

Close end tube (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.

* Note. Depending on the material and U-length, the appearance of the connector may change.



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.

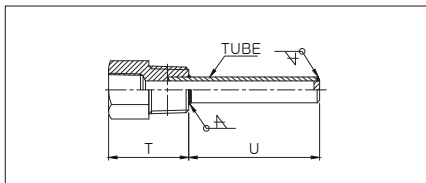
■ Bore size

Almost any installation uses several types of temperature measuring instruments.

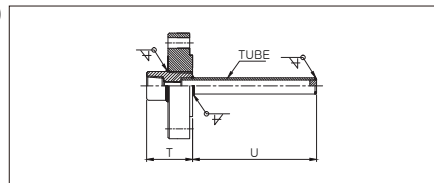
The selection of a standard bore diameter can produce extreme flexibility within the plant.

Structure

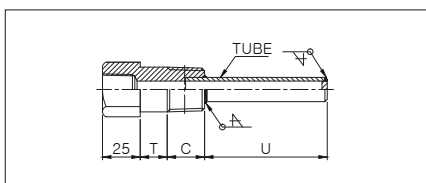
A5000



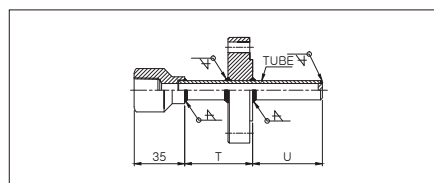
A5100



A5001



A5101



1. Base model

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

2. Material of well

AX	S25C	PX	304SS + PTFE lining
BX	304SS	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	A106
JX	Inconel 600	3X	GK-Sic
KX	Hastelloy-C	YX	A335P11
LX	Monel	ZX	Others
MX	Titanium		

3. Material of flange

AX	S25C	MX	Titanium
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	WX	A105
JX	Inconel 600	YX	A182F11
KX	Hastelloy-C	ZX	Others
LX	Monel		

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

4. Internal connection

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

5. Pipe (Tube) outer diameter (mm)

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

6. Pipe (Tube) thickness (mm)

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

7. Process connection size

A(1)	½" (15A)	F	2" (50A)
B(1)	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

8. 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	B16.5 class 150 RF	DI	PN25 RF
AD	B16.5 class 150 RFSF	DO	PN40 RF
AE	B16.5 class 150 FF	KA	5K RF
AF	B16.5 class 300 RF	KT	5K FF
AG	B16.5 class 300 RFSF	KP	20K RF
AH	B16.5 class 300 FF	KQ	20K RFSF
AJ	B16.5 class 600 RF	KR	20K FF
AK	B16.5 class 600 RFSF	ZZ	Other
KL	10K RF		

9. 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.

10. "T" length (mm)

0	45
1	50 below
2	50 above

Note : Actual length shall be specified.

11. Option

0	None
1	Plug and chain (304SS)
2	Plug and chain (316SS)

1	2	3	4	5	6	7	8	9	10	11	Sample ordering code
A5000	AX	AX	0	A	A	A(1)	AZ	0	0	1	