				
¾" NPT ¹⁾	G ½ B	7	12	-	19	12	27
		9	14				
		11	14				
		13	16				

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

Process connection: cylindrical thread



Process connection: conical thread



Thermowell Total Length, Installation Length and Thermometer Stem Length

Normed thermowell lengths, suitable stem length L

Normed thermowell length		Suitable stem length Model A3 / B3
Total length	Install. length	
$L^{+1)}$	$U1^{+2)}$	
101	73	96
138	110	133
198	170	193
288	260	283
438	410	433

¹⁾ $L = U1 + 28$ mm

Not normed thermowell lengths

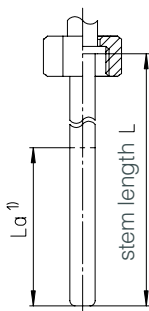
Calculation

- Thermowell length when existent stem thermowell length $L = L(\text{stem}) + 5$ mm
- Stem length when existent thermowell stem length $L = L(\text{thermowell}) - 5$ mm

Thermometer Stem

Corresponding thermometer stem

Models A3 / B3
union nut,
Form 5 DIN 13 190

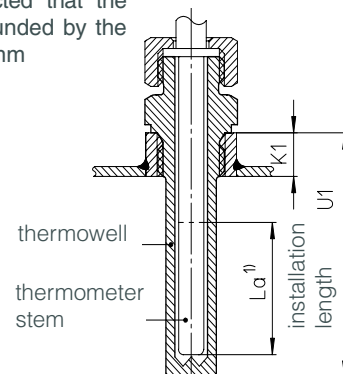


¹⁾ $L_a =$ active stem length

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

Installation example

The installation length $U1$ of the thermowell has to be selected that the active length L_a is surrounded by the medium. $U1 \geq L_a + K1 + 5$ mm



Technical changes, replacement of materials and errors excepted.