



## TW/F FLANGED TYPE THERMOWELLS



**TW/FS Flanged Type  
Straight Thermowell**



**TW/FT Flanged Type  
Tapered Thermowell**



**TW/FSt Flanged Type  
Stepped Thermowell**

### ■ GENERAL

Thermowells are protecting tubes which are manufactured by solid bar stock or pipe material to protect thermocouples, resistance thermometers and other temperature sensors. Especially, they are used widely in critical applications where pressure, viscosity, fluid velocity, chemical and mechanical corrosive abrasive materials are present individually or in combination.

A properly selected thermowell will protect the temperature sensor from possible damage resulting from these process variables. A thermowell permits removal of the temperature sensors for replacement, repair or testing without effecting the process or system.

### ■ ELIMKO THERMOWELLS

Elimko thermowell types in process applications;

TW/T : Threaded Type  
TW/F : Flanged Type

TW/W : Weld-in Socketed Type  
TW/WI : Weld-in Type

TW/V : Vanstone Flanged Type

## STANDART FEATURES

Bar Materials			Bore Diameter
ASTM A304	DIN 1.4571	INCOLOY 825	5.0 mm
ASTM A316 Ti	DIN 1.4749	HASTELLOY C4	6.0 mm
ASTM A316 L	DIN 1.4828	BRASS	6.6 mm
ASTM A310	DIN 1.4841	PTFE	7.0 mm
ASTM A321	DIN 1.7335 MOLIBDEN		8.0 mm
ASTM A446	INCONEL 600		9.0 mm
ASTM A105	INCOLOY 800		10.0 mm

Note 1: Elimko Thermowells can be produced additionally to the standart bore diameters, it is also possible to produce bore diameters from 4 mm to 22 mm, up to maximum 1200 mm length.

Note 2 : The above mentioned solid bar stock materials are our standart types. Special materials could be supplied upon receipt of satisfactory orders.

Others : Haynes 25, Carpenter, 20 CB, Nichrome, HCF, 50Co-30Cr, Monel 400, Titanium, Tantalum, X-750, B, C276, X.

Note 3 : Satellite coating can be produced against abrasion.

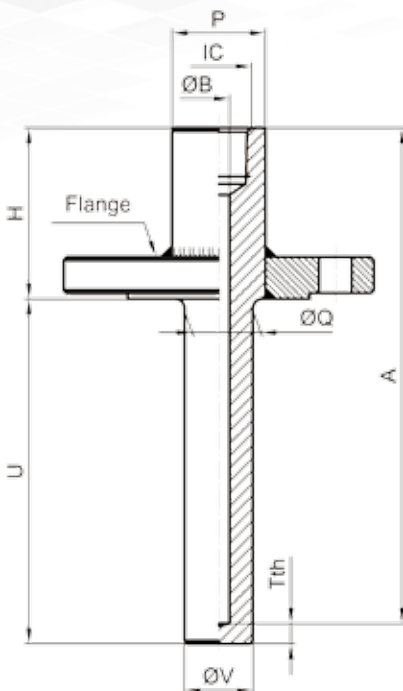
### Tests

Thermowells can be tested after produced on request. These tests are made by special institutions for a fea.

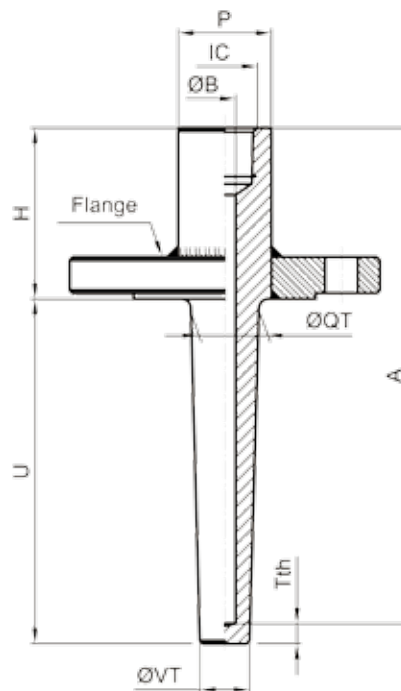
- a- Pressure tests
- b- X-ray tests

## TW/F FLANGED TYPE THERMOWELL CODING

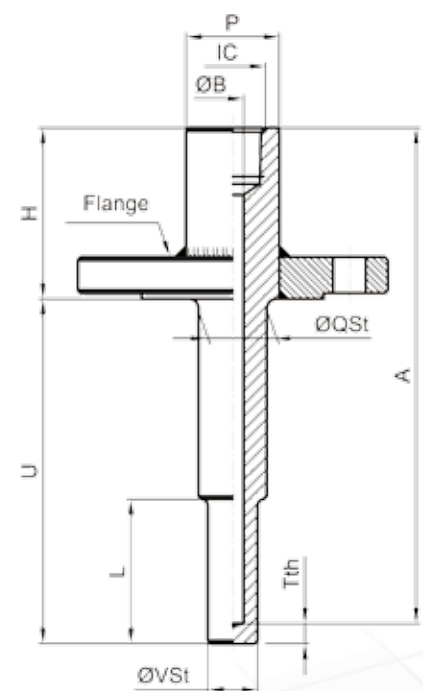
**TW/FS Straight**



**TW/FT Tapered**



**TW/FS St Stepped**



P : Welding Diameter  
 Ø IC : Instrument Connection  
 Ø B : Bore Diameter  
 H : Head Length

U : Insertion Length  
 A : Stem Length  
 Flanş : Flange Type & Diameter  
 Ø Q/QT/QSt : Stem/Root Diameter

Ø V/VT/VSt : Type Diameter  
 Tth : Type Thickness  
 L : Type Length

TW	F	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
		B		Pr/s	Fs		Ft		IC		P		L	A	Q	V	Tth	Wm	Fm	O
	Type	Bore Diameter	Production Type	Production Standard	Flange Size	Flange Rate	Flange Type	Flange Welding Type	Instrument Connection	Head Length	Head Diameter	Insertion Length	Type Length	Stem Length	Stem/Root Diameter	Type Diameter	Type Thickness	Well Material	Flange Material	Options

TW	F	Flanged Type Thermowells
F	FS	Straight Type
	FT	Tapered Type
	FSt	Stepped Type

01	B	Bore Diameter
B	.....	Please write B diameter like B ..... Example: B 6

02	Pr/t	Production Type
Pr/t	SB	Solid Bar Drilled
	SBT	Solid Bar Tapered
	P	Pipe

03	Pr/s	Production Standard
Pr/s	M	Metric
	I	Non Metric

04	Fs	Flange Size
FsM	FsM01	DN25
	FsM02	DN40
	FsM03	DN50
	FsM04	DN64
	FsM....	* .....
FsS	FsS01	1/2"
	FsS02	1"
	FsS03	1 1/2"
	FsS04	2"
	FsS....	* .....

05	Fr	Flange Rate
FrM	FrM01	PN10
	FrM02	PN25
	FrM03	PN40
	FrM04	PN100
	FrM....	* .....
FrS	FrS01	150#
	FrS02	300#
	FrS03	600#
	FrS04	1500#
	FrS....	* .....

06	Ft	Flange Type
Ft	RF	Raised Face
	FF	Flat Face
	RTJ	Ring Type Joint
	THR	Threaded Raised Face Flange

07	Fwt	Flange Welding Type
Fwt	Fp	Full Penetration
	Pp	Partial Penetration
	Thr	Threaded & Welded
	Fwt00	Without Welding

08	IC	Instrument Connection
IC	IC01	M20x1.5
	IC21	1/2" NPT
	IC....	* .....

09	H	Head Length
H	H01	60 mm
	H02	86 mm
	H21	2- 1/2
	H22	3- 1/2
	H....	* .....

10	P	Head Diameter
P	P01	30 mm
	P02	1 1/2"
	P....	* .....

11	U	Insertion Length
U	.....	Please write U length like U ..... Example: U 100

12	L	Type Length
L	L00	No Stepped
	L01	50 mm
	L02	65 mm
	L21	2"
	L22	2 1/2"
	L....	* .....

13	A	Stem Length
A	.....	Please write A length like A ..... Example: A 150

14	Q	For TW/FS Stem/Root Diameter
Q	Q01	16 mm
	Q02	19 mm
	Q03	22 mm
	Q21	5/8"
	Q22	3/4"
	Q23	7/8"
	Q....	* .....

\* Please give the Process Connection (P), Instrument Connection (IC), Head Length (H), Type Length (L), Stem/Root Diameter (Q,QT, QSt), Type Diameter (V, VT, VSt), Type Thickness (Tth), Well Material (Wm), Flange Material (Fm) and Options (O) of the thermowells, if they are not exist on the tables.

\*\* Please apply to Elimko for these kinds of well and flange materials.

14	QT	For TW/FT Stem/Root Diameter
QT	QT01	27 mm
	QT21	1.063
	QT...	* .....

14	QSt	For TW/FSt Stem/Root Diameter
QSt	QSt01	19 mm
	QSt21	3/4"
	QSt...	* .....

15	V	For TW/FS Type Diameter
V	V01	16 mm
	V02	19 mm
	V03	22 mm
	V21	5/8"
	V22	3/4"
	V23	7/8"
	V...	* .....

15	VT	For TW/FT Type Diameter
VT	VT01	16 mm
	VT02	19 mm
	VT21	5/8"
	VT22	3/4"
	VT...	* .....

15	VSt	For TW/FSt Type Diameter
VSt	VSt01	12,7 mm
	VSt21	1/2"
	VSt...	* .....

16	Tth	Type Thickness
Tth	Tth01	6 mm
	Tth21	1/4"
	Tth...	* .....

17	Wm	Well Material
Wm	Wm01	ASTM A304
	Wm02	ASTM A316 Ti
	Wm03	ASTM A316 L
	Wm04	ASTM A310
	Wm05	ASTM A321
	Wm06	ASTM A446
	Wm07	ASTM A105
	Wm08	DIN 1.4571
	Wm09	DIN 1.4749
	Wm10	DIN 1.4828
	Wm11	DIN 1.4841
	Wm12	DIN 1.7335 MOLIBDEN
	Wm13	INCONEL 600 **
	Wm14	INCOLOY 800 **
	Wm15	INCOLOY 825 **
	Wm16	HASTELLOY C4 **
	Wm17	MONEL 400 **
	Wm18	PTFE
Wm...	* .....	

18	Fm	Flange Material
Fm	Fm01	ASTM A304
	Fm02	ASTM A316 Ti
	Fm03	ASTM A316 L
	Fm04	ASTM A310
	Fm05	ASTM A321
	Fm06	ASTM A446
	Fm07	ASTM A105
	Fm08	DIN 1.4571
	Fm09	DIN 1.4749
	Fm10	DIN 1.4828
	Fm11	DIN 1.4841
	Fm12	DIN 1.7335 MOLIBDEN
	Fm13	INCONEL 600 **
	Fm14	INCOLOY 800 **
	Fm15	INCOLOY 825 **
	Fm16	HASTELLOY C4 **
	Fm17	MONEL 400 **
	Fm18	PTFE
Fm...	* .....	

19	O	Options
O	O01	Screw Plug and Chain
	O02	Tag No Written on SS Plate
	O03	Pressure Test
	O04	Material Certificate
	O...	* .....

## EXAMPLES

**TW/FS-B18-P-M-FsM02-FrM04-THR-Fwt00-IC01-H110-P01-U120-L00-A130-Q02-V02-Tth02-Wm18-Fm18-O01-O02-O03**

**Well Type (TW)** = TW/FS Flanged Type Straight Thermowell,

**Bore Diameter (B)** = 18 mm, **Production Type (P)** = Pipe, **Production Standard (M)** = Metric,

**Flange Size (FsM02)** = DN40, **Flange Rate (FrM04)** = PN100,

**Flange Type (THR)** = Threaded Raised Face Flange, **Flange Welding Type (Fwt00)** = Without Welding,

**Instrument Connection (IC01)** = M20X1,5, **Head Length (H02)** = 110 mm,

**Head Diameter (P01)** = 30 mm, **Insertion Length (U)** = 1200, **Type Length (L00)** = No Stepped,

**Stem Length (A)** = 1300, **Stem/Root Diameter (Q02)** = 22 mm, **Type Diameter (V02)** = 22 mm,

**Type Thickness (Tth02)** = 10 mm, **Well Material (Wm18)** = PTFE, **Flange Material (Fm18)** = PTFE,

**Options (001)** = Screw Plug and Chain / **(002)** = Tag No Written on SS Plate / **(003)** = Pressure Test

## HOW TO ORDER

Select one of the types of TW/T, TW/W, TW/W, TW/V, TW/F and TW/WI according to the process. And specify; thermowell material, process connection, connection type, type of the flange (if flanged), it's material, bore diameter, insertion length, length of connection.



The company's policy is one of continuous product improvement. We reserve the right to modify the information contained herein without notice.



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