

Thermometers

Thermowells

Solid Machined, Weld-in Type

Form 4 per DIN 43772 • Model SD400S

Application

The thermowells model SD400S are welded into the process. They are suitable for high process loads, that might occur as a result of flow, temperature and process pressure influences or vibrations.

Standard features

Thermowell material

Stainless steel 1.4571 Steel 1.0460, 1.5415, 1.7335, 1.7380

Thermowell outer diameter 1)

 \emptyset 18 mm, \emptyset 24 mm, \emptyset 26 mm, \emptyset 32 mm

Instrument connection 1)

Female thread M14 x 1.5 , M18 x 1.5 , G $\frac{1}{2}$ or G $\frac{3}{4}$

Bore size 1)

 $\emptyset 3.5 \, mm, \, \emptyset 7 \, mm, \, \emptyset 9 \, mm, \, \emptyset 11 \, mm$

Insertion length 1) U

65, 73, 125, 133 or 275 mm

Total length 1) L

110, 140, 170, 200, 260 or 410 mm

Maximum process temperature 2)

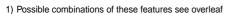
600°C

Maximum process pressure (static) 2)

150 bar

Optional extras

- Other dimensions and materials
- Quality certificates
- Extension neck as accessory

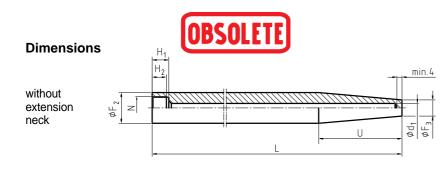


²⁾ Ratings depends on below parameters:

- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)

Load diagrams see DIN 43772





Legend:

H₁ Bore depth for female thread

H₂ Length of female thread

L Total length

M Extension neck length

N Instrument connection

U Insertion length

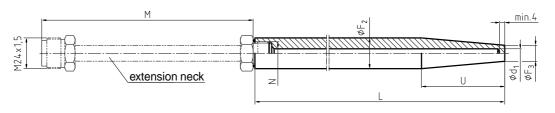
 $Ø d_1$ Bore size

 \emptyset F_2 Thermowell outer diameter

Ø F_3 Tip diameter of thermowell



with extension neck



Dimensions in mm		Weight in kg 1)
L	U	
110	65	0.240
	73	0.230
140	65	0.340
170	133	0.340
200	65	0.540
	125	0.450
260	125	0.650
410 2)	275	0.920

Dimensions in mm					
N	Ø d ₁	Ø F ₂	ØF ₃	H ₁	H ₂
M14 x 1.5	3.5	18	9	16	13
M18 x 1.5	7	24	12.5	10	13
G ½	,	26	12.5	19	15
G /2	9	20	15	19	13
G ¾	11	32	17	22	17

Suitable stem lengths of mechanical thermometers

Dial thermometers

Design of connection	Stem length I ₁ if assembled		
	without extension neck	with extension neck	
S/4/5	I ₁ = L - 10 mm	_	
2	I ₁ = L - 30 mm	-	
3	-	I ₁ = L - 10 mm + M ³⁾	

Machine glass thermometers

Design of connection	Stem length I ₁ if assembled		
	without extension neck	with extension neck	
E	I ₁ = L - 10 mm	_	
3	_	$I_1 = L - 10 \text{ mm} + M^{3}$	

- 1) Designs with $N = M18 \times 1.5$ $\emptyset d_1 = 7 \text{ mm}$ $\emptyset F_2 = 24 \text{ mm}$
- 2) Not with bore size $\varnothing d_1 = 3.5 \text{ mm}$
- 3) Standard of extension neck length M = 165 mm

Ordering information

State: Model / Material / Thermowell outer diameter / Instrument connection / Bore size / Total length L / Insertion length U / Optional extras required

Specifications and dimensions given in this leaflet are correct at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

