

## BAR STOCK (SANITARY)

## Model - TW

#### Special Features:

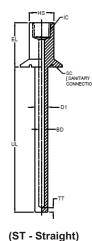
- Design as per PTC 19.3.
- These Thermowells are manufactured from solid bar stock and installed into the process by using clamp connection.
- The design is suitable for all type of RTD's, Thermocouples, Mechanical as well as digital Thermometers.
- The smooth and polished surface of the wetted parts helps for easy cleaning and prevent potential contamination of the process.
- Available in various shapes like Straight, Straight with reduced tip, partial taper & full taper.

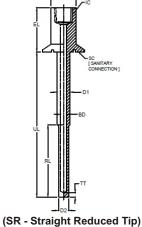
#### Application:

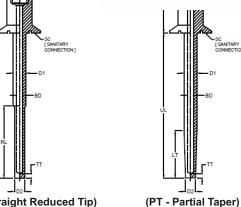
- · Chemical Plants
- **Petrochemical Plants**
- On Shore & Off Shore
- **Engineering Plants**
- Other similar process Industries

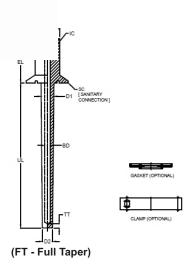


#### Thermowell Drawings:









Note: Drawings are not to scale. All Dimensions are in mm.

HS - Finished Head Size

IC - Instrument Connection

SC - Sanitary Connection

**BD** - Bore Diameter

TT - Tip Thickness

D1 - Major Diameter

D2 - Minor Diameter

EL - Extension Length

UL - Insertion Length

RL - Reduced Tip Length

LT - Taper Length

## SELECTION OF MODEL

#### (1) MODEL CODE

#### (2) TYPE

Straight	ST
Straight Reduced Tip	SR

Partial Taper	PT
Full Taper	FT

#### (3) MATERIAL

AISI 304L SS	S4L
AISI 316 SS	S6
AISI 316L SS	S6L

**TW7** 

ST

**S6** 

#### (4) INSTRUMENT CONNECTION "IC"

3/8" BSP(F)	3BF
3/8" NPT(F)	3NF
3/8" R(F)	3RF
3/8" G(F)	3GF
1/2" BSP(F)	4BF
1/2" NPT(F)	4NF

1/2" G(F)	4GF
1/2" R(F)	4RF
3/4" BSP(F)	5BF
3/4" NPT(F)	5NF
3/4" G(F)	5GF

3/4" R(F)	5RF
M18 x 1.5(F)	3MF
M20 x 1.5(F)	4MF
M22 x 1.5(F)	5MF
M24 x 1.5(F)	6MF

Note: Other Connections are available on request.

#### (5) SANITARY CONNECTION "SC"

1 1/2" Sanitary Connection	1.5
2" Sanitary Connection	2.0
2 1/2" Sanitary Connection	2.5

#### (6) FINISHED HEAD SIZE "HS"

PLEASE SPECIFY IN mm

e.g.: For 28mm Finished head size, Specify HS28

#### (7) TYPE OF HEAD

Hex Headed*	НН
Round Headed with Spanner Slots	RS

<sup>\*</sup> Maximum "U" Length below Triclover will be 250mm.

#### (8) EXTENSION / LAGGING LENGTH "EL"

EL50 (Standard)

e.g.: For length 50mm, mention EL50.

#### (9) BORE DIAMETER "BD"

PLEASE SPECIFY IN mm

e.g.: For length 9mm, mention BD9.

Note: Refer Thermowell design procedure for dimension as per PTC 19.3

#### (10) MAJOR DIAMETER

ST

Major Diameter "D1" Please specify in mm e.g. For 22mm mention D122

Major Diameter of Taper "D1"

Please specify in mm e.g. For 22mm mention D122

**Minor Diameter of Taper "D2"** Please specify in mm e.g. For 18mm mention D218

...

Major Diameter of Step "D1" Please specify in mm e.g. For 22mm mention D122

**Minor Diameter of Step "D2"** Please specify in mm e.g. For 18mm mention D218

Length of Step "RL"
Please specify in mm
e.g. For 100mm step length from tip,

Note: Refer Thermowell design procedure for dimension as per PTC 19.3

specify RL100

ьт

Major Diameter of Taper "D1" Please specify in mm

e.g. For 22mm mention D122

Minor Diameter of Taper "D2" Please specify in mm e.g. For 18mm mention D218

**Length of Step "TL"**Please specify in mm
e.g. For taper length from tip of 150mm, specify TL150

#### (11) TIP THICKNESS "TT"

TT5 (Standard)

e.g.: For Tip Thickness 5mm, specify TT5.

#### (12) INSERTION LENGTH "UL" (Below Sanitary Connection)

PLEASE SPECIFY IN MM

e.g.: For 800mm, mention UL800.

Note: Refer Thermowell design procedure for dimension as per PTC 19.3

4NF

1.5

HS28

нн

EL50

BD9

XX

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TT5

**UL800** 

## **SELECTION OF MODEL**

#### (13) OPTIONS

Plug & Chain in SS	CP
Marking by Laser	LM
SS Tag Plate	TS

#### (14) SANITARY CLAMP

1 ½" Clamp AISI 304 SS	C1
2" Clamp AISI 304 SS	C2
2 1/2" Clamp AISI 304 SS	C3

#### (15) GASKET

1 ½" PTFE Gasket	G1
2" PTFE Gasket	G2
2 ½" PTFE Gasket	G3

#### (16) TESTS & CERTIFICATION

Radiography fo Bore Concentricity	TC1
Ultrasonic Test	TC4
PMI Test	TC5
Dye Penetration Test	TT4

Wake Frequency Calculations as [per PTC 19.3*	TC7
Certification for Oxygen Service	TC9
Chemical Composition Test	TT1
3.1B Material Conformity Certificate	TT2

XX

**C1** 

G1

XX

<sup>\*</sup>Please specify Fluid, Max. Pressure, Temperature & Flow velocity for wake frequency calculations as per PTC 19.3.

Example	1	2	3	4	5	6	7	8	9
SELECTION OF MODEL	TW7	ST	S6	4NF	1.5	HS28	нн	EL50	BD9
Example	10	11	12	13	14	15	16		
SELECTION OF MODEL	xx	TT5	UL800	xx	C1	G1	xx		

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