

Close end (Pipe) type thermowell

Model : A500, A510 series

Spec. sheet no. AD05-01

Service intended

Temperature sensors or indicating type temperature gauges are not directly inserted into the process pipe, unless these are used to measure the outside temperature of process pipe, instead, these are used with thermowells. By using thermowells, sensors and gauges will not interfere with the process line operation, and the users are able to perform the maintenance procedure of the process line more easily.

A500 and A510 Series are either pipe or tube with one end is sealed. These thermowells are used in the process pipe where a very slow current is exist or in a container, and its length can be vary.



Standard features

Selection of thermowell

■ Material

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

■ 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.

■ 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.

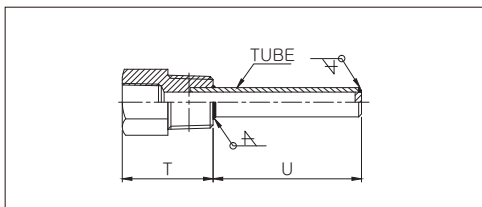
■ Option

Wake frequency calculations in accordance with ASME PTC 19.3

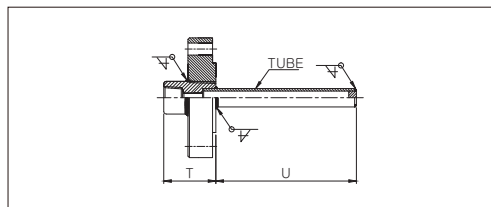
WISE Inc. offers this as an engineering service.

Structure

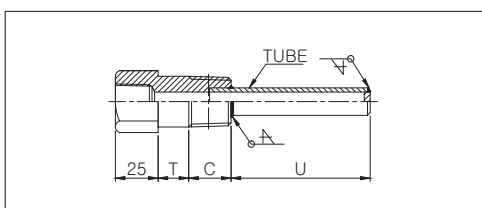
A5000



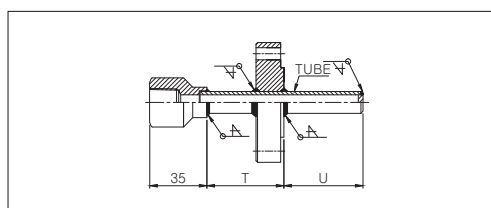
A5100



A5001



A5101



Main order

Ordering information

1. Base model

A5000	Thread connection
A5001	Thread connection with extension
A5100	Flange connection
A5101	Flange connection with extension

2. Material of well and material of flange

AX	S25C	NX	Tantalum clad
BX	304SS	PX	304SS + PTFE lining
CX	316SS	QX	316SS + PTFE lining
DX	304L SS	RX	304L SS + PTFE coating
EX	316L SS	SX	316L SS + PTFE coating
FX	310SS	TX	Incoloy-800
GX	321SS	1X	SSA-S
HX	446SS	WX	A105
JX	Inconel 600	3X	GK-Sic
KX	Hastelloy-C	YX	A182F11
LX	Monel	ZX	Others
MX	Titanium		

Note. Please give XX to 8,9th character for A500 series

3. Internal connection

0	½" NPT	3	¾" NPT
1	½" PT	4	¾" PF
2	½" PF	5	¾" PT

4. Pipe (Tube) outer diameter (mm)

A	14	J	10
B	16	K	12.7
C	17	L	13
D	19	N	21
E	21.7	O	25
F	17.3	P	30
G	15	Q	40
H	12	R	20
I	13.8	S	21.3

5. Pipe (Tube) thickness (mm)

A	3.7	G	1.5
B	3.2	H	1.0
C	3.0	J	0.7
D	2.8	K	2.5
E	2.3	L	5.0
F	2.0		

6. Process connection size

A	½" (15A)	F	2" (50A)
B	¾" (20A)	G	2½" (65A)
C	1" (25A)	H	3" (80A)
D	1¼" (32A)	I	4" (100A)
E	1½" (40A)	Z	Other

Note. Available for flange connection only

7. Process connection type

AZ	S.W.	KM	10K RFSF
AA	NPT	KN	10K FF
AB	PT	DA	PN10 RF
PF	PF	DB	PN16 RF
AC	150 Lb RF	DI	PN25 RF
AD	150 Lb RFSF	DO	PN40 RF
AE	150 Lb FF	KA	5K RF
AF	300 Lb RF	KT	5K FF
AG	300 Lb RFSF	KP	20K RF
AH	300 Lb FF	KQ	20K RFSF
AJ	600 Lb RF	KR	20K FF
AK	600 Lb RFSF	ZZ	Other
KL	10K RF		

8. Insertion length ("U") length (mm)

0	80	B	600	M	4,000
1	100	C	700	N	5,000
2	150	D	800	P	6,000
3	200	E	900	Q	7,000
4	250	F	1,000	R	8,000
5	300	G	1,500	S	9,000
6	350	H	2,000	T	10,000
7	400	J	2,500	Z	Other
8	450	K	3,000		
A	500	L	3,500		

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

9. Option

0	45 mm
1	Plug and chain (304SS)
2	Plug and chain (316SS)

Note : Actual length shall be specified.

1	2	3	4	5	6	7	8	9
A5000	AX	3	A	A	C	AB	K	1

Sample
ordering code