

# Fabricated, with flange

## Version per DIN 43772 form 2F, 3F

### Models TW40-8, TW40-9

WIKA data sheet TW 95.40

#### Applications

- Chemical industry, process technology, apparatus construction
- For low and medium process loads

#### Special features

- Version per DIN 43772
- Thermowell form Model TW40-8: form 2F  
Model TW40-9: form 3F
- For highly corrosion-resistant coating
- With integrated neck tube
- Model TW40-9: fast-response feature

#### Description

**Thermowell material**  
Stainless steel 1.4571

**Process connection**  
Flanges to valid national or international standards like e.g. EN 1092-1, DIN 2527, ASME B 16.5

**Connection to the thermometer**  
M24 x 1.5 male nut rotatable or G ½, ½ NPT female

**Bore size**  
Ø 6.1 mm, Ø 7 mm, Ø 9 mm, Ø 11 mm, Ø 12.2 mm

**Insertion length U<sub>1</sub>**  
to customer specification

**Overall length L**  
Model TW40-8: insertion length U<sub>1</sub> + 80 mm  
Model TW40-9: insertion length U<sub>1</sub> + 82 mm



**Fig. left: thermowell with flange, model TW40-8**  
**Fig. right: thermowell with flange, model TW40-9**

#### Coating

- PFA  
Coat thickness min. 0.4 mm (standard) or min. 0.6 mm (option)
- E-CTFE (Halar®)  
Coat thickness min. 0.6 mm

**Maximum process temperature <sup>1)</sup>**  
see rating charts DIN 43772  
dependent on the selected coating

**Maximum process pressure**  
dependent on the flange pressure rating

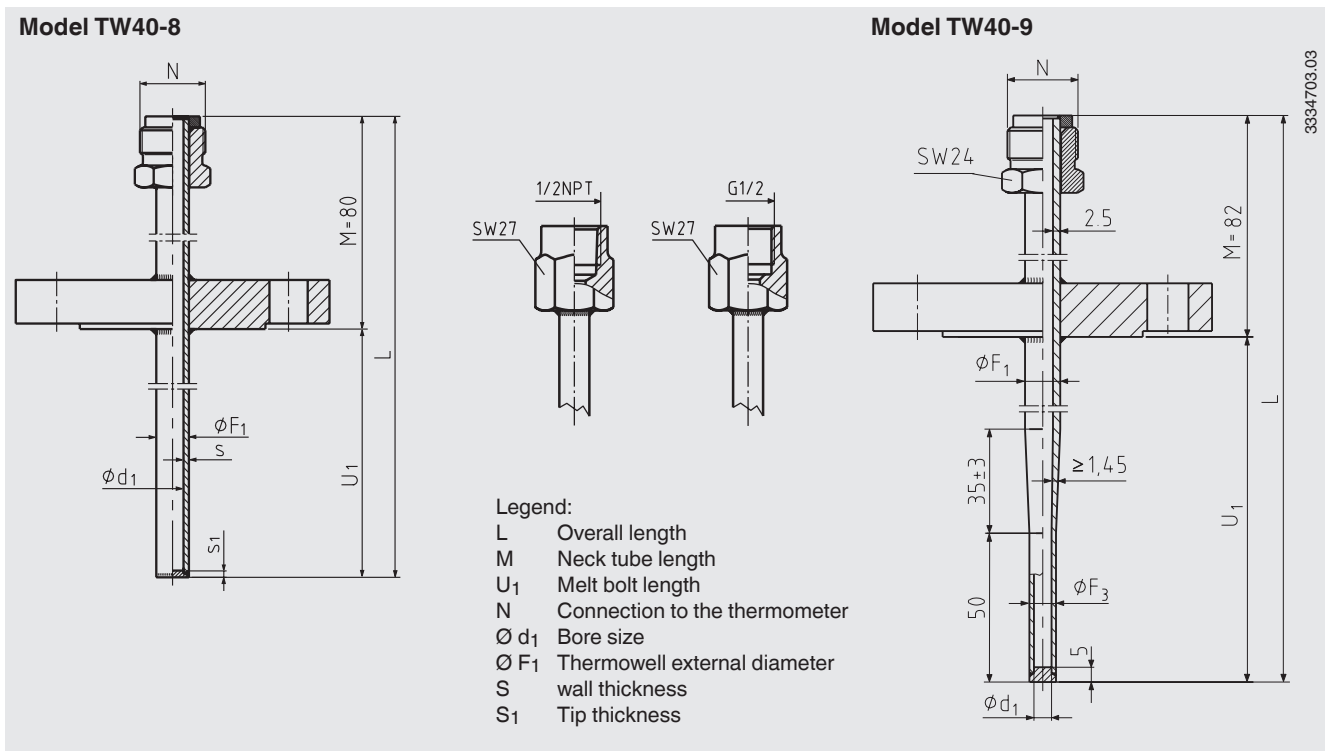
- 1) Rating depends on the parameters below:
- Process medium
  - Process pressure and temperature
  - Flow rate
  - Design of thermowell (dimensions, material)

# Options

- Other dimensions and materials
- Quality certificates
- Thermowell calculation to Dittrich/Klotter is recommended in critical applications as a WIKA engineering service.

Please find further information in our separate Technical Information IN 00.15 "Strength calculation for thermowells"

## Dimensions in mm



Dimensions in mm					Weight in kg
$\varnothing d_1$	$F_1$	$S$	$S_1$	$N$	Flange DN 25 PN 16-40 $U_1 = 225$ mm
7	9	1	3	M24 x 1.5, G 1/2 or 1/2 NPT	1.39
7	11	2	3	M24 x 1.5, G 1/2 or 1/2 NPT	1.55
7	12	2.5	3.5	M24 x 1.5, G 1/2 or 1/2 NPT	1.64
9	14	2.5	3.5	M24 x 1.5, G 1/2 or 1/2 NPT	1.71
6.1	12	2.5	5	M24 x 1.5, G 1/2 or 1/2 NPT	1.64

Additional weight in kg at other flanges		
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 1/2"	150 lbs	0.22
1 1/2"	300 lbs	1.34
1 1/2"	600 lbs	1.85

## Suitable stem lengths (mechanical dial thermometers)

Connection type	Stem length $l_1$
S / 3 / 4 / 5	$l_1 = L - 10 \text{ mm}$ or $l_1 = U_1 + M - 10 \text{ mm}$
2	$l_1 = L - 30 \text{ mm}$ or $l_1 = U_1 + M - 30 \text{ mm}$

## Sealing face roughness

Flange standard		AARRH in $\mu\text{inch}$	Ra in $\mu\text{m}$	Rz in $\mu\text{m}$
ASME	Stock finish	125 - 250	3.2 - 6.3	-
B 16.5	Smooth finish	< 125	< 3.2	-
	RTJ	< 63	< 1.6	-
	Tongue / Groove	< 125	< 3.2	-
EN 1092	Form B1	-	3.2 - 12.5	12.5 - 50
	Form B2	-	0.8 - 3.2	3.2 - 12.5
DIN 2527	Form C	-	-	40 - 160
	Form E	-	-	< 16

## Ordering information

Model / Thermowell form / Thermowell material / Dimension of thermowell stem / Connection to the thermometer / Bore / Nominal width / Pressure rating / Sealing face / Insertion length  $U_1$  / Overall length L / Coating / Assembly with resistance thermometer or thermocouple / Certificates / Options

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