Bar stock thermowell with welded connection

Model : A630, A631, A632

Spec. sheet no. AD06-04

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. These thermowells can be used in a high steam line or Vapor line. These are directly welded onto the socket or pipe so can be a semipermanent. Therefore, the user must carefully decide its material and specification before welding process is performed.

CRN

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 woule 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

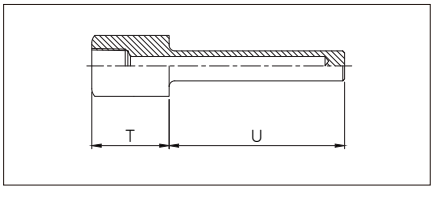
Almost any installation uses several type of temperature measuring instruments.
The selection of a standard bore diameter can produce extreme flexibility within the plant.

■ Option

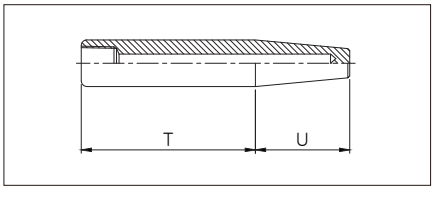
Wake frequency calculations in accordance with ASME PTC 19.3
WISE Inc. offers this as an engineering service.

Structure

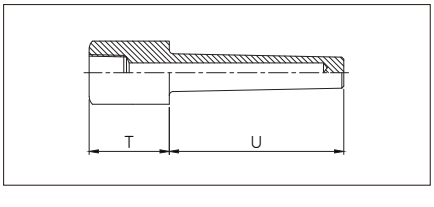
A6300



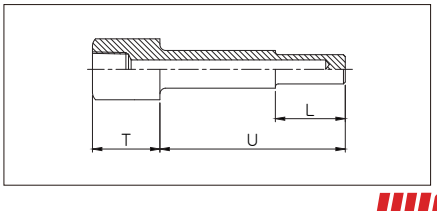
A6311



A6310



A6320



1. Base model

A6300	Straight bar stock (Socket welded type)
A6310	Tapered bar stock (Socket welded type)
A6311	Tapered bar stock (Weld in type)
A6320	Stepped bar stock (Socket welded type)

2. Material of well

AX	S25C	**JX**	Inconel 600
BX	304SS	**KX**	Hastelloy-C
CX	316SS	**LX**	Monel
DX	304L SS	**MX**	Titanium
EX	316L SS	**OX**	A182F316
FX	310SS	**TX**	Incoloy-800
GX	321SS	**WX**	A105
HX	446SS	**YX**	A182F11
IX	A182F304	**ZX**	Others

Note : Not available for A601 and A602

3. Internal connection

0	½" NPT
1	½" PT
2	½" PF

4. Tip outer diameter / Bore size (mm)

A0	14 / 7	**C2**	17 / 10
A1	14 / 9	**C3**	17 / 12
B0	16 / 7	**D0**	19 / 7
B1	16 / 9	**D1**	19 / 9
B2	16 / 10	**D2**	19 / 10
C0	17 / 7	**D3**	19 / 12
C1	17 / 9	**D4**	21 / 10

5. Socket size

AAZ	½"
BAZ	¾"
CAZ	1"
DAZ	1¼"
EAZ	1½"
FAZ	2"

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

0	80	**8**	450
1	100	**A**	500
2	150	**B**	600
3	200	**C**	700
4	250	**D**	800
5	300	**E**	900
6	350	**F**	1,000
7	400	**Z**	Other

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

7. "T" length (mm)

0	45
1	50 below
2	50 above

Note : Actual length shall be specified.

8. Option

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

1	2	3	4	5	6	7	8	
A6300	**AX**	**0**	**A0**	**AAZ**	**2**	**1**	**1**	**Sample ordering code**