

Fabricated, with Flange Wetted Parts made of Exotic Material Model SD250F, SW550F

WIKA Data Sheet TW 90.40

Applications

- Chemical engineering, process engineering, apparatus engineering
- For high chemical loads
- For low and medium process loads

Special Features

- Good price-performance ratio
- Wetted parts made of exotic material
- Non wetted parts (flange, connection parts) made of stainless steel
- All parts of the thermowell welded to one unit

Description

Material of wetted parts

Hastelloy C4 (2.4610), Hastelloy C276 (2.4819),
Monel 400 (2.4360), Titanium Grade 2 (3.7035) 2)

Washer disc of flange

to EN 1092-1 with flange facing form B1
to DIN 2527 with flange facing form C nach DIN 2526
to ASME B16.5 with flange facing form RF

Nominal diameter

to EN/DIN: DN 25, DN 40, DN 50
to ASME: 1", 1½", 2"

Pressure rating

to EN/DIN: PN 16-40
to ASME: 150 lbs, 300 lbs, 600 lbs

Instrument connection

SD250F: running nut M24 x 1.5
SW550F: G ½ female, ½ NPT female

Tube dimensions

OD 13.7 mm, ID 9.3 mm (¼" Sched. 40)



Thermowell with flange Model SW550F

Insertion length U_1

100, 160, 200, 250, 300, 400, 500 mm

Total length L

SD250F: Insertion length U_1 + 80 mm
SW550F: Insertion length U_1 + 45 mm

Maximum process temperature 1)

Depend on thermowell material

Maximum process pressure (static) 1)

Depend on pressure rating of flange

1) Ratings depends on below parameters:

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

2) For material Titanium Grade 2 (3.7035) a removeable cover flange with connection parts will be used

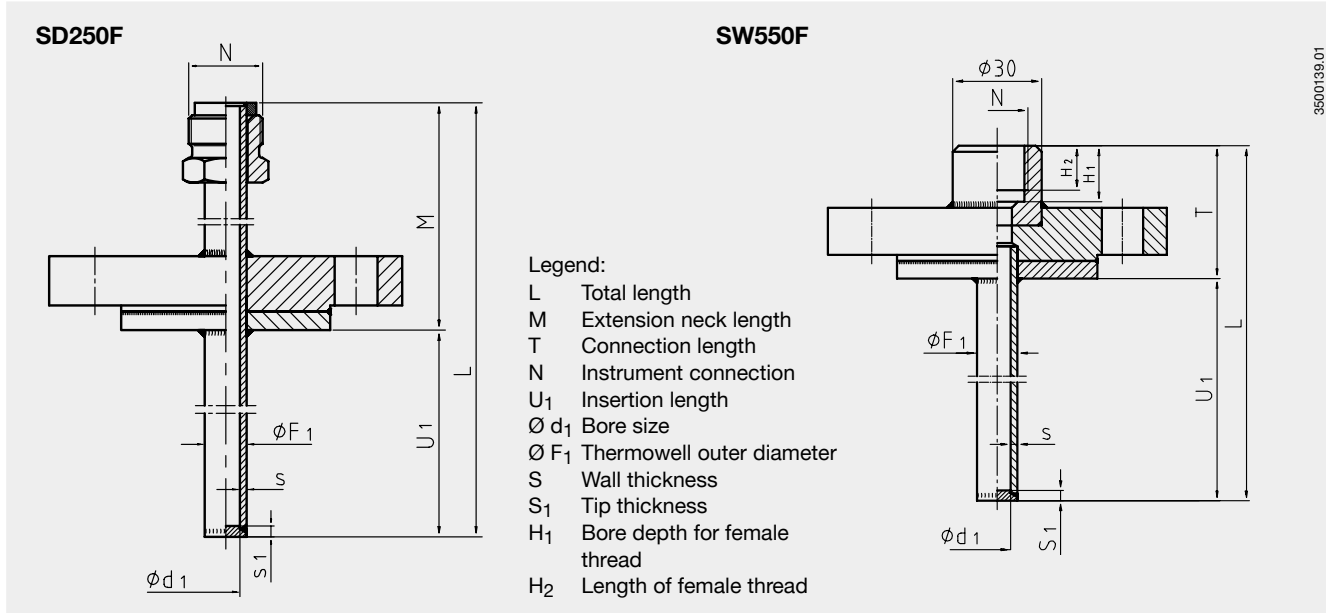
Optional extras

- 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

Dimensions in mm



Model	Dimensions in mm							Weight in kg	
	N	Ø F ₁	S	H ₁	H ₂	T	M	Flange DN 25 PN 16-40 U ₁ =100 mm	U ₁ =500 mm
SD250F	M 24x1.5	13.7	2.2	-	-	-	80	1.50	1.90
SW550F	G ½	13.7	2.2	19	15	45	-	1.50	1.90
SW550F	½ NPT	13.7	2.2	-	-	45	-	1.50	1.90

additional weight in kg with other flange		
DN 40	PN 16-40	0.76
DN 50	PN 16-40	1.63
1"	150 lbs	-0.46
1"	300 lbs	0.04
1"	600 lbs	0.22
1 ½"	150 lbs	0.22
1 ½"	300 lbs	1.34
1 ½"	600 lbs	1.85

Suitable stem lengths of mechanical thermometers

Model	Dial thermometers	
	Design of connection	Stem length l ₁
SD250F	3	l ₁ = L - 10 mm or l ₁ = U ₁ + M - 10 mm
SW550F	S / 4 / 5	l ₁ = L - 10 mm or l ₁ = U ₁ + T - 10 mm
SW550F	2	l ₁ = L - 30 mm or l ₁ = U ₁ + T - 30 mm

Ordering information

Model / Material / Flange / Instrument connection / Insertion length U₁ / Optional extras required

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

