

Thermowells

Solid Machined, Screwed Connection

Form 6 per DIN 43 772 • Model SD600G Form 9 per DIN 43 772 • Model SD900G

Application

The thermowells model SD600G and model SD900G are screwfitted 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

Process connection

G 1/2 B, G 3/4 B

Instrument connection

SD600G: female thread G $\frac{1}{2}$, G $\frac{3}{4}$ SD900G: male thread G $\frac{1}{2}$ B, G $\frac{3}{4}$ B

Bore size

Ø7mm, Ø9mm, Ø11mm

Insertion length U₁

SD600G: 82, 142, 182, 232 or 382 mm SD900G: 73, 110, 170, 260 or 410 mm

Total length L

Insertion length + 28 mm

Maximum process temperature 1)

600°C

Maximum process pressure (static) 1)

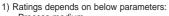
150 bar

Optional extras

- Other dimensions and materials
- Quality certificates
- Wake frequency calculations according to Dittrich/Klotter are recommended in critical applications. WIKA offer this as an engineering service.

Following process data are necessary for the calculation:

- Process pressure (in bar or psi)
- Process temperature (in °C or °F)
- Flow rate (in m/s)
- Density (in kg/m3)
- · Dimensions and material of thermowell



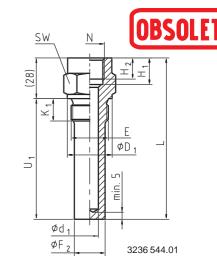
- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)



Dimensions

Model SD600G

Dimensions in mm									Weight in kg	
Е	N	Ø d ₁	Ø D ₁	Ø F ₂	H ₁	H ₂	K ₁	SW	U ₁ = 82 mm U ₁ = 382 mr	
		7		17	19	15 -	14	27	0.220	0.670
G ½ B		9	26						0.210	0.590
G % B	G ½	11							0.190	0.500
		7					16	32	0.280	0.720
		9							0.270	0.650
		11	32	19					0.250	0.630
	G ¾	7	32	17	22	17			0.310	0.820
		9		17					0.300	0.750
		11		19					0.290	0.740



Legend:

E Process connection

H₁ Bore depth for female thread

H₂ Length of female thread

K₁ Length of male thread

K₂ Length for instrument connection

L Total length

N Instrument connection

SW Across flats

U₁ Insertion length

Ø d₁ Bore size

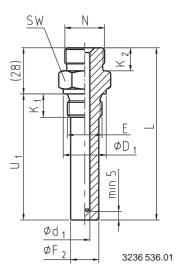
 \emptyset D₁ Diameter of sealing face

Ø F₂ Thermowell outer diameter

Dimensions

Model SD900G

Dimensions in mm								Weight in kg	
Е	N	Ø d ₁	Ø D ₁	Ø F ₂	K ₁	K ₂	SW	U ₁ = 73 mm	U ₁ = 410 mm
		7						0.220	0.720
G ½ B	G ½ B	9	26		14	12	27	0.200	0.640
		11		17				0.180	0.530
G ¾ B	G ¾ B	7			16	14	32	0.310	0.790
		9	32					0.290	0.710
		11		19				0.290	0.780



Suitable stem lengths of mechanical thermometers

Dial thermometers

Thermowell model	Design of connection	Stem length I ₁			
SD600G	S/4/5	I ₁ = L - 10 mm	or	$I_1 = U_1 + 18 \text{mm}$	
SD600G	2	$I_1 = L - 30 \text{ mm}$	or	$I_1 = U_1 - 2 \text{mm}$	
SD900G	3	I ₁ = L - 12 mm	or	$I_1 = U_1 + 16 \text{mm}$	

Machine glass thermometers

Thermowell model	Thermowell model Design of connection		Stem length I ₁		
SD600G	E	all	$I_1 = L - 10 \text{ mm}$ or $I_1 = U_1 + 18 \text{ mm}$		
SD900G	3	G ½	$I_1 = L - 12 \text{ mm}$ or $I_1 = U_1 + 16 \text{ mm}$		
		G ¾	$I_1 = L - 8 \text{ mm}$ or $I_1 = U_1 + 20 \text{ mm}$		

Ordering information

State: Model / Material / Process connection / Instrument connection / Bore size / Insertion length U₁ / 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.

