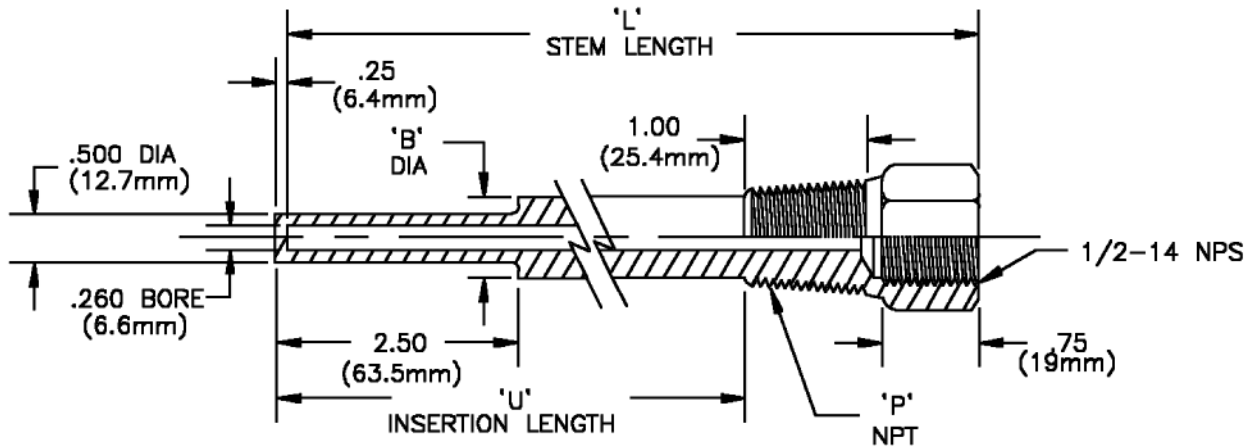


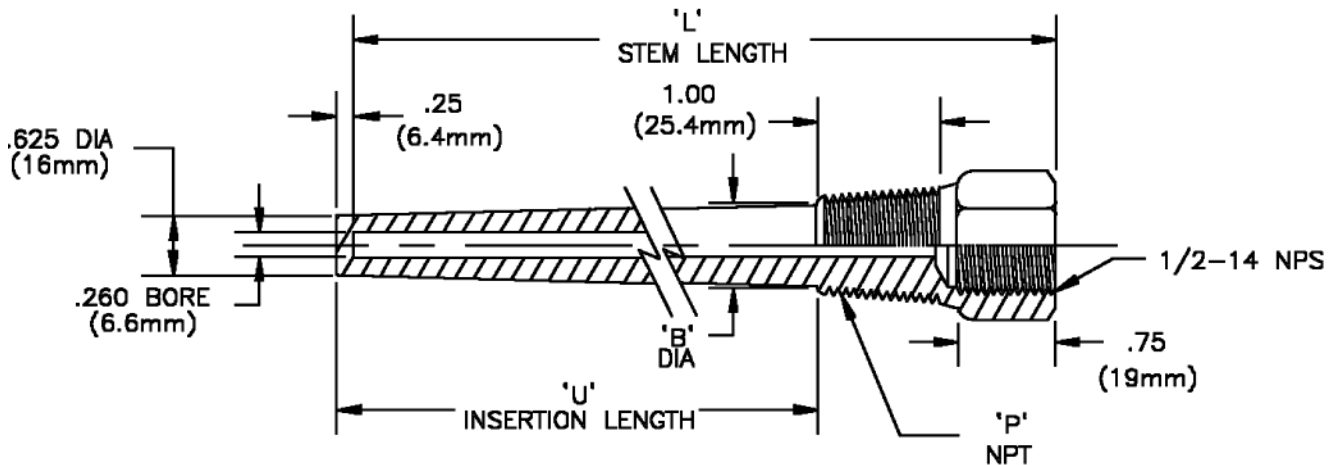
TW 10

STANDARD STEPPED 0.260 BORE
THREADED PROCESS CONNECTION



TW 20

STANDARD TAPERED 0.260 BORE
THREADED PROCESS CONNECTION



INTEMPCO MODEL: TW _____
 PROCESS CONNECTION: _____
 STEM LENGTH: _____
 WELL MATERIAL: _____

"P"	"B"		CODE
	TW 10	TW 20	
	TW 30	TW 35	
1/2	0.63	—	1/2
3/4	0.75	0.88	3/4
1	0.88	1.06	1

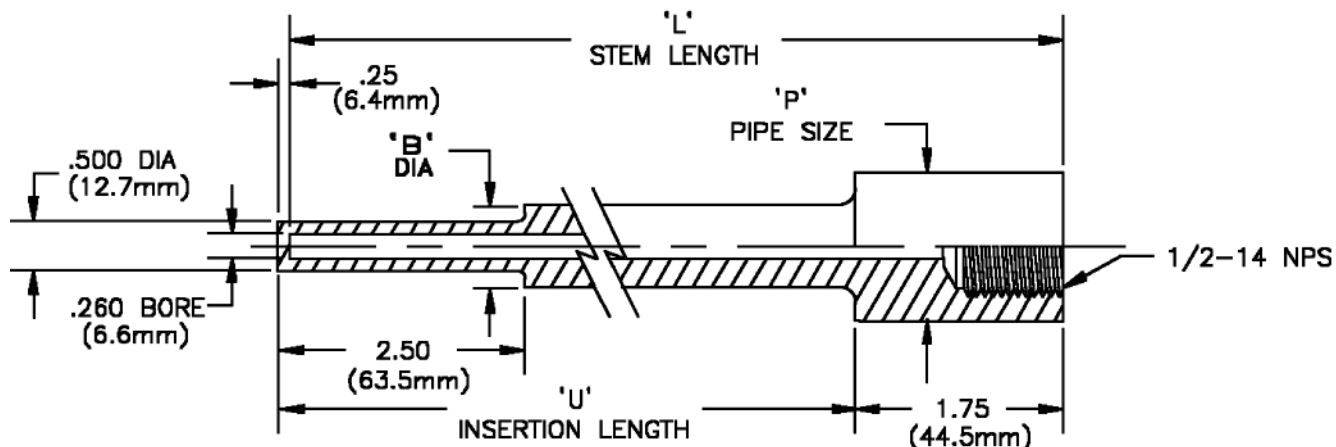
Other diameters and custom lengths available. Consult factory for details.

CODE	"U"	"L"
L2.5	1.63	2.5
L4	2 1/2	4
L6	4 1/2	6
L9	7 1/2	9
L12	10 1/2	12
L15	13 1/2	15
L18	16 1/2	18
L21	19 1/2	21

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
BR	Brass ASTM B16
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy

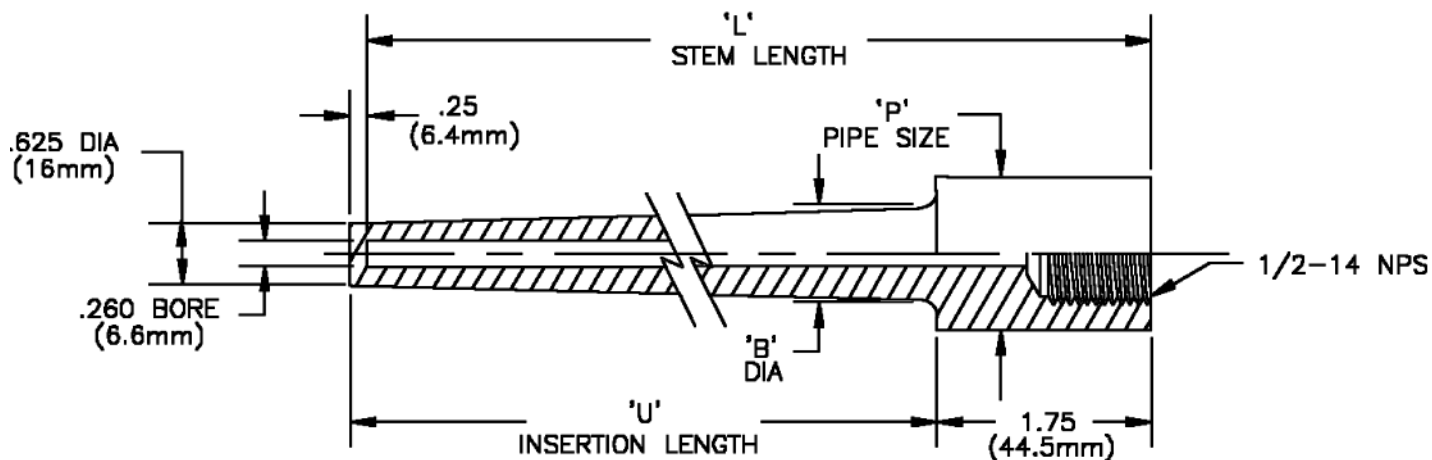
TW 30

STANDARD STEPPED 0.260 BORE SOCKET
WELD PROCESS CONNECTION



TW 35

STANDARD TAPERED 0.260 BORE SOCKET
WELD PROCESS CONNECTION



INTEPCO MODEL PROCESS CONNECTION STEM LENGTH WELL MATERIAL

TW _____ - _____ - _____ - _____

"P"	"B"		CODE
	TW 10	TW 20	
	TW 30	TW 35	
1/2	0.63	—	1/2
3/4	0.75	0.88	3/4
1	0.88	1.06	1

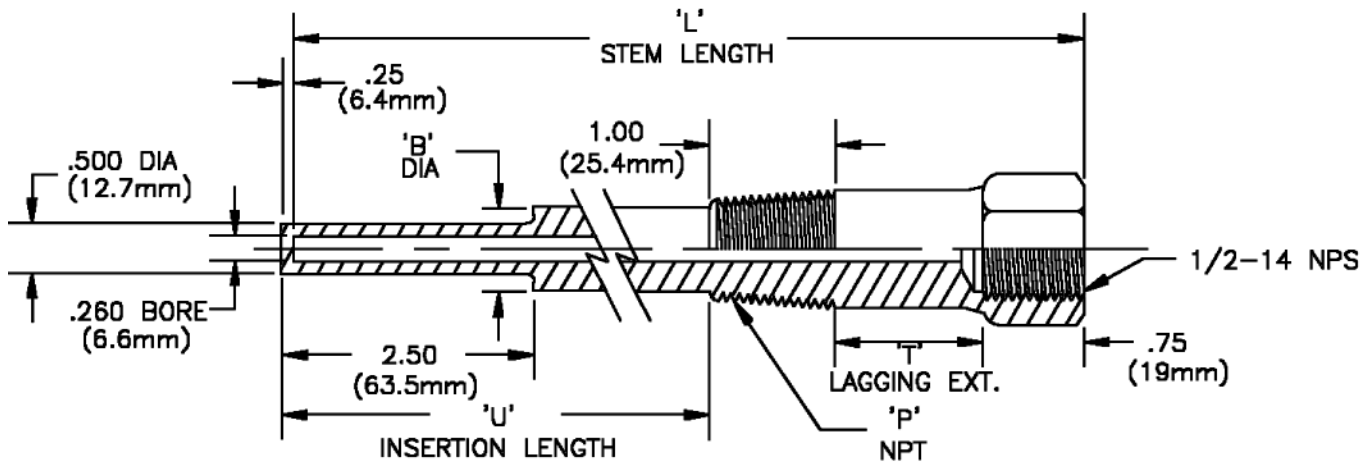
Other diameters and custom lengths available. Consult factory for details.

CODE	"U"	"L"
L2.5	1.63	2.5
L4	2 1/2	4
L6	4 1/2	6
L9	7 1/2	9
L12	10 1/2	12
L15	13 1/2	15
L18	16 1/2	18
L21	19 1/2	21

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
BR	Brass ASTM B16
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy

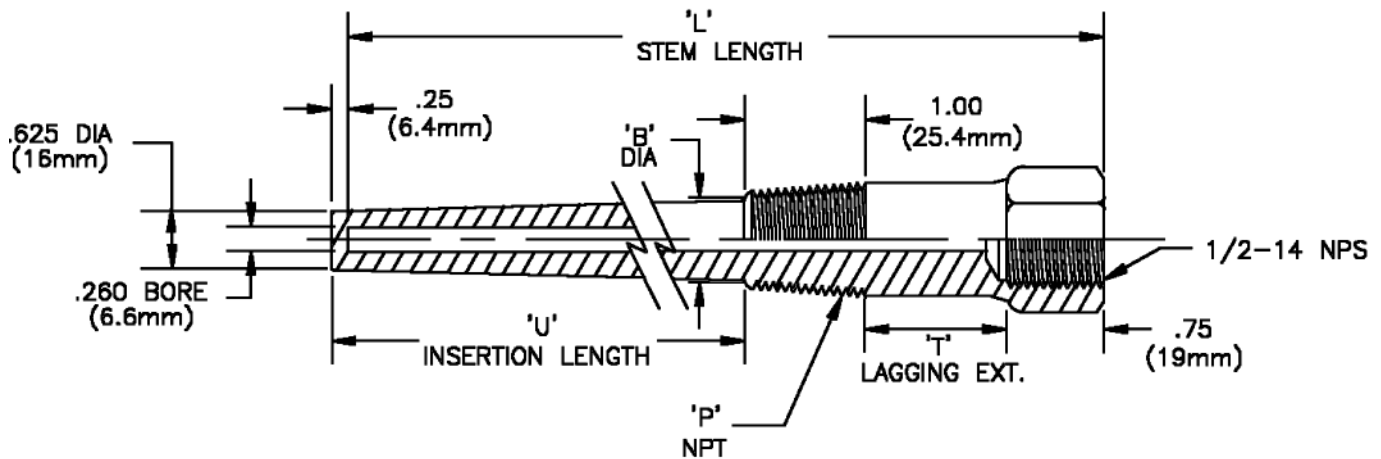
TW 15

STANDARD STEPPED 0.260 BORE WITH LAGGING EXTENSION
THREADED PROCESS CONNECTION



TW 25

STANDARD TAPERED 0.260 BORE WITH LAGGING EXTENSION
THREADED PROCESS CONNECTION



INTEMPCO MODEL PROCESS CONNECTION STEM LENGTH LAGGING EXTENSION WELL MATERIAL

TW _____ - _____ - _____ - _____ - _____

"P"	"B"		CODE
	TW 15	TW 25	
	TW 31	TW 36	
1/2	0.63	—	1/2
3/4	0.75	0.88	3/4
1	0.88	1.06	1

Other diameters and custom lengths available.
Consult factory for details.

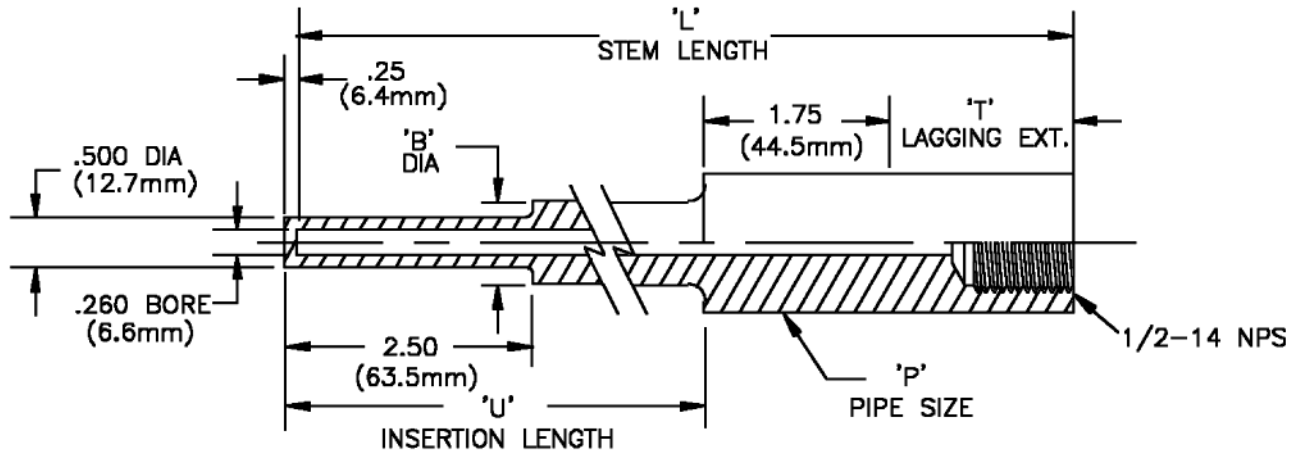
CODE	"U"
L = U + T + 1 1/2	1.63
	2 1/2
	4 1/2
	7 1/2
	10 1/2
	13 1/2
	16 1/2
	19 1/2

CODE	"T"
T1	1
T2	2
T3	3
T4	4
T5	5
T6	6
T7	7
T8	8

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
BR	Brass ASTM B16
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy

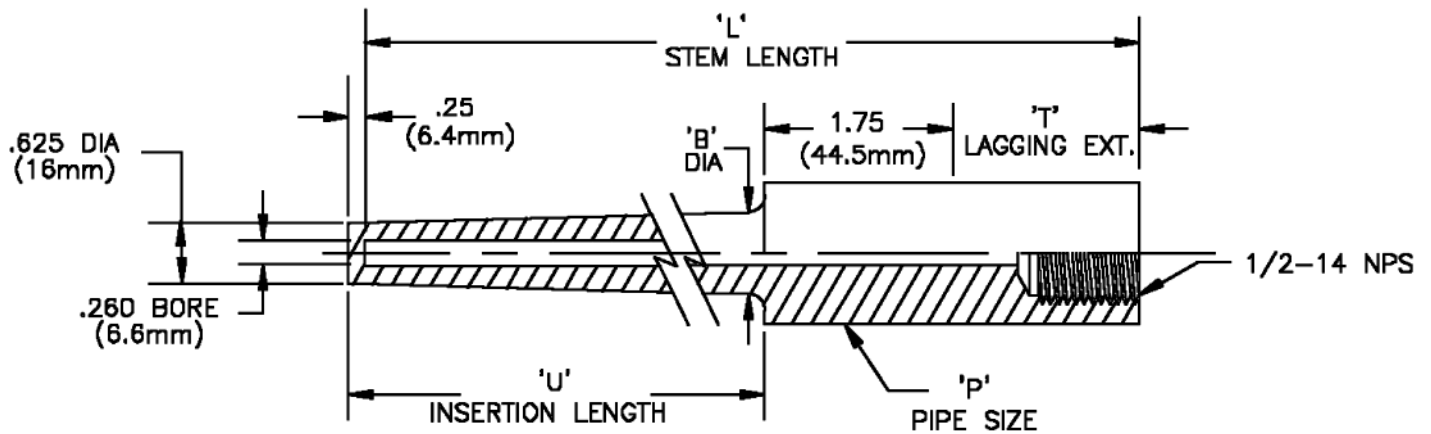
TW 31

STANDARD STEPPED 0.260 BOREWITH LAGGING EXTENTION
SOCKET WELD PROCESS CONNECTION



TW 36

STANDARD TAPERED 0.260 BORE WITH LAGGING EXTENTION
SOCKET WELD PROCESS CONNECTION



INTEMPCO
MODEL

PROCESS
CONNECTION

STEM
LENGTH

LAGGING
EXTENSION

WELL
MATERIAL

TW _____ - _____ - _____ - _____ - _____

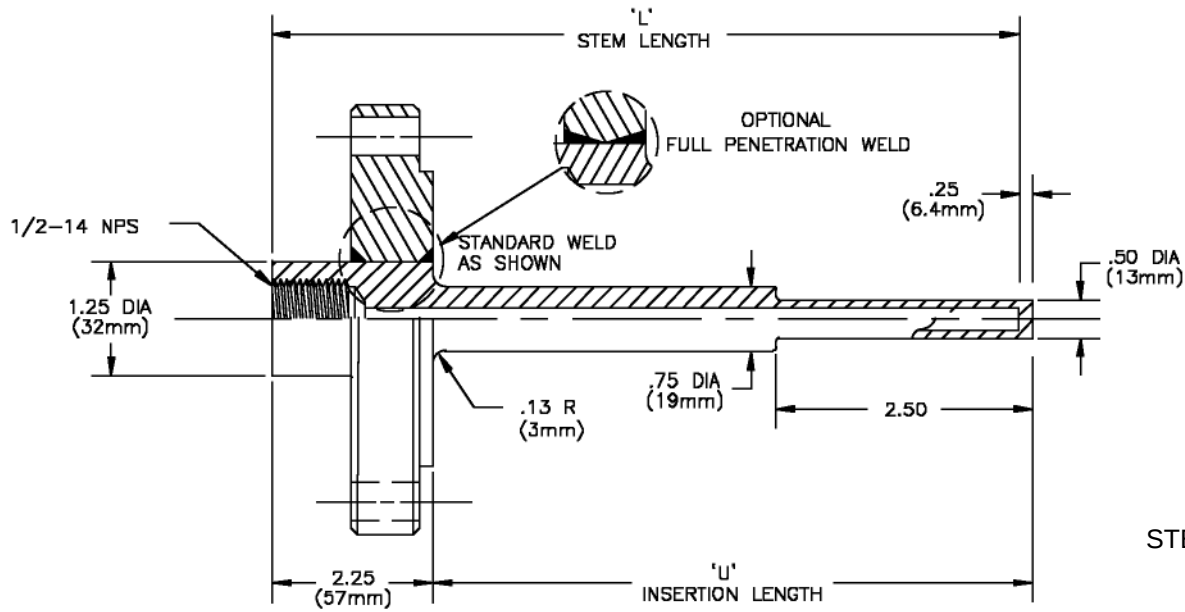
"P"	"B"		CODE
	TW 15	TW 25 TW 36	
1/2	0.63	—	1/2
3/4	0.75	0.88	3/4
1	0.88	1.06	1

Other diameters and
custom lengths available.
Consult factory for details.

CODE	"U"
L = U + T + 1 1/2	1.63
	2 1/2
	4 1/2
	7 1/2
	10 1/2
	13 1/2
	16 1/2
	19 1/2

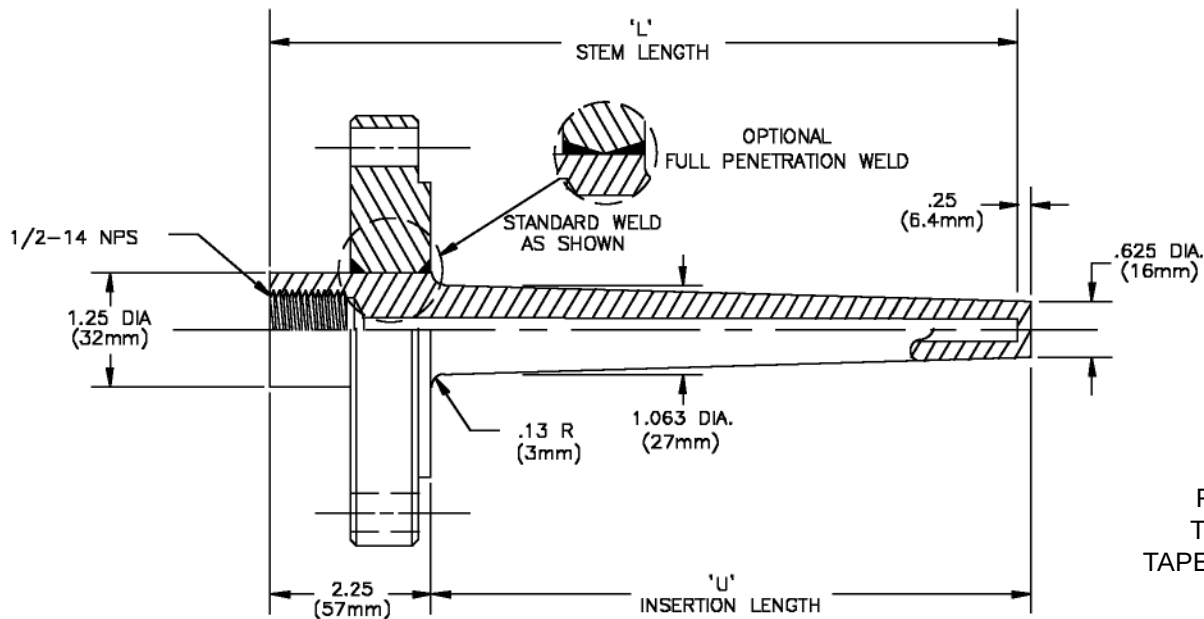
CODE	"T"
T1	1
T2	2
T3	3
T4	4
T5	5
T6	6
T7	7
T8	8

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
BR	Brass ASTM B16
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy



TW 40

R.F. FLANGED
THERMOWELL
STEPPED 0.260 BORE



TW 45

R.F. FLANGED
THERMOWELL
TAPERED 0.260 BORE

INTEMPCO MODEL - FLANGE PRESSURE RATING - PIPE (FLANGE) SIZE - STEM LENGTH - WELL MATERIAL

TW _____ - _____ - _____ - _____ - _____

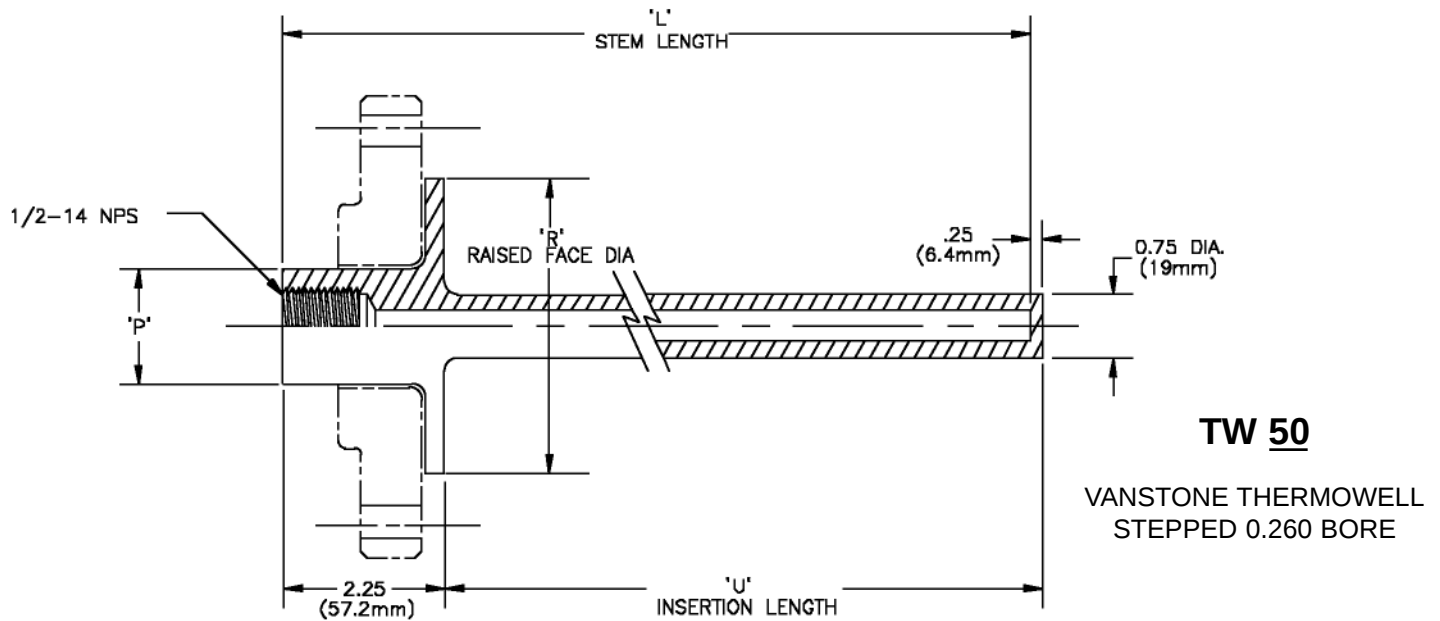
FLANGE PRESSURE RATING CODE
150
300
600
900
1500

Other diameters and
custom lengths available.
Consult factory for details.

SIZE	CODE
1 1/2	F1.5
2	F2
2 1/2	F2.5
3	F3
3 1/2	F3.5
4	F4

CODE	"U"	"L"
L4	2	4
L6	4	6
L9	7	9
L12	10	12
L15	13	15
L18	16	18
L21	19	21
L24	22	24

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy



INTEMPCO MODEL: **TW 50** -
 FLANGE PRESSURE RATING: -
 PIPE (FLANGE) SIZE: -
 STEM LENGTH: -
 WELL MATERIAL:

FLANGE PRESSURE RATING CODE
150
300
600
900
1500

Other diameters and custom lengths available. Consult factory for details.

"P" Pipe Size (Flange Size)	"R" Raised Face diameter	CODE
1	2	1
1 1/2	2.875	1 1/2

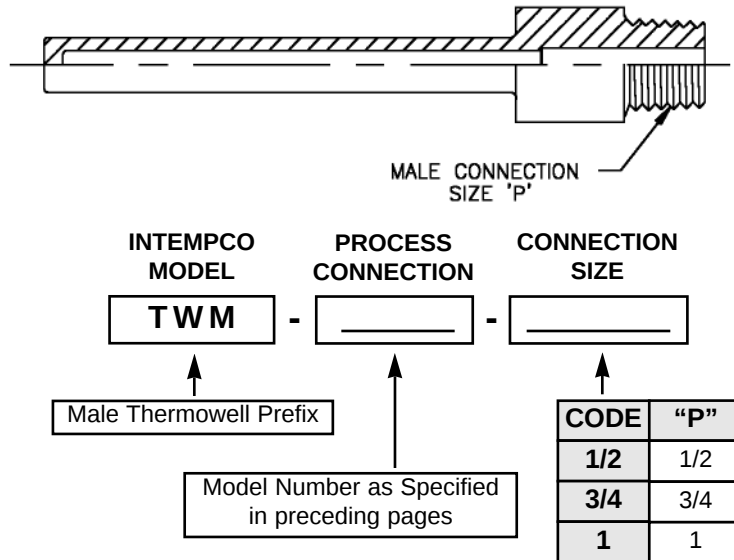
CODE	"U"	"L"
L4	2	4
L6	4	6
L9	7	9
L12	10	12
L15	13	15
L18	16	18
L21	19	21
L24	22	24

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy

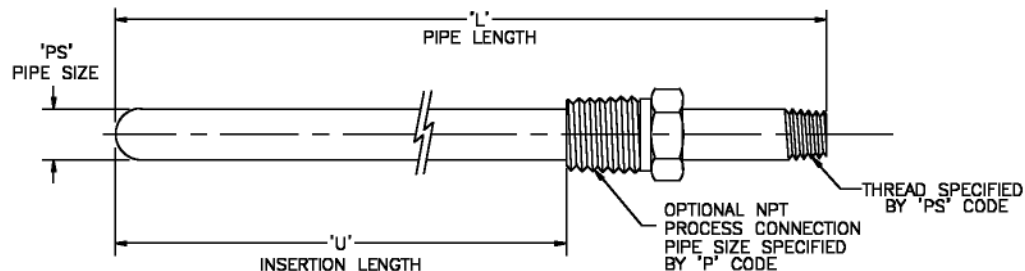
OPTIONAL MALE TERMINATION FOR MODELS TW10-TW36

Models TW10 - TW36 are available with male NPT termination for connection to external peripheral such as a protection head. Consult factory for details or custom construction.

To order a thermowell with a male thread simply select the model required from the preceding pages and append the model number as shown below.



PROTECTION TUBES



INTEMPCO MODEL	PIPE SIZE	PROCESS CONNECTION	PIPE LENGTH	INSERTION LENGTH	MATERIAL
TW 60					

"P S"	CODE
1/8	PS 18
1/4	PS 14
1/2	PS 12
3/4	PS 34
1	PS 1
1 1/4	PS 125

"P"
1/4
1/2
3/4
1
1 1/4
1 1/2

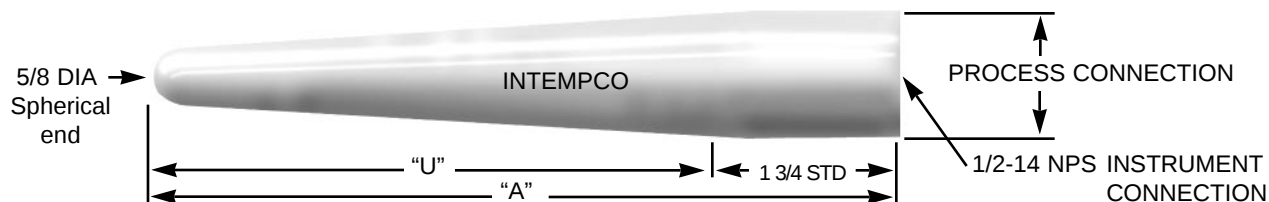
"L"
Specify Length in inches

"U"
Specify Length in inches

Other diameters and custom lengths available. Consult factory for details.

CODE	MATERIAL
SS304	Stainless 304/L
SS316	Stainless 316/L
BR	Brass ASTM B16
CS	Carbon Steel C-1010
AL	Aluminum 6061
INC	Inconel 600
MN	Monel
HS	Hastelloy

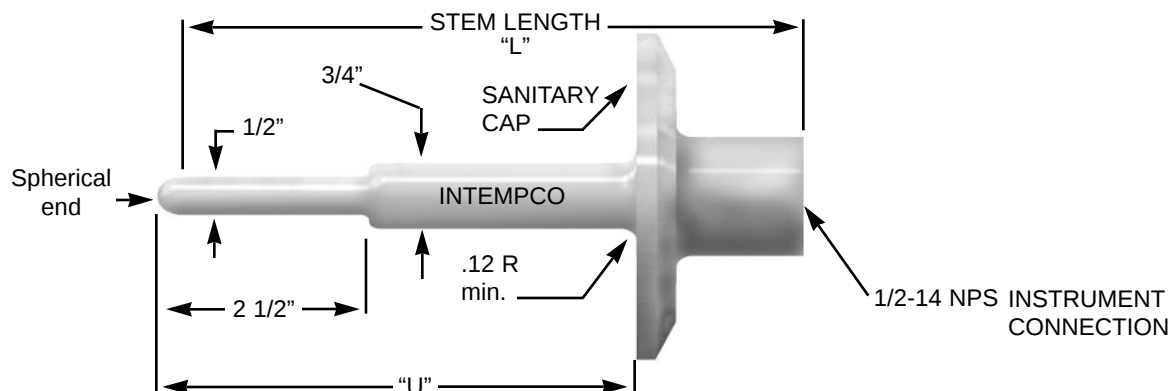
SANITARY WELD-IN STYLE 0.260 BORE



INTEMPCO MODEL NO. **TW 84** - PROCESS CONNECTION - INSERTION LENGTH "U" - OVERALL LENGTH "A" U + 1 3/4 IS STD - MAT'L **SS316**

CODE	DIA
3/4	1.05
1	1.315

SANITARY CAP STYLE WELL 0.260 BORE

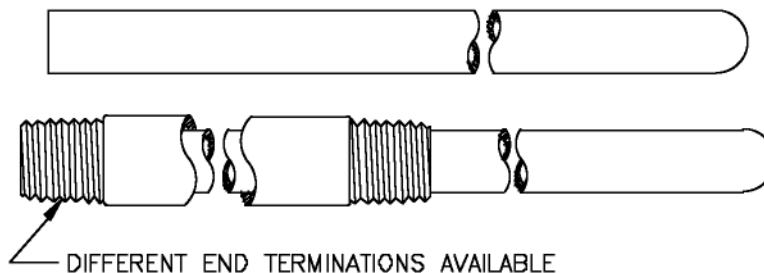


INTEMPCO MODEL NO. **TW 88** - CAP STYLE (SIZE) **T ()** - INSERTION "U" in inches - STEM LENGTH "L" U + 1 1/2 IS STD - MAT'L **SS316**

CODE	SANITARY CAP STYLE
T	Tri-Clamp (16AMP)
A	Cherry-Burrel (16A1-141), male std.
B	Cherry-Burrel (16A1-141), female
C	Bevelled Seat (16A) with 13H nut
D	Bevelled Seat (16A) without nut
E	Bevelled Seat (16A) female
F	John Perry (JP16A) with 13H nut
G	John Perry (JP16A) without nut
X	Other, Describe

STANDARD "U" DIMENSIONS ARE LISTED BELOW
2.5
4.5
7.5
10.5
13.5
16.5
19.5

CERAMIC PROTECTION TUBES



INTEMPCO MODEL **TWC** - MATERIAL - OUTSIDE DIAMETER - MOUNTING TYPE - ASSEMBLY TUBE LENGTH (in inches)

MATERIAL	CODE
Mullite 60	M60
Alumina 997	A97
Alumina 998	A98

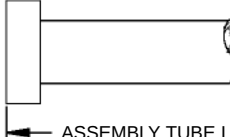
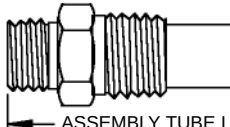
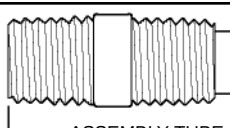
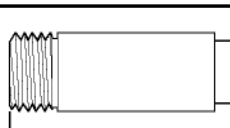
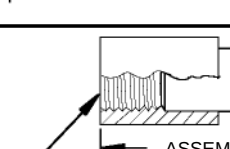
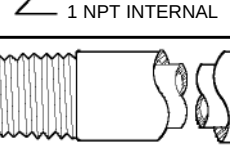
I.D	O.D	CODE
3/16	1/4	250
1/4	3/8	375
3/8	1/2	500
7/16	11/16	687
3/4	1	1000
1	1 1/4	1250

Table "A"	
Tube O.D	Collar O.D
0.250	0.500
0.375	0.687
0.500	0.875
0.687	1.000
1.000	1.250
1.250	1.750

Other diameters and custom lengths available. Consult factory for details.

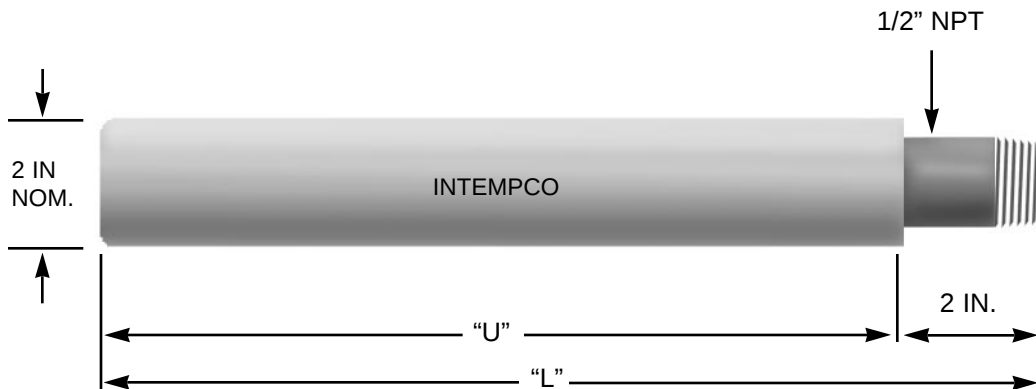
Table "B"		
Tube Size	Max Tube O.D	CODE
1/4 NPT	0.250	ST-14-
1/2 NPT	0.500	ST-12-
3/4 NPT	0.687	ST-34-
1 NPT	1.000	ST-10-

Specify Support Tube Length in Inches

CODE	DESCRIPTION	
0		Plain End
CC	 SEE TABLE "A"	Ceramic Collar
SB1	 ASSEMBLY TUBE LENGTH	Steel bushing 1/2 NPT x 3/4 NPT tube 11/16" O.D max.
SB2	 ASSEMBLY TUBE LENGTH	Steel bushing 1 NPT x 1 NPT
BS	 ASSEMBLY TUBE LENGTH	Brass Sleeve 7/8 - 27 Thread tube 11/16" O.D max.
CL	 ASSEMBLY TUBE LENGTH 1 NPT INTERNAL	Coupling 1 NPT Internal
SEE TABLE "B"	 SUPPORT TUBE LENGTH ASSEMBLY TUBE LENGTH	S.S. Support Tube

INTEMPORITE II PROTECTION TUBES FOR MOLTEN ALUMINUM

The INTEMPORITE II protection tube is designed to protect the thermocouple elements used in measuring the temperature of molten non ferrous metals, specifically molten aluminum and zinc. The protection tube is constructed by casting a phosphate bonded refractory material containing 85% alumina, 4% silica, and other trace elements around a 1/2" NPT steel pipe. The closed end "hot" measuring portion of this tube contains a cast-in thermal conductive plug of graphite to provide fast thermal response to process temperature changes. The cast refractory material was developed for use in molten aluminum and it has excellent non wetting properties and slag is easily removed. The INTEMPORITE II protection tube provides good resistance to thermal shock and mechanical breakage. The maximum temperature rating of the refractory materials is 2800°F (1538°C), however its use as an INTEMPORITE II protection tube is generally limited to the temperatures of molten aluminum or 1500°F (815°C) maximum.



*Codes shown in bold are most common construction

INTEMPCO MODEL NO. IMMERSION 'U' in inches OVERALL LENGTH 'L' in inches PIPE INSERT

IPT01* - [] - [] - []

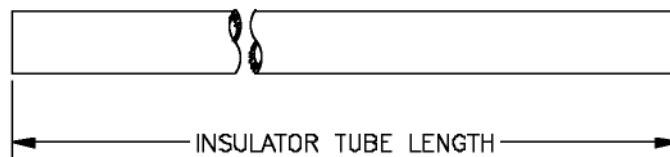
"U" in inches	THERMOCOUPLE ELEMENT LENGTH in inches	CODE
11	13	U11
17	19	U17
23	25	U23
29	31	U29
35	37	U35

"U" + 2"
STANDARD

CODE	MAT'L
ST	STEEL
SS	SS 304

Consult factory for other lengths

Disclaimer: Due to the widely varying conditions under which the INTEMPORITE tube is used or installed, seller offers no warranty, expressed or implied, as to its length of service life or suitability for any particular purpose.

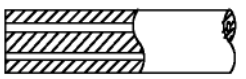
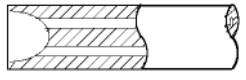
**CERAMIC INSULATORS**ONE
HOLETWO
HOLEFOUR
HOLE

INTEMP CO MODEL	MATERIAL	OUTSIDE DIAMETER	NO. OF BORES	TERMINATION	END OPTION	INSULATOR LENGTH (in inches)
CINS	-	-	-	-	-	-

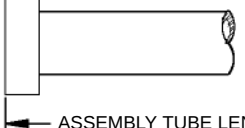
MATERIAL	CODE
Mullite 60	M60
Alumina 997	A97
Alumina 998	A98

O.D	CODE
1/8	125
3/16	188
1/4	250

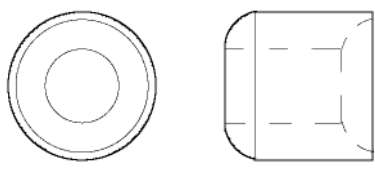
CODE
1
2
4

CODE	DESCRIPTION
P	 Plain
R	 Recessed for 1/4" & 3/16" only

# Of Holes	O.D	Hole Dia.
1	1/8	0.062
	3/16	0.093
	1/4	0.125
2	1/8	0.031
	3/16	0.040
	1/4	0.062
4	1/8	0.020
	3/16	0.040
	1/4	0.062

CODE	DESCRIPTION
0	Plain 
CC	Ceramic Collar 

BALL & SOCKET CERAMIC INSULATORS

	FOR WIRE GAUGE	O.D (Inches)	Hole Size (Inches)	Length (Inches)	Part Number
	8	0.26	0.156	0.260	BAS-08
	14	0.20	0.092	0.200	BAS-14
	20	0.17	0.068	0.170	BAS-20
	24	0.11	0.056	0.110	BAS-24

Also Available:

Custom ceramic insulators available, specify: diameter, bore size or wire gauge, bore configuration, length, material.

Special orders welcomed, consult factory for details.