

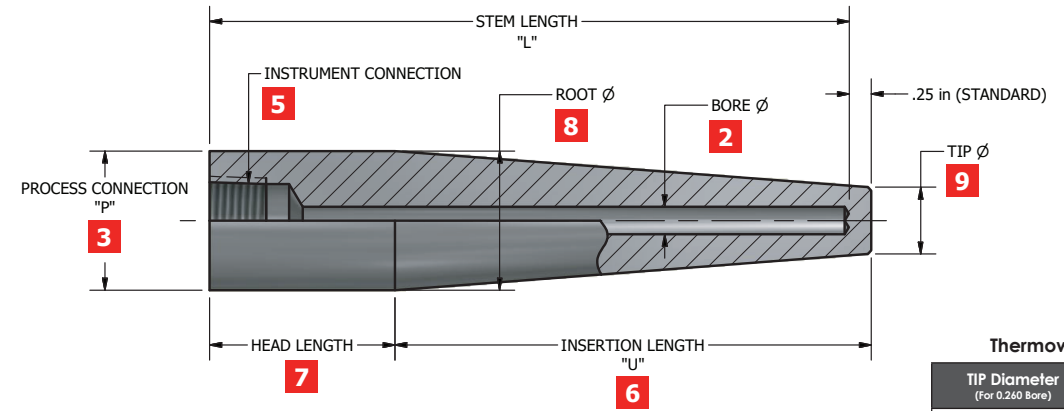
# AT27 WELD-IN TAPERED THERMOWELL



Weld-in thermowells are highly recommended in applications that produce a high rate of flow or pressure, since the thermowell is welded directly to the process pipe without the need for threads or flanges. This type of thermowell is recommended when contaminants could collect in exposed threads, such as pharmaceutical or food processing production.

Our weld-in thermowells are designed and manufactured 100% in house, and are made to accept standard and custom made thermometers, thermocouples, bulbs and RTD's.

They are also available in a wide variety of process pipe sizes and configurations.



Thermowell Dimensions	
TIP Diameter (For 0.260 Bore)	TIP Diameter (For 0.385 Bore)
0.625" (15.9 mm)	0.750" (19.1 mm)

Please note: Various configurations may not be available. American Thermowell will notify you if you have selected an incompatible part combination.



1 Thermowell Stem Style	
Code	Description
AT27	Tapered Stem

2 Bore Size	
Code	Description
A	0.260
B	0.385
C	0.515
D	0.203
E	0.375
F	0.390
G	0.343
M	0.406
N	0.280
O	0.302
P	0.312
R	0.275
U	0.394
V	0.354
X	0.437

3 Process Connection	
Code	Description
BH	1/2" Pipe (0.840" Dia)
BA	3/4" Pipe (1.05" Dia)
BB	1" Pipe (1.315" Dia)
BF	1-1/4" Pipe (1.660" Dia)
BG	1-1/2" Pipe (1.900" Dia)
BI	1" OD
BC	1-1/4" OD
BD	1-1/2" OD
BE	1-3/4" OD
BJ	2" OD
BK	2-1/4" OD
BL	2-3/8" OD
BL	2-3/8" OD
BM	2-1/2" OD

Custom sizes, connections and materials may not be listed, contact American Thermowell today to find out more.

4 Material	
L2	316/316L
H2	304/304L
H3	304H
K2	310/310H
L3	316H
J1	317
J3	317L
M2	321/H
M3	RA330
N2	347/H
N3	410
N4	446
N5	HR160
S3	904L
S4	AL-6XN
S2	Alloy 20
S1	Alloy 200
R1	Alloy 400
P1	Alloy 600
P3	Alloy 601
P2	Alloy 625
Q3	Alloy 800/H/HT
Q1	Alloy 825
U2	Alloy B2
U3	Alloy B3
U4	Alloy C-22

4 Material (Continued)	
U1	Alloy C-276
R2	Alloy K500
U5	Alloy X
C1	Aluminum 6061
A1	Brass
E4	Carbon Steel 1018
E3	Carbon Steel 12L14
E1	Carbon Steel ASTM A105
G1	Chrome-M-Moly F22
F1	Chrome-Moly-F11
F6	Chrome-Moly-F5
F7	Chrome-Moly-F9
F8	Chrome-Moly-F91
Y2	CPVC
F2	Duplex F51/2205
E2	Alloy 20
B1	Naval Brass
Y1	PVC
F4	Stainless F44/254 SMO
F3	Super Duplex F53/2507
F5	Super Duplex F55
W1	Teflon
T1	Tit Gr2
T2	Tit Gr5
T3	Tit Gr7
Z1	Zirc 702

5 Instrument Connection	
AA	1/2" NPT
AB	3/4" NPT
AC	1" NPT
AD	1-1/4" NPT
AE	1-1/2" NPT
AF	1/2" NPSM
AS	1/2" NPT TO CSA
AZ	1/2" ANPT
AR	1/4" NPT
AT	1/8" NPT
AG	1/2" BSPP
AH	3/4" BSPP
AI	1/2" BSPT
AJ	3/4" BSPT
AK	M14 x 1.5
AL	M18 x 1.5
AM	M20 x 1.5
AN	M24 x 1.5
AO	M27 x 2.0
AP	1/4" - 20 UNF
AQ	3/8" - 24 UNF
AU	1/2" - 20 UNF
AV	5/8" - 18 UNF
AW	3/4" - 16 UNF
AX	7/8" - 14 UNF
AY	1" - 14 UNF

6 Insertion Length	
Code	Description
xxxxx	Imperial: 6.500" = 06500 Metric: 165.1 mm = 01651
*U length => 100,000" or 10,000.0mm see sales person for custom part number	

7 Head Length	
Code	Description
xxxxx	Imperial: 2.25" = 02250 Metric: 57.2 mm = 00572

8 Root Diameter	
Code	Description
xxxx	Imperial: 0.875" = 0875 Metric: 22.2 mm = 0222

9 Tip Diameter	
Code	Description
xxxx	Imperial: 0.625" = 0625 Metric: 15.9 mm = 0159

10 Measurement	
Code	Description
I	Imperial
M	Metric

## OPTIONS

- Brass Plug & Chain
- Stainless Plug & Chain
- Teflon Coating
- Stellite Overlay
- Kynar Coating
- Dye Penetrant Test
- Dye Penetrant Cap
- Dye Penetrant Root (Optional)
- Internal Hydrostatic Testing
- External Hydrostatic Testing
- Material Test Report (MTR)
- Nace MR0175
- PMI
- Tantalum Sheath (Flanged Only)
- Velocity Calculation per PTC 19.3 TW-2010
- X-Ray
- O2 Cleaning
- Post Weld Heat Treatment
- UT bore concentricity
- UT phased array
- CofC (Certificate of compliance)
- COO (certificate of origin)
- Traceability Index
- ITP (Inspection Test Plan)
- Stamping
- SS tags
- Visual dimensional report
- Electro polish
- Pickle and Passivation

American Thermowell has provided quality thermowells since 1991.



**American Thermowell**

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Specializing in instrumentation and process control hardware.

- Thermowells
- Orifice Plates
- Bleed & Flush Rings
- Valves



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