TM 90.50

Thermowells

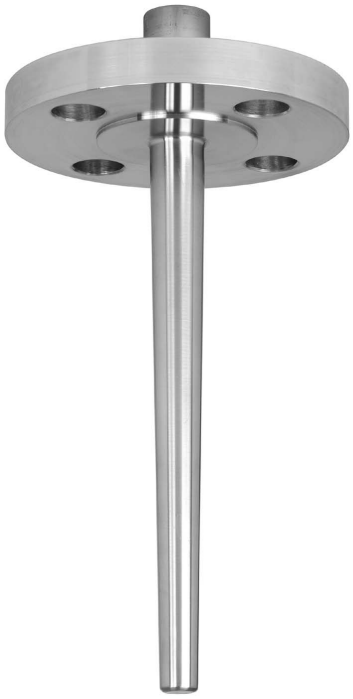
Solid Machined, with Flange

Thermometers

per WIKA Standard • Model SW400F

Application

The thermowells model SW400F are flange-fitted 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. These thermowells are used for mechanical thermometers as well as for electrical thermometers.



Standard features

Thermowell material
Stainless steel 1.4571

Flange
per DIN 2527 with sealing face Form C per DIN 2526

Nominal diameter
DN 25, DN 40, DN 50

Pressure rating
PN 16 - 40, PN 64 - 100

Instrument connection
Female thread G ½, ½ NPT

Bore size
Ø 6.2 mm, Ø 8.2 mm, Ø 10.2 mm

Insertion length U_1
160, 250, 300, 400, 500 mm

Total length L
Insertion length + connection length

Maximum process temperature [1)]
600 °C with thermowell material stainless steel 1.4571

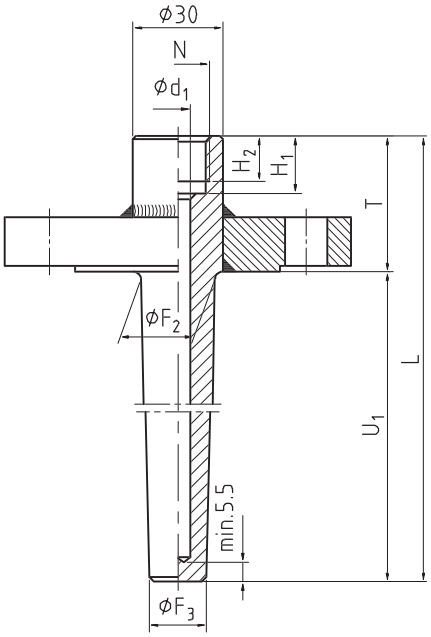
Maximum process pressure (static) [1)]
150 bar with thermowell material stainless steel 1.4571

Optional extras

- Other dimensions and materials
- Coating of wetted parts
- Armour plating with STELLIT®
- Quality certificates
- Wake frequency calculations according to Dittrich / Klotter or to ASME / ANSI PTC 19.3 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

1) Ratings depends on below parameters:
- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)

Dimensions



3336 306.01

Legend:

H_1 Bore depth for female thread
H_2 Length of female thread
L Total length
N Instrument connection
T Connection length
U_1 Insertion length
Ø d_1 Bore size
Ø F_2 Root diameter of thermowell
Ø F_3 Tip diameter of thermowell

Dimensions in mm							Weight in kg (flange DN 25 PN 16-40)	
N	Ø d_1	Ø F_2	Ø F_3	H_1	H_2	T	U_1 = 160 mm	U_1 = 500 mm
G ½	6.2	25	19	19	15	45	1.820	2.760
	8.2						1.790	2.670
	10.2						1.750	2.550
½ NPT	6.2			–	–		1.820	2.760
	8.2						1.790	2.670
	10.2						1.750	2.550

additional weight with other flange in kg		
DN25	PN64-100	1.230
DN40	PN16-40	0.820
	PN64-100	2.640
DN50	PN16-40	1.620
	PN64-100	4.300

Suitable stem lengths of mechanical thermometers

Dial thermometers

Design of connection	Stem length l_1		
S/4/5	l_1 = L - 10 mm	or	l_1 = U_1 + T - 10 mm
2	l_1 = L - 30 mm	or	l_1 = U_1 + T - 30 mm

Ordering information

State: Model / Material / Nominal diameter / Pressure rating / Sealing face / Instrument connection / Bore size / Insertion length U_1 / Connection length / 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.

WIKA Alexander Wiegand GmbH & Co. KG
Alexander-Wiegand-Straße · 63911 Klingenberg
☎ (0 93 72) 132-0 · Fax (0 93 72) 132-406/414
http://www.wika.de · E-mail: info@wika.de

9048057 GB 30 CM 12.01