TWF Thermowell with Flanged Process Connection

Description & Features

- Thermowells are recommended for temperature instruments in process systems where pressure, velocity, or viscous, abrasive, and corrosive materials are present individually or in combination. A properly selected thermowell will protect the temperature instrument from damage resulting from these process variables. Additionally, a thermowell enables removal of the temperature instrument for replacement, repair, or testing without affecting the process system.
- Full penetration weld design construction
- Thermowells are available in virtually any material to fit different applications.
  Solid-machined thermowells are manufactured from barstock.

Applications

- Chemical plant
- Petrochemical industry
- Power plant

Specifications

Construction
Stepped construction standard;
Tapered or straight construction available upon request

Thermowell Material
AISI 304 stainless steel, AISI 316 stainless steel,
AISI 316L stainless steel, and Duplex stainless steel,
Other materials are available upon requests

Instruments Connection
1/2" NPT female standard,
other thread size are available upon request

Process Connection Flange Standard
Flange as per EN 1092-1 or ASME B 16.5,
also others standard versions are available on request

Stem Length
2.5” (63mm), 4” (100mm), 6” (150mm), 9” (229mm),
12” (305mm)
other thread size are available upon request

Length "H" Dimension
60mm standard
Others，please specify the length in mm

Tip Diameter
16mm, 18mm, 20mm, 22mm, 24mm
Others，please specify the length in mm

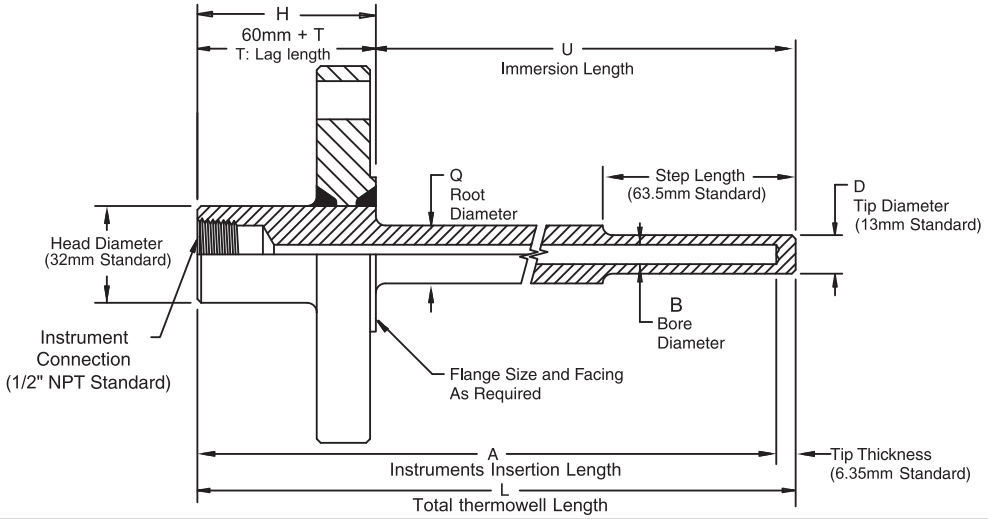
Immersion Length (Excluded Thread Length)
2.5" (63mm),4" (100mm)
Others，please specify the length in mm

Bore Diameter
7mm standard
Others，please specify the length in mm

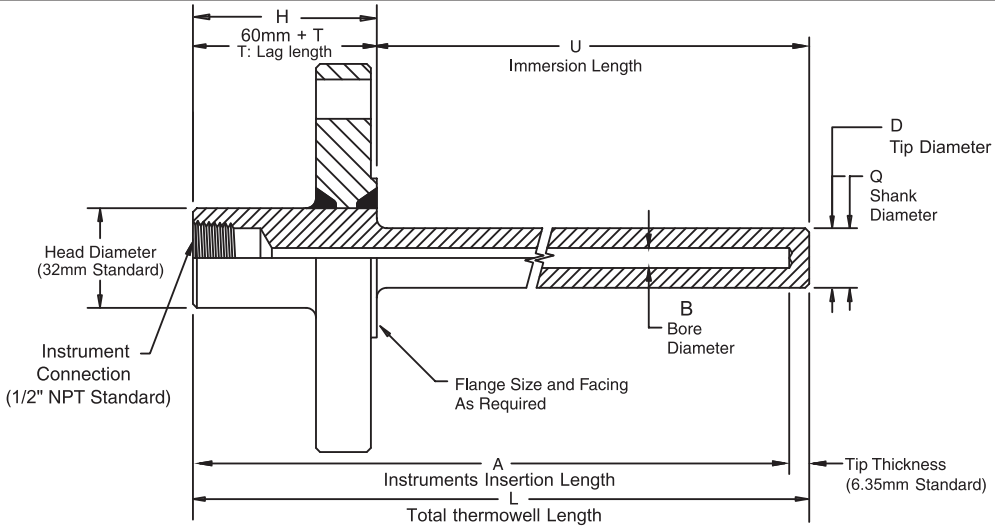
Option
Oxygen service
NACE MR 0175-2002
Please specify the length in mm for step length M
stepped style not 2.5”

Dimensions (Unit: mm)

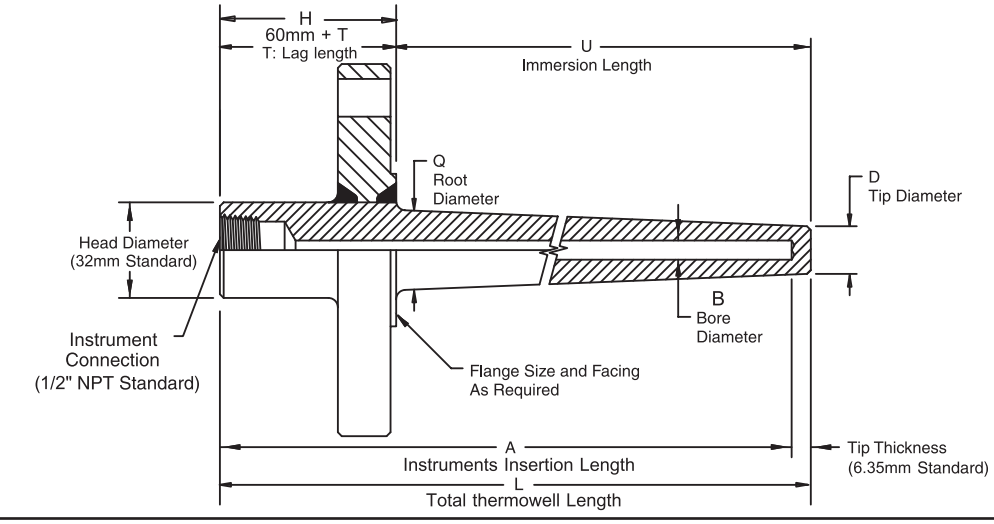
Stepped (Code: SM)



Straight (Code: SH)



Tapered (Code: ST)



TWF Thermowell with Flanged Process Connection

Ordering Code TWF Series

	Field No.	Code	Specifications
1.		TWF	**Series**
			Shank Style
2.		SM	Stepped
		SH	Straight
		ST	Tapered
			Wetted Parts Material
3.		T	304 SS
		S	316 SS
		L	316L SS
		P	316 SS with PTFE Coated
		V	Alloy 800
		C	Inconel 600
		D	Duplex 2205
		M	Monel
		H	Hastelloy C
		A	Tantalum
		Q	Titanium
		Z	Special request
			Instruments Connection Size
4.		4	1/4"
		2	1/2"
		5	3/4"
		3	3/8"
		Z	Special request
			Instruments Connection Threaded Standard
5.		N	NPT
		G	G B
		T	BSPT
		P	BSPP
		M	M20X1.5
		Z	Special request
			Overall Length "L" in mm
6.		120	120mm
		150	150mm
		ZZZ	Others , please specify the length in mm
			Length "H" Dimension in mm
7.		60	60mm, standard, lag length "T" = 0
		ZZ	Others please specify "H" in mm with wrench allowance length "W" = 60mm add lag length "T" in mm
			Immersion Length "U" (Excluded Thread Length) in mm
8.		063	2.5" (63mm)
		100	4" (100mm)
		150	6" (150mm)
		ZZZ	Other, please specify the length in mm

NOTE

Only when U≤1500mm, a thermowell is machined from one bar stock
U>1500mm, a thermowell is welded from two components

Ordering Code TWF Series

Field No.	Code	Specifications
		Flange Material
9.	T	304 SS
	S	316 SS
	L	316L SS
	P	316 SS with PTFE Coated
	M	Monel
	H	Hastelloy C
	A	Tantalum
	Q	Titanium
	Z	Special request
		Process Connection Standard
10.	A	ASME B 16.5
	E	EN 1092-1
	C	Class series: HG/T 20615~20635 2009
	P	PN series: HG/T 20592~20614 2009
		Process Connection Flange Size
11.		**ASME B 16.5 HG/T 20615~20635 2009 NPS**
	02	1/2”
	10	1”
	15	1.5”
	20	2”
	25	2.5”
	ZZ	Special request
		EN 1092-1 HG/T 20592~20614 2009 DN (Unit: mm)
	B	DN 20
	D	DN 25
	E	DN 40
	F	DN 50
	G	DN 65
	Z	Special request
		Process Connection Pressure Rating
12.		**ASME B 16.5 HG/T 20615~20635 2009 Class**
	5	150#
	3	300#
	6	600#
	9	900#
	1	1500#
	2	2500#
		EN 1092-1 HG/T 20592~20614 2009 PN (Unit: bar)
	P	PN 16 bar
	K	PN 25 bar
	S	PN 40 bar
	V	PN 63 bar
	B	PN 100 bar
	C	PN 160 bar
	T	PN 260 bar
	R	PN 420 bar
	Z	Special request
		Sealing Face
13.	R	RF
	F	FF
	J	RTJ
	T	RJ
	Z	Special request

Ordering Code TWF Series

Field No.	Code	Specifications
		Bore Diameter "B" in mm
14.	07	7mm standard
	09	9mm
	11	11mm
	ZZ	Others，please specify the length in mm
		Root Outside Diameter "Q" in mm
15.	16	16mm
	18	18mm
	20	20mm
	22	22mm
	ZZ	Others，please specify the length in mm
		Tip Outside Diameter "D" in mm
16.	16	16mm
	18	18mm
	20	20mm
	22	22mm
	ZZ	Others，please specify the length in mm
		Option
17.	VN	Oxygen service
	RR	NACE MR 0175-2002
	ZZ	Please specify the length in mm for step length M stepped style not 2.5”

NOTE - USER RESPONSIBILITY

For most industrial applications. A properly selected thermowell must be based on application parameters: fluid type, temperature, pressure, and fluid velocity. Most thermowell failures are due to vibration induced by fluid flow.