

WISE[®]

THERMOWELL

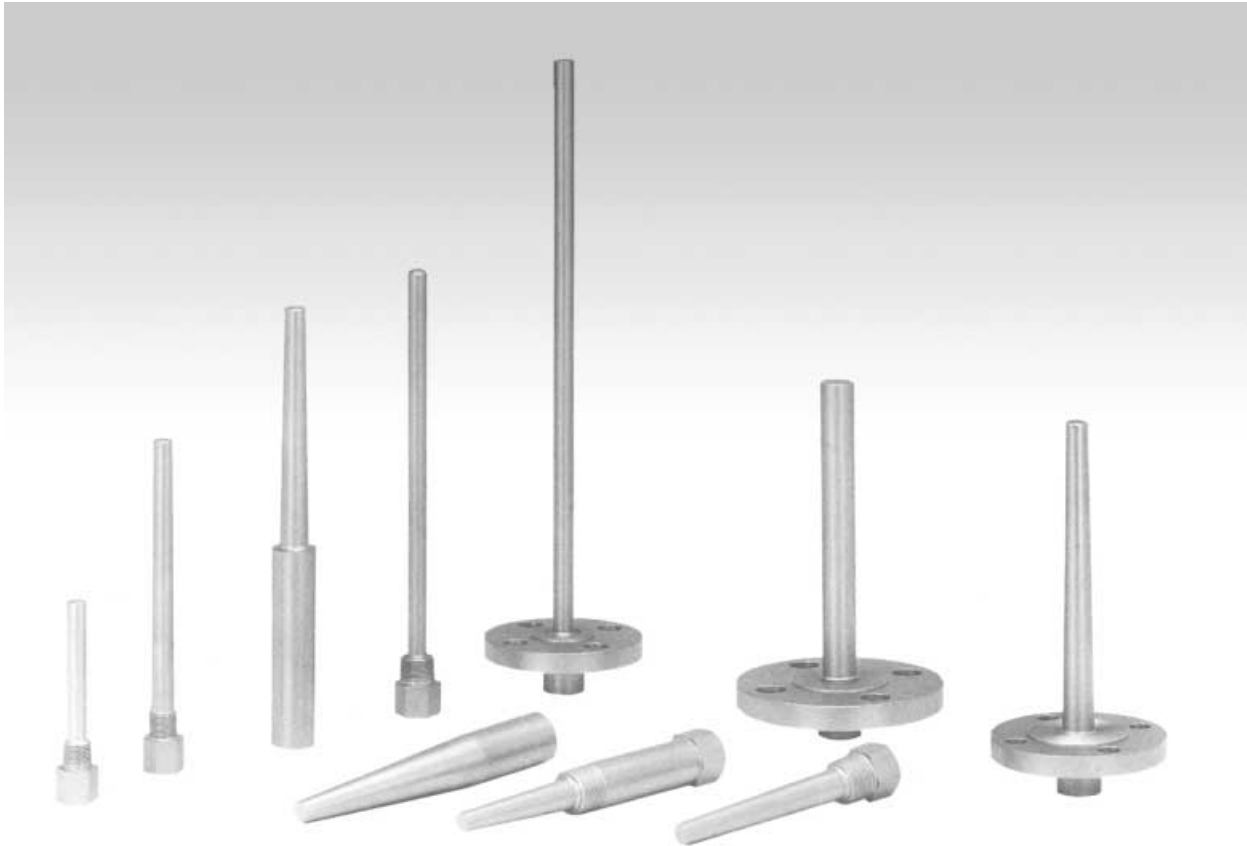
THERMOWELL

MODEL

CAT. NO

.....

Pipe Type Thermowell.....	A500, A510	AD05-01
Bar Stock Thermowell with Thread Connection	A600, A601, A602	AD06-01
Bar Stock Thermowell with Flange Connection	A610, A611, A612	AD06-02
Bar Stock Thermowell with Welded Connection.....	A630, A631, A632	AD06-03



INTRODUCTION

Thermowells are used for protecting temperature sensing elements from excessive pressure, from solid particles in suspension or from aggressive fluids. Another advantage of thermowell is the possibility to remove the temperature sensing instruments without any risk of effecting the tightness of the enclosure and without stopping the process.

SELECTION OF THERMOWELL

-MATERIAL

In general, the thermowell material chosen for the installation is governed mainly by the corrosion conditions the thermowell will face.

Recommended materials for various services are given in the corrosion table.

Occasionally the material consideration is one of strength rather than corrosion. For example, a stainless steel thermowell may be required for high pressure water service where otherwise a brass thermowell would be satisfactory from a corrosion standpoint.

-INSERTION

The distance from the end of the well to the underside of the thread, or other connection means, (designated as "U") is the insertion length.

-BORE SIZE

Almost any installation uses several types of temperature measuring instruments.

The selection of a standard bore diameter can produce extreme flexibility within the plant.

The bore size of thermowells is shown in this Catalogue Ordering Information.

-TAPERED OR STRAIGHT TYPE

Tapered type thermowells provide greater stiffness for the same sensitivity. The higher strength to weight ratio gives these thermowells higher natural frequency than for equivalent length straight type thermowells, thus permitting operation at higher fluid velocity.

PIPE TYPE THERMOWELLS

MODEL : A500, A510



ORDERING INFORMATION

BASE MODEL - 1st thru 4th characters

A500 : Thread Connection
 A510 : Flanged Connection

5th Character- Extension
 0= None 1= Extension

6th Character- Material of well
7th Character-Material of flange(★)

A=S25C	B=304SS	C=316SS	D=304LSS
E=316LSS	F=310SS	G=321SS	H=446SS
J=Inconel	K=Hast-C	L=Monel	M=Titanium
N=Tantalum clad	Y=A182-F11	P=304SS+PTFE Lining	
Q=316SS+PTFE Lining		R=304SS+PTFE Coating	
S=316SS+PTFE Coating		T=Incoloy	
W=A105		Z=Others	

Note (★)Please give X to 7th character for A500

8th Character- Internal Connection
 0=1/2" NPT
 1=1/2" PT
 9=Others

9th &10th Characters- Pipe Size
 H9=12.0MM A9=14.0MM G9=15.0MM
 F9=17.3MM E9=21.7MM

11th Character- Process Connection Size
 A=1/2" B=3/4" C=1" D=1 1/4" (★) E=1 1/2" (★)
 F=2" (★) G=2 1/2" H=(★) G=4" (★) Z=Others

Note (★)Available for Flanged Connection Only

12th Character- Process Connection Type

A=NPT B=PT
 C=150#RF D=150#RFSF E=150#FF F=300#RF G=300#RFSF
 H=300#FF J=600#RF K=600#RFSF
 L=10KRFF M=10KRFSF N=10KFF P=20KRFF Q=20KRFSF
 R=20KFF Z=Others

13th Character- Insertion Length ("U"-Length)

0=80 1=100 2=150 3=200 4=250 5=300 6=350
 7=400 8=450 A=500 B=600 C=700 D=800 E=900
 F=1000 G=1500 H=2000 J=2500 K=3000 L=3500 M=4000
 N=5000 P=6000 Q=7000 R=8000 S=9000 T=10000
 Z=Others

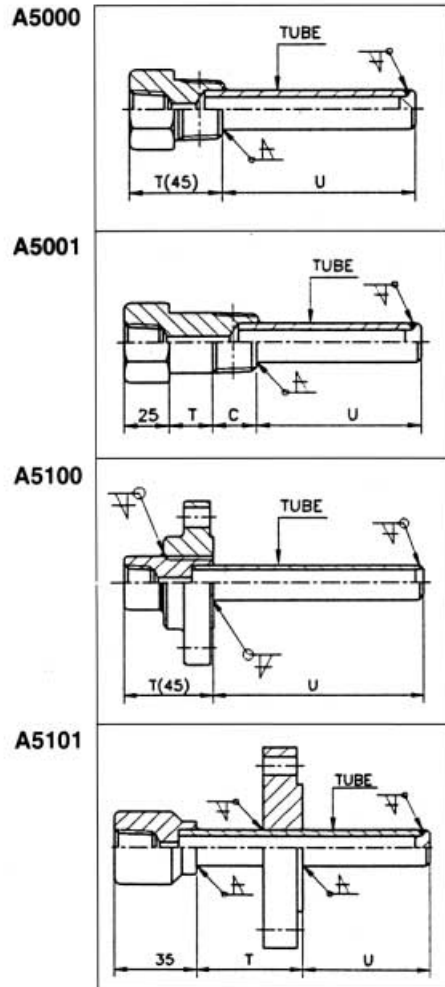
Note Please choose a code of next higher length if applicable length is not. Actual length shall be specified.

14th Character-Extension Length ("T"-Length)
 0=None(MFR.STD) 1=Bleow 50MM 2=More than 50MM

Note Actual length shall be specified.

15th Character-Options
 0=None
 1=Plug & Chain

A5000BXOH9BA400 SAMPLE ORDERING NUMBER



BAR STOCK THERMOWELLS WITH THREAD CONNECTION MODEL : A600, A601, A602



ORDERING INFORMATION

BASE MODEL - 1st thru 4th characters
A600 : Straight Bar Stock (Thread Connection Type)
A601 : Tapered Bar Stock (Thread Connection Type)
A602 : Stepped Bar Stock (Thread Connection Type)

15th Character-Options

0=None
 1=Plug & Chain

5th Character- Extension

0= None 1= Extension

A6000BXOBOBA400 SAMPLE ORDERING NUMBER

6th & 7th Characters - Material

AX=S25C	BX=304SS	CX=316SS	DX=304LSS
EX=316LSS	FX=310SS	GX=321SS	HX=446SS
JX=Inconel	KX=Hast-C	LX=Monel	MX=Titanium
NX=Tantalum clad (★)		PX=304SS+PTFE Lining	
QX=316SS+PTFE Lining		RX=304SS+PTFE Coating	
SX=316SS+PTFE Coating			
WX=A105	YX=A182-F11	TX=Incoly	ZX=Others

Note (★)Not Available for A601& A602

8th Character- Internal Connection

0=1/2" NPT
 1=1/2" PT
 9=Others

9th &10th Characters- End Out Dia./Bore Size

A0=14/7 A1=14/9 B0=16/7 B1=16/9 B2=16/10
 C0=17/7 C1=17/9 C2=17/10 C3=17/12
 D0=19/7 D1=19/9 D2=19/10 D3=19/12

11th Character- Connection Size

A=1/2" NPT B=3/4" C=1" Z=Others"

12th Character- Connection Type

A=NPT B=PT Z=Others

13th Character- Insertion Length ("U"-Length)

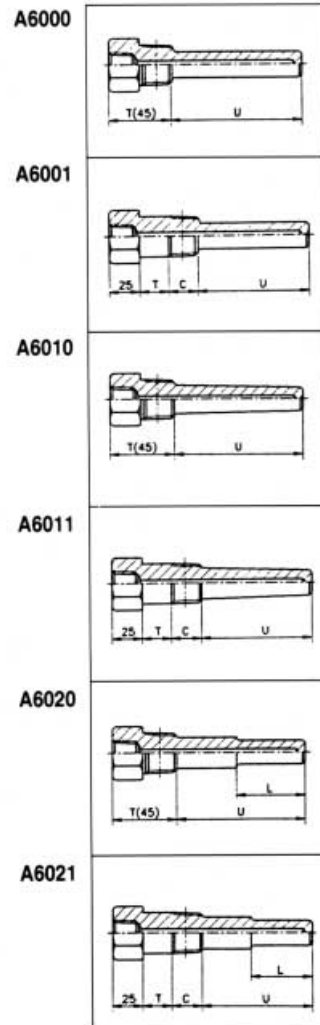
0=80 1=100 2=150 3=200 4=250 5=300
 6=350 7=400 8=450 A=500 B=600 C=700
 D=800 E=9-00 F=1000 Z=Others

Note Please choose a code of next higher length if applicable length is not. Actual length shall be specified.

14th Character-Extension Length ("T"-Length)

0=None(MFR.STD) 1=Below 50MM 2=More than 50MM

Note Actual length shall be specified.



BAR STOCK THERMOWELLS WITH FLANGE CONNECTION MODEL : A610, A611, A612



ORDERING INFORMATION

BASE MODEL - 1st thru 4th characters

- A610 : Straight Bar Stock (Flanged Connection Type)
- A611 : Tapered Bar Stock (Flanged Connection Type)
- A612 : Stepped Bar Stock (Flanged Connection Type)

5th Character- Extension

0= None 1= Extension

6th Character- Material of well 7th Character-Material of flange

A=S25C	B=304SS	C=316SS	D=304LSS
E=316LSS	F=310SS	G=321SS	H=446SS
J=Inconel	K=Hast-C	L=Monel	M=Titanium
N=Tantalum clad (★)	Y=A182-F11	P=304SS+PTFE Lining(★)	
Q=316SS+PTFE Lining(★)		R=304SS+PTFE Coating(★)	
S=316SS+PTFE Coating(★)		T=Incoloy	
W=A105		Z=Others	

Note (★) Not available for Flange
N Code is not available for A611 & A612

8th Character- Internal Connection

0=1/2" NPT
1=1/2" PT
9=Others

9th & 10th Characters- End Out Dia./Bore Size

A0=14/7 A1=14/9 B0=16/7 B1=16/9 B2=16/10
C0=17/7 C1=17/9 C2=17/10 C3=17/12
D0=19/7 D1=19/9 D2=19/10 D3=19/12

11th Character- Flange Size

A=1/2" B=3/4" C=1" D=1 1/4" E=1 1/2"
F=2" G=2 1/2" H=3" G=4" Z=Others

12th Character- Flange Rating

C=150#RF	D=150#RFSF	E=150#FF
F=300#RF	G=300#RFSF	H=300#FF
J=600#RF	K=600#RFSF	
L=10KRF	M=10KRFSF	N=10KFF
P=20KRF	Q=20KRFSF	R=20KFF
S=900#RF	T=1500#RF	U=2500#RF
V=600#RTJ	W=900#RTJ	X=1500#RTJ
Y=2500#RTJ	Z=Others	

13th Character- Insertion Length ("U"-Length)

0=80 1=100 2=150 3=200 4=250 5=300
7=400 8=450 A=500 B=600 C=700 D=800
F=1000 Z=Others

Note Please choose a code of next higher length if applicable length is not.
Actual length shall be specified.

14th Character-Extension Length ("T"-Length)

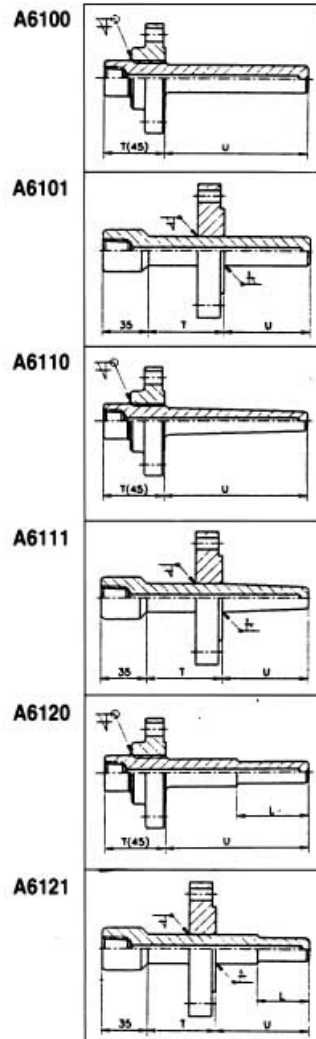
0=None(MFR.STD) 1=Below 50MM 2=More than 50MM

Note Actual length shall be specified.

15th Character-Options

0=None
1=Plug & Chain

A6100BBOBOCC400 SAMPLE ORDERING NUMBER



BAR STOCK THERMOWELLS WITH WELDED CONNECTION MODEL : A630, A631, A632



ORDERING INFORMATION

BASE MODEL - 1st thru 4th characters

- A630 : Straight Bar Stock (Welded Connection Type)
- A631 : Taperad Bar Stock (Welded Connection Type)
- A632 : Stepped Bar Stock (Welded Connection Type)

15th Character-Options

- 0=None
- 1=Plug & Chain

5th Character- Extension

- 0= None
- 1= Extension

Note (*)Not Available for A601 & A602

6th & 7th Characters - Material of Well

- | | | | |
|--------------|-------------|---------------|---------------|
| AX: S25C | BX : 304SS | CX : 316SS | DX : 304LSS |
| EX : 316LSS | FX : 310SS | GX : 321SS | HX : 446SS |
| JX : Inconel | KX : Hast-C | LX : Monel | MX : Titanium |
| TX : Incoly | WX : A105 | YX : A182-F11 | ZX : Others |

8th Character- Internal Connection

- 0=1/2" NPT
- 1=1/2" PT
- 9=Others

9th &10th Characters- End Out Dia./Bore Size

- | | | | | |
|---------|---------|----------|----------|----------|
| A0=14/7 | A1=14/9 | B0=16/7 | B1=16/9 | B2=16/10 |
| C0=17/7 | C1=17/9 | C2=17/10 | C3=17/12 | |
| D0=19/7 | D1=19/9 | D2=19/10 | D3=19/12 | |

11th Character- Connection Size

- AZ=1/2" NPT
- BZ=3/4"
- CZ=1"
- ZZ=Others

13th Character- Insertion Length ("U"-Length)

- 0=80
- 1=100
- 2=150
- 3=200
- 4=250
- 5=300
- 6=350
- 7=400
- 8=450
- A=500
- B=600
- C=700
- D=800
- E=900
- F=1000
- Z=Others

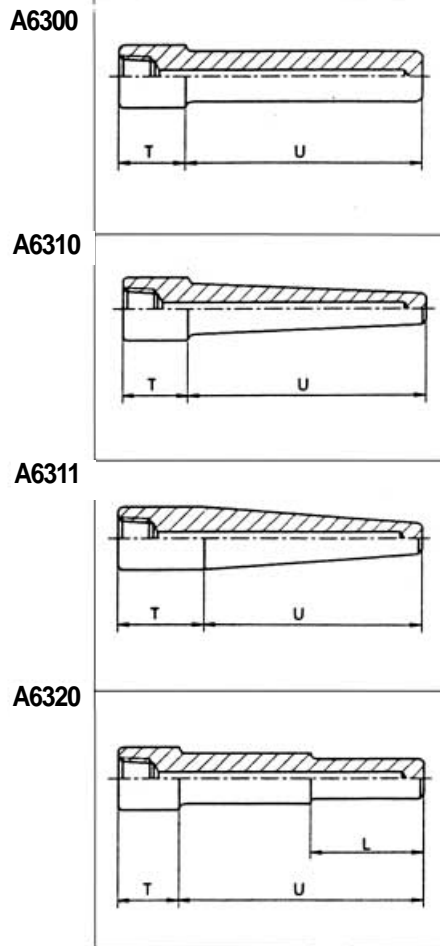
Note (*) please choose code of next higher length if application length is not. Actual length shall be specified

14th Character-Extension Length ("T"-Length)

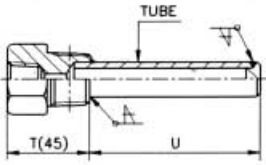
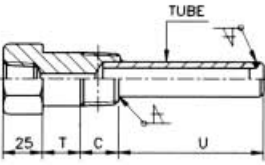
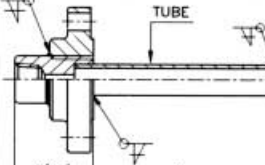
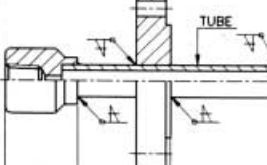
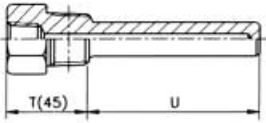
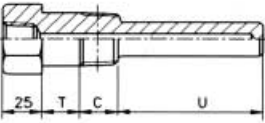
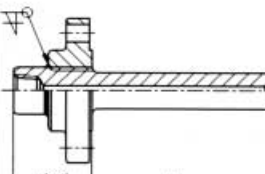
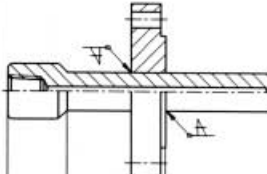
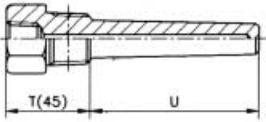
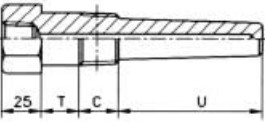
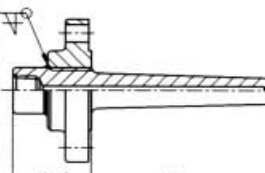
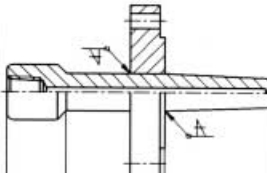
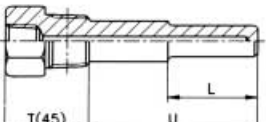
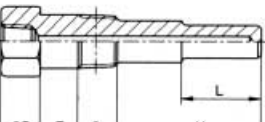
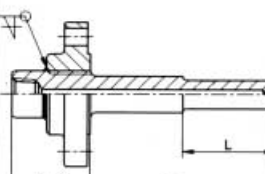
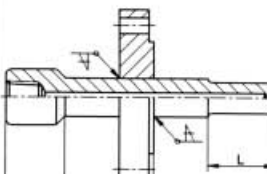
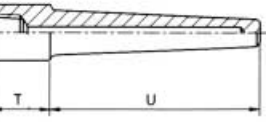
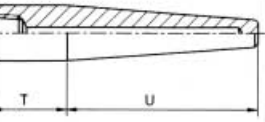
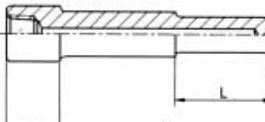
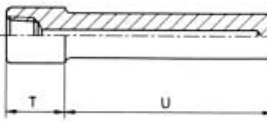
- 0=None(MFR.STD)
- 1=Bleow 50MM
- 2=More than 50MM
- 9=Others

Note Actual length shall be specified.

A6310BXOBOBZ400 SAMPLE ORDERING NUMBER



THERMOWELLS

	THREAD TYPE		FLANGE TYPE	
	PLANE TYPE	LAG TYPE	PLANE TYPE	LAG TYPE
CLOSED END TUBE STRAIGHT TYPE				
	A5000	A5001	A5100	A5101
DRILLED BAR STOCK STRAIGHT TYPE				
	A6000	A6001	A6100	A6101
DRILLED BAR STOCK TAPER TYPE				
	A6010	A6011	A6110	A6111
DRILLED BAR STOCK STEP TYPE				
	A6020	A6021	A6120	A6121
DRILLED BAR STOCK WELD TYPE	WELD-IN TYPE		SOCKET WELD TYPE	
				
	A6310	A6311	A6320	A6300