



# TEMPERATURE SOLUTIONS



ALABAMA  ARKANSAS  FLORIDA  GEORGIA  LOUISIANA  MISSISSIPPI  TENNESSEE  
 SOUTH CAROLINA  NORTH CAROLINA  VIRGINIA

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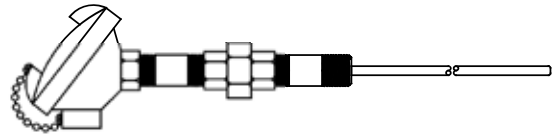
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Thermocouple Quick Selection Sheet



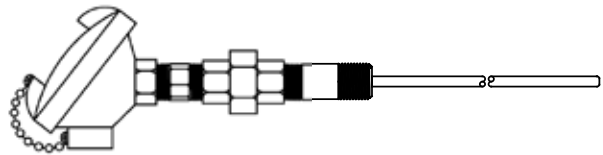
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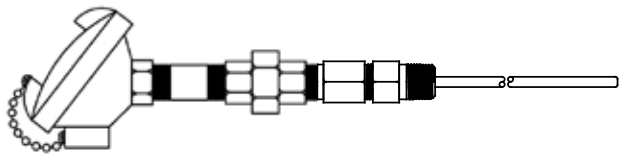
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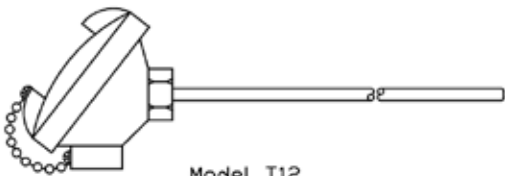
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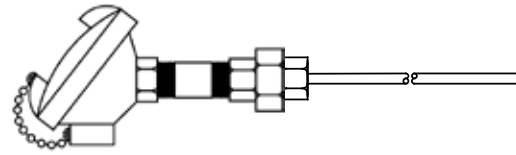
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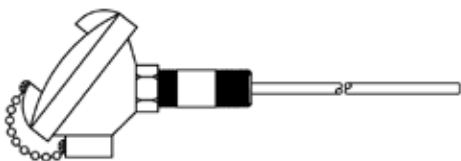
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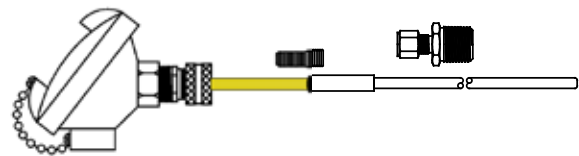
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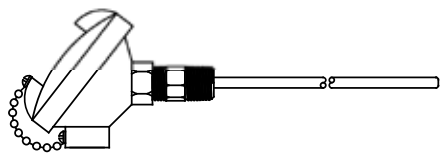
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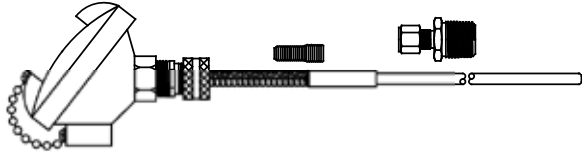


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Thermocouple Quick Selection Sheet



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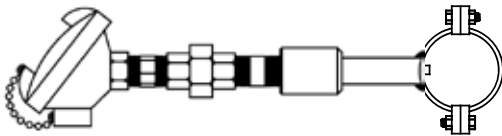
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Model T61  
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Model TE61  
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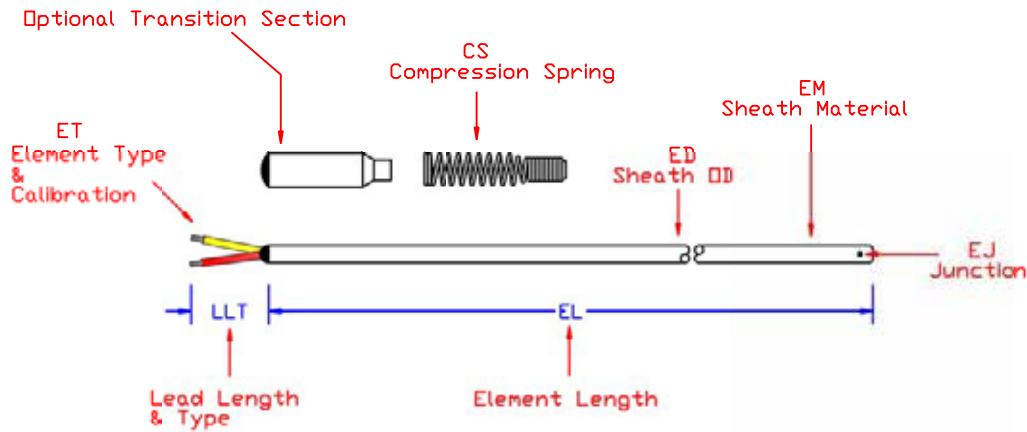


Model T62  
Spring Loaded Hex-Union-Nipple Clamp Assembly  
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Model T63  
Washer Type with Armor or SS Braid  
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Model "T01" Thermocouple Element Only (No Connection Head or Fittings)



T01

EL	
Element Length	
Code Decimal Inches	

ET	
TCType & Calibration	
Single	Dual
Code	Code
J	JJ
K	KK
T	TT
E	EE
N	NN
B	BB
R	RR
S	SS
For special limits insert "P" after the code.	

ED	
Sheath OD	
	Code
1/16"	1
1/8"	2
3/16"	3
1/4"	4
5/16"	5
3/8"	6
1/2"	8
5/8"	10
3/4"	12

EJ	
Junction (Grounding)	
	Code
<u>Singles</u>	
Grounded	G
Ungrounded	U
<u>Duals</u>	
Grounded	G
Ung. / Common	U
Ung. / Uncommon	UU

EM	
Sheath Material	
	Code
304SS	A
310SS	B
316SS	C
1-600	D
1-601	E
Hast. B	F
Hast. C	H
Hast. X	K
Tan	L
Monel-400	M
Incoloy-800	N
347SS	O
446SS	P
321SS	Q

CS

Compression Spring (Available with Sheath OD's - 1/8", 3/16", 1/4", 5/16", 3/8")	
Yes	Code
None	Y
	X

LLT

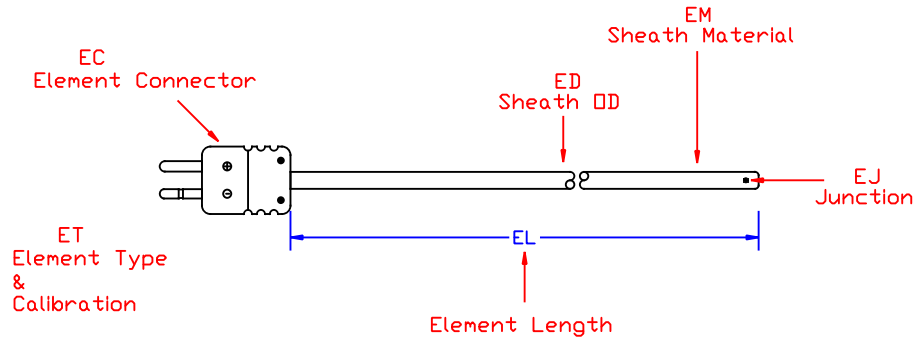
Lead Length & Type	
Length Code Decimal Inches	
*For stranded wire insert an "S" behind length	
Type	Code
Bare	B
Heat Shrink	H
PVC	P
Teflon	T
Fiber Glass	G
Kapton	K
Fish Spine	F

SO

Special Options	
None	Code
	X



Model "T02" Thermocouple Element with Connector

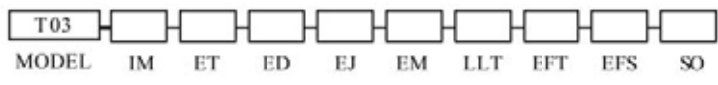
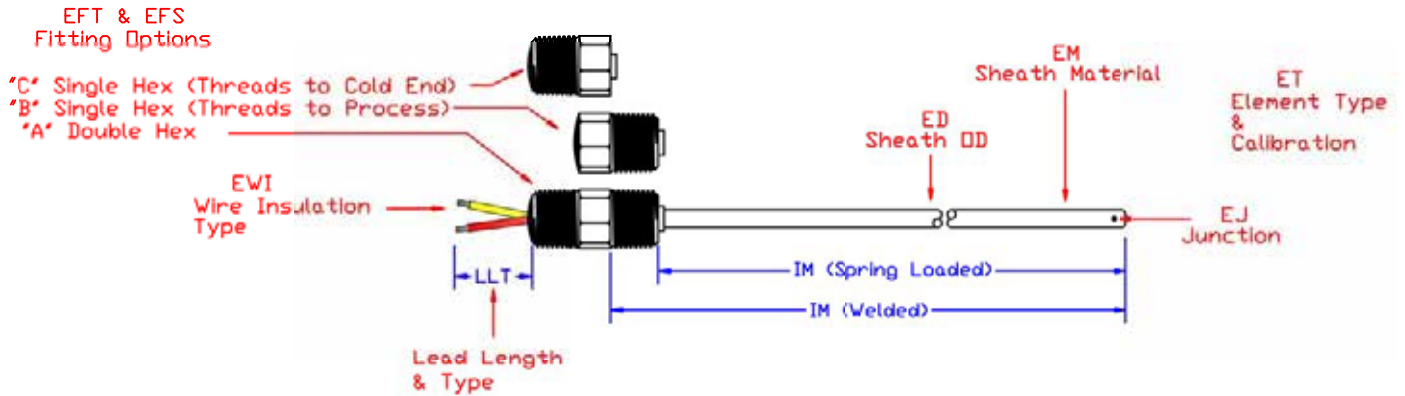


T02	EL	ET	ED	EJ	EM
	Sheath Length	T C Type & Calibration	Sheath OD	Junction (Grounding)	Sheath Material
	Code Decimal Inches	Single   Dual	Code	Singles   Code	Code
		J   JJ K   KK T   TT E   EE N   NN B   BB R   RR S   SS	1/16"   1 1/8"   2 3/16"   3 1/4"   4 5/16"   5 3/8"   6 1/2"   8 5/8"   10 3/4"   12	Grounded   G Ungrounded   U Duals Grounded   G Ung. / Common   U Ung. / Uncommon   UU	304SS   A 310SS   B 316SS   C 1-600   D 1-601   E Hast. B   F Hast. C   H Hast. X   K
		For special limits insert P after the code.			

EC	Element Connector
Mini-Male	Code 1
Mini-Female	Code 2
Standard Male	Code 3
Standard Female	Code 4
For High Temp. Connector insert H after the code.	

SO	Special Options
None	Code X

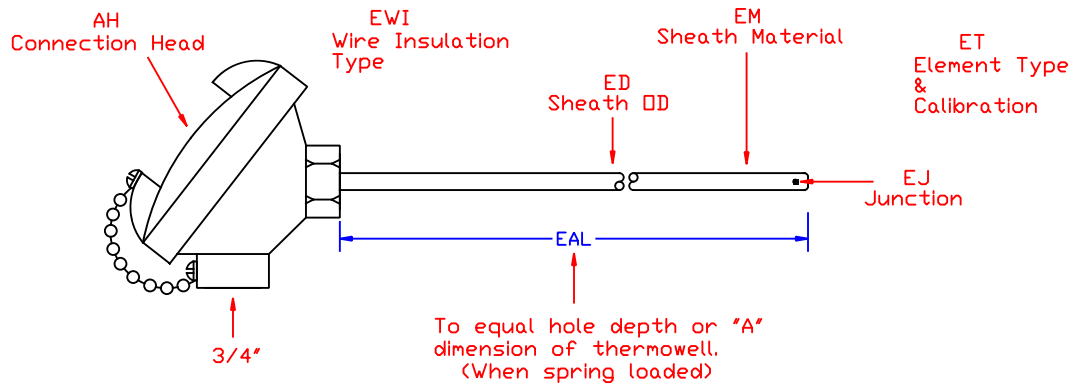
Model "T03" Thermocouple Element with Welded Hex



T03	IM	ET	ED	EJ	EM																																																																					
	Immersion Length	T/C Type & Calibration	Sheath OD	Junction (Grounding)	Sheath																																																																					
	Code Decimal Inches	<table border="1"> <tr> <th>Single</th> <th>Dual</th> </tr> <tr> <td>Code</td> <td>Code</td> </tr> <tr> <td>J</td> <td>JJ</td> </tr> <tr> <td>K</td> <td>KK</td> </tr> <tr> <td>T</td> <td>TT</td> </tr> <tr> <td>E</td> <td>EE</td> </tr> <tr> <td>N</td> <td>NN</td> </tr> <tr> <td>B</td> <td>BB</td> </tr> <tr> <td>R</td> <td>RR</td> </tr> <tr> <td>S</td> <td>SS</td> </tr> </table>	Single	Dual	Code	Code	J	JJ	K	KK	T	TT	E	EE	N	NN	B	BB	R	RR	S	SS	<table border="1"> <tr> <th></th> <th>Code</th> </tr> <tr> <td>1/8"</td> <td>2</td> </tr> <tr> <td>3/16"</td> <td>3</td> </tr> <tr> <td>1/4"</td> <td>4</td> </tr> <tr> <td>5/16"</td> <td>5</td> </tr> <tr> <td>3/8"</td> <td>6</td> </tr> <tr> <td>1/2"</td> <td>8</td> </tr> <tr> <td>5/8"</td> <td>10</td> </tr> <tr> <td>3/4"</td> <td>12</td> </tr> </table>		Code	1/8"	2	3/16"	3	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	<table border="1"> <tr> <th>Singles</th> <th>Code</th> </tr> <tr> <td>Grounded</td> <td>G</td> </tr> <tr> <td>Ungrounded</td> <td>U</td> </tr> <tr> <th>Duals</th> <th>Code</th> </tr> <tr> <td>Grounded</td> <td>G</td> </tr> <tr> <td>Ung. / Common</td> <td>U</td> </tr> <tr> <td>Ung. / Uncommon</td> <td>UU</td> </tr> </table>	Singles	Code	Grounded	G	Ungrounded	U	Duals	Code	Grounded	G	Ung. / Common	U	Ung. / Uncommon	UU	<table border="1"> <tr> <th>Code</th> </tr> <tr> <td>304SS</td> <td>A</td> </tr> <tr> <td>310SS</td> <td>B</td> </tr> <tr> <td>316SS</td> <td>C</td> </tr> <tr> <td>1-600</td> <td>D</td> </tr> <tr> <td>1-601</td> <td>E</td> </tr> <tr> <td>Hast. B</td> <td>F</td> </tr> <tr> <td>Hast. C</td> <td>H</td> </tr> <tr> <td>Hast. X</td> <td>K</td> </tr> </table>	Code	304SS	A	310SS	B	316SS	C	1-600	D	1-601	E	Hast. B	F	Hast. C	H	Hast. X	K
Single	Dual																																																																									
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R	RR																																																																									
S	SS																																																																									
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1/8"	2																																																																									
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Hast. C	H																																																																									
Hast. X	K																																																																									
		For special limits insert P after the code.																																																																								

LLT	EFT	EFS	SO																		
Lead Length & Type	Fitting Type	Fitting Size	Special Options																		
Length Code Inches	<p><b>WELDED</b></p> <p>Double Hex Single Hex (Threads to front) Single Hex (Threads to back)</p> <p><b>SPRING LOADED</b></p> <p>Double Hex Single Hex (Threads to front) Single Hex (Threads to back)</p>	NPT Size																			
*For stranded wire insert a "S" behind length	Code	Code	Code																		
Type	A B C	<table border="1"> <tr> <th></th> <th>Code</th> </tr> <tr> <td>1/8"</td> <td>2</td> </tr> <tr> <td>3/16"</td> <td>3</td> </tr> <tr> <td>1/4"</td> <td>4</td> </tr> <tr> <td>5/16"</td> <td>5</td> </tr> <tr> <td>3/8"</td> <td>6</td> </tr> <tr> <td>1/2"</td> <td>8</td> </tr> <tr> <td>5/8"</td> <td>10</td> </tr> <tr> <td>3/4"</td> <td>12</td> </tr> </table>		Code	1/8"	2	3/16"	3	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	None X
	Code																				
1/8"	2																				
3/16"	3																				
1/4"	4																				
5/16"	5																				
3/8"	6																				
1/2"	8																				
5/8"	10																				
3/4"	12																				
Heat Shrink PVC Teflon Fiber Glass Kapton	H P T G K																				

Model "T12" Thermocouple Spring Loaded Assembly (No Fittings)



T12

EAL	
Element Assembled Length	
Code	Decimal Inches

ET	
TCType & Calibration	
Single	Dual
<u>Code</u>	<u>Code</u>
J	JJ
K	KK
T	TT
E	EE
N	NN
B	BB
R	RR
S	SS
For special limits insert P after the code.	

ED	
Sheath OD	
	<u>Code</u>
1/16"	1
1/8"	2
3/16"	3
1/4"	4
5/16"	5
3/8"	6
1/2"	8
5/8"	10
3/4"	12

EJ	
Junction (Grounding)	
	<u>Code</u>
<u>Singles</u>	
Grounded	G
Ungrounded	U
<u>Duals</u>	
Grounded	G
Ung. / Common	U
Ung. / Uncommon	UU

EM	
Sheath Material	
	<u>Code</u>
304SS	A
310SS	B
316SS	C
1-600	D
1-601	E
Hast. B	F
Hast. C	H
Hast. X	K

EWI

Wire Insulation Type (Leads out of Sheath)	
	<u>Code</u>
Bare	B
PVC	P
Teflon	T
Fiber Glass	G
Heat Shrink	H

AH

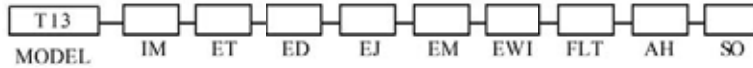
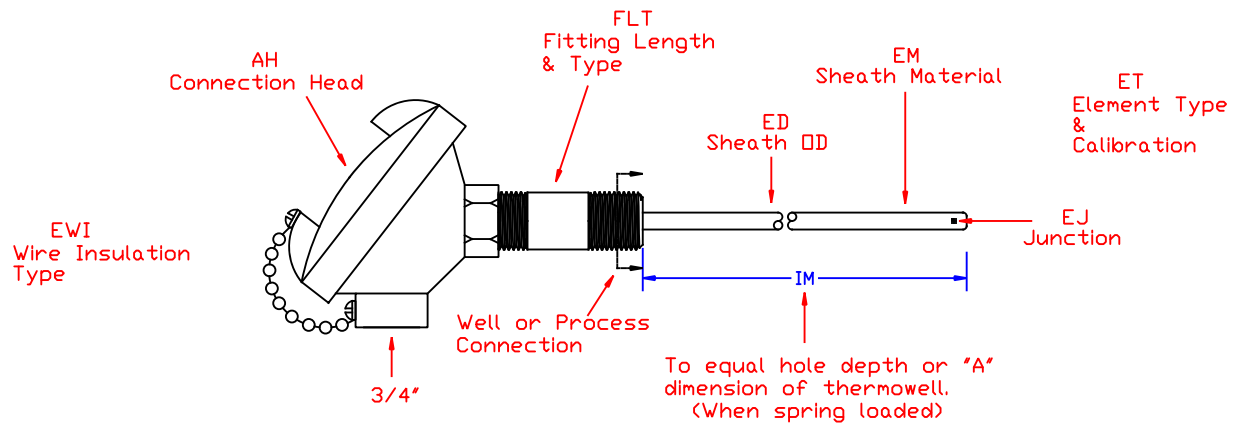
Connection Head	
	<u>Code</u>
Alum. screwtop	5B
Epoxy coated Al. screwtop	5L
Cast iron screwtop	1A
Black poly screwtop	1N
SS Screw top	5K
Alum. Flip top	3A
Poly Flip top	3B
Alum. explosion proof	1E

SO

Special Options	
	<u>Code</u>
None	X

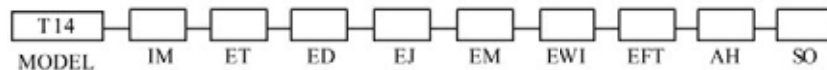
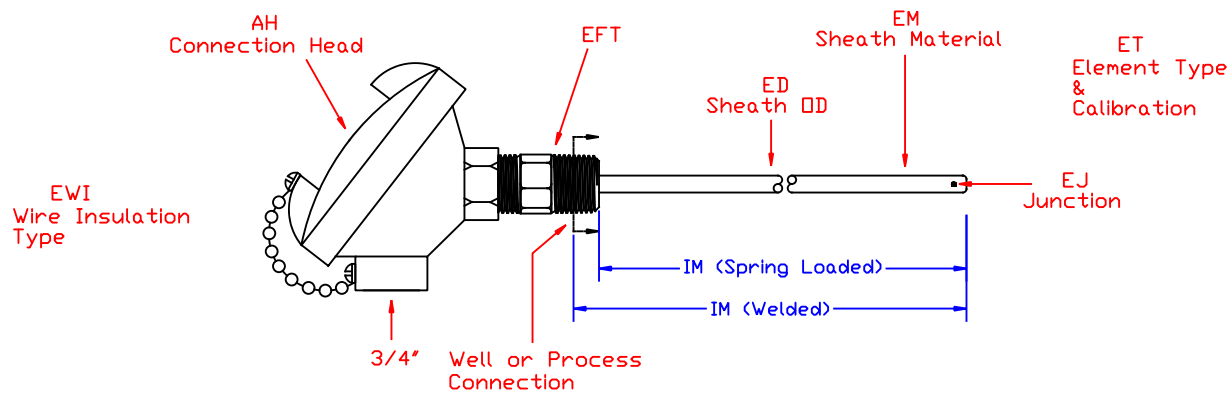


Model "T13" Thermocouple Spring Loaded Nipple Assembly



T13	-	IM	-	ET	-	ED	-	EJ	-	EM	-																																																																													
		Inersion Length		TC Type & Calibration		Sheath OD		Junction (Grounding)		Sheath Material																																																																														
		Code Decimal Inches		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Single</th> <th colspan="2">Dual</th> </tr> <tr> <td>Code</td> <td>Code</td> <td>Code</td> <td>Code</td> </tr> <tr> <td>J</td> <td>JJ</td> <td>K</td> <td>KK</td> </tr> <tr> <td>T</td> <td>TT</td> <td>E</td> <td>EE</td> </tr> <tr> <td>N</td> <td>NN</td> <td>B</td> <td>BB</td> </tr> <tr> <td>R</td> <td>RR</td> <td>S</td> <td>SS</td> </tr> </table> <p style="font-size: small;">For special limits insert P after the code.</p>	Single		Dual		Code	Code	Code	Code	J	JJ	K	KK	T	TT	E	EE	N	NN	B	BB	R	RR	S	SS		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Code</th> </tr> <tr> <td>1/16"</td> <td>1</td> </tr> <tr> <td>1/8"</td> <td>2</td> </tr> <tr> <td>3/16"</td> <td>3</td> </tr> <tr> <td>1/4"</td> <td>4</td> </tr> <tr> <td>5/16"</td> <td>5</td> </tr> <tr> <td>3/8"</td> <td>6</td> </tr> <tr> <td>1/2"</td> <td>8</td> </tr> <tr> <td>5/8"</td> <td>10</td> </tr> <tr> <td>3/4"</td> <td>12</td> </tr> </table>	Code	Code	1/16"	1	1/8"	2	3/16"	3	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Singles</th> <th colspan="2">Duals</th> </tr> <tr> <td>Grounded</td> <td>Code</td> <td>Grounded</td> <td>Code</td> </tr> <tr> <td>Ungrounded</td> <td>G</td> <td>Ungrounded</td> <td>U</td> </tr> <tr> <td>Ung. / Common</td> <td>G</td> <td>Ung. / Uncommon</td> <td>UU</td> </tr> </table>	Singles		Duals		Grounded	Code	Grounded	Code	Ungrounded	G	Ungrounded	U	Ung. / Common	G	Ung. / Uncommon	UU		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Code</th> </tr> <tr> <td>304SS</td> <td>A</td> </tr> <tr> <td>310SS</td> <td>B</td> </tr> <tr> <td>316SS</td> <td>C</td> </tr> <tr> <td>1-600</td> <td>D</td> </tr> <tr> <td>1-601</td> <td>E</td> </tr> <tr> <td>Hast. B</td> <td>F</td> </tr> <tr> <td>Hast. C</td> <td>H</td> </tr> <tr> <td>Hast. X</td> <td>K</td> </tr> </table>	Code	Code	304SS	A	310SS	B	316SS	C	1-600	D	1-601	E	Hast. B	F	Hast. C	H	Hast. X	K
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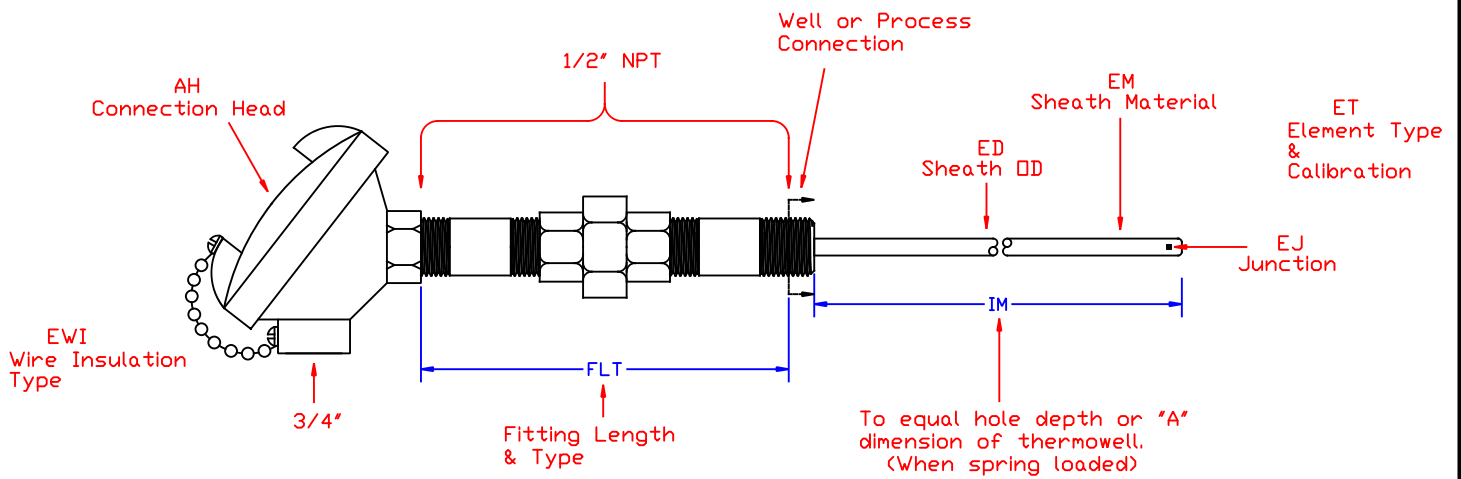
Model "T14" Thermocouple Spring Loaded or Welded Hex Assembly



T14	IM	ET	ED	EJ	EM	EWI
Imersion Length	TCType & Calibration	Sheath OD	Junction (Grounding)	Sheath Material	Wire Insulation Type (Leads out of Sheath)	
Code Decimal Inches	Single Code Dual Code	Code	Singles Grounded Ungrounded DUALS Grounded Ung./Common Ung./Uncommon	Code	Code	
	J K T E N B R S	JJ KK TT EE NN BB RR SS	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	G U G U UU	A B C D E F H K	
	For special limits insert P after the code.					

EFT	AH	SO
Fitting Type	Connection Head	Special Options
WELDED	Code	Code
Double Hex	Alum. screwtop	5B
Single Hex (Threads to front)	Epoxy coated Al. screwtop	5L
Single Hex (Threads to back)	Cast iron screwtop	1A
	Black poly screwtop	1N
	SS Screw top	5K
	Alum. Flip top	3A
	Poly Flip top	3B
	Alum. explosionproof	1E
SPRING LOADED		
Double Hex		
Single Hex (Threads to front)		
Single Hex (Threads to back)		

Model "T15" Thermocouple Spring Loaded Nipple-Union-Nipple Assembly

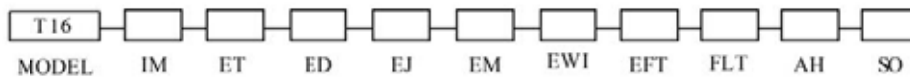
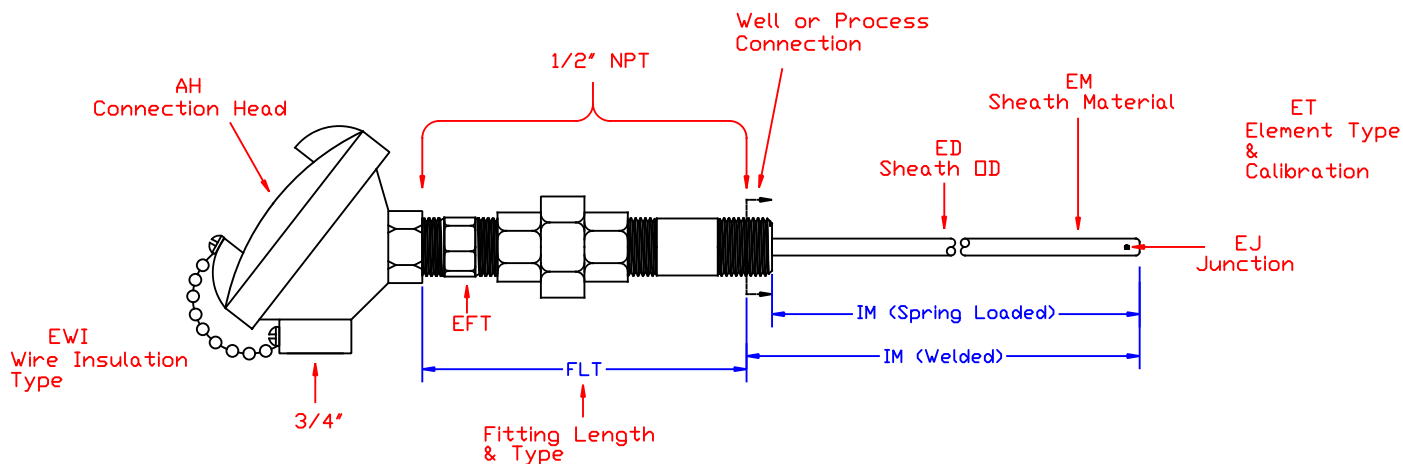


T15	IM	ET	ED	EJ	EM	EWI
	Imersion Length	TCType & Calibration	Sheath OD	Junction (Grounding)	Sheath Material	Wire Insulation Type (Leads out of Sheath)
	Code Decimal Inches	Single / Dual	Code	Code	Code	Code
		J, JJ, K, KK, T, TT, E, EE, N, NN, B, BB, R, RR, S, SS	1/16" 1, 1/8" 2, 3/16" 3, 1/4" 4, 5/16" 5, 3/8" 6, 1/2" 8, 5/8" 10, 3/4" 12	Singles: Grounded (G), Ungrounded (U); Duals: Grounded (G), Ung./Common (U), Ung./Uncommon (UU)	304SS (A), 310SS (B), 316SS (C), 1-600 (D), 1-601 (E), Hast. B (F), Hast. C (H), Hast. X (K)	Bare (B), PVC (P), Teflon (T), Fiber Glass (G), Heat Shrink (H)
		For special limits insert P after the code.				

FLT	AH	SO
Fitting Length & Type	Connection Head	Special Options
Length Code Decimal Inches	Code	Code
Type	Alum. screwtop (5B), Epoxy coated Al. screwtop (5L), Cast iron screwtop (1A), Black poly screwtop (1N), SS Screw top (5K), Alum. Flip top (3A), Poly Flip top (3B), Alum. explosionproof (1E)	None (X)
Galv. Sch. 40 (A), Galv. Sch. 80 (B), 304SS Sch. 40 (C), 304SS Sch. 80 (D), 316SS Sch. 40 (E), 316SS Sch. 80 (F)		



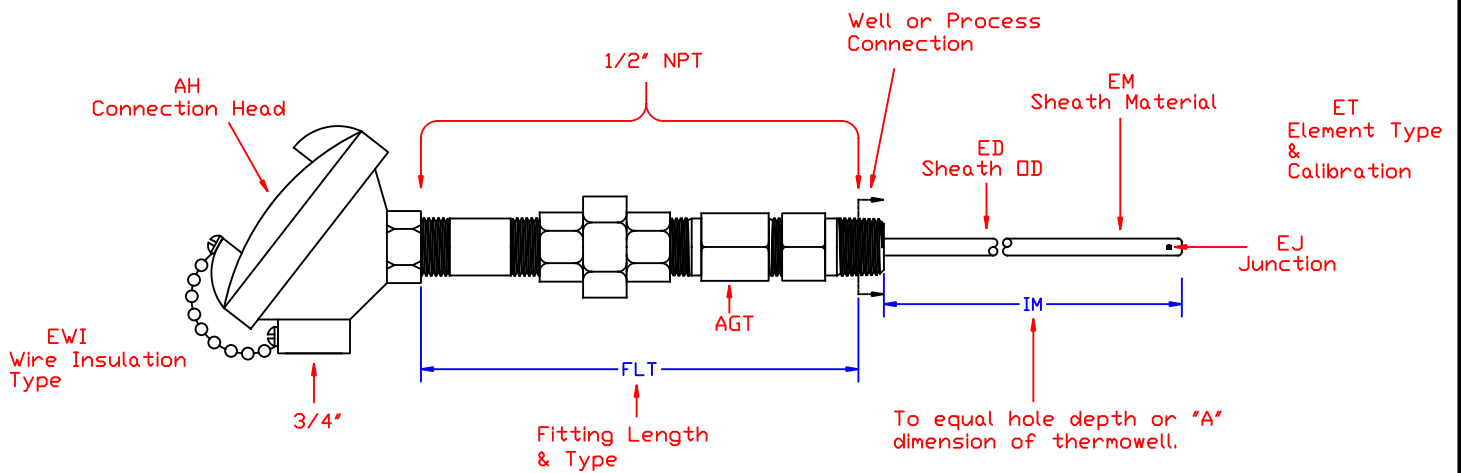
Model "T16" Thermocouple Spring Loaded or Welded Hex-Union-Nipple Assembly



T16	IM	ET	ED	EJ	EM	EWI
Imersion Length	TCType & Calibration		Sheath OD	Junction (Grounding)	Sheath Material	Wire Insulation Type (Leads out of Sheath)
Code Decimal Inches	Single	Dual	Code	Code	Code	Code
	J	JJ	1/16" 1	Singles	304SS A	Bare B
	K	KK	1/8" 2	Grounded G	310SS B	PVC P
	T	TT	3/16" 3	Ungrounded U	316SS C	Teflon T
	E	EE	1/4" 4	Duals	1-600 D	Fiber Glass G
	N	NN	5/16" 5	Grounded G	1-601 E	Heat Shrink H
	B	BB	3/8" 6	Ung./Common U	Hast. B F	
	R	RR	1/2" 8	Ung./Uncommon UU	Hast. C H	
	S	SS	5/8" 10		Hast. X K	
			3/4" 12			
	For special limits insert P after the code.					

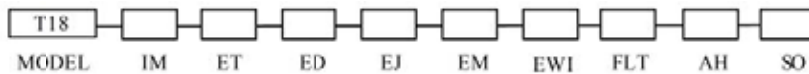
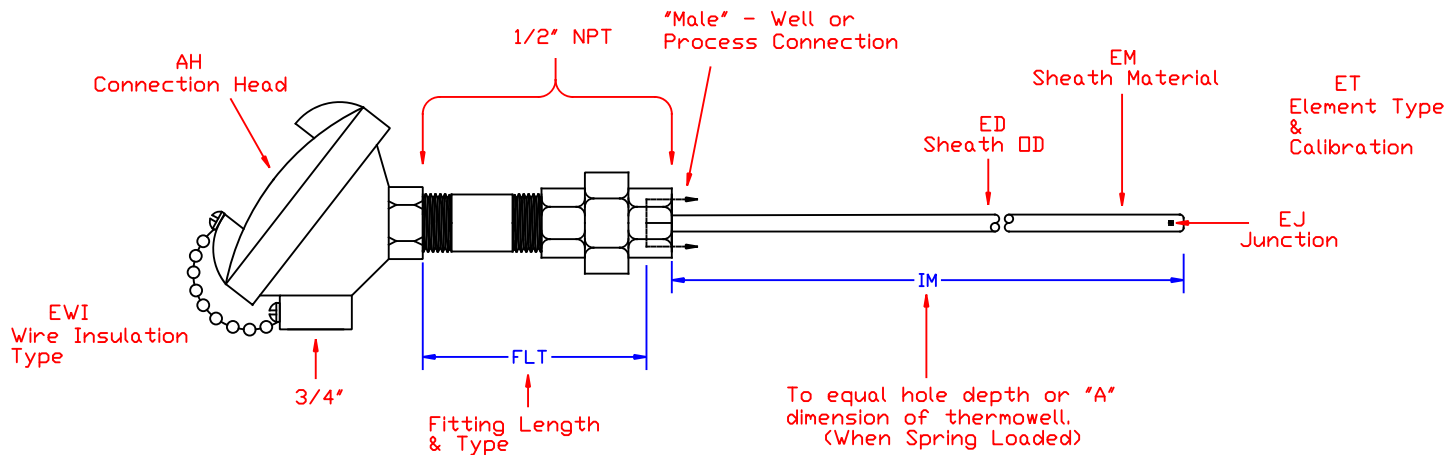
EFT	FLT	AH	SO
Fitting Type	Fitting Length & Type	Connection Head	Special Options
WELDED	Length Code	Code	Code
Double Hex A	Decimal Inches	Alum. screw top 5B	None
Single Hex (Threads to front) B		Epoxy coated Al. screw top 5L	X
Single Hex (Threads to back) C	Type	Cast iron screw top 1A	
	Code	Black poly screw top 1N	
	Galv. Sch. 40 A	SS Screw top 5K	
	Galv. Sch. 80 B	Alum. Flip top 3A	
	304SS Sch. 40 C	Poly Flip top 3B	
	304SS Sch. 80 D	Alum. explosion proof 1E	
	316SS Sch. 40 E		
	316SS Sch. 80 F		

Model "T17" Thermocouple Nipple-Union-Gland Assembly



T17	IM	ET	ED	EJ	EM	EWI	
	Imersion Length Code Decimal Inches	TCType & Calibration Single Code Dual Code	Sheath OD Code	Junction (Grounding) Singles Grounded Ungrounded Duals Grounded Ung./Common Ung./Uncommon	Code	Sheath Material Code	Wire Insulation Type (Leads out of Sheath) Code
		J K T E N B R S	1/16" 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	G U G U UU	304SS 310SS 316SS I-600 I-601 Hast. B Hast. C Hast. X	B P T G H	
		For special limits insert P after the code.					
	FLT Fitting Length & Type Length Code Decimal Inches Type Code	AGT Sealing Gland Size & Sealant Type Std. Housing -303SS Code Sealant Code Insert this code after the size code. Code		AH Connection Head Code		SO Special Options Code	
	2 4 6 8 12 16 A B C D E F	1/8" NPT 1/4" NPT 3/8" NPT 1/2" NPT 3/4" NPT 1" NPT L T N V G		5B 5L 1A 1N 5K 3A 3B 1E		None X	

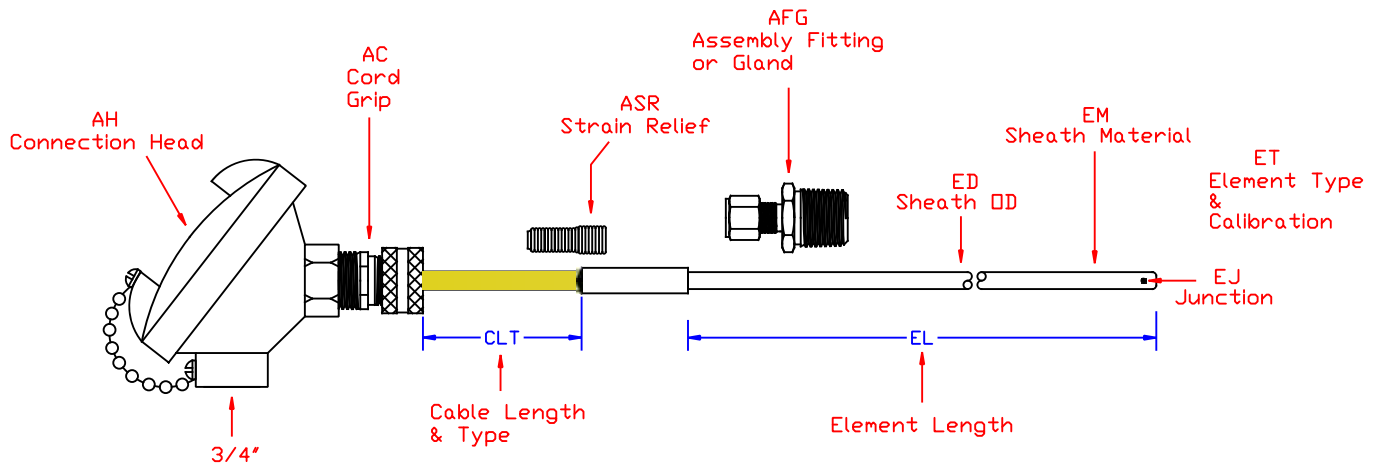
Model "T18" Thermocouple Nipple-Union Assembly



<b>T18</b>	<b>IM</b>	<b>ET</b>	<b>ED</b>	<b>EJ</b>	<b>EM</b>	<b>EWI</b>
	Imersion Length	T/C Type & Calibration		Junction (Grounding)	Sheath Material	Wire Insulation Type (Leads out of Sheath)
	Code Decimal Inches	Single	Dual	Code	Code	Code
		Code	Code	Singles	304SS A	Bare B
		J	JJ	Grounded	310SS B	PVC P
		K	KK	Ungrounded	316SS C	Teflon T
		T	TT	Duals	1-600 D	Fiber Glass G
		E	EE	Grounded	1-601 E	Heat Shrink H
		N	NN	Ung. / Common	Hast. B F	
		B	BB	U	Hast. C H	
		R	RR	Ung. / Uncommon	Hast. X K	
		S	SS	UU		
		For special limits insert P after the code.				

<b>FLT</b>	<b>AH</b>	<b>SO</b>
Fitting Length & Type	Connection Head	Special Options
Length Code Decimal Inches		Code
Type	Alum. screwtop	5B
Galv. Sch. 40	Epoxy coated Al. screwtop	5L
Galv. Sch. 80	Cast iron screwtop	1A
304SS Sch. 40	Black poly screwtop	1N
304SS Sch. 80	SS Screw top	5K
316SS Sch. 40	Alum. Flip top	3A
316SS Sch. 80	Poly Flip top	3B
	Alum. explosion proof	1E
Code		Code
A		X
B		
C		
D		
E		
F		

Model "T31" Thermocouple Extension Cable Remote Head Assembly



T31	EL	ET	ED	EJ	EM	CLT	AFG	ASR	AC	AH	SO
	Element Length	TCType & Calibration	Sheath OD	Junction (Grounding)	Sheath Material	Cable Length & Type					
	Code Decimal Inches	Single Code Dual Code	Code	Singles Code DUALS Code	Code	Code Decimal Inches Type Code					
		J K T E N B R S	1/16" 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	G U G U UU	304SS 310SS 316SS 1-600 1-601 Hast. B Hast. C Hast. X	PVC Jacketed Cable Heavy Wall PVC Cable Teflon Jacketed Cable Fiberglass Jacketed Cable Kapton Jacketed Cable					
		For special limits insert P after the code.				For stranded wire insert a "S" behind length					

AFG		
Assembly Fitting or Gland		
Compression Fitting Code		
NPT Size	SS Code	Brass Code
1/8"	C2	M2
1/4"	C4	M4
3/8"	C6	M6
1/2"	C8	M8
3/4"	C12	M12
1"	C16	M16
For Teflon ferrule add a T behind the code		
Sealing Gland Code		
Thread Size	Code	
1/8" NPT	2	
1/4" NPT	4	
3/8" NPT	6	
1/2" NPT	8	
3/4" NPT	12	
1" NPT	16	
Sealant Type	Code	
Lava	L	
Teflon	T	
Neoprene	N	
Viton	V	
Grafoil	G	
* If neither fitting is required Code = "X"		

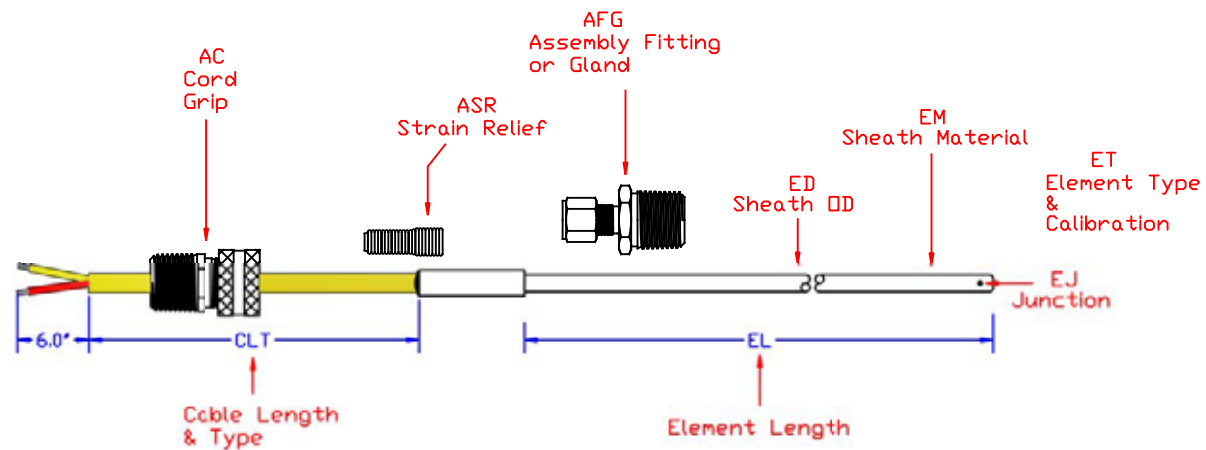
ASR	
Strain Relief Spring	
Yes	Code
None	Y
	X

AC		
CG Fitting with Bushing sized for Cable or Armor		
Material & Pipe size	Code	
Steel 1/2"	A8	
Steel 3/4"	A12	
Steel 1"	A16	
Alum. 1/2"	B8	
Alum. 3/4"	B12	
Alum. 1"	B16	
Plastic 1/2"	C8	
Plastic 3/4"	C12	
Plastic 1"	C16	

AH	
Connection Head	
Alum. screwtop	Code
Epoxy coated Al. screwtop	5B
Cast iron screwtop	5L
Black poly screwtop	1A
SS Screw top	1N
Alum. Flip top	5K
Poly Flip top	3A
Alum. explosion proof	3B
	1E

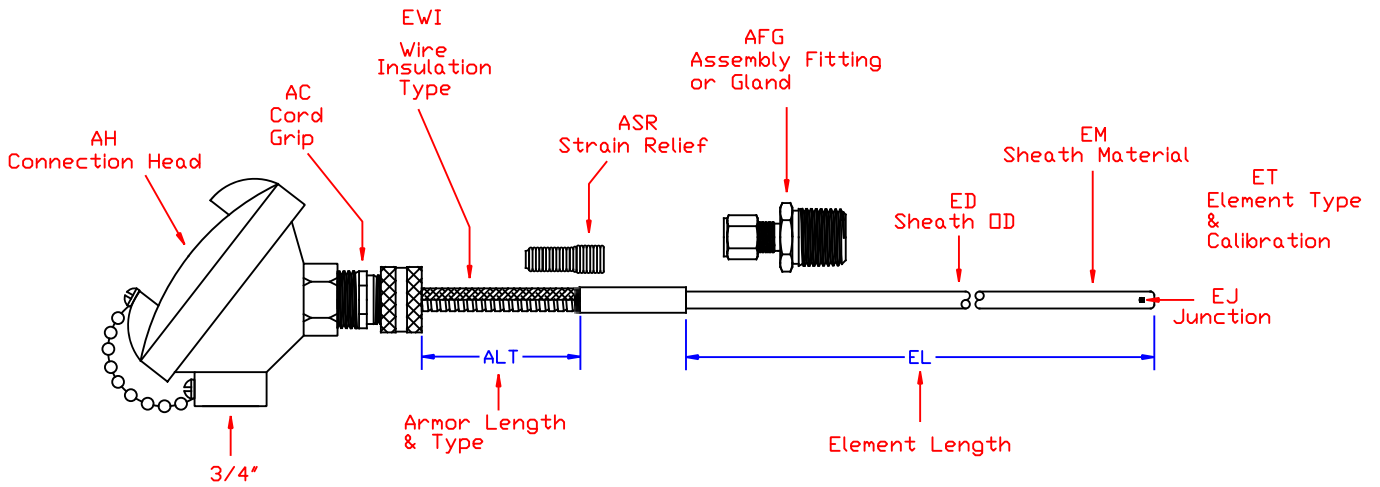
SO	
Special Options	
None	Code
	X

Model "TE31" Thermocouple Extension Cable Assembly



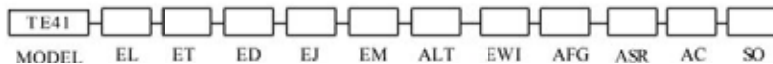
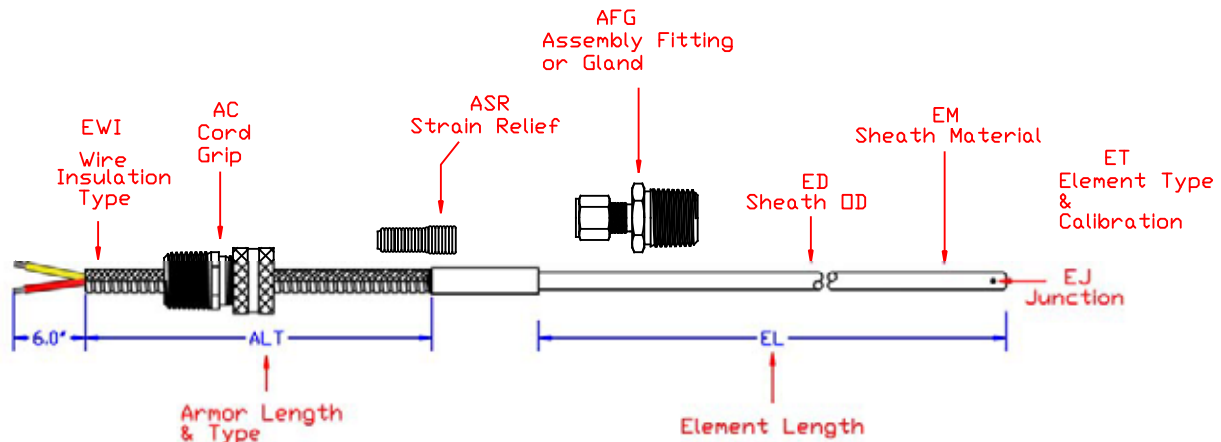
TE31	EL	ET	ED	EJ	EM	CLT	AFG	ASR	AC	SO																																																																																																																																																																																																																																																				
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B</td><td>F</td></tr> <tr><td>Hast. C</td><td>H</td></tr> <tr><td>Hast. X</td><td>K</td></tr> </table>	Sheath Material		Code		304SS	A	310SS	B	316SS	C	1-600	D	1-601	E	Hast. B	F	Hast. C	H	Hast. X	K	<table border="1"> <tr><th colspan="2">Cable Length &amp; Type</th></tr> <tr><th colspan="2">Code</th></tr> <tr><th colspan="2">Decimal Inches</th></tr> <tr><th colspan="2">Type</th></tr> <tr><th>Type</th><th>Code</th></tr> <tr><td>PVC Jacketed Cable</td><td>P</td></tr> <tr><td>Heavy Wall PVC Cable</td><td>PW</td></tr> <tr><td>Teflon Jacketed Cable</td><td>T</td></tr> <tr><td>Fiberglass Jacketed Cable</td><td>G</td></tr> <tr><td>Kapton Jacketed Cable</td><td>K</td></tr> <tr><td colspan="2">* Std. Lead Length = 6.0"</td></tr> <tr><td colspan="2">** Add special option for different lead length in Decimal Inches</td></tr> </table>	Cable Length & Type		Code		Decimal Inches		Type		Type	Code	PVC Jacketed Cable	P	Heavy Wall PVC Cable	PW	Teflon Jacketed Cable	T	Fiberglass Jacketed Cable	G	Kapton Jacketed Cable	K	* Std. 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**Model "T41" Thermocouple Flex Armor or SS Braid Remote Head Assembly**



<b>T41</b>	<b>EL</b>	<b>ET</b>	<b>ED</b>	<b>EJ</b>	<b>EM</b>	<b>ALT</b>	<b>EWI</b>	<b>AFG</b>	<b>ASR</b>	<b>AC</b>	<b>AH</b>	<b>SO</b>	
	Element Length Code Decimal Inches	T/C Type & Calibration Single Code Dual Code	Sheath OD Code	Junction (Grounding) Singles Grounded Ungrounded DUALS Grounded Ung./Common Ung./Uncommon	Code	Sheath Material Code	Armor Length & Type Code Decimal Inches Armor Type Code SS Bare PVC Coated Teflon Coated Braid Code SS Braid	Wire Insulation Type (Insulation type of wire inside Armor) Code	Assembly Fitting or Gland Compression Fitting Code NPT Size SS Code Brass Code	Strain Relief Spring (For SS Braid Only) Code	CG Fitting with Bushing sized for Cable or Armor Material & Pipe size Code	Connection Head Code	Special Options Code
	J K T E N B R S	JJ KK TT EE NN BB RR SS	1/16" 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	G U G U UU	A B C D E F H K	A B P T	P T G K	C2 C4 C6 C8 C12 C16 M2 M4 M6 M8 M12 M16	Y X	A8 A12 A16 B8 B12 B16 C8 C12 C16	5B 5L 1A 1N 5K 3A 3B 1E	X	
		For special limits insert P after the code.				For color coated insert C after the code.	For stranded wire insert S after the code.	For Teflon ferrule add a T behind the code					
								Sealing Gland Code Thread Size Code					
								Sealant Type Code					
								* If neither fitting is required Code = "X"					

Model "TE41" Thermocouple Flex Armor or SS Braid Assembly

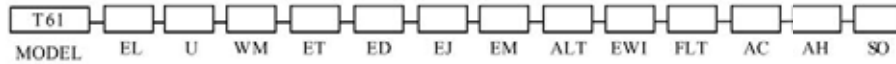
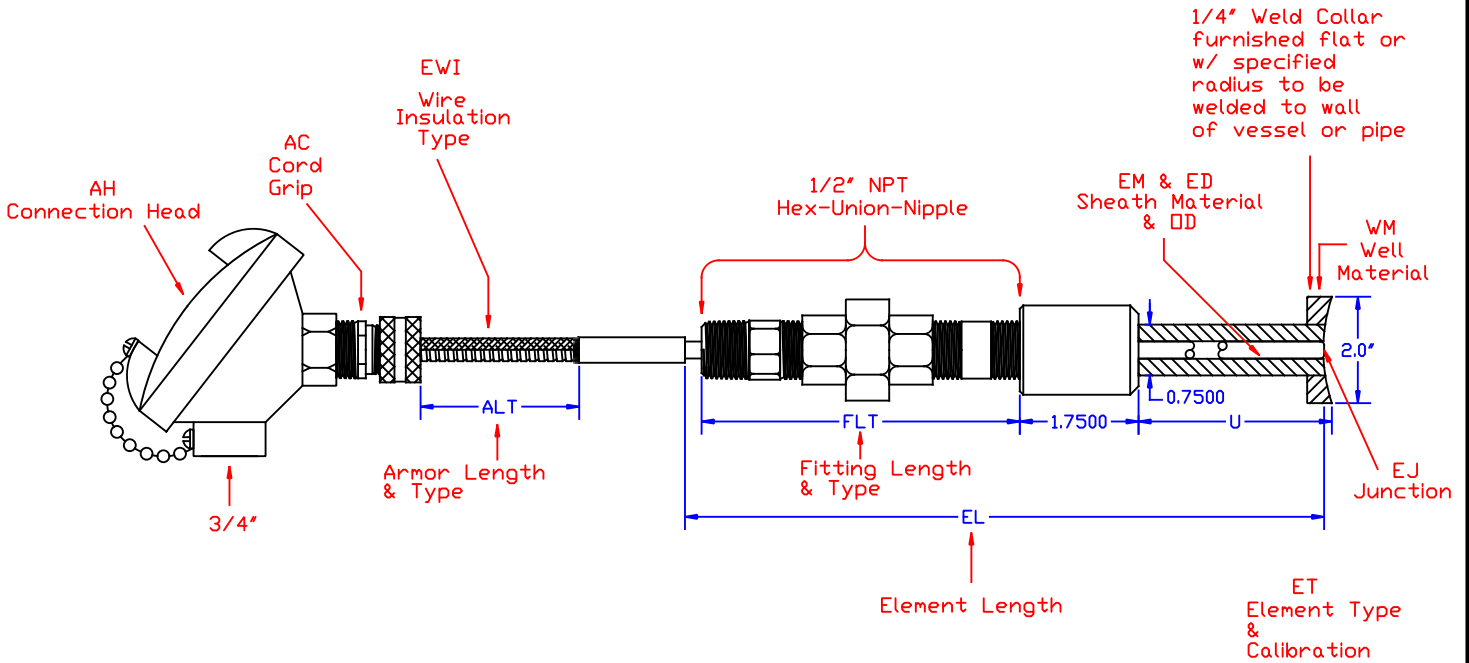


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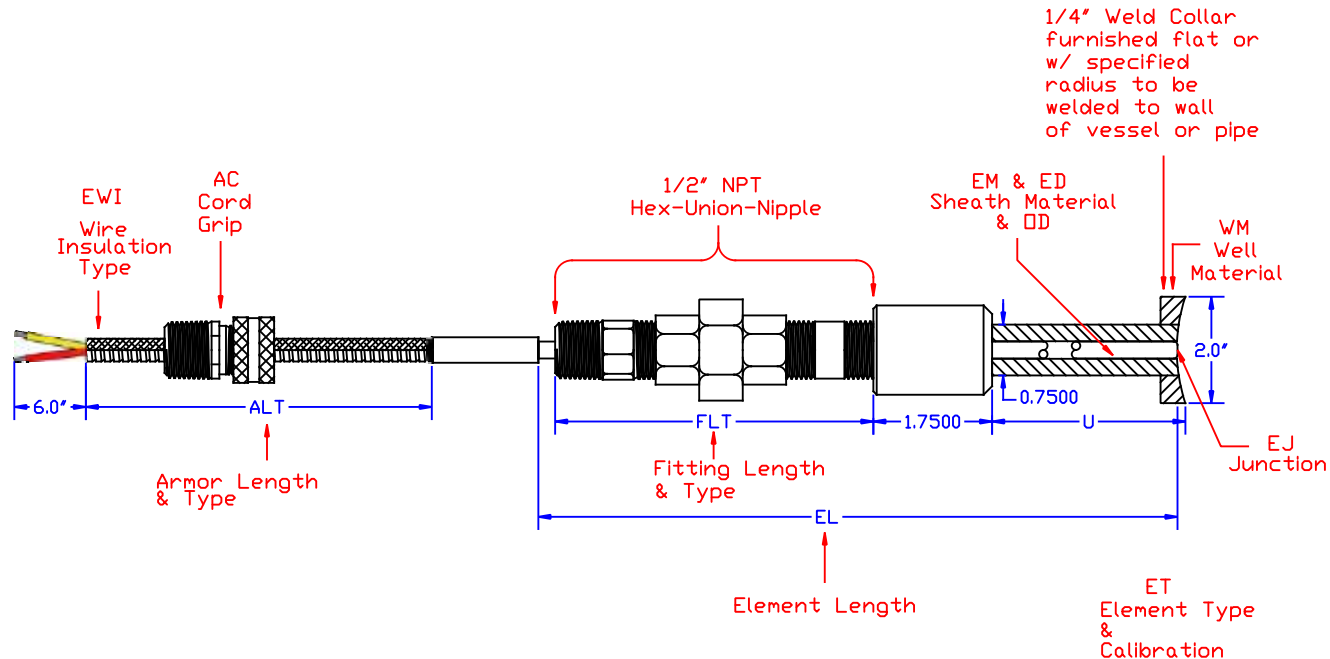
**Model "T61" Thermocouple Spring Loaded Surface Mount & Head Assembly**



<b>T61</b>	<b>EL</b>	<b>U</b>	<b>WM</b>	<b>ET</b>	<b>ED</b>	<b>EJ</b>	<b>EM</b>
	Element Length	Well Length	Well Material	TCType & Calibration	Sheath OD	Junction (Grounding)	Sheath Material
	Code Decimal Inches	Code Decimal Inches	Code	Single Dual Code Code	Code	Singles Code Grounded U Ungrounded G DUALS Code Grounded G Ung./Common U Ung./Uncommon UU	Code
			304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	J JJ K KK T TT E EE N NN B BB R RR S SS <small>For special limits insert P after the code.</small>	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12		304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K

<b>ALT</b>	<b>EWI</b>	<b>FLT</b>	<b>AC</b>	<b>AH</b>	<b>SO</b>
Armor Length & Type	Wire Insulation Type (Insulation type of wire inside Armor)	Fitting Length & Type	CG Fitting with Bushing sized for Cable or Armor	Connection Head	Special Options
Code Decimal Inches	Code	Length Code Decimal Inches	Material & Pipe size	Code	Code
Armor Type Code SS Bare A PVC Coated P Teflon Coated T Braid Code SS Braid B <small>For color coated insert C after the code.</small>	PVC P Teflon T Fiberglass G Kapton K <small>For stranded wire insert a "S" behind length</small>	Type Code Galv. Sch. 40 A Galv. Sch. 80 B 304SS Sch. 40 C 304SS Sch. 80 D 316SS Sch. 40 E 316SS Sch. 80 F	Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16	Alum. screwtop 5B Epoxy coated Al. screwtop 5L Cast iron screwtop 1A Black poly screw:op 1N SS Screw top 5K Alum. Flip top 3A Poly Flip top 3B Alum. explosion proof 1E	None Code X

Model "TE61" Thermocouple Spring Loaded Surface Mount Assembly



TE61	EL	U	WM	ET	ED	EJ	EM
Element Length	Well Length	Well Material	TCType & Calibration	Sheath OD	Junction (Grounding)	Sheath Material	
Code Decimal Inches	Code Decimal Inches	Code	Single Code Dual Code	Code	Code	Code	
		304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	J JJ K KK T TT E EE N NN B BB R RR S SS	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Singles Grounded G Ungrounded U Duals Grounded G Ung./Common U Ung./Uncommon UU	304SS A 310SS B 316SS C I-600 D I-601 E Hast.B F Hast.C H Hast.X K	

For special limits insert P after the code.

ALT	
Armor Length & Type	
Code Decimal Inches	
Armor Type	Code
SS Bare	A
PVC Coated	P
Teflon Coated	T
Braid	Code
SS Braid	B
For color coated insert C after the code.	
* Std. Lead Length = 6.0"	
** Add special option for different lead length in Decial Inches	

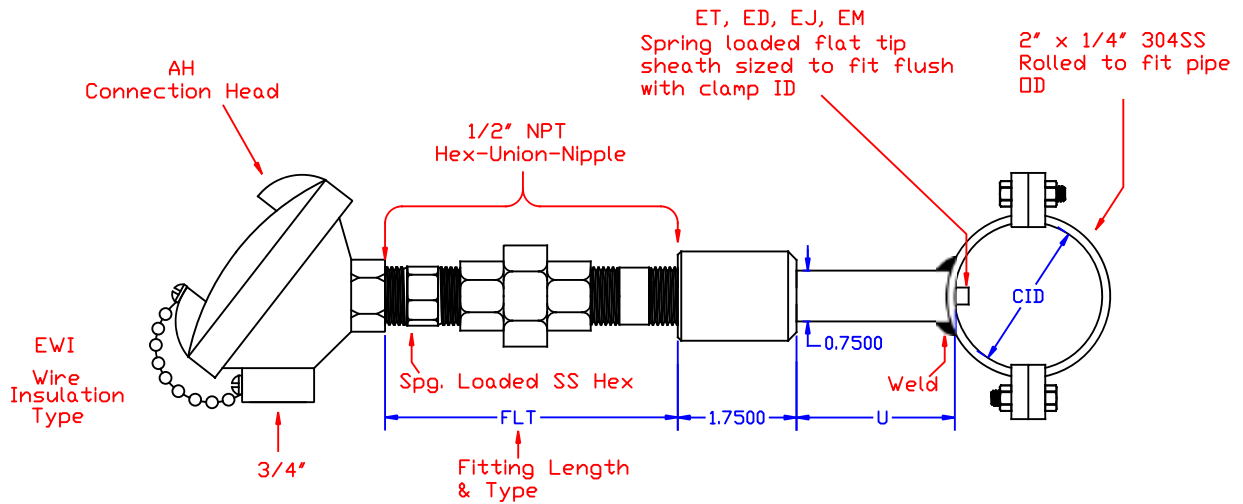
EWI	
Wire Insulation Type	
PVC	Code
Teflon	P
Fiberglass	T
Kapton	K

FLT	
Fitting Length & Type	
Length Code Decimal Inches	
Type	Code
Galv. Sch. 40	A
Galv. Sch. 80	B
304SS Sch. 40	C
304SS Sch. 80	D
316SS Sch. 40	E
316SS Sch. 80	F

AC		
CG Fitting with Bushing sized for Cable or Armor		
Material & Pipe size	Code	
Steel 1/2"	A8	
Steel 3/4"	A12	
Steel 1"	A16	
Alum. 1/2"	B8	
Alum. 3/4"	B12	
Alum. 1"	B16	
Plastic 1/2"	C8	
Plastic 3/4"	C12	
Plastic 1"	C16	

SO	
Special Options	
None	Code
	X

**Model "T62" Thermocouple Spring Loaded Hex-Union-Nipple Clamp Assembly**



1" Pipe CID = 1.315"
2" Pipe CID = 2.375"
3" Pipe CID = 3.50"
4" Pipe CID = 4.50"
6" Pipe CID = 6.625"
10" Pipe CID = 10.75"
12" Pipe CID = 12.75"
48" Pipe CID = 48.0"

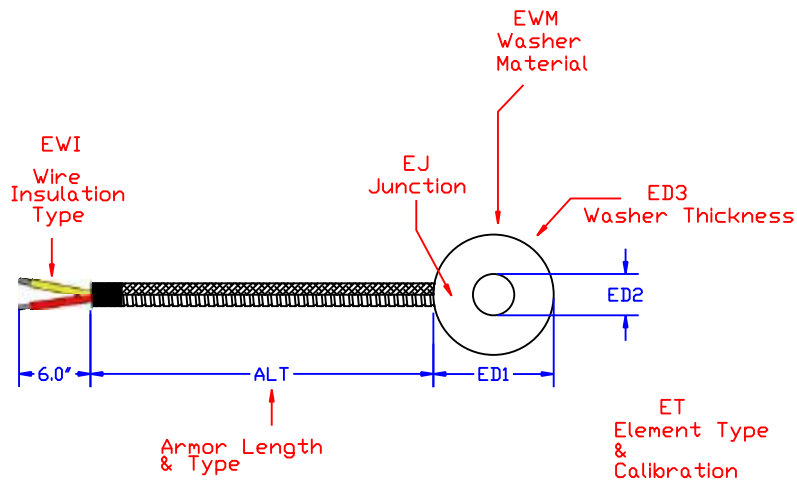
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None	X																																																								

For stranded wire insert a "S" behind length

Model "T63" Thermocouple Element Washer Type with Armor or SS Braid

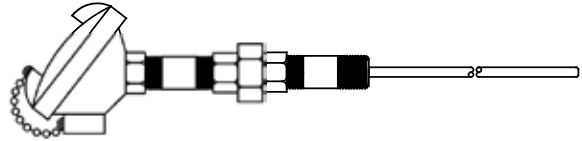


T63	ET	EJ	EWM	ED1	ED2	ED3	ALT	EWI	SO																																																																																																															
	<table border="1"> <tr><th colspan="2">TC Type &amp; Calibration</th></tr> <tr> <th>Single</th> <th>Dual</th> </tr> <tr> <td><u>Code</u></td> <td><u>Code</u></td> </tr> <tr> <td>J</td> <td>JJ</td> </tr> <tr> <td>K</td> <td>KK</td> </tr> <tr> <td>T</td> <td>TT</td> </tr> <tr> <td>E</td> <td>EE</td> </tr> <tr> <td>N</td> <td>NN</td> </tr> <tr> <td>B</td> <td>BB</td> </tr> <tr> <td>R</td> <td>RR</td> </tr> <tr> <td>S</td> <td>SS</td> </tr> <tr> <td colspan="2">For special limits insert P after the code.</td> </tr> </table>	TC Type & Calibration		Single	Dual	<u>Code</u>	<u>Code</u>	J	JJ	K	KK	T	TT	E	EE	N	NN	B	BB	R	RR	S	SS	For special limits insert P after the code.		<table border="1"> <tr><th colspan="2">Junction (Grounding)</th></tr> <tr> <th>Singles</th> <th>Code</th> </tr> <tr> <td>Grounded</td> <td>G</td> </tr> <tr> <td>Ungrounded</td> <td>U</td> </tr> <tr> <th>Duals</th> <th>Code</th> </tr> <tr> <td>Grounded</td> <td>G</td> </tr> <tr> <td>Ung./Common</td> <td>U</td> </tr> <tr> <td>Ung./Uncommon</td> <td>UU</td> </tr> </table>	Junction (Grounding)		Singles	Code	Grounded	G	Ungrounded	U	Duals	Code	Grounded	G	Ung./Common	U	Ung./Uncommon	UU	<table border="1"> <tr><th colspan="2">Washer Material</th></tr> <tr> <th>Code</th> <th>Code</th> </tr> <tr> <td>304SS</td> <td>A</td> </tr> <tr> <td>310SS</td> <td>B</td> </tr> <tr> <td>316SS</td> <td>C</td> </tr> <tr> <td>1-600</td> <td>D</td> </tr> <tr> <td>1-601</td> <td>E</td> </tr> <tr> <td>Hast. B</td> <td>F</td> </tr> <tr> <td>Hast. C</td> <td>H</td> </tr> <tr> <td>Hast. X</td> <td>K</td> </tr> </table>	Washer Material		Code	Code	304SS	A	310SS	B	316SS	C	1-600	D	1-601	E	Hast. B	F	Hast. C	H	Hast. X	K	<table border="1"> <tr><th>Washer OD</th></tr> <tr> <td><u>Code</u></td> </tr> <tr> <td>Decimal Inches</td> </tr> </table>	Washer OD	<u>Code</u>	Decimal Inches	<table border="1"> <tr><th>Washer ID</th></tr> <tr> <td><u>Code</u></td> </tr> <tr> <td>Decimal Inches</td> </tr> </table>	Washer ID	<u>Code</u>	Decimal Inches	<table border="1"> <tr><th>Washer Thickness</th></tr> <tr> <td><u>Code</u></td> </tr> <tr> <td>Decimal Inches</td> </tr> </table>	Washer Thickness	<u>Code</u>	Decimal Inches	<table border="1"> <tr><th colspan="2">Armor Length &amp; Type</th></tr> <tr> <td colspan="2"><u>Code</u></td> </tr> <tr> <td colspan="2">Decimal Inches</td> </tr> <tr> <th>Armor Type</th> <th>Code</th> </tr> <tr> <td>SS Bare</td> <td>A</td> </tr> <tr> <td>PVC Coated</td> <td>P</td> </tr> <tr> <td>Teflon Coated</td> <td>T</td> </tr> <tr> <th>Braid</th> <th>Code</th> </tr> <tr> <td>SS Braid</td> <td>B</td> </tr> <tr> <td colspan="2">For color coated insert C after the code.</td> </tr> <tr> <td colspan="2">* Std. Lead Length = 6.0"</td> </tr> <tr> <td colspan="2">** Add special option for different lead length in Decial Inches</td> </tr> </table>	Armor Length & Type		<u>Code</u>		Decimal Inches		Armor Type	Code	SS Bare	A	PVC Coated	P	Teflon Coated	T	Braid	Code	SS Braid	B	For color coated insert C after the code.		* Std. Lead Length = 6.0"		** Add special option for different lead length in Decial Inches		<table border="1"> <tr><th colspan="2">Wire Insulation Type (Insulation type of wire inside Armor)</th></tr> <tr> <th></th> <th>Code</th> </tr> <tr> <td>PVC</td> <td>P</td> </tr> <tr> <td>Teflon</td> <td>T</td> </tr> <tr> <td>Fiberglass</td> <td>G</td> </tr> <tr> <td>Kapton</td> <td>K</td> </tr> </table>	Wire Insulation Type (Insulation type of wire inside Armor)			Code	PVC	P	Teflon	T	Fiberglass	G	Kapton	K	<table border="1"> <tr><th colspan="2">Special Options</th></tr> <tr> <th>None</th> <th>Code</th> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Special Options		None	Code		X
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RTD Quick Selection Sheet



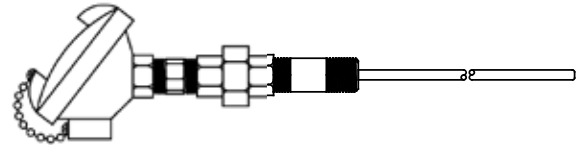
Model R01  
RTD Element Only  
Page 1



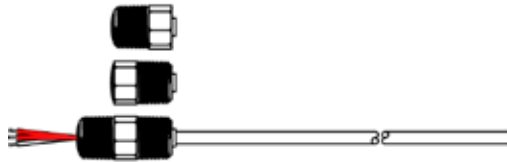
Model R15  
Spring Loaded Nipple-Union-Nipple Assembly  
Page 7



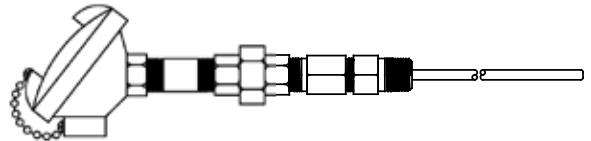
Model R02  
RTD Element with Connector  
Page 2



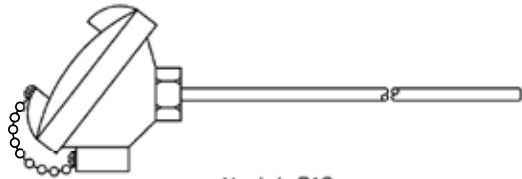
Model R16  
Spring Loaded Hex-Union-Nipple Assembly  
Page 8



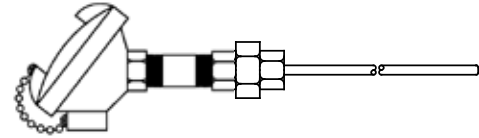
Model R03  
RTD Element with Welded or Spring Loaded Hex  
Page 3



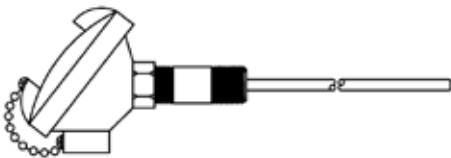
Model R17  
Nipple-Union-Gland Assembly  
Page 9



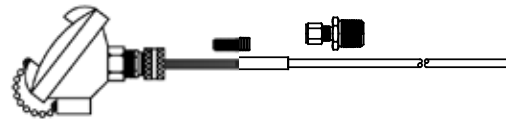
Model R12  
Spring Loaded RTD Assembly  
Page 4



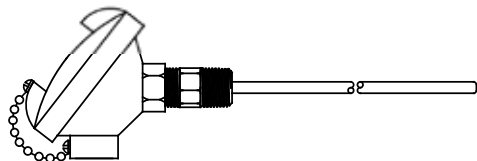
Model R18  
Nipple-Union Assembly  
Page 10



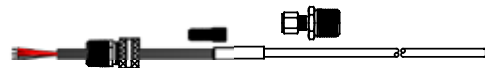
Model R13  
Spring Loaded Nipple Assembly  
Page 5



Model R31  
Extension Cable Remote Head Assembly  
Page 11

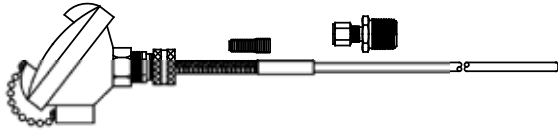


Model R14  
Spring Loaded or Welded Hex Assembly  
Page 6

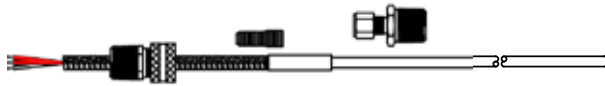


Model RE31  
Extension Cable Assembly  
Page 12

RTD Quick Selection Sheet



Model R41  
Flex Armor or SS Braid Remote Head Assembly  
Page 13



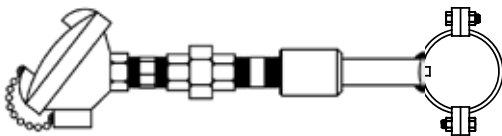
Model RE41  
Flex Armor or SS Braid Assembly  
Page 14



Model R61  
Spring Loaded Surface Mount & Head Assembly  
Page 15



Model RE61  
Spring Loaded Surface Mount Assembly  
Page 16

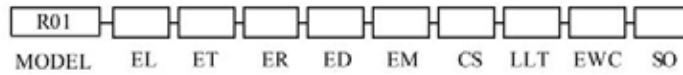
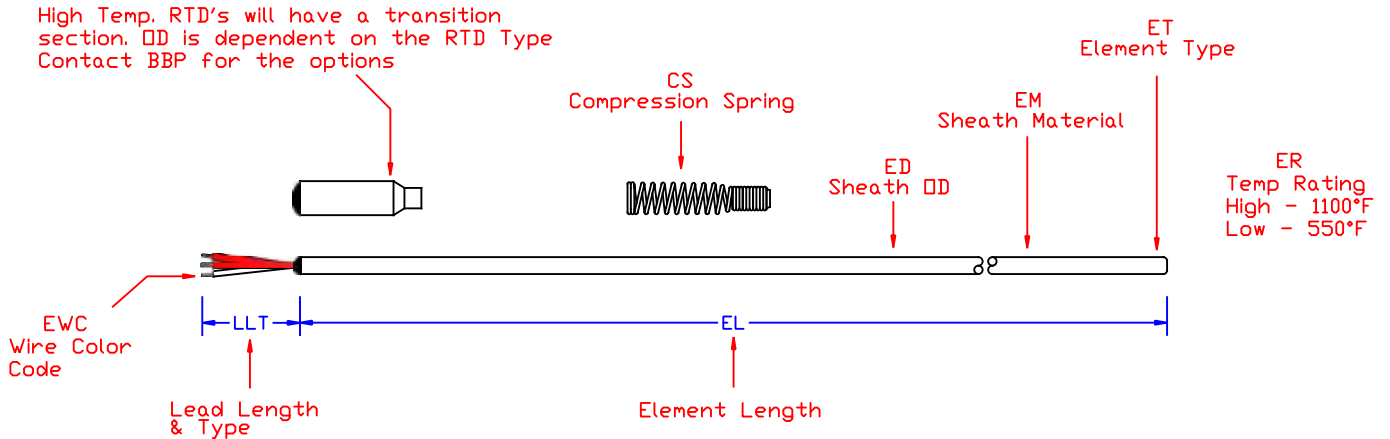


Model R62  
Spring Loaded Hex-Union-Nipple Clamp Assembly  
Page 17



Model R63  
Washer Type with Armor or SS Braid  
Page 18

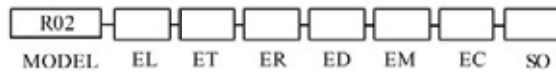
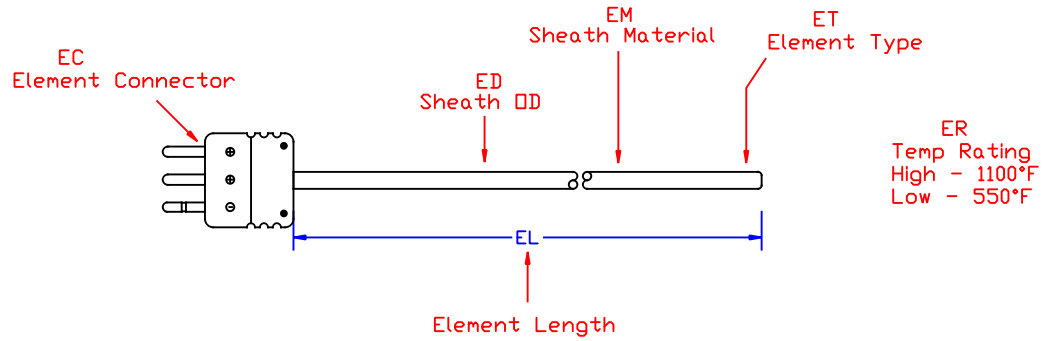
Model "R01" RTD Element Only (No Connection Head or Fittings)



<b>R01</b>	-	<b>EL</b>	-	<b>ET</b>	-	<b>ER</b>	-	<b>ED</b>	-	<b>EM</b>	-	
		Element Length <u>Code</u> Decimal Inches		RTD Element Type <u>Code</u> Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire  * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb		Temperature Rating High = 1100F Low = 550F  <u>Code</u> High H Low L		Sheath OD <u>Code</u> 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12		Sheath Material <u>Code</u> 304SS A 310SS B 316SS C 1-600 D 1-601 E Hast. B F Hast. C H Hast. X K		
						<b>CS</b>	-	<b>LLT</b>	-	<b>EWC</b>	-	<b>SO</b>
						Compression Spring (Available with Sheath OD's - 1/8", 3/16", 1/4", 5/16", 3/8")  Yes <u>Code</u> None     Y X		Lead Length & Type <u>Length Code</u> Decimal Inches  <u>Type</u> Teflon      T Fiberglass   G		Wire Color Code <u>Code</u> Red, Red, White      R White, White, Red    W Red, Red, White, White S  Green, Green, Black    G Black, Black, Green    B Black, Black, Green, Green V		Special Options <u>Code</u> None      X

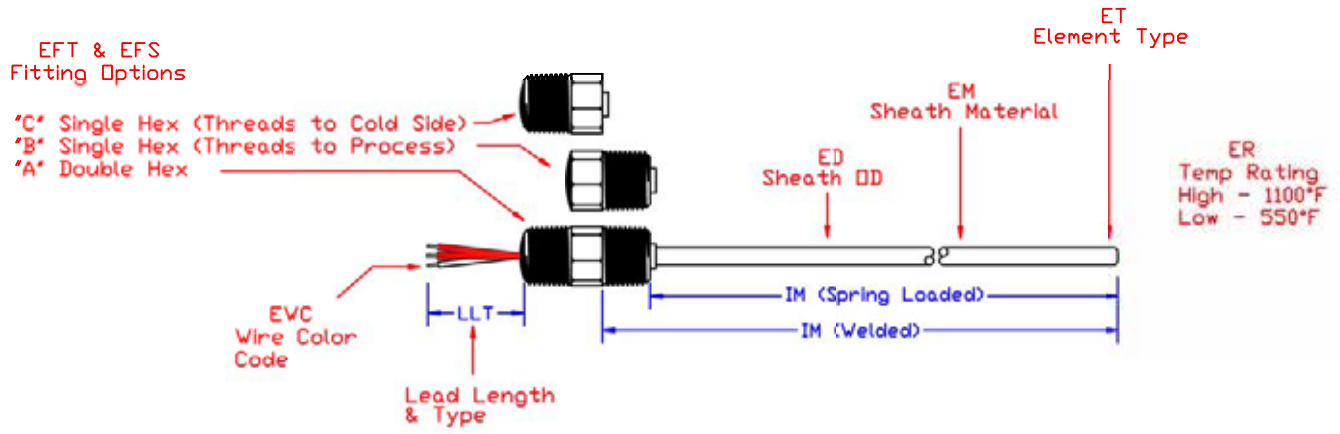


Model "R02" RTD Element with Connector



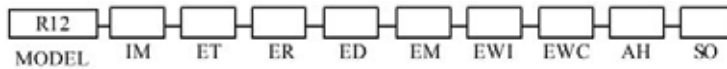
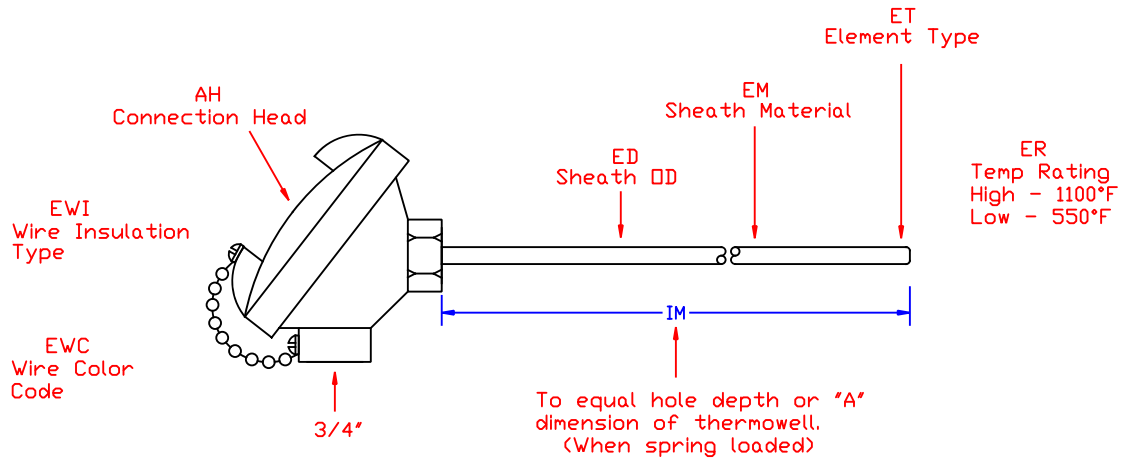
<b>R02</b>	-	<b>EL</b>	-	<b>ET</b>	-	<b>ER</b>	-	<b>ED</b>	-	<b>EM</b>																																																																		
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Model "R03" RTD Element with Hex Fitting



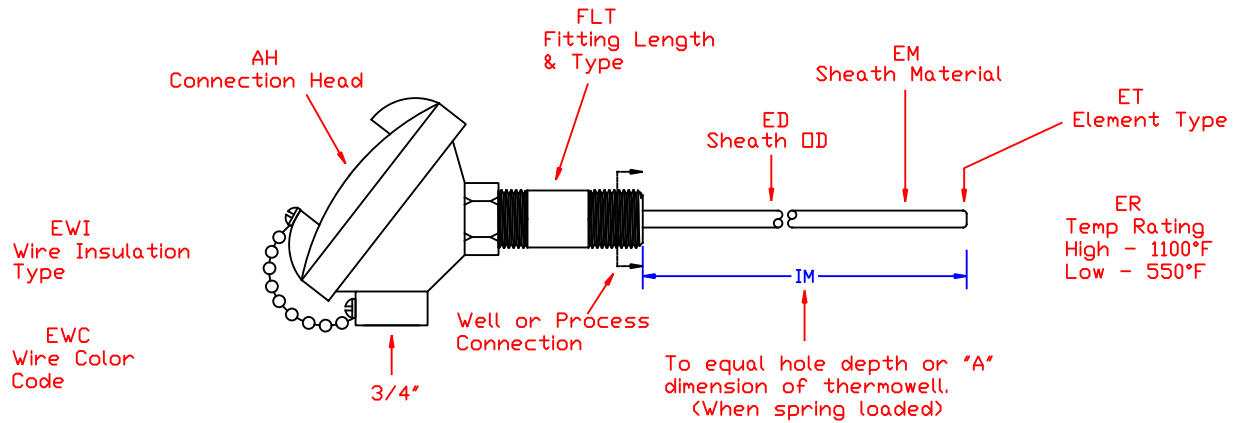
<b>R03</b>	<b>IM</b> Immersion Length Code Decimal Inches	<b>ET</b> RTD Element Type Code Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire * Std. = 100 Ohm Platinum. Alpha .00385, Wire Wound, Class B bulb	<b>ER</b> Temperature Rating High - 1100F Low - 550F Code High Low	<b>ED</b> Sheath OD Code 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	<b>EM</b> Sheath Code 304SS A 310SS B 316SS C 1-600 D 1-601 E Hast. B F Hast. C H Hast. X K
<b>LLT</b> Lead Length & Type Length Code Inches Type Teflon Fiber Glass Code T G	<b>EVC</b> Wire Color Code Code Red, Red, White R White, White, Red W Red, Red, White, White S Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	<b>EFT</b> Fitting Type Code <b>WELDED</b> Double Hex A Single Hex (Threads to front) B Single Hex (Threads to back) C <b>SPRING LOADED</b> Double Hex D Single Hex (Threads to front) E Single Hex (Threads to back) F	<b>EFS</b> Fitting Size Code NPT Size 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	<b>SO</b> Special Options Code None X	

Model "R12" RTD Spring Loaded Assembly (No Fittings)



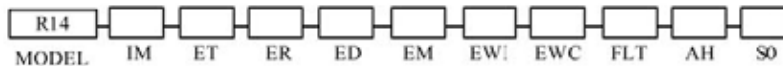
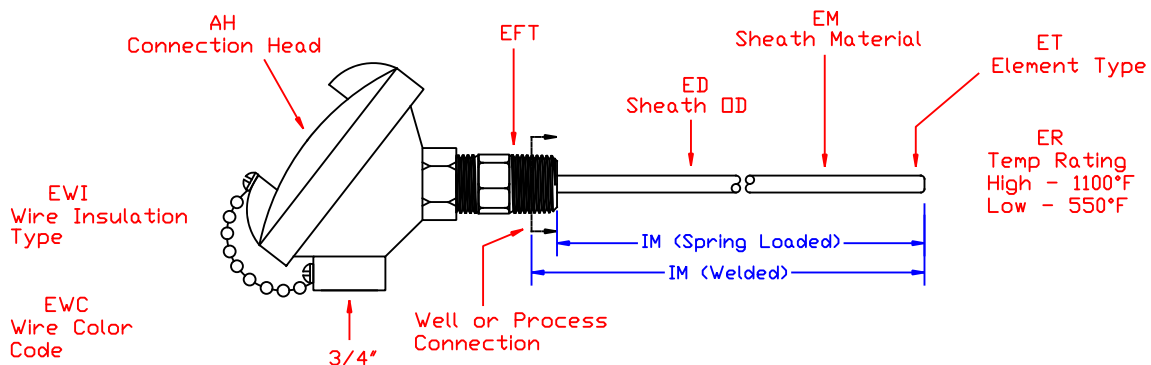
R12	IM	ET	ER	ED	EM	EWI	EWC	AH	SO
	Immersion Length Code Decimal Inches	RTD Element Type Code	Temperature Rating High = 1100F Low = 550F Code High H Low L	Sheath OD Code	Sheath Material Code	Wire Insulation Type Code			
		Single, 3 wire    A Single, 4 wire    B Dual, 3 wire        C Dual, 4 wire        D Triplex, 3 Wire    E Triplex, 4 Wire    F  * S.d. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb		1/16"    1 1/8"     2 3/16"    3 1/4"     4 5/16"    5 3/8"     6 1/2"     8 5/8"     10 3/4"     12	304SS    A 310SS    B 316SS    C 1-600     D 1-601     E Hast. B   F Hast. C   H Hast. X   K	Teflon    T Fiberglass G			
	Wire Color Code Code	Connection Head Code			Special Options Code				
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Model "R13" RTD Spring Loaded Nipple Assembly



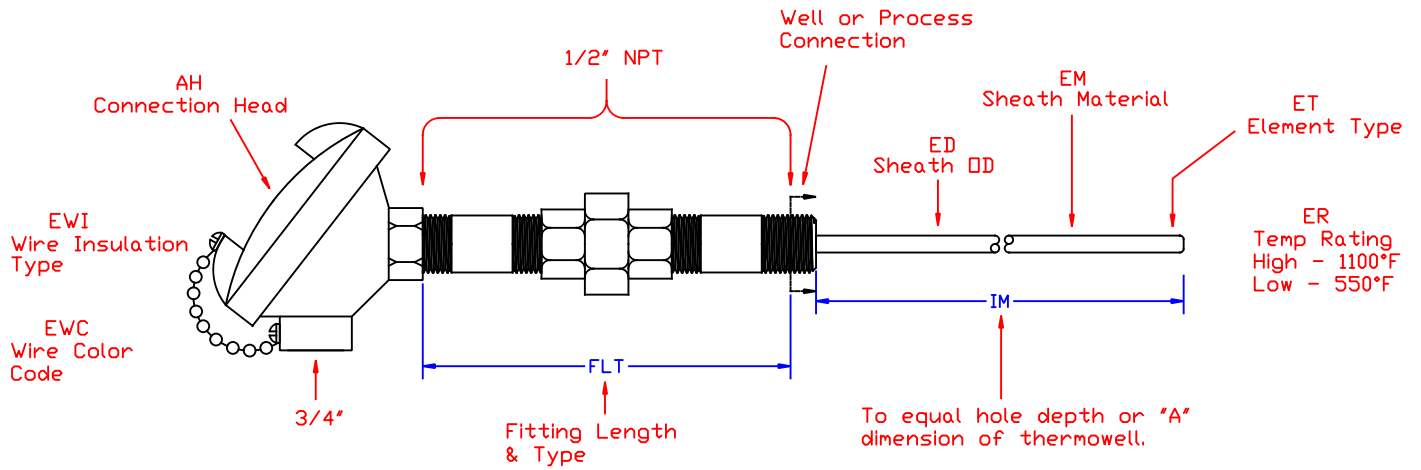
<b>R13</b>	<b>IM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>	<b>EWC</b>	<b>FLT</b>	<b>AH</b>	<b>SO</b>																																																																														
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Model "R14" RTD Spring Loaded or Welded Hex Assembly



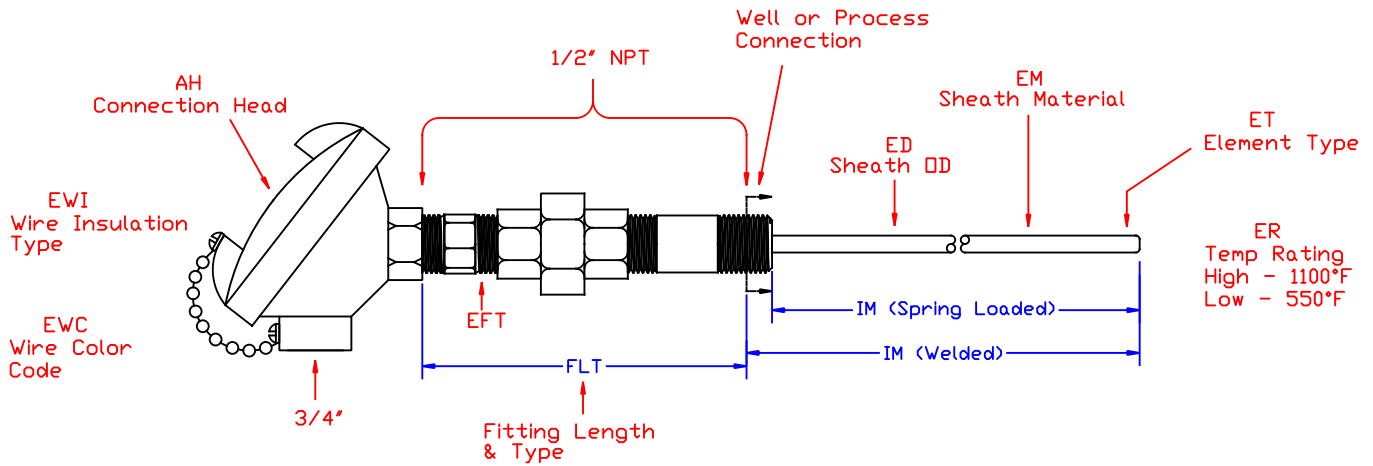
<b>R14</b>	<b>IM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>
	Immersion Length	RTD Element Type	Temperature Rating	Sheath OD	Sheath Material	Wire Insulation Type
	Code Decimal Inches	Code Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire  * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb	High = 1100F Low = 550F  Code High H Low L	Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Code 304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Code Teflon T Fiberglass G
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	Wire Color Code	Fitting Type	Connection Head	Special Options		
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Model "R15" RTD Spring Loaded Nipple-Union-Nipple Assembly



<b>R15</b>	<b>IM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>																																																										
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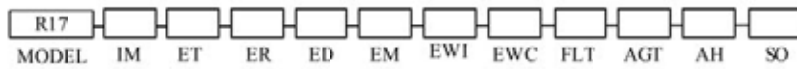
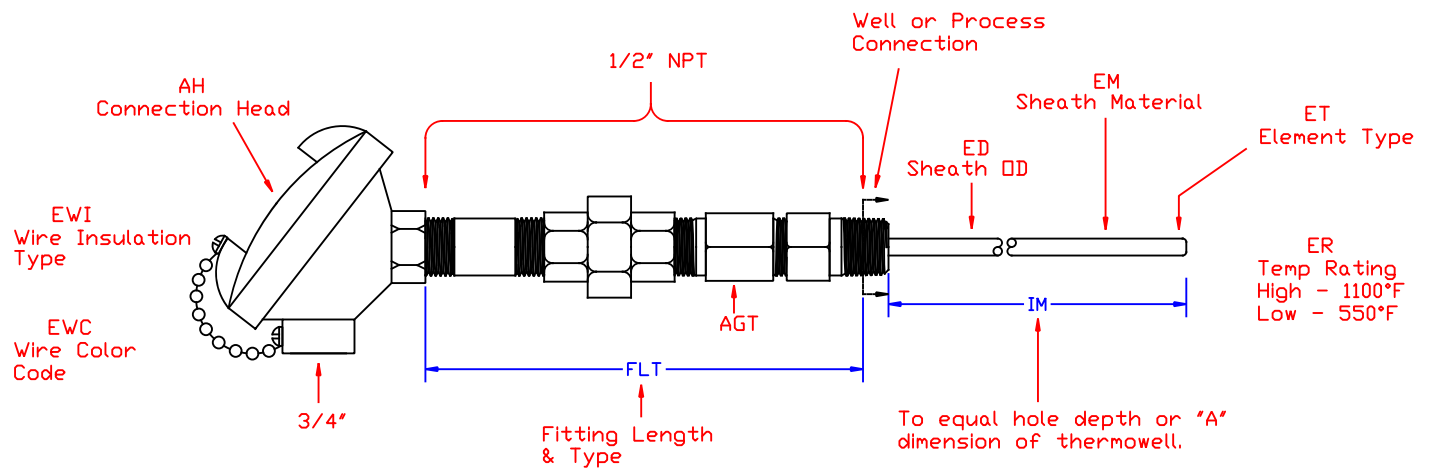
Model "R16" RTD Spring Loaded or Welded Hex-Union-Nipple Assembly



<b>R16</b>	<b>IM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>																																																																			
	Immersion Length	RTD Element Type	Temperature Rating	Sheath OD	Sheath Material	Wire Insulation Type (Stranded Teflon - Standard for RTDs)																																																																			
	Code Decimal Inches	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Code</th></tr> <tr><td>Single, 3 wire</td><td>A</td></tr> <tr><td>Single, 4 wire</td><td>B</td></tr> <tr><td>Dual, 3 wire</td><td>C</td></tr> <tr><td>Dual, 4 wire</td><td>D</td></tr> <tr><td>Triplex, 3 Wire</td><td>E</td></tr> <tr><td>Triplex, 4 Wire</td><td>F</td></tr> </table> <p style="font-size: small;">* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb</p>	Code		Single, 3 wire	A	Single, 4 wire	B	Dual, 3 wire	C	Dual, 4 wire	D	Triplex, 3 Wire	E	Triplex, 4 Wire	F	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2">High = 1100F</td></tr> <tr><td colspan="2">Low = 550F</td></tr> <tr><th>High</th><th>Code H</th></tr> <tr><td>Low</td><td>L</td></tr> </table>	High = 1100F		Low = 550F		High	Code H	Low	L	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Code</th></tr> <tr><td>1/16"</td><td>1</td></tr> <tr><td>1/8"</td><td>2</td></tr> <tr><td>3/16"</td><td>3</td></tr> <tr><td>1/4"</td><td>4</td></tr> <tr><td>5/16"</td><td>5</td></tr> <tr><td>3/8"</td><td>6</td></tr> <tr><td>1/2"</td><td>8</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>3/4"</td><td>12</td></tr> </table>	Code		1/16"	1	1/8"	2	3/16"	3	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Code</th></tr> <tr><td>304SS</td><td>A</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>1-600</td><td>D</td></tr> <tr><td>1-601</td><td>E</td></tr> <tr><td>Hast. B</td><td>F</td></tr> <tr><td>Hast. C</td><td>H</td></tr> <tr><td>Hast. X</td><td>K</td></tr> </table>	Code		304SS	A	310SS	B	316SS	C	1-600	D	1-601	E	Hast. B	F	Hast. C	H	Hast. X	K	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Code</th></tr> <tr><td>Teflon</td><td>T</td></tr> <tr><td>Fiberglass</td><td>G</td></tr> </table>		Code		Teflon	T	Fiberglass	G
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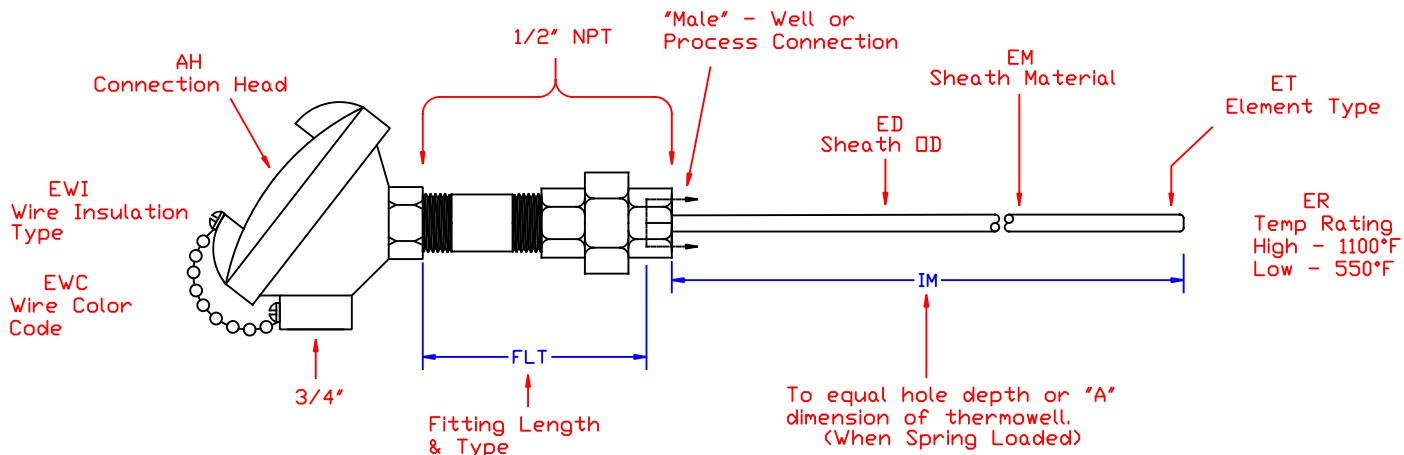
Model "R17" RTD Nipple-Union-Gland Assembly



<b>R17</b>	<b>IM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>
Immersion Length	RTD Element Type		Temperature Rating	Sheath OD	Sheath Material	Wire Insulation Type
Code Decimal Inches	Code		High = 1100F Low = 550F	Code	Code	Code
	Single, 3 wire A Single, 4 wire B Dual, 3 wire C Dual, 4 wire D Triplex, 3 Wire E Triplex, 4 Wire F		High Code H Low Code L	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	304SS A 310SS B 316SS C 1-600 D 1-601 E Hast. B F Hast. C H Hast. X K	Teflon T Fiberglass G
	* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb					

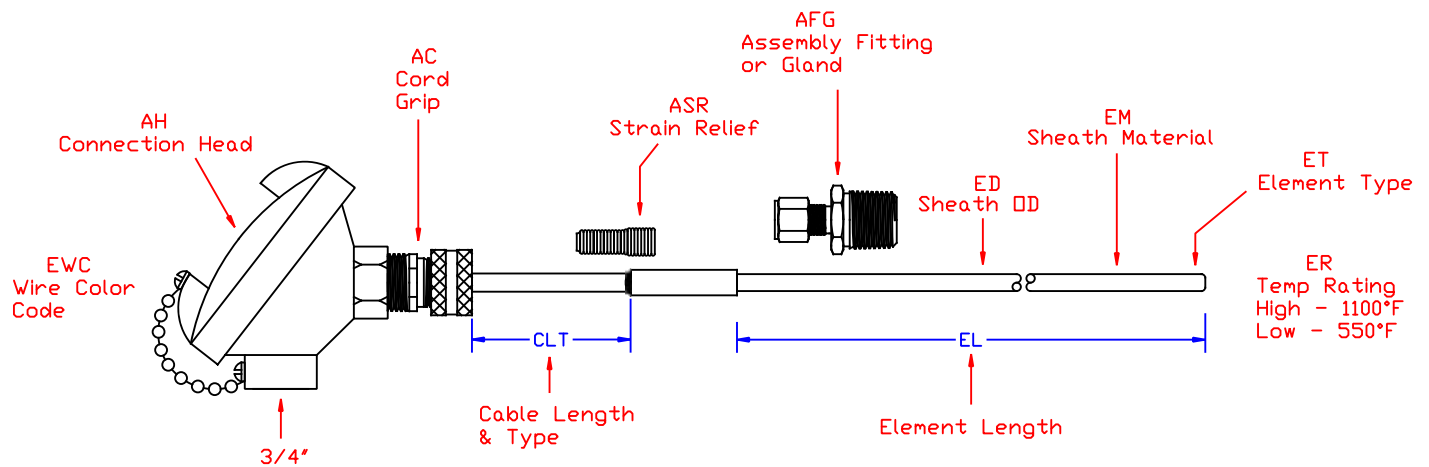
<b>EWC</b>	<b>FLT</b>	<b>AGT</b>	<b>AH</b>	<b>SO</b>
Wire Color Code	Fitting Length & Type	Sealing Gland Size & Sealant Type	Connection Head	Special Options
Code	Length Code	Size & Sealant Type	Code	Code
Red, Red, White R White, White, Red W Red, Red, White, White S  Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Decimal Inches	Std. Housing - 303SS	Alum. screwtop 5B Epoxy coated Al. screwtop 5L Cast iron screwtop 1A Black poly screwtop 1N SS Screw top 5K Alum. Flip top 3A Poly Flip top 3B Alum. explosion proof 1E	None X
	Type	Code		
	Galv. Sch. 40 A Galv. Sch. 80 B 304SS Sch. 40 C 304SS Sch. 80 D 316SS Sch. 40 E 316SS Sch. 80 F	1/8" NPT 2 1/4" NPT 4 3/8" NPT 6 1/2" NPT 8 3/4" NPT 12 1" NPT 16		
		Sealant Code		
		Insert this code after the size code.		
		Code		
		Lava L Teflon T Neoprene N Viton V Grafoil G		

Model "R18" RTD Nipple-Union Assembly



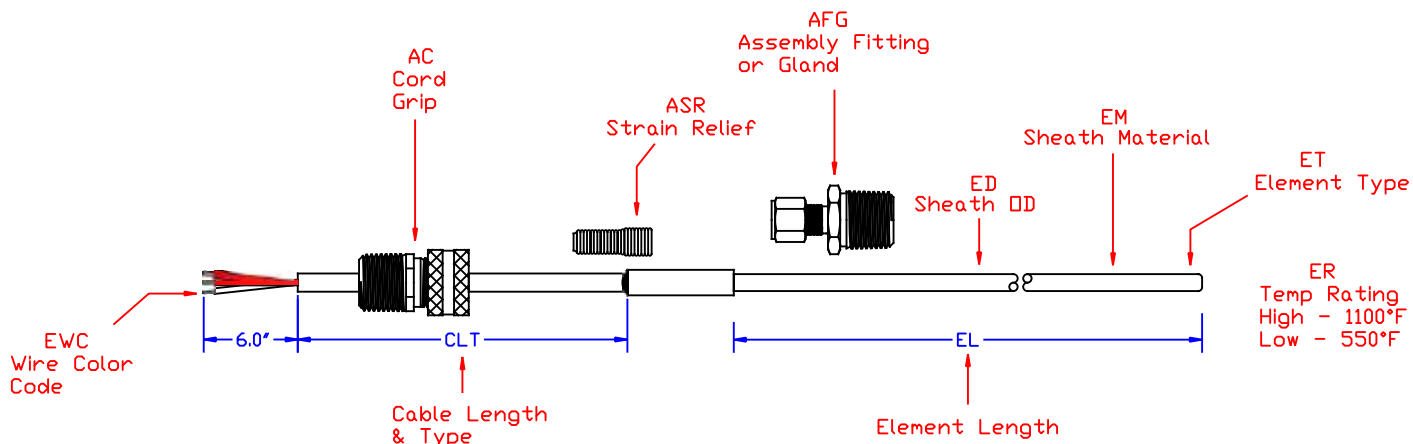
R18	IM	ET	ER	ED	EM	EWI	EWC	FLT	AH	SO
	Immersion Length	RTD Element Type	Temperature Rating	Sheath OD	Sheath Material	Wire Insulation Type				
	Code Decimal Inches	Code	High Code Low L	Code	Code	Code				
		Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire	High = 1100F Low = 550F	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	304SS A 310SS B 316SS C 1-600 D 1-601 E Hast. B F Hast. C H Hast. X K	Teflon Fiberglass				
		* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb								
	EWC	FLT	AH	SO						
	Wire Color Code	Fitting Length & Type	Connection Head	Special Options						
	Code	Length Code Decimal Inches	Code	Code						
	Red, Red, White R White, White, Red W Red, Red, White, White S  Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Type Code Galv. Sch. 40 A Galv. Sch. 80 B 304SS Sch. 40 C 304SS Sch. 80 D 316SS Sch. 40 E 316SS Sch. 80 F	Alum. screw top 5B Epoxy coated Al. screw top 5L Cast iron screw top 1A Black poly screw top 1N SS Screw top 5K Alum. Flip top 3A Poly Flip top 3B Alum. explosion proof 1E	None Code X						

Model "R31" RTD Extension Cable Remote Head Assembly



<b>R31</b>	<b>EL</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>CLT</b>	<b>EWC</b>	<b>AFG</b>	<b>ASR</b>	<b>AC</b>	<b>AH</b>	<b>SO</b>
<b>Element Length</b>	<b>RTD Element Type</b>	<b>Temperature Rating</b>	<b>Sheath OD</b>	<b>Sheath Material</b>	<b>Cable Length &amp; Type</b>	<b>Wire Color Code</b>	<b>Assembly Fitting or Gland</b>	<b>Strain Relief Spring</b>	<b>CG Fitting with Bushing sized for Cable or Armor</b>	<b>Connection Head</b>	<b>Special Options</b>	
Code Decimal Inches	Code Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire  * Std. = 100 Ohm Platinum, Alpha.00385, Wire Wound, Class B bulb	High = 1100°F Low = 550°F  High Code H Low Code L	Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Code 304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Code Decimal Inches Type PVC Jacketed Cable P Teflon Jacketed Cable T	Code Red, Red, White R White, White, Red W Red, Red, White, White S  Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Compression Fitting Code NPT Size SS Code Brass Code 1/8" C2 M2 1/4" C4 M4 3/8" C6 M6 1/2" C8 M8 3/4" C12 M12 1" C16 M16  For Teflon ferrule add a T behind the code  Sealing Gland Code Thread Size Code 1/8" NPT 2 1/4" NPT 4 3/8" NPT 6 1/2" NPT 8 3/4" NPT 12 1" NPT 16  Sealant Type Code Lava L Teflon T Neoprene N Viton V Grafoil G  * If neither fitting is required Code = "X"	Code Yes Y None X	Material & Pipe size Code Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16	Code Alum. screwtop 5B Epoxy coated Al. screwtop 5L Cast iron screwtop 1A Black poly screwtop 1N SS Screw top 5K Alum. Flip top 3A Poly Flip top 3B Alum. explosion proof 1E	Code None X	

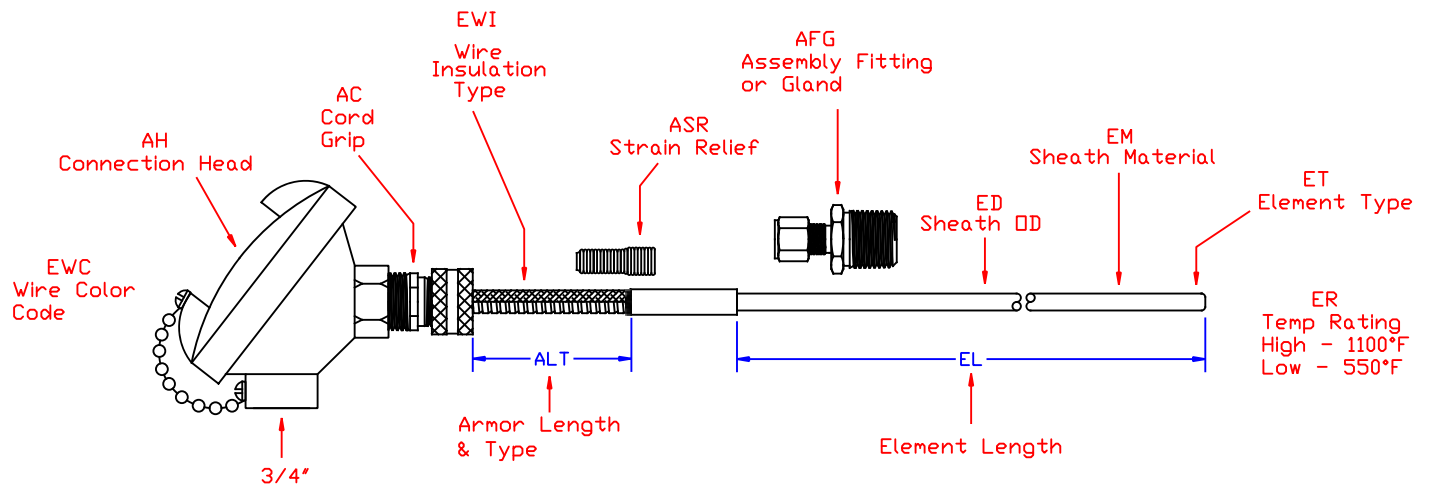
Model "RE31" RTD Extension Cable Assembly



<b>RE31</b>	<b>EL</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>CLT</b>
	Element Length	RTD Element Type	Temperature Rating	Sheath OD	Sheath Material	Cable Length & Type
	Code Decimal Inches	Code Single, 3 wire A Single, 4 wire B Dual, 3 wire C Dual, 4 wire D Triplex, 3 Wire E Triplex, 4 Wire F  * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb	High = 1100F Low = 550F  High Code H Low Code L	Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Code 304SS 1 310SS 2 316SS 3 1-600 4 1-601 5 Hast. B 6 Hast. C 7 Hast. X 8	Code Decimal Inches Type Code PVC Jacketed Cable P Teflon Jacketed Cable T  * Std. Lead Length = 6.0" ** Add special option for different lead length in Decial Inches

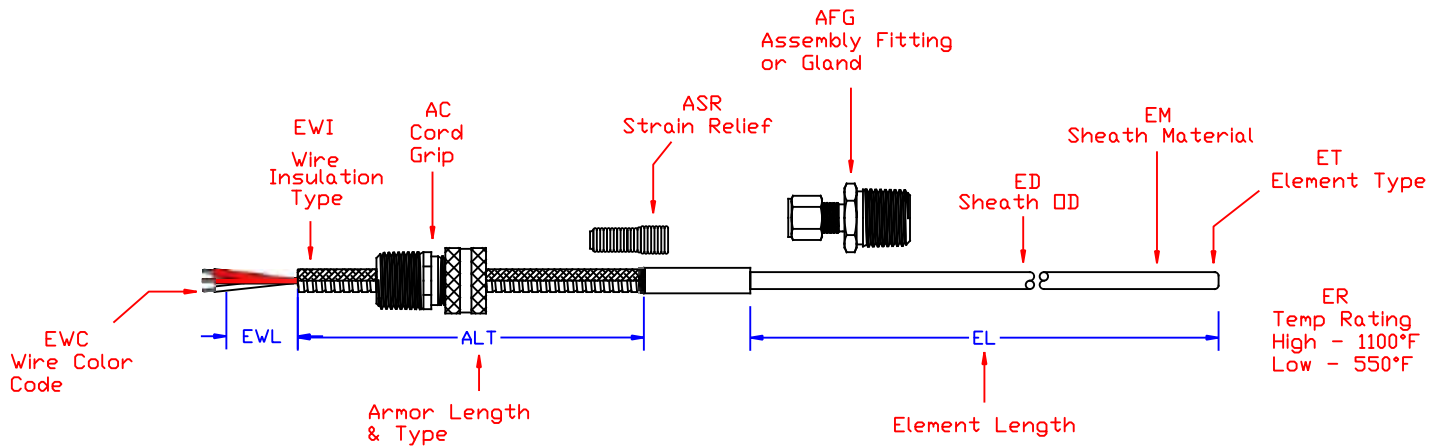
<b>EWI</b>	<b>EWC</b>	<b>AFG</b>	<b>ASR</b>	<b>AC</b>	<b>SO</b>
Wire Insulation Type	Wire Color Code	Assembly Fitting or Gland	Strain Relief Spring	CG Fitting with Bushing sized for Cable or Armor	Special Options
PVC Code P Teflon Code T	Code Red, Red, White R White, White, Red W Red, Red, White, White S  Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Compression Fitting Code NPT Size SS Code Brass Code 1/8" C2 M2 1/4" C4 M4 3/8" C6 M6 1/2" C8 M8 3/4" C12 M12 1" C16 M16  For Teflon ferrule add a T behind the code  Sealing Gland Code Thread Size Code 1/8" NPT 2 1/4" NPT 4 3/8" NPT 6 1/2" NPT 8 3/4" NPT 12 1" NPT 16  Sealant Type Code Lava L Teflon T Neoprene N Viton V Grafoil G  * If neither fitting is required Code = "X"	Code Yes Y None X	Material & Pipe size Code Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16 None --- X	Code None X

**Model "R41" RTD Flex Armor or SS Braid Remote Head Assembly**



<b>R41</b>	<b>EL</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>ALT</b>	<b>EWI</b>	<b>EWC</b>	<b>AFG</b>	<b>ASR</b>	<b>AC</b>	<b>AH</b>	<b>SO</b>
	Element Length Code Decimal Inches	RTD Element Type Code Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb	Temperature Rating High = 1100F Low = 550F High Code H Low Code L	Sheath OD Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Sheath Material Code 304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Armor Length & Type Code Decimal Inches Armor Type Code SS Bare A PVC Coated P Teflon Coated T Braid Code SS Braid B	Wire Insulation Type (Insulation type of wire inside armor) Code PVC P Teflon T Fiberglass G	Wire Color Code Code Red, Red, White R White, White, Red W Red, Red, White, White S Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Assembly Fitting or Gland Compression Fitting Code NPT Size SS Code Brass Code 1/8" C2 M2 1/4" C4 M4 3/8" C6 M6 1/2" C8 M8 3/4" C12 M12 1" C16 M16 For Teflon ferrule add a T behind the code Sealing Gland Code Thread Size Code 1/8" NPT 2 1/4" NPT 4 3/8" NPT 6 1/2" NPT 8 3/4" NPT 12 1" NPT 16 Sealant Type Code Lava L Teflon T Neoprene N Viton V Grafoil G * If neither fitting is required Code = "X"	Strain Relief Spring (For SS Braid Only) Code Yes Y None X	CG Fitting with Bushing sized for Cable or Armor Material & Pipe size Code Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16	Connection Head Code Alum. screw top 5B Epoxy coated AL 5L screw top Cast iron screw top 1A Black poly screw-top 1N SS Screw top 5K Alum. Flip top 3A Poly Flip top 3B Alum. explosion proof 1E	Special Options Code None X

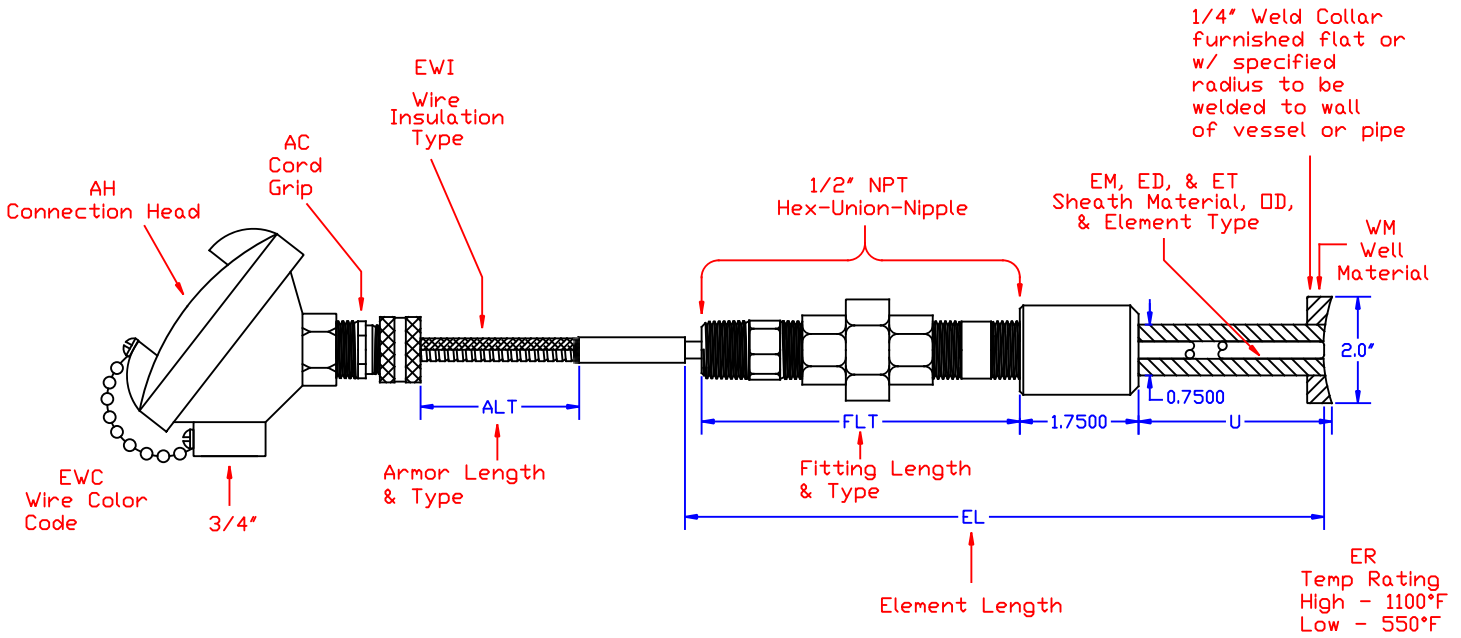
Model "RE41" RTD Flex Armor or SS Braid Assembly



<b>RE41</b>	<b>EL</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>ALT</b>	<b>EWI</b>	<b>EWC</b>	<b>AFG</b>	<b>ASR</b>	<b>AC</b>	<b>SO</b>
	Element Length Code Decimal Inches	RTD Element Type Code Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb	Temperature Rating High = 1100F Low = 550F High Code H Low Code L	Sheath OD Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Sheath Material Code 304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Armor Length & Type Code Decimal Inches Armor Type Code SS Braid A PVC Coated P Teflon Coated T Braid Code SS Braid B * Std. Lead Length = 6.0" ** Add special option for different lead length in Decimal Inches	Wire Insulation Type (Insulation type of wire inside armor) Code PVC P Teflon T Fiberglass G	Wire Color Code Code Red, Red, White R White, White, Red W Red, Red, White, White S Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Assembly Fitting or Gland Compression Fitting Code NPT Size SS Code Brass Code 1/8" C2 M2 1/4" C4 M4 3/8" C6 M6 1/2" C8 M8 3/4" C12 M12 1" C16 M16 For Teflon ferrule add a T behind the code Sealing Gland Code Thread Size Code 1/8" NPT 2 1/4" NPT 4 3/8" NPT 6 1/2" NPT 8 3/4" NPT 12 1" NPT 16 Sealant Type Code Lava L Teflon T Neoprene N Viton V Grafoil G * If neither fitting is required Code = "X"	Strain Relief Spring (For SS Braid Only) Code Yes Y None X	CG Fitting with Bushing sized for Cable or Armor Material & Pipe size Code Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16 None --- X	Special Options Code None X



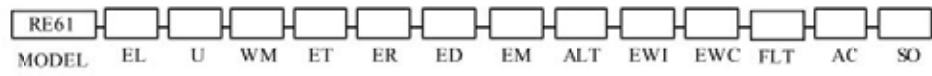
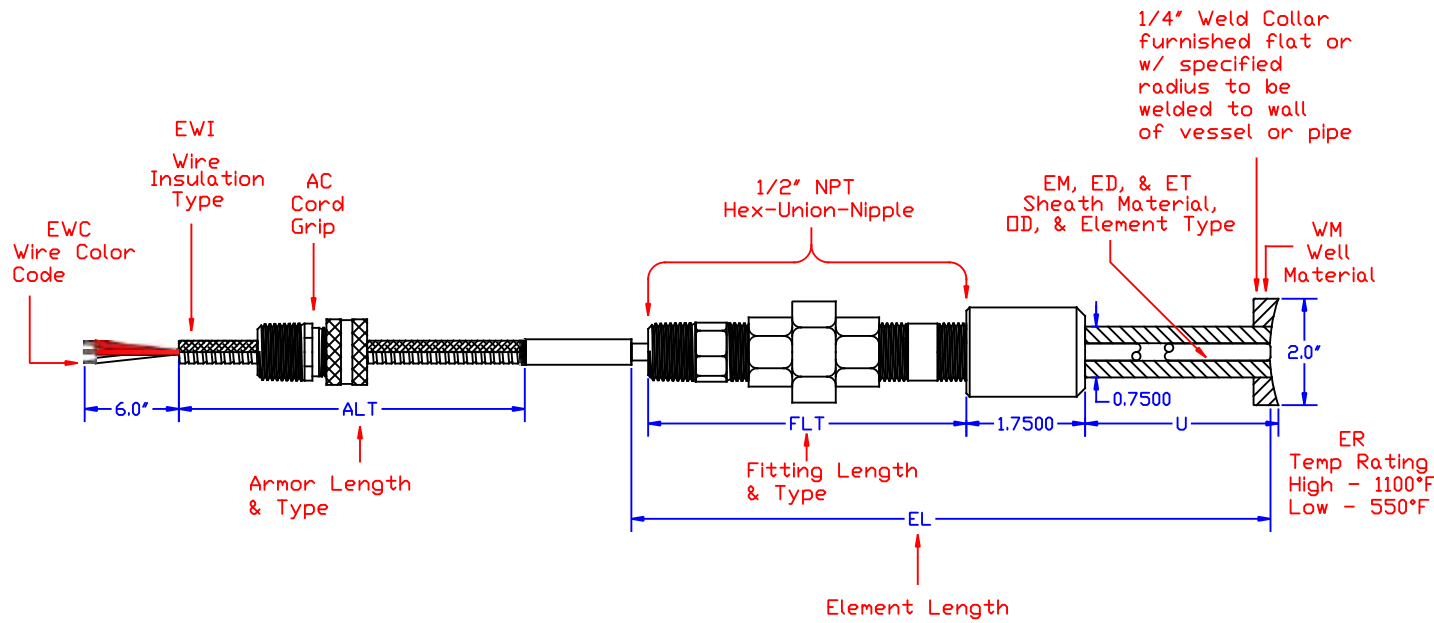
**Model "R61" RTD Spring Loaded Surface Mount & Head Assembly**



<b>R621</b>	<b>EL</b>	<b>U</b>	<b>WM</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>ALT</b>
Element Length	Well Length	Well Material	RTD Element Type	Temperature Rating	Sheath OD	Sheath Material	Armor Length & Type	
Code Decimal Inches	Code Decimal Inches	Code	Code	High = 1100°F Low = 550°F	Code	Code	Code Decimal Inches	
		304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	Single, 3 wire A Single, 4 wire B Dual, 3 wire C Dual, 4 wire D Triplex, 3 Wire E Triplex, 4 Wire F  * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb	High <b>H</b> Low <b>L</b>	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Code Armor Type SS Bare A PVC Coated P Teflon Coated T  Code Braid SS Braid B	
<b>EWI</b>	<b>EWC</b>			<b>FLT</b>	<b>AC</b>	<b>AH</b>	<b>SO</b>	
Wire Insulation Type (Insulation type of wire inside Armor)	Wire Color Code			Fitting Length & Type	CG Fitting with Bushing sized for Cable or Armor	Connection Head	Special Options	
PVC <b>P</b> Teflon <b>T</b> Fiberglass <b>G</b> Kapton <b>K</b>	Red, Red, White <b>R</b> White, White, Red <b>W</b> Red, Red, White, White <b>S</b>  Green, Green, Black <b>G</b> Black, Black, Green <b>B</b> Black, Black, Green, Green <b>V</b>			Length Code Decimal Inches	Material & Pipe size	Alum. screwtop <b>5B</b> Epoxy coated Al. screwtop <b>5L</b> Cast iron screwtop <b>1A</b> Black poly screwtop <b>1N</b> SS Screw top <b>5K</b> Alum. Flip top <b>3A</b> Poly Flip top <b>3B</b> Alum. explosion proof <b>1E</b>	None <b>X</b>	
				Type Galv. Sch. 40 <b>A</b> Galv. Sch. 80 <b>B</b> 304SS Sch. 40 <b>C</b> 304SS Sch. 80 <b>D</b> 316SS Sch. 40 <b>E</b> 316SS Sch. 80 <b>F</b>	Steel 1/2" <b>A8</b> Steel 3/4" <b>A12</b> Steel 1" <b>A16</b> Alum. 1/2" <b>B8</b> Alum. 3/4" <b>B12</b> Alum. 1" <b>B16</b> Plastic 1/2" <b>C8</b> Plastic 3/4" <b>C12</b> Plastic 1" <b>C16</b>			

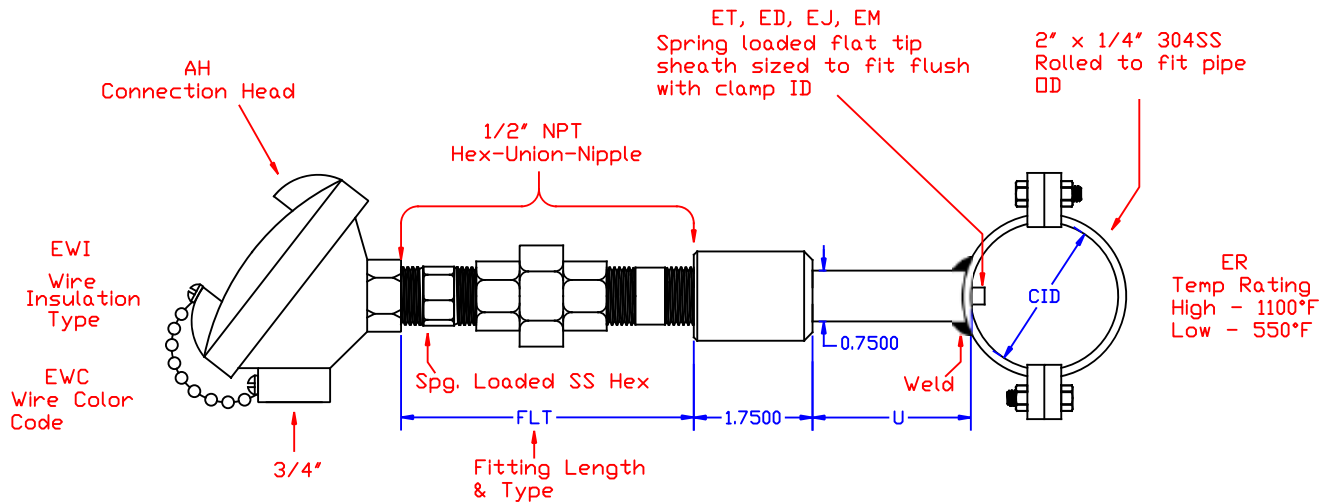


Model "RE61" RTD Spring Loaded Surface Mount Assembly

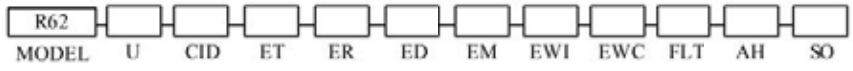


RE61	EL	U	WM	ET	ER	ED	EM	ALT	EWI	EWC	FLT	AC	SO
	Sheath Length Code Decimal Inches	Well Length Code Decimal Inches	Well Material Code	RTD Element Type Code	Temperature Rating High = 1100F Low = 550F High Code H Low Code L	Sheath OD Code	Sheath Material Code	Armor Length & Type Code Decimal Inches	Wire Insulation Type Code	Wire Color Code Code	Fitting Length & Type Length Code Decimal Inches Type Code	CG Fitting with Bushing sized for Cable or Armor Material & Pipe size Code	Special Options None Code X
			304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	Single, 3 wire A Single, 4 wire B Dual, 3 wire C Dual, 4 wire D Triplex, 3 Wire E Triplex, 4 Wire F  * Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb		1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Amor Type Code SS Bare A PVC Coated F Teflon Coated T  Braid Code SS Braid B  * Std. Lead Length = 6.0" ** Add special option for different lead length in Decial Inches	PVC P Teflon T Fiberglass G Kapton K	Red, Red, White R White, White, Red W Red, Red, White, White S  Green, Green, Black G Black, Black, Green B Black, Black, Green, Green V	Galv. Sch. 40 A Galv. Sch. 80 B 304SS Sch. 40 C 304SS Sch. 80 D 316SS Sch. 40 E 316SS Sch. 80 F	Steel 1/2" A8 Steel 3/4" A12 Steel 1" A16 Alum. 1/2" B8 Alum. 3/4" B12 Alum. 1" B16 Plastic 1/2" C8 Plastic 3/4" C12 Plastic 1" C16	

**Model "R62" RTD Spring Loaded Hex-Union-Nipple Clamp Assembly**



1" Pipe CID = 1.315"
2" Pipe CID = 2.375"
3" Pipe CID = 3.50"
4" Pipe CID = 4.50"
6" Pipe CID = 6.625"
10" Pipe CID = 10.75"
12" Pipe CID = 12.75"
48" Pipe CID = 48.0"



<b>R62</b>	<b>U</b>	<b>CID</b>	<b>ET</b>	<b>ER</b>	<b>ED</b>	<b>EM</b>	<b>EWI</b>
Stem Length	Clamp ID	RTD Element Type		Temperature Rating	Sheath OD	Sheath Material	Wire Insulation Type (Leads out of Sheath)
Code Decimal Inches	Code Decimal Inches	Code		High = 1100F Low = 550F	Code	Code	Code
		Single, 3 wire Single, 4 wire Dual, 3 wire Dual, 4 wire Triplex, 3 Wire Triplex, 4 Wire		High Code H Low L	1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	304SS A 310SS B 316SS C I-600 D I-601 E Hast. B F Hast. C H Hast. X K	Bare B PVC P Teflon T Fiber Glass G Heat Shrink H
		* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb					

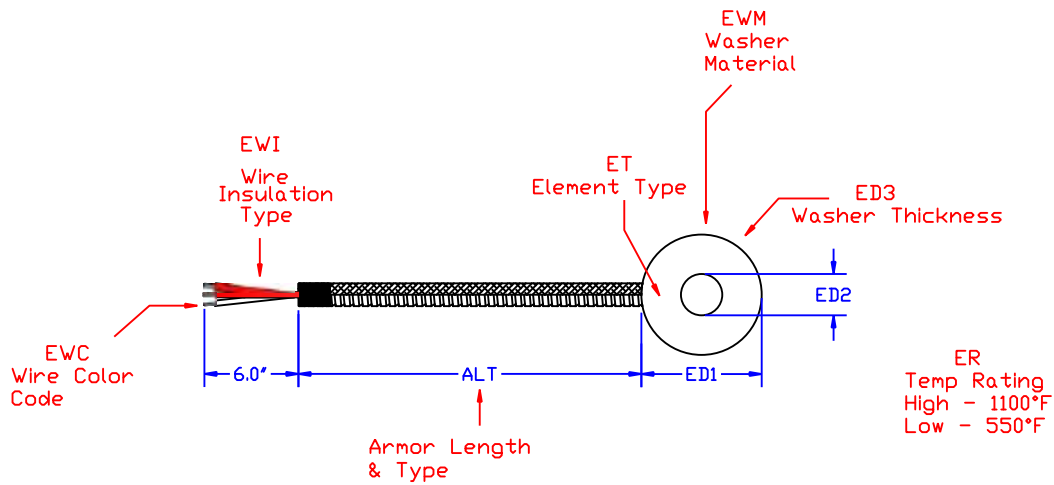
<b>EWC</b>
Wire Color Code
Code
Red, Red, White R
White, White, Red W
Red, Red, White, White S
Green, Green, Black G
Black, Black, Green B
Black, Black, Green, Green V

<b>FLT</b>
Fitting Length & Type
Length Code
Decimal Inches
Type
Code
Galv. Sch. 40 A
Galv. Sch. 80 B
304SS Sch. 40 C
304SS Sch. 80 D
316SS Sch. 40 E
316SS Sch. 80 F

<b>AH</b>
Connection Head
Code
Alum. screw top 5B
Epoxy coated Al. screw top 5L
Cast iron screw top 1A
Black poly screw top 1N
SS Screw top 5K
Alum. Flip top 3A
Poly Flip top 3B
Alum. explosion proof 1E

<b>SO</b>
Special Options
Code
None X

Model "R63" RTD Element Washer Type with Armor or SS Braid

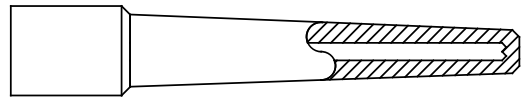


<b>R63</b>	<b>ET</b>	<b>ER</b>	<b>EWM</b>	<b>ED1</b>	<b>ED2</b>	<b>ED3</b>																																																								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">RTD Element Type</th></tr> <tr><td>Single, 3 wire</td><td style="text-align: center;">Code A</td></tr> <tr><td>Single, 4 wire</td><td style="text-align: center;">B</td></tr> <tr><td>Dual, 3 wire</td><td style="text-align: center;">C</td></tr> <tr><td>Dual, 4 wire</td><td style="text-align: center;">D</td></tr> <tr><td>Triplex, 3 Wire</td><td style="text-align: center;">E</td></tr> <tr><td>Triplex, 4 Wire</td><td style="text-align: center;">F</td></tr> <tr><td colspan="2">* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb</td></tr> </table>	RTD Element Type		Single, 3 wire	Code A	Single, 4 wire	B	Dual, 3 wire	C	Dual, 4 wire	D	Triplex, 3 Wire	E	Triplex, 4 Wire	F	* Std. = 100 Ohm Platinum, Alpha .00385, Wire Wound, Class B bulb		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Temperature Rating</th></tr> <tr><td colspan="2">High = 1100F</td></tr> <tr><td colspan="2">Low = 550F</td></tr> <tr><td>High</td><td style="text-align: center;">Code H</td></tr> <tr><td>Low</td><td style="text-align: center;">L</td></tr> </table>	Temperature Rating		High = 1100F		Low = 550F		High	Code H	Low	L	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Washer</th></tr> <tr><td>304SS</td><td style="text-align: center;">Code A</td></tr> <tr><td>310SS</td><td style="text-align: center;">B</td></tr> <tr><td>316SS</td><td style="text-align: center;">C</td></tr> <tr><td>I-600</td><td style="text-align: center;">D</td></tr> <tr><td>I-601</td><td style="text-align: center;">E</td></tr> <tr><td>Hast. B</td><td style="text-align: center;">F</td></tr> <tr><td>Hast. C</td><td style="text-align: center;">H</td></tr> <tr><td>Hast. X</td><td style="text-align: center;">K</td></tr> </table>	Washer		304SS	Code A	310SS	B	316SS	C	I-600	D	I-601	E	Hast. B	F	Hast. C	H	Hast. X	K	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Washer OD</th></tr> <tr><td colspan="2">Code Decimal Inches</td></tr> </table>	Washer OD		Code Decimal Inches		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Washer ID</th></tr> <tr><td colspan="2">Code Decimal Inches</td></tr> </table>	Washer ID		Code Decimal Inches		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Washer Thickness</th></tr> <tr><td colspan="2">Code Decimal Inches</td></tr> </table>	Washer Thickness		Code Decimal Inches	
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Armor Length & Type																																																														
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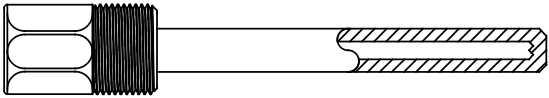
Thermowell Quick Selection Sheet



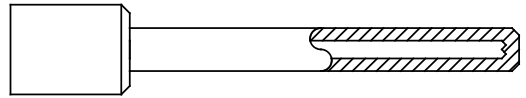
Model W11  
Thermowell - Threaded, Tapered  
Page 1



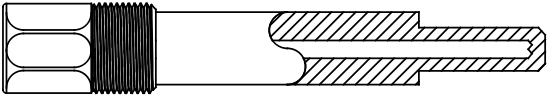
Model W31  
Thermowell - Socket Weld, Tapered  
Page 7



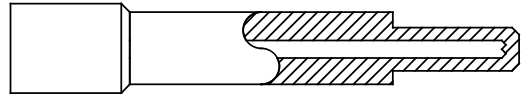
Model W12  
Thermowell - Threaded, Straight  
Page 2



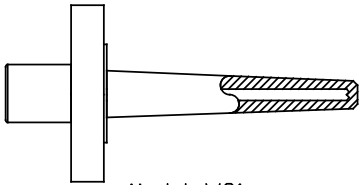
Model W32  
Thermowell - Socket Weld, Straight  
Page 8



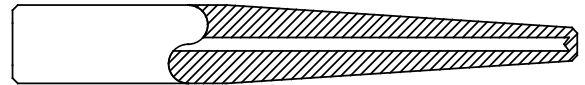
Model W13  
Thermowell - Threaded, Reduced Tip  
Page 3



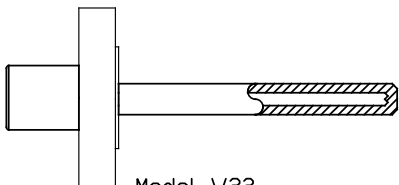
Model W33  
Thermowell - Socket Weld, Reduced Tip  
Page 9



Model W21  
Thermowell - Flanged, Tapered  
Page 4



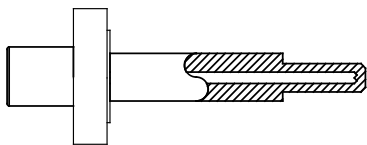
Model W34  
Thermowell - Weld In, Tapered  
Page 10



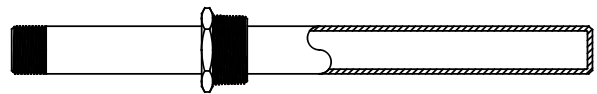
Model W22  
Thermowell - Flanged, Straight  
Page 5



Model W41  
Pipe Well  
Page 11

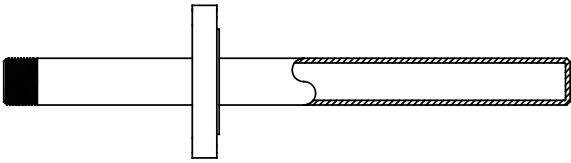


Model W23  
Thermowell - Flanged, Reduced Tip  
Page 6

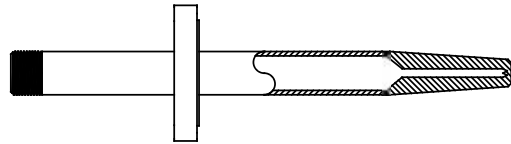


Model W42  
Pipe Well with Welded Bushing  
Page 12

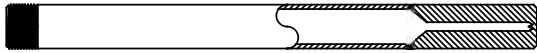
Thermowell Quick Selection Sheet



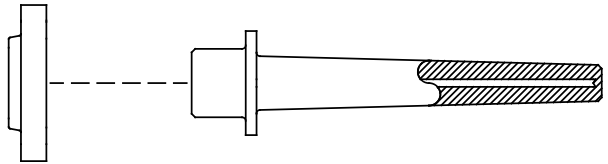
Model W43  
Flanged Pipe Well  
Page 13



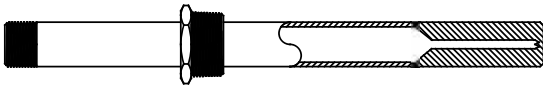
Model W49  
Flanged Pipe Well with Tapered Bar Stock Tip  
Page 19



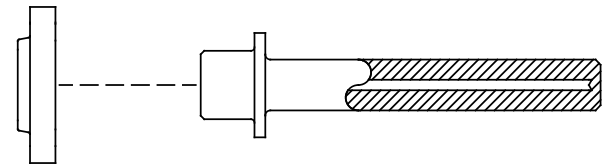
Model W44  
Pipe Well with Straight Bar Stock Tip  
Page 14



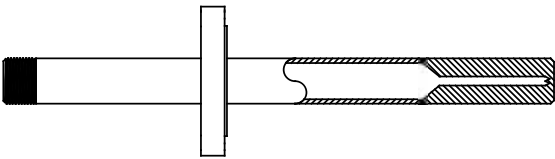
Model W50  
Thermowell - Vanstone, Tapered  
Page 20



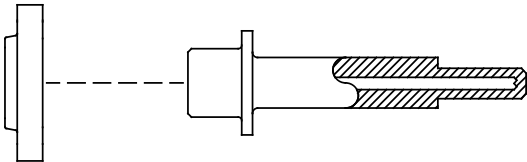
Model W45  
Pipe Well with Welded Bushing &  
Straight Bar Stock Tip  
Page 15



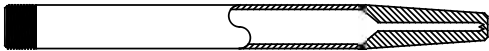
Model W51  
Thermowell - Vanstone, Straight  
Page 21



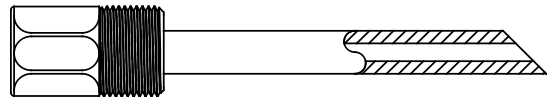
Model W46  
Flanged Pipe Well with Straight Bar Stock Tip  
Page 16



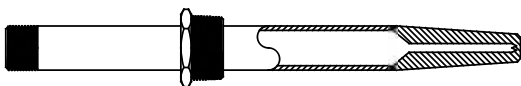
Model W52  
Thermowell - Vanstone, Reduced Tip  
Page 22



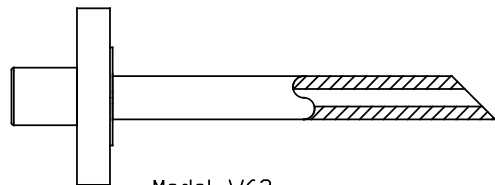
Model W47  
Flanged Pipe Well with Straight Bar Stock Tip  
Page 17



Model W61  
Thermowell - Threaded, Open Ended, Angled Tip  
Page 23

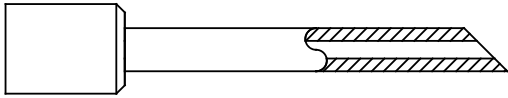


Model W48  
Pipe Well with Welded Bushing &  
Tapered Bar Stock Tip  
Page 18

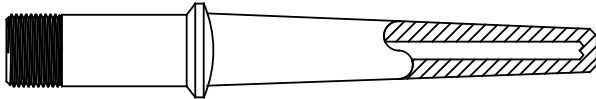


Model W62  
Thermowell - Flanged, Open Ended, Angled Tip  
Page 24

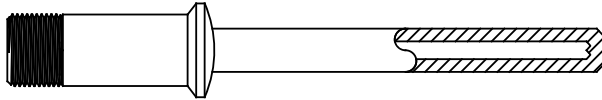
Thermowell Quick Selection Sheet



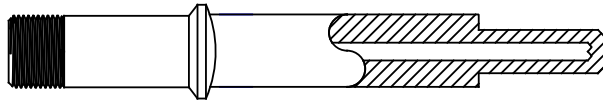
Model W63  
Thermowell - Socket Weld, Open Ended, Angled Tip  
Page 25



Model W71  
Thermowell - Ground Joint, Tapered  
Page 26



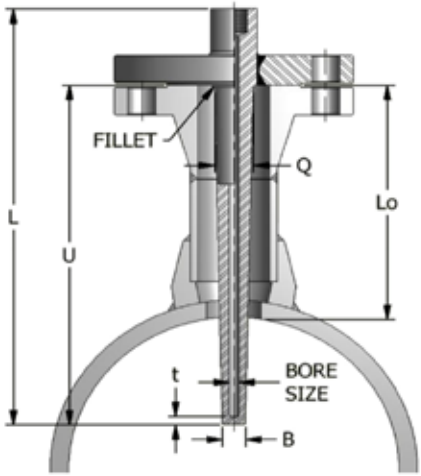
Model W72  
Thermowell - Ground Joint, Straight  
Page 27



Model W73  
Thermowell - Ground Joint, Reduced Tip  
Page 28

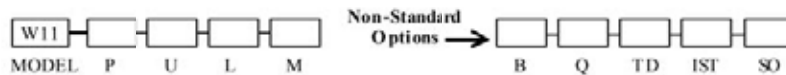
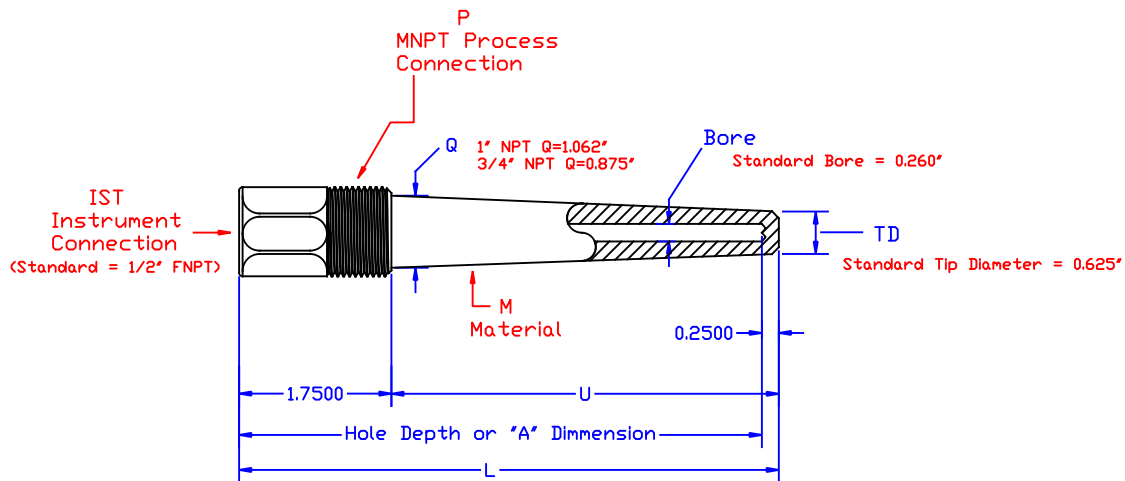
# Example of Thermowell Calculations Available In-House:

\*Red indicates customer supplied information

Wake Calc System		In Accordance with ASME PTC 19.3 TW-2010	
<b>Report Information</b>			
Customer: 0	Analyst: 0	Date : XX/XX/20XX	
Tag Numbers: Customer Supplied	Reference #: Customer Supplied		
	<b>Process Operating Conditions</b>		
	Process Fluids:	HC VAPOR	
	Max Temperature (T):	1250 F	
	Max Pressure (P):	605 psi	
	Fluid Velocity (v):	102.7 ft/s	
	Fluid Density:	0.516 lb/ft <sup>3</sup>	
	Fluid Viscosity:	0.0292 centipoise	
	<b>Thermowell Material Properties</b>		
	Density (Pm):	0.29 lb/in <sup>3</sup>	
	Elastic Modulus, E(T):	20300000 psi	
	Allowable Stress (S) / Fatigue Limit (Sf):	4400 psi / 9100 psi	
	<b>Stress (Support Plane)</b>		
	In-Line Reson. Velocity(VIR):	20.31 m/s	Von Mises Stress (Root): 181.85 psi
	Bending Stress at VIR (So,max)	5749.12 psi	
	Dynamic Stress at V (So,max)	367.49 psi	
	<b>Frequency</b>		
	Frequency Limit:	0.80	Reynolds # (Re): 196926
	Frequency must be below:	275.21 [Hz]	Strouhal # (Ns): 0.1936
	Installed Natural Freq (fnc):	344.01 [Hz]	Scruton # (Nsc): 3.86
	Strouhal Frequency (fs):	272.64 [Hz]	Freq Ratio (fs/fnc) 0.79
	<b>Pressure</b>		
	Allowable Stem Pressure(Pc):	1519.74psi	
	Allowable Tip Pressure(Pt):	14267.74psi	
	<b>Thermowell Rating</b>		
		<b>Status</b>	<b>Value</b>
	Oscillating Stress (psi)	PASS	367.48
	Steady-State Stress (psi)	PASS	813.195
	Pressure (psi)	PASS	605
	Frequency (Hz)	PASS	272.64
<p><b>The thermowell design has PASSED the wake frequency calculation</b></p> <p>"These well design calculations are based on the ASME PTC 19.3 TW-2010 formulas. The results of these calculations should only be used as a guide for thermowell design. The company does not guarantee the performance of a specific well design obtained from the use of these calculations."</p>			



Model "W11" Thermowell - Threaded, Tapered



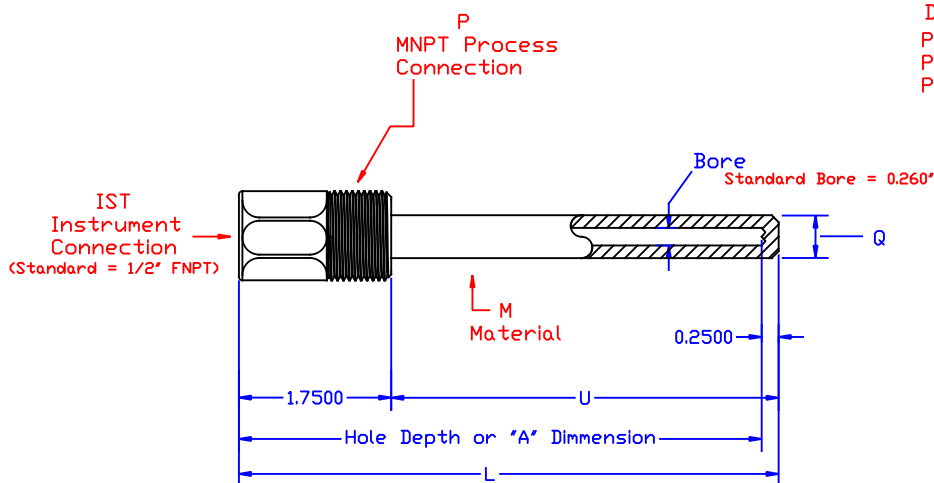
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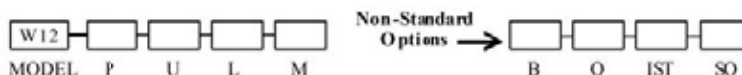
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Model "W12" Thermowell - Threaded, Straight



Dimensional Standards  
 P = 1/2" → Q = 0.625"  
 P = 3/4" → Q = 0.750"  
 P = 1.0" → Q = 0.875"



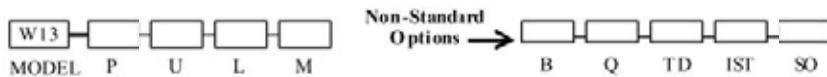
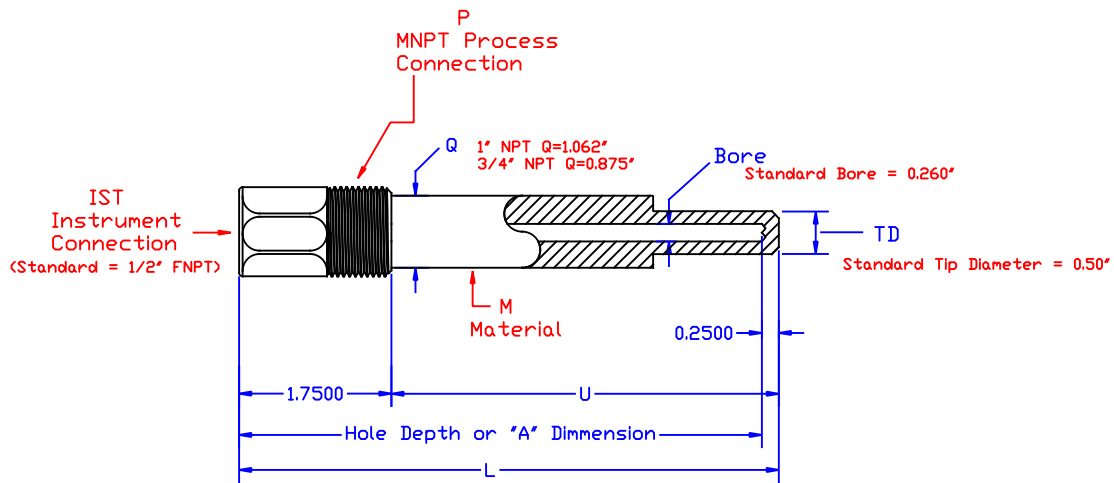
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Model "W13" Thermowell - Threaded, Reduced Tip



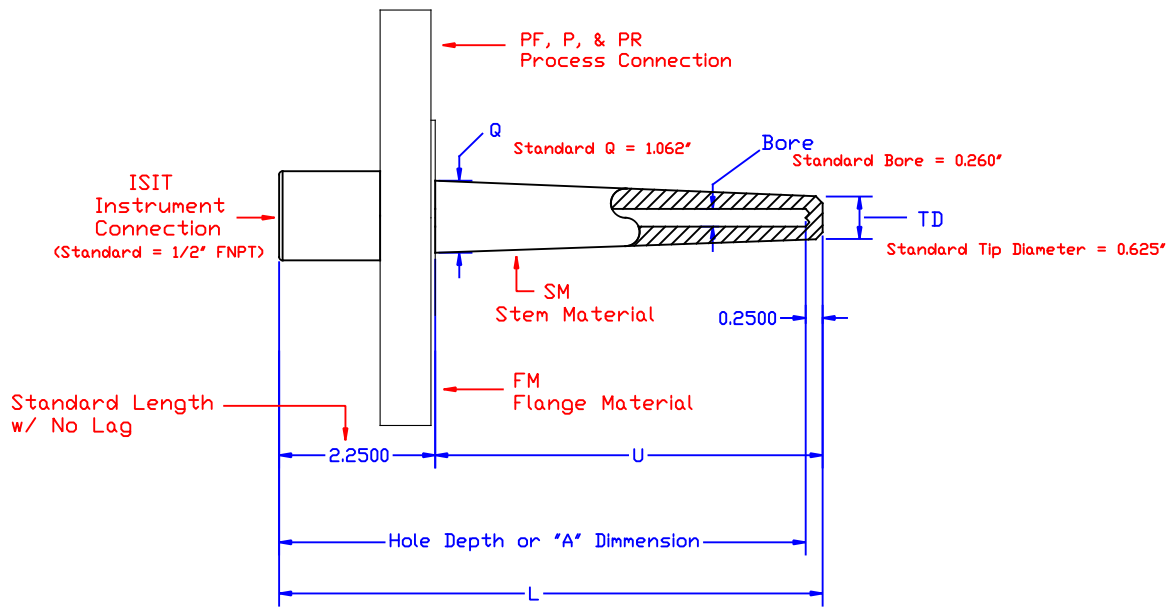
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">MNPT Process Connection</th></tr> <tr><th>Size -MNPT</th><th>Code</th></tr> <tr><td>.25"</td><td>4</td></tr> <tr><td>.375"</td><td>6</td></tr> <tr><td>.5"</td><td>8</td></tr> <tr><td>.75"</td><td>12</td></tr> <tr><td>1.0"</td><td>16</td></tr> <tr><td>1.25"</td><td>20</td></tr> <tr><td>1.5"</td><td>24</td></tr> </table>	MNPT Process Connection		Size -MNPT	Code	.25"	4	.375"	6	.5"	8	.75"	12	1.0"	16	1.25"	20	1.5"	24	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Code</th></tr> <tr><td>U length in inches</td></tr> <tr><td>Insert "U" followed by inches</td></tr> <tr><td>Example: U dimension = 12.5"</td></tr> <tr><td>Code: U12.5</td></tr> </table>	Code	U length in inches	Insert "U" followed by inches	Example: U dimension = 12.5"	Code: U12.5	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Code</th></tr> <tr><td>L length in inches</td></tr> <tr><td>Insert "L" followed by inches</td></tr> <tr><td>Example: L dimension = 14.25"</td></tr> <tr><td>Code: L14.25</td></tr> </table>	Code	L length in inches	Insert "L" followed by inches	Example: L dimension = 14.25"	Code: L14.25	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">Well Material</th></tr> <tr><th></th><th>Code</th></tr> <tr><td>304SS</td><td>A</td></tr> <tr><td>304LSS</td><td>AL</td></tr> <tr><td>304H</td><td>AH</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>310LSS</td><td>BL</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>316LSS</td><td>CL</td></tr> <tr><td>316HSS</td><td>CH</td></tr> <tr><td>I-600</td><td>D</td></tr> <tr><td>I-601</td><td>E</td></tr> <tr><td>Hast.B</td><td>F</td></tr> <tr><td>Hast.C</td><td>H</td></tr> </table>	Well Material			Code	304SS	A	304LSS	AL	304H	AH	310SS	B	310LSS	BL	316SS	C	316LSS	CL	316HSS	CH	I-600	D	I-601	E	Hast.B	F	Hast.C	H
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B	Q	TD	IST	SO														
Bore Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Instrument Connection	Special Options														
Code Decimal Inches	Code Decimal Inches	Code Decimal Inches	Size	None    Code X														
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Size</th><th>Code</th></tr> <tr><td>1/4"</td><td>4</td></tr> <tr><td>5/16"</td><td>5</td></tr> <tr><td>3/8"</td><td>6</td></tr> <tr><td>1/2"</td><td>8</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>3/4"</td><td>12</td></tr> </table>	Size	Code	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	
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Type	Code																	
FNPT	A																	
MNPT	B																	
FNPS	C																	
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Model "W21" Thermowell - Flanged, Tapered



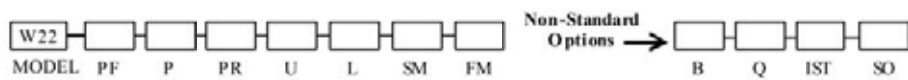
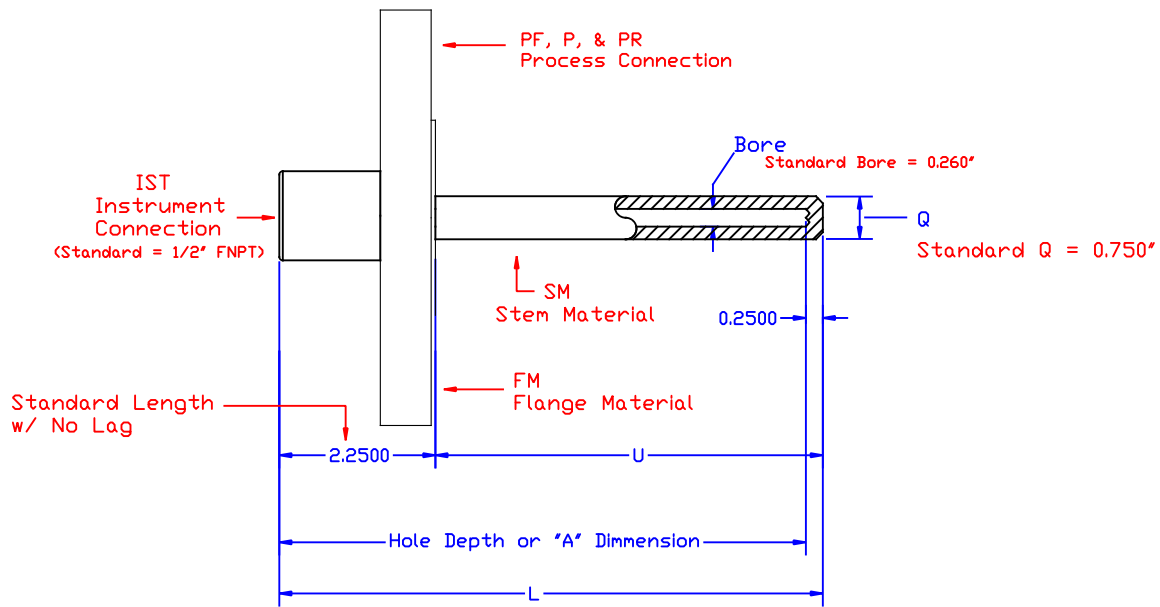
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W21	PF	P	PR	U	L	SM	FM
	Flange Type	Flange Size	Flange Rating	Code	Code	Stem Material	Flange Material
	Code	Code	Code	Code	Code	Code	Code
	Raised Face Flat Face Ring Joint	1" 1.5" 2" 3" 4" 6"	150 300 600 900 1500 2500	U length in inches Insert "U" followed by inches  Example: U = 12.5" Code: U12.5	L length in inches Insert "L" followed by inches  Example: L = 14.75" Code: L14.75	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS I-600 I-601 Hast.B Hast.C	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS I-600 I-601 Hast.B Hast.C
	A B C	A B C D E F	A B C D E F			A AL AH B BL C CL CH D E F H	A AL AH B BL C CL CH D E F H

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B	Q	TD	IST	SO
Bore Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Instrument Connection Size	Special Options
Code Decimal Inches	Code Decimal Inches	Code Decimal Inches	Code	None    Code X
			1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	
			4 5 6 8 10 12	
			Type	
			Code	
			FNPT MNPT FNPS MNPS	
			A B C D	

Model "W22" Thermowell - Flanged, Straight



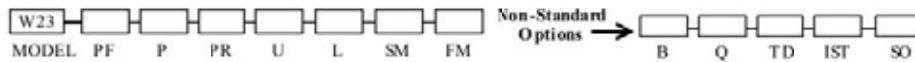
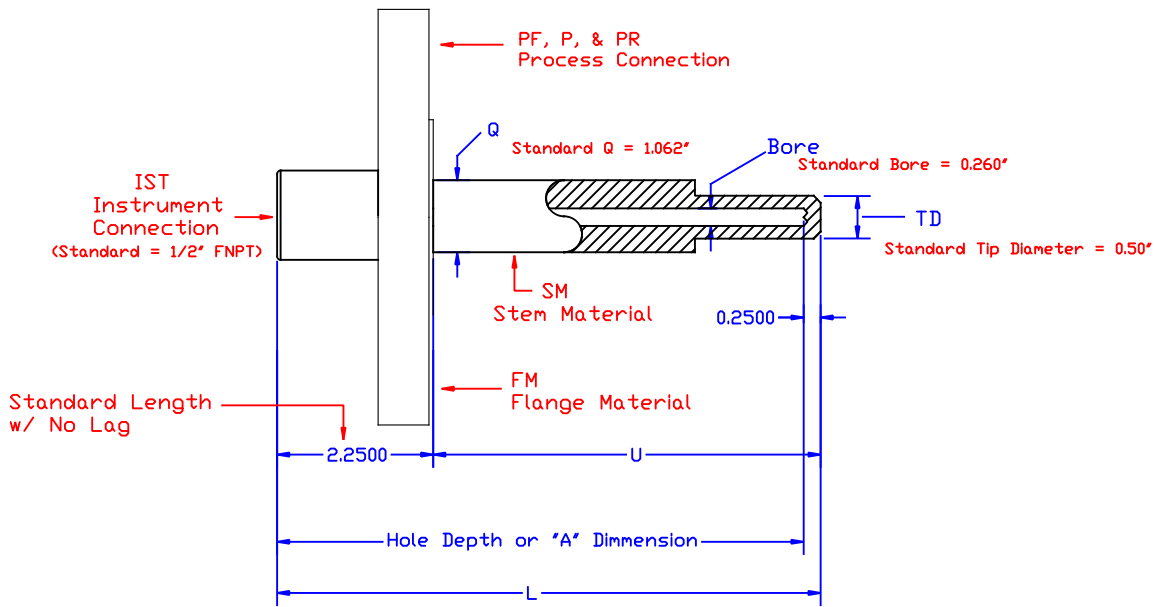
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W22	PF	P	PR	U	L	SM	FM																																																																																																																
	<table border="1"> <tr><th colspan="2">Flange Type</th></tr> <tr><td>Raised Face</td><td>A</td></tr> <tr><td>Flat Face</td><td>B</td></tr> <tr><td>Ring Joint</td><td>C</td></tr> </table>	Flange Type		Raised Face	A	Flat Face	B	Ring Joint	C	<table border="1"> <tr><th colspan="2">Flange Size</th></tr> <tr><th>Code</th><th></th></tr> <tr><td>1"</td><td>A</td></tr> <tr><td>1.5"</td><td>B</td></tr> <tr><td>2"</td><td>C</td></tr> <tr><td>3"</td><td>D</td></tr> <tr><td>4"</td><td>E</td></tr> <tr><td>6"</td><td>F</td></tr> </table>	Flange Size		Code		1"	A	1.5"	B	2"	C	3"	D	4"	E	6"	F	<table border="1"> <tr><th colspan="2">Flange Rating</th></tr> <tr><th>Code</th><th></th></tr> <tr><td>150</td><td>A</td></tr> <tr><td>300</td><td>B</td></tr> <tr><td>600</td><td>C</td></tr> <tr><td>900</td><td>D</td></tr> <tr><td>1500</td><td>E</td></tr> <tr><td>2500</td><td>F</td></tr> </table>	Flange Rating		Code		150	A	300	B	600	C	900	D	1500	E	2500	F	<table border="1"> <tr><th>Code</th><th>U length in inches</th></tr> <tr><td>Insert "U"</td><td>followed by inches</td></tr> <tr><td>Example:</td><td>U = 12.5"</td></tr> <tr><td>Code:</td><td>U12.5</td></tr> </table>	Code	U length in inches	Insert "U"	followed by inches	Example:	U = 12.5"	Code:	U12.5	<table border="1"> <tr><th>Code</th><th>L length in inches</th></tr> <tr><td>Insert "L"</td><td>followed by inches</td></tr> <tr><td>Example:</td><td>L = 14.75"</td></tr> <tr><td>Code:</td><td>L14.75</td></tr> </table>	Code	L length in inches	Insert "L"	followed by inches	Example:	L = 14.75"	Code:	L14.75	<table border="1"> <tr><th colspan="2">Stem Material</th></tr> <tr><th>Code</th><th></th></tr> <tr><td>304SS</td><td>A</td></tr> <tr><td>304LSS</td><td>AL</td></tr> <tr><td>304H</td><td>AH</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>310LSS</td><td>BL</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>316LSS</td><td>CL</td></tr> <tr><td>316HSS</td><td>CH</td></tr> <tr><td>I-600</td><td>D</td></tr> <tr><td>I-601</td><td>E</td></tr> <tr><td>Hast.B</td><td>F</td></tr> <tr><td>Hast.C</td><td>H</td></tr> </table>	Stem Material		Code		304SS	A	304LSS	AL	304H	AH	310SS	B	310LSS	BL	316SS	C	316LSS	CL	316HSS	CH	I-600	D	I-601	E	Hast.B	F	Hast.C	H	<table border="1"> <tr><th colspan="2">Flange Material</th></tr> <tr><th>Code</th><th></th></tr> <tr><td>304SS</td><td>A</td></tr> <tr><td>304LSS</td><td>AL</td></tr> <tr><td>304H</td><td>AH</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>310LSS</td><td>BL</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>316LSS</td><td>CL</td></tr> <tr><td>316HSS</td><td>CH</td></tr> <tr><td>I-600</td><td>D</td></tr> <tr><td>I-601</td><td>E</td></tr> <tr><td>Hast.B</td><td>F</td></tr> <tr><td>Hast.C</td><td>H</td></tr> </table>	Flange Material		Code		304SS	A	304LSS	AL	304H	AH	310SS	B	310LSS	BL	316SS	C	316LSS	CL	316HSS	CH	I-600	D	I-601	E	Hast.B	F	Hast.C	H
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Model "W23" Thermowell - Flanged, Reduced Tip



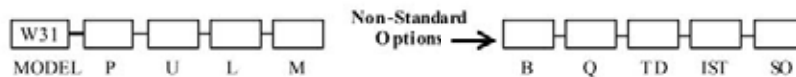
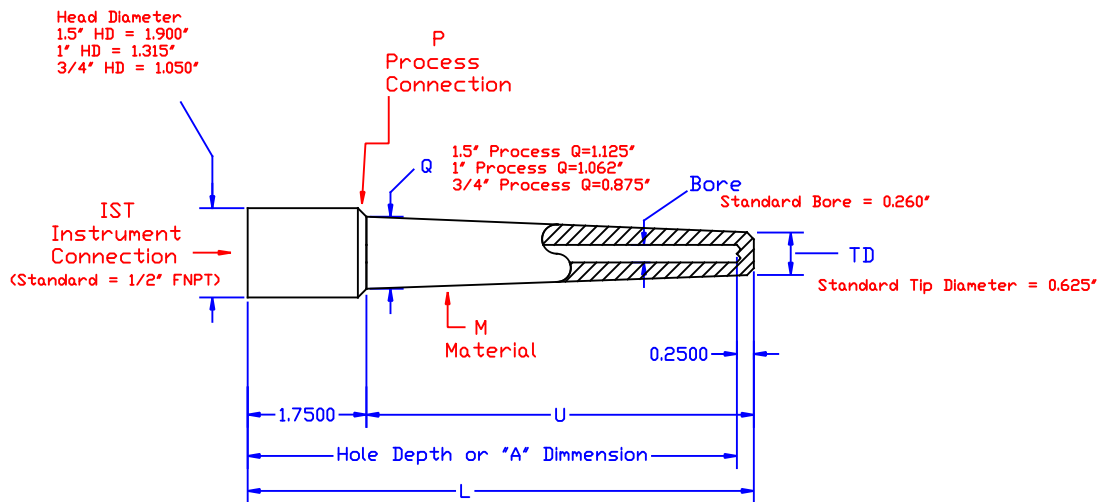
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W23	PF	P	PR	U	L	SM	FM
	Flange Type	Flange Size	Flange Rating	Code	Code	Stem Material	Flange Material
	Raised Face Flat Face Ring Joint	Code	Code	Code	Code	Code	Code
	A B C	Code	Code	Code	Code	Code	Code
		1" A 1.5" B 2" C 3" D 4" E 6" F	150 A 300 B 600 C 900 D 1500 E 2500 F	U length in inches Insert "U" followed by inches  Example: U = 12.5" Code: U12.5	L length in inches Insert "L" followed by inches  Example: L = 14.75" Code: L14.75	304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H

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<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center; margin: 0;">B</p> <p style="font-size: small; margin: 0;">Bore Diameter in inches if different from standard in drawing.</p> <p style="text-align: center; margin: 0;">Code Decimal Inches</p> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center; margin: 0;">Q</p> <p style="font-size: small; margin: 0;">Diameter in inches if different from standard in drawing.</p> <p style="text-align: center; margin: 0;">Code Decimal Inches</p> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center; margin: 0;">TD</p> <p style="font-size: small; margin: 0;">Diameter in inches if different from standard in drawing.</p> <p style="text-align: center; margin: 0;">Code Decimal Inches</p> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center; margin: 0;">IST</p> <p style="font-size: small; margin: 0;">Instrument Connection</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Size</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1/4"</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">5/16"</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">3/8"</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">1/2"</td> <td style="text-align: center;">8</td> </tr> <tr> <td style="text-align: center;">5/8"</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">3/4"</td> <td style="text-align: center;">12</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Type</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">FNPT</td> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">MNPT</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">FNPS</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">MNPS</td> <td style="text-align: center;">D</td> </tr> </tbody> </table> </div>	Size		1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	Type		FNPT	A	MNPT	B	FNPS	C	MNPS	D	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center; margin: 0;">SO</p> <p style="font-size: small; margin: 0;">Special Options</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: center;">None</td> <td style="text-align: center;">Code X</td> </tr> </tbody> </table> </div>	None	Code X
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Model "W31" Thermowell - Socket Weld, Tapered



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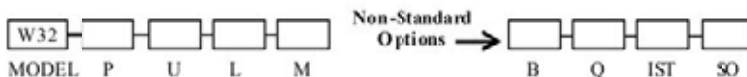
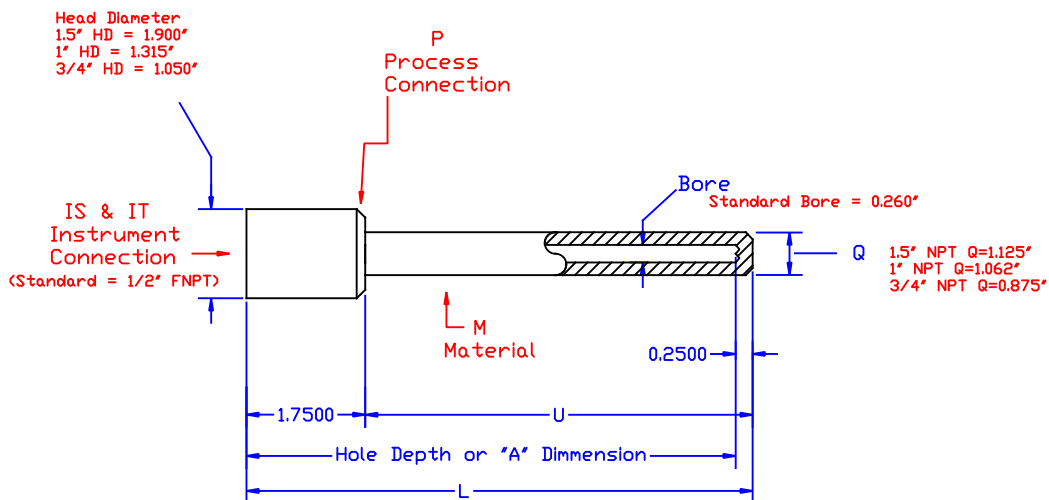
W31	P	U	L	M																																																										
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Model "W32" Thermowell - Socket Weld, Straight



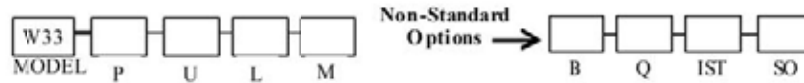
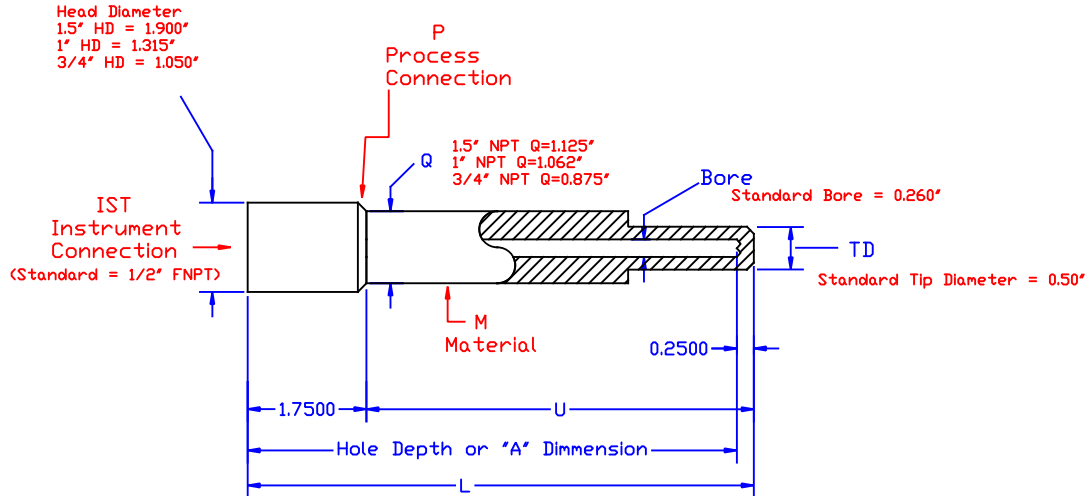
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Model "W33" Thermowell - Socket Weld, Reduced Tip



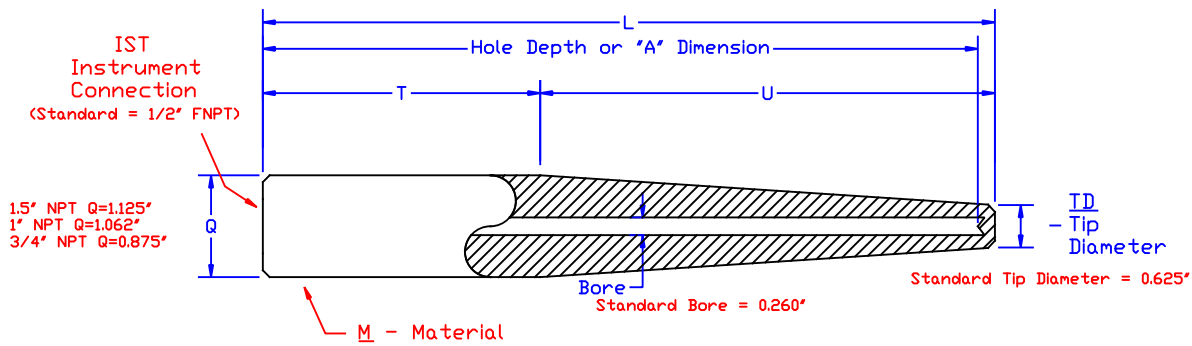
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Model "W34" Thermowell - Weld-In, Tapered



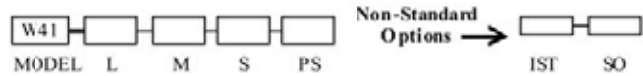
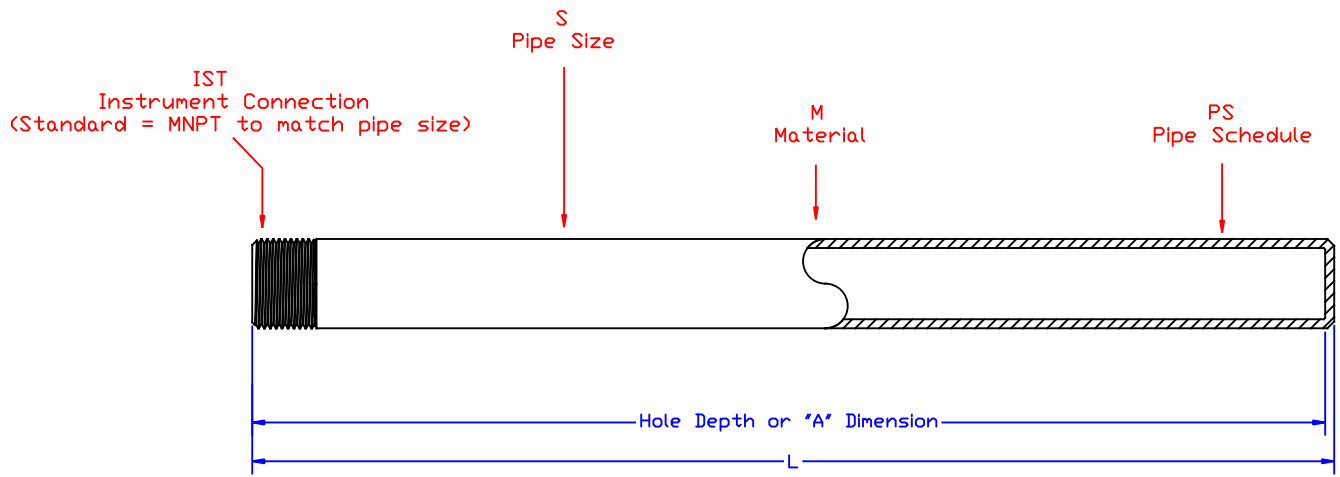
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W34	P	U	L	T	M
	Code Field Pipe Size	Code U length in inches	Code L length in inches	T-Dimension Code T length in inches	Well Material Code
	Example: Pipe Size = 1.0" Code: 1.0	Example: U dimension = 12.5" Code: U12.5	Example: L dimension = 17.25" Code: L17.25	Example: T dimension = 1.25" Code: T1.25	304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H

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No change from Standard in Dwg. - Insert X	No change from Standard in Dwg. - Insert X	No change from Standard in Dwg. - Insert X	Code	None   Code X
			1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	
			Type	
			Code	
			FNPT A MNPT B FNPS C MNPS D	

Model "W41" Pipe Well



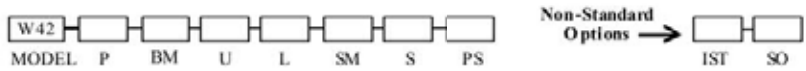
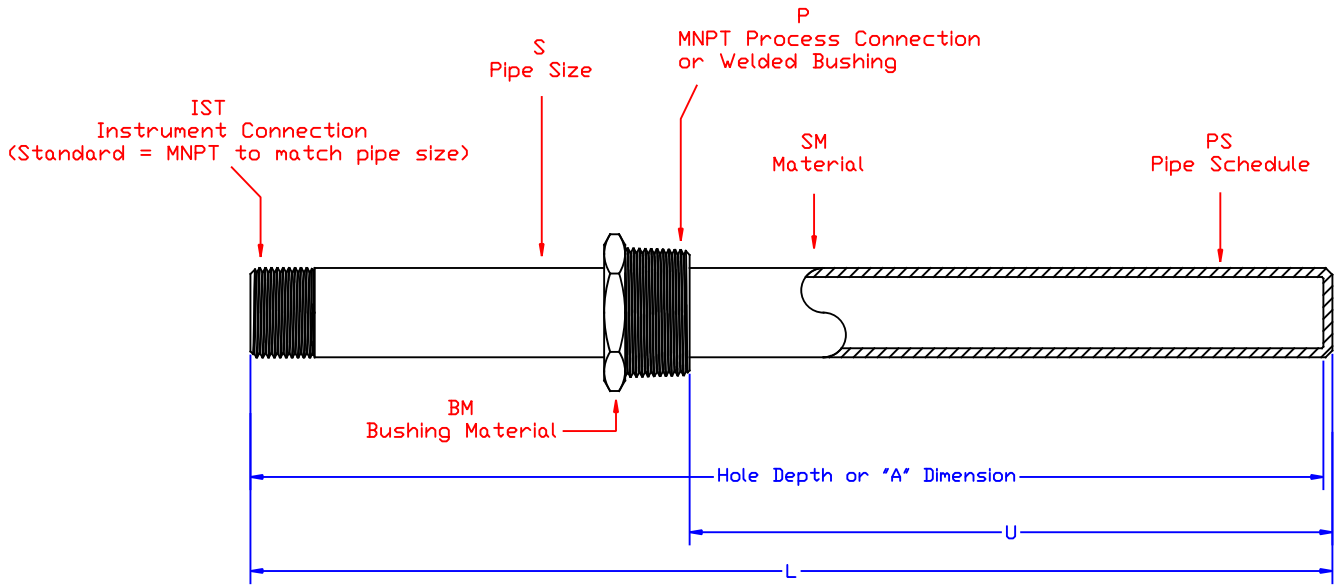
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	<u>Code</u>																																			
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**Model "W42" Pipe Well with Welded Bushing**



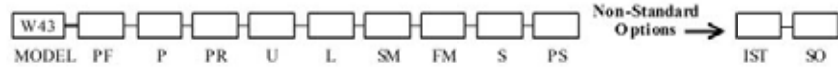
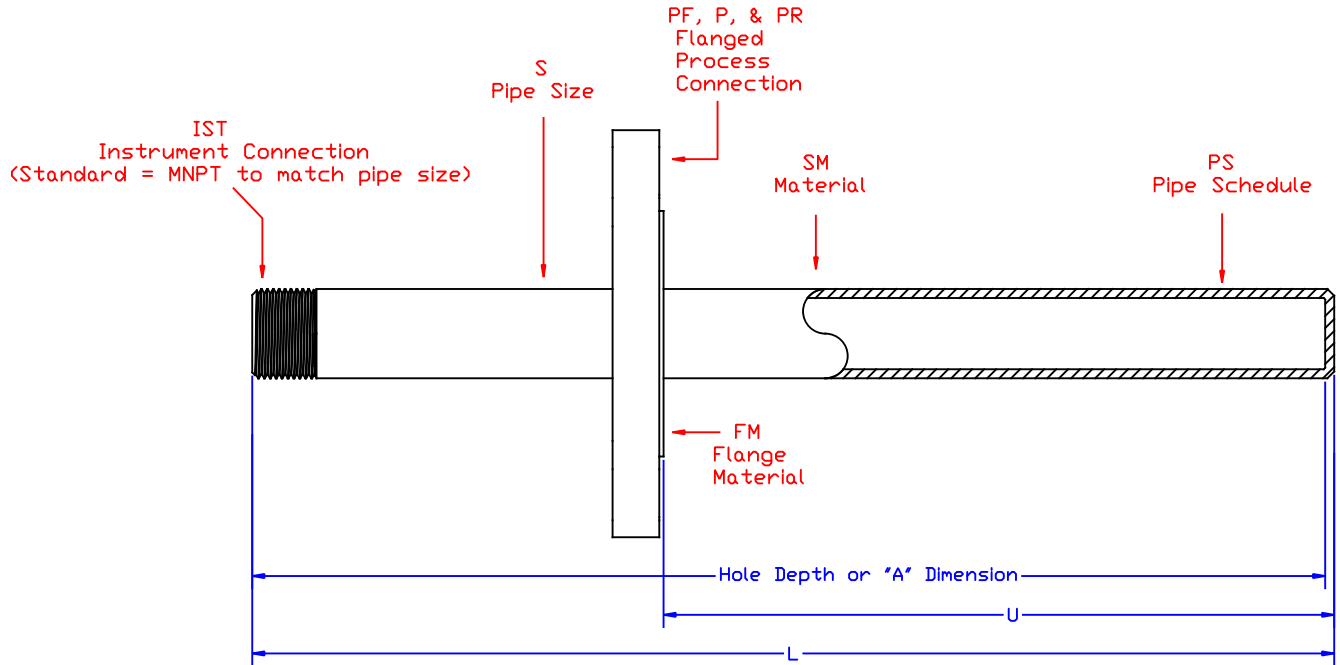
**These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.**

W42	P		BM		U	L	SM		S		PS	
	MNPT Process		Bushing		Code	Code	Stem Material		Pipe Size		Pipe Schedule	
	Size-MNPT	Code	304SS	Code	U length in inches Insert "U" followed by inches	L length in inches Insert "L" followed by inches	304SS	Code	1/4"	Code	40	Code
	.25"	4	304LSS	AL	Example: U dimension = 12.5" Code: U12.5	Example: L dimension = 14.25" Code: L14.25	304H	AH	5/16"	5	80	B
	.375"	6	304H	AH			310SS	B	3/8"	6	160	C
	.5"	8	310SS	B			310LSS	BL	1/2"	8	XX	D
	.75"	12	310LSS	BL			316SS	C	5/8"	10		
	1.0"	16	316SS	C			316LSS	CL	3/4"	12		
	1.25"	20	316LSS	CL			316HSS	CH	1"	16		
	1.5"	24	316HSS	CH			I-600	D				
			I-601	E			I-601	E				
			Hast.B	F			Hast.B	F				
			Hast.C	H			Hast.C	H				

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IST		SO	
Instrument Connection		Special Options	
Size		None	
1/4"	Code 4	None	Code X
5/16"	5		
3/8"	6		
1/2"	8		
5/8"	10		
3/4"	12		
Type			
FNPT	Code A		
MNPT	B		
FNPS	C		
MNPS	D		

Model "W43" Pipe Well Flanged



These 10 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

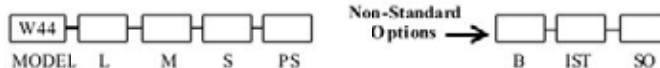
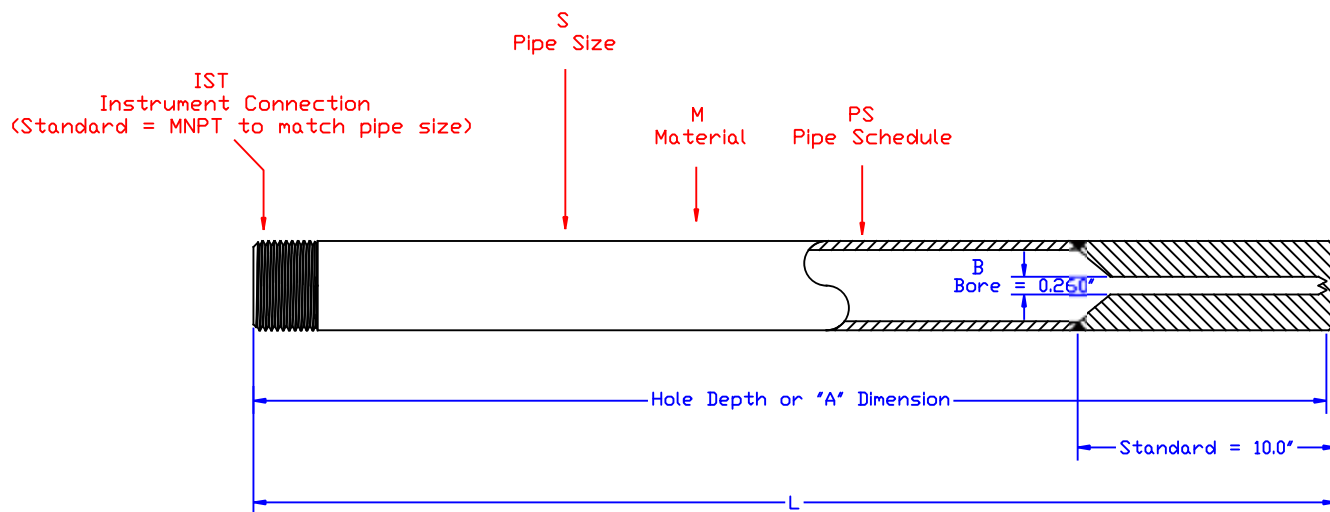
W43	PF	P	PR	U	L	SM	FM
	Flange Type	Flange Size	Flange Rating	Code	Code	Stem Material	Flange Material
	Code	Code	Code	U length in inches Insert "U" followed by inches	L length in inches Insert "L" followed by inches	Code	Code
	Raised Face Flat Face Ring Joint	1" 1.5" 2" 3" 4" 6"	150 300 600 900 1500 2500	Example: U = 12.5" Code: U12.5	Example: L = 14.75" Code: L14.75	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS E-600 E-601 Hast.B Hast.C	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS E-600 E-601 Hast.B Hast.C
	A B C	A B C D E F	A B C D E F			A AL AH B BL C CL CH D E F H	A AL AH B BL C CL CH D E F H

S	PS
Pipe Size	Pipe Schedule
Code	Code
1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12 1" 16	40 A 80 B 160 C XX D

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IST	SO
Instrument Connection	Special Options
Size	Code
Code	None
1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	X
Type	
Code	
FNPT A MNPT B FNPS C MNPS D	

Model "W44" Pipe Well with Straight Bar Stock Tip



These 5 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

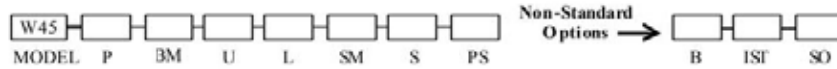
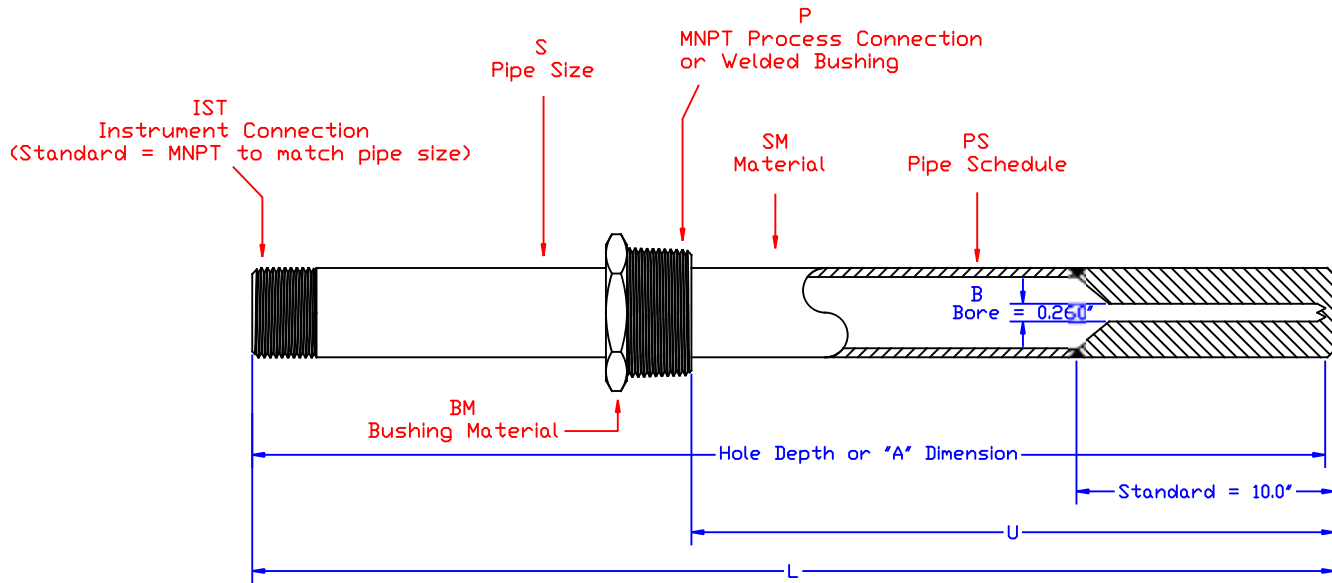
W44	-	L	-	M	-	S	-	PS
		Code L length in inches Insert "L" followed by inches Example: L dimension = 14.25" Code: L14.25		Well Material Code		Pipe Size Code		Pipe Schedule Code
				304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H		1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12 1" 16		40 A 80 B 160 C XX D

NON-STANDARD OPTIONS: Only use the 3 PN entries below when the dimensions needed are different from the standard dimensions shown in the drawing above and/or special options apply. When completing this section **BESURE** to use a "X" for all entries that do not apply.

B	-	IST	-	SO
Bore Diameter in inches if different from standard in drawing.  Code Decimal Inches		Instrument Connection Size Code		Special Options  None Code X
		1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12		
		Type Code		
		FNPT A MNPT B FNPS C MNPS D		



Model "W45" Pipe Well with Welded Bushing and Straight Bar Stock Tip



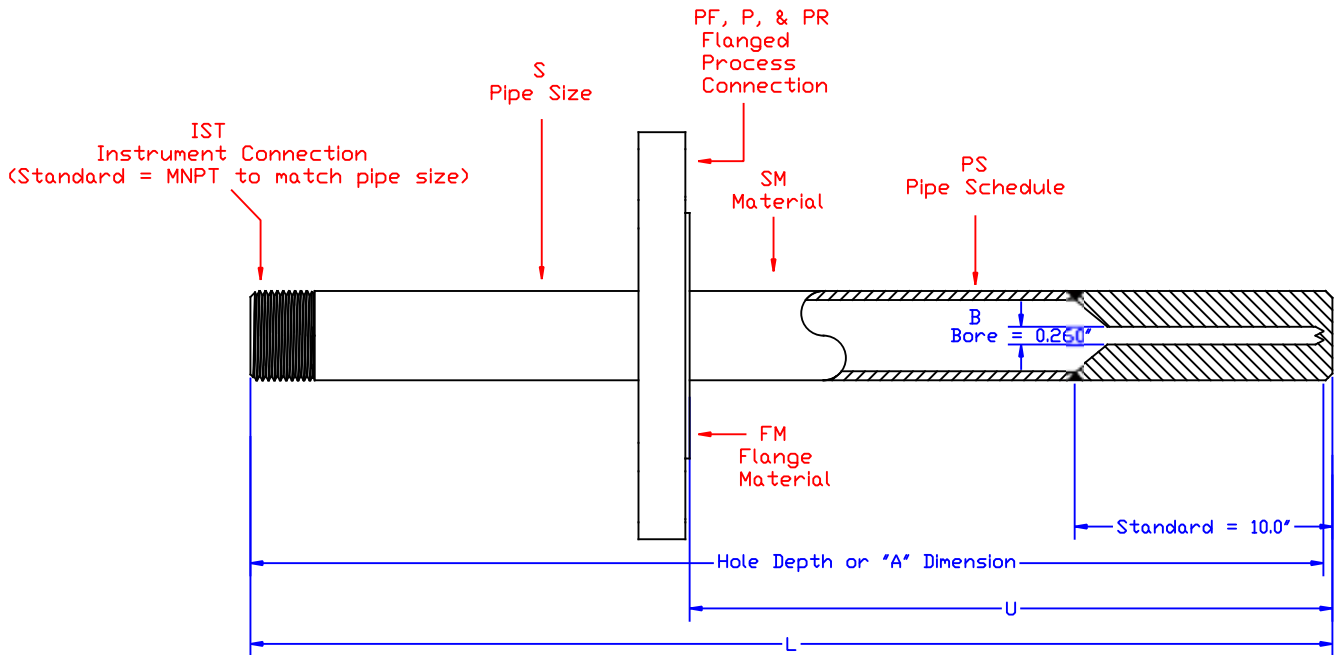
These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W45	P	BM	U	L	SM	S	PS
	MNPT Process	Bushing	Code	Code	Stem Material	Pipe Size	Pipe Schedule
	Size-MNPT	Code	U length in inches Insert "U" followed by inches Example: U dimension = 12.5" Code: U12.5	L length in inches Insert "L" followed by inches Example: L dimension = 14.25" Code: L14.25	Code	Code	Code
	.25" 4	304SS A			304SS A	1/4" 4	40 A
	.375" 6	304LSS AL			304LSS AL	5/16" 5	80 B
	.5" 8	304H AH			304H AH	3/8" 6	160 C
	.75" 12	310SS B			310SS B	1/2" 8	XX D
	1.0" 16	310LSS BL			310LSS BL	5/8" 10	
	1.25" 20	316SS C			316SS C	3/4" 12	
	1.5" 24	316LSS CL			316LSS CL	1" 16	
		316HSS CH			316HSS CH		
		I-600 D			I-600 D		
		I-601 E			I-601 E		
		Hast.B F			Hast.B F		
		Hast.C H			Hast.C H		

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B	IST	SO
Bore Diameter in inches if different from standard in drawing.	Instrument Connection	Special Options
Code	Size	None
Decimal Inches	Code	Code X
	1/4" 4	
	5/16" 5	
	3/8" 6	
	1/2" 8	
	5/8" 10	
	3/4" 12	
	Type	
	Code	
	FNPT A	
	MNPT B	
	FNPS C	
	MNPS D	

Model "W46" Pipe Well - Flanged with Straight Bar Stock Tip



These 10 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

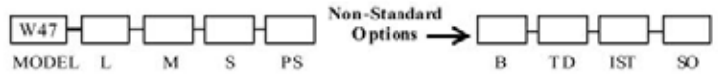
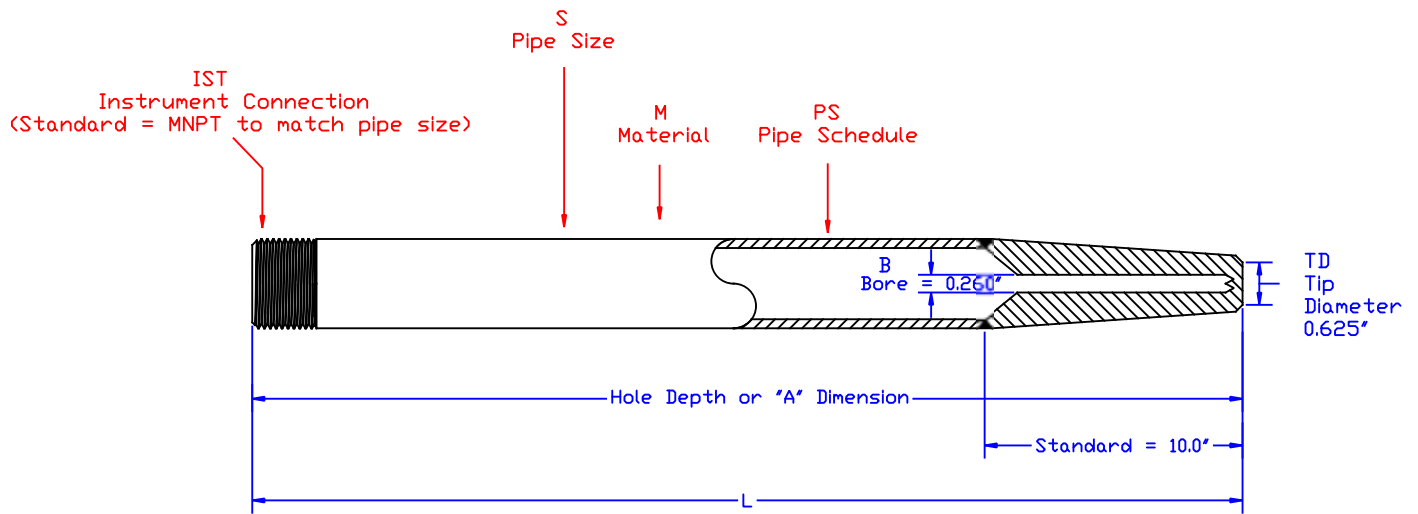
W46	PF	P	PR	U	L	SM	FM																																																																																												
	Flange Type	Flange Size	Flange Rating	Code	Code	Seem Material	Flange Material																																																																																												
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<table border="1" style="font-size: small;"> <tr><th>Code</th></tr> <tr><td>Bore Diameter in inches if different from standard in drawing.</td></tr> <tr><td>Decimal Inches</td></tr> </table>	Code	Bore Diameter in inches if different from standard in drawing.	Decimal Inches	<table border="1" style="font-size: small;"> <tr><th>Code</th></tr> <tr><td>Instrument Connection</td></tr> <tr><td>Size</td></tr> <tr><td>1/4"</td><td>4</td></tr> <tr><td>5/16"</td><td>5</td></tr> <tr><td>3/8"</td><td>6</td></tr> <tr><td>1/2"</td><td>8</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>3/4"</td><td>12</td></tr> <tr><td>Type</td></tr> <tr><td>FNPT</td><td>A</td></tr> <tr><td>MNPT</td><td>B</td></tr> <tr><td>FNPS</td><td>C</td></tr> <tr><td>MNPS</td><td>D</td></tr> </table>	Code	Instrument Connection	Size	1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	Type	FNPT	A	MNPT	B	FNPS	C	MNPS	D	<table border="1" style="font-size: small;"> <tr><th>Code</th></tr> <tr><td>Special Options</td></tr> <tr><td>None</td><td>X</td></tr> </table>	Code	Special Options	None	X
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Special Options																																	
None	X																																

Model "W47" Pipe Well with Tapered Bar Stock Tip



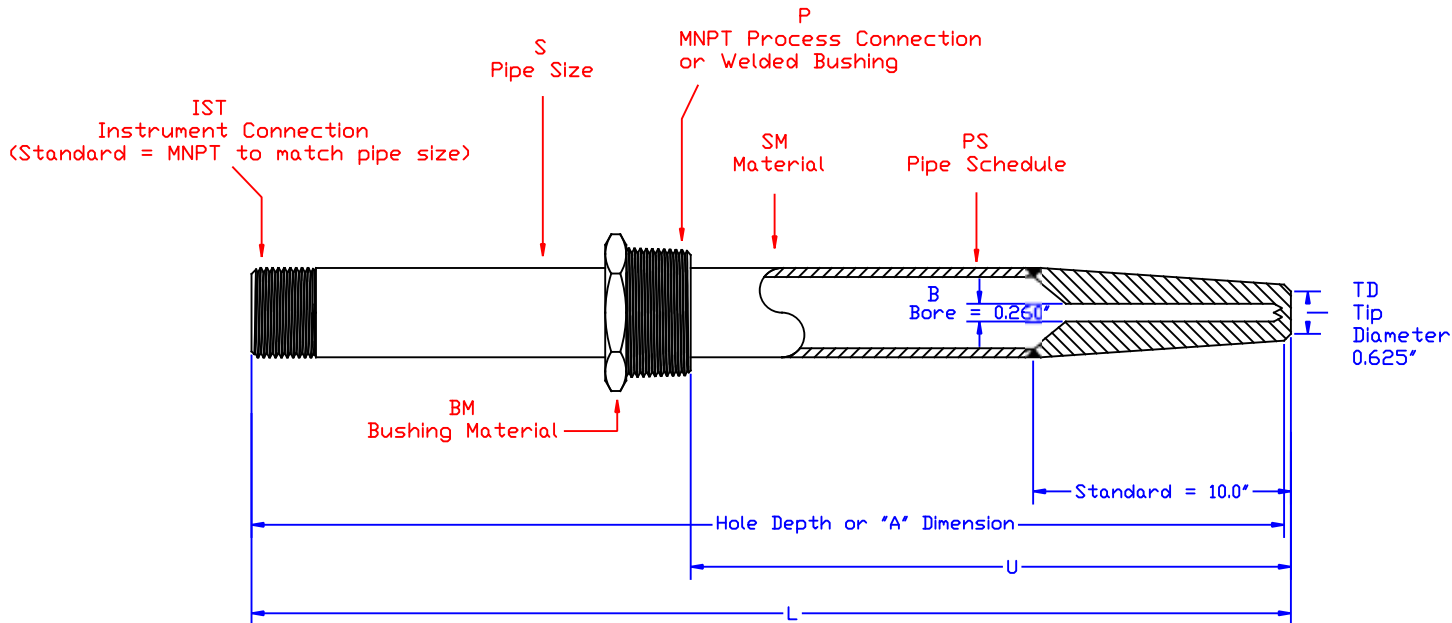
These 5 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W47	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>L</b></p> <p style="text-align: center; margin: 0;"><u>Code</u></p> <p style="text-align: center; margin: 0;">L length in inches Insert "L" followed by inches</p> <p style="text-align: center; margin: 0;">Example: L dimension = 14.25" Code: L14.25</p> </div>	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>M</b></p> <p style="text-align: center; margin: 0;">Well Material</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;"><u>Code</u></th> </tr> </thead> <tbody> <tr><td>304SS</td><td>A</td></tr> <tr><td>304LSS</td><td>AL</td></tr> <tr><td>304H</td><td>AH</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>310LSS</td><td>BL</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>316LSS</td><td>CL</td></tr> <tr><td>316HSS</td><td>CH</td></tr> <tr><td>1-600</td><td>D</td></tr> <tr><td>1-601</td><td>E</td></tr> <tr><td>Hast.B</td><td>F</td></tr> <tr><td>Hast.C</td><td>H</td></tr> </tbody> </table> </div>	<u>Code</u>		304SS	A	304LSS	AL	304H	AH	310SS	B	310LSS	BL	316SS	C	316LSS	CL	316HSS	CH	1-600	D	1-601	E	Hast.B	F	Hast.C	H	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>S</b></p> <p style="text-align: center; margin: 0;">Pipe Size</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;"><u>Code</u></th> </tr> </thead> <tbody> <tr><td>1/4"</td><td>4</td></tr> <tr><td>5/16"</td><td>5</td></tr> <tr><td>3/8"</td><td>6</td></tr> <tr><td>1/2"</td><td>8</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>3/4"</td><td>12</td></tr> <tr><td>1"</td><td>16</td></tr> </tbody> </table> </div>	<u>Code</u>		1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	1"	16	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>PS</b></p> <p style="text-align: center; margin: 0;">Pipe Schedule</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;"><u>Code</u></th> </tr> </thead> <tbody> <tr><td>40</td><td>A</td></tr> <tr><td>80</td><td>B</td></tr> <tr><td>160</td><td>C</td></tr> <tr><td>XX</td><td>D</td></tr> </tbody> </table> </div>	<u>Code</u>		40	A	80	B	160	C	XX	D
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<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>B</b></p> <p style="text-align: center; margin: 0;">Bore Diameter in inches if different from standard in drawing.</p> <p style="text-align: center; margin: 0;"><u>Code</u></p> <p style="text-align: center; margin: 0;">Decimal Inches</p> </div>	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>TD</b></p> <p style="text-align: center; margin: 0;">Diameter in inches if different from standard in drawing.</p> <p style="text-align: center; margin: 0;"><u>Code</u></p> <p style="text-align: center; margin: 0;">Decimal Inches</p> </div>	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>IST</b></p> <p style="text-align: center; margin: 0;">Instrument Connection</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;"><u>Size</u></th> </tr> </thead> <tbody> <tr><td>1/4"</td><td>4</td></tr> <tr><td>5/16"</td><td>5</td></tr> <tr><td>3/8"</td><td>6</td></tr> <tr><td>1/2"</td><td>8</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>3/4"</td><td>12</td></tr> </tbody> </table> <p style="text-align: center; margin: 0;">Type</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;"><u>Code</u></th> </tr> </thead> <tbody> <tr><td>FNPT</td><td>A</td></tr> <tr><td>MNPT</td><td>B</td></tr> <tr><td>FNPS</td><td>C</td></tr> <tr><td>MNPS</td><td>D</td></tr> </tbody> </table> </div>	<u>Size</u>		1/4"	4	5/16"	5	3/8"	6	1/2"	8	5/8"	10	3/4"	12	<u>Code</u>		FNPT	A	MNPT	B	FNPS	C	MNPS	D	-	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;"><b>SO</b></p> <p style="text-align: center; margin: 0;">Special Options</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%;">None</td> <td style="width: 50%;">Code X</td> </tr> </tbody> </table> </div>	None	Code X
<u>Size</u>																																
1/4"	4																															
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FNPT	A																															
MNPT	B																															
FNPS	C																															
MNPS	D																															
None	Code X																															

Model "W48" Pipe Well with Welded Bushing and Tapered Bar Stock Tip



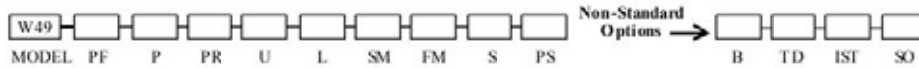
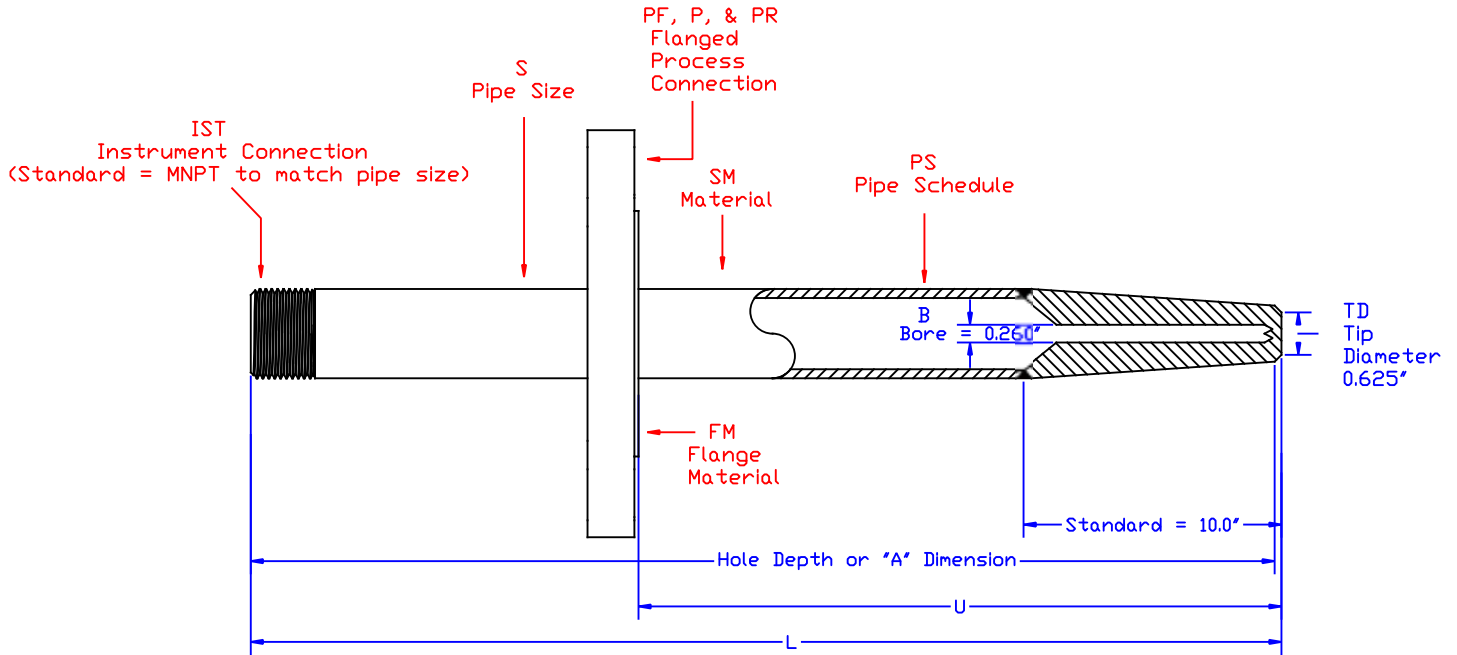
These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W48	P		BM		U	L	SM		S		PS	
	Size-MNPT	Code	Bushing		Code	Code	Stem Material		Pipe Size		Pipe Schedule	
	.25"	4	304SS	A	Code U length in inches Insert "U" followed by inches  Example: U dimension = 12.5" Code: U12.5	Code L length in inches Insert "L" followed by inches  Example: L dimension = 14.25" Code: L14.25	304SS	A	1/4"	4	40	A
	.375"	6	304LSS	AL			304H	AH	5/16"	5	80	B
	.5"	8	310SS	B	310SS	B	310SS	B	3/8"	6	160	C
	.75"	12	310LSS	BL	316SS	C	310LSS	BL	1/2"	8	XX	D
	1.0"	16	316SS	C	316LSS	CL	316SS	C	5/8"	10		
	1.25"	20	316LSS	CL	316HSS	CH	316LSS	CL	3/4"	12		
	1.5"	24	316HSS	CH	I-600	D	316HSS	CH	1"	16		
			I-600	D			I-600	D				
			I-601	E			I-601	E				
			Hast.B	F			Hast.B	F				
			Hast.C	H			Hast.C	H				

**NON-STANDARD OPTIONS:** Only use the 4 PN entries below when the dimensions needed are different from the standard dimensions shown in the drawing above and/or special options apply. When completing this section **BE SURE** to use a "X" for all entries that do not apply.

B	TD	IST	SO
Bore Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Instrument Connection Size	Special Options
Code Decimal Inches	Code Decimal Inches	Size	None Code X
		1/4" 4	
		5/16" 5	
		3/8" 6	
		1/2" 8	
		5/8" 10	
		3/4" 12	
		Type	
		Code	
		FNPT A	
		MNPT B	
		FNPS C	
		MNPS D	

Model "W49" Pipe Well - Flanged with Tapered Bar Stock Tip



These 10 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W49	PF Flange Type		P Flange Size		PR Flange Rating		U Code		L Code		SM Srem Material		FM Flange Material	
	Raised Face Flat Face Ring Joint	Code A B C	Code A B C D E F	Code A B C D E F	Code A B C D E F	Code A B C D E F	Code U length in inches Insert "U" followed by inches Example: U = 12.5" Code: U12.5	Code L length in inches Insert "L" followed by inches Example: L = 14.75" Code: L14.75	Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H

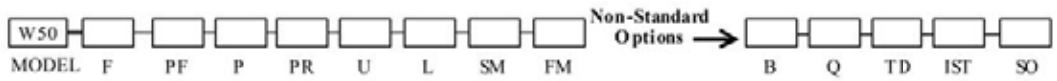
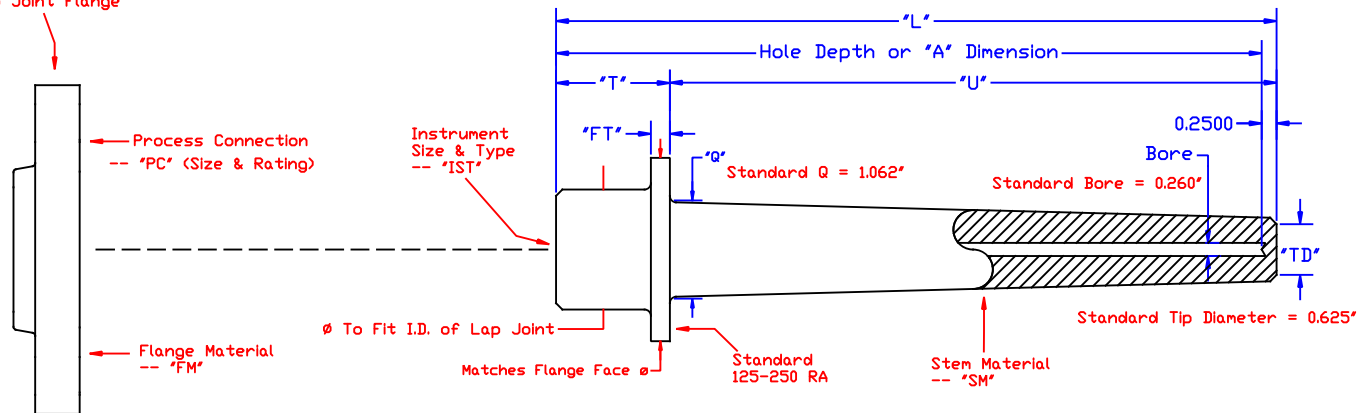
S Pipe Size		PS Pipe Schedule	
Code		Code	
1/4"	4	40	A
5/16"	5	80	B
3/8"	6	160	C
1/2"	8	XX	D
5/8"	10		
3/4"	12		
1"	16		

**NON-STANDARD OPTIONS:** Only use the 4 PN entries below when the dimensions needed are different from the standard dimensions shown in the drawing above and/or special options apply. When completing this section **BESURE** to use a "X" for all entries that do not apply.

B Bore Diameter in inches if different from standard in drawing.		TD Diameter in inches if different from standard in drawing.		IST Instrument Connection		SO Special Options	
Code		Code		Size	Code	None	Code X
Decimal Inches		Decimal Inches		1/4"	4		
				5/16"	5		
				3/8"	6		
				1/2"	8		
				5/8"	10		
				3/4"	12		
				Type	Code		
				FNPT	A		
				MNPT	B		
				FNPS	C		
				MNPS	D		

Model "W50" Vanstone Thermowell - Tapered with Standard Welding

\*\* OPTIONAL \*\*  
Lap Joint Flange



These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W50	F	PF	P	PR	U	L	SM	FM
	Flange	Flange Type	Flange Size	Flange Rating	Code U length in inches Insert "U" followed by inches	Code L length in inches Insert "L" followed by inches	Stem Material	Flange Material
	Yes No	Raised Face Flat Face Ring Joint	1" 1.5" 2" 3" 4" 6"	150 300 600 900 1500 2500	Example: U = 12.5" Code: U12.5	Example: L = 14.75" Code: L14.75	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS 1-600 1-601 Hast.B Hast.C	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS 1-600 1-601 Hast.B Hast.C
	Code 1 0	Code A B C	Code A B C D E F	Code A B C D E F			Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H

**NON-STANDARD OPTIONS:** Only use the 5 PN entries below when the dimensions needed are different from the standard dimensions shown in the drawing above and/or special options apply. When completing this section **BESURE** to use a "X" for all entries that do not apply.

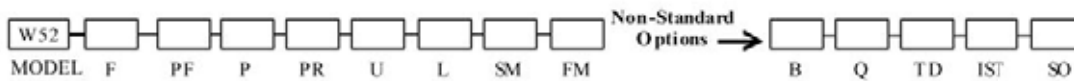
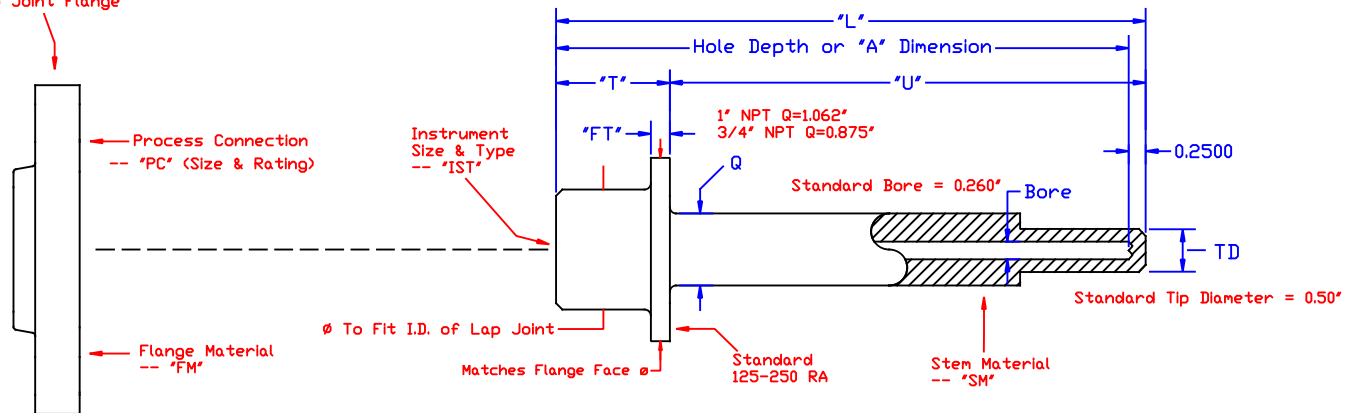
B	Q	TD	IST	SO
Bore Diameter in inches if different from standard in drawing	Diameter in inches if different from standard in drawing	Diameter in inches if different from standard in drawing	Instrument Connection	Special Options
Code Decimal Inches	Code Decimal Inches	Code Decimal Inches	Size	None Code X
			1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	
			Code 4 5 6 8 10 12	
			Type	
			Code FNPT MNPT FNPS MNPS	
			A B C D	





Model "W52" Vanstone Thermowell - Reduced Tip with Standard Welding

**\*\* OPTIONAL \*\***  
Lap Joint Flange



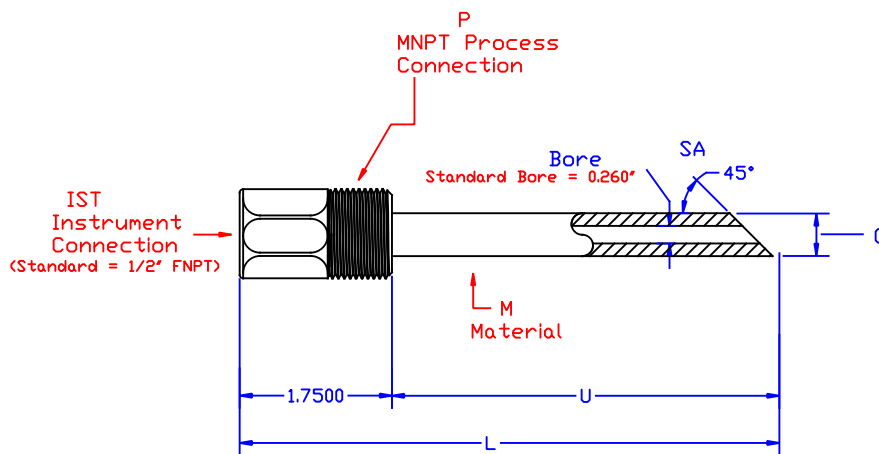
These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W52	F	PF	P	PR	U	L	SM	FM						
	Flange	Flange Type		Flange Size		Flange Rating		Code	Code	Stem Material		Flange Material		
	Yes No	Code 1 0	Raised Face Flat Face Ring Joint	Code A B C	1" 1.5" 2" 3" 4" 6"	Code A B C D E F	150 300 600 900 1500 2500	Code A B C D E F	U length in inches Insert "U" followed by inches  Example: U = 12.5 Code: U12.5	L length in inches Insert "L" followed by inches  Example: L = 14.75 Code: L14.75	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS I-600 I-601 Hast.B Hast.C	Code A AL AH B BL C CL CH D E F H	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS I-600 I-601 Hast.B Hast.C	Code A AL AH B BL C CL CH D E F H

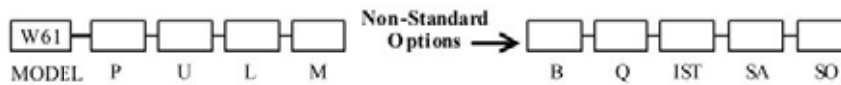
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B	Q	TD	IST	SO
Bore Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Instrument Connection	Special Options
Code Decimal Inches	Code Decimal Inches	Code Decimal Inches	Size	None    Code X
			1/4"    4 5/16"    5 3/8"    6 1/2"    8 5/8"    10 3/4"    12	
			Type	
			FNPT    A MNPT    B FNPS    C MNPS    D	

Model "W61" Thermowell - Threaded, Straight, Open Ended, Angled Tip



**Dimensional Standards**  
 P = 1/2" → Q = 0.625"  
 P = 3/4" → Q = 0.750"  
 P = 1.0" → Q = 0.875"



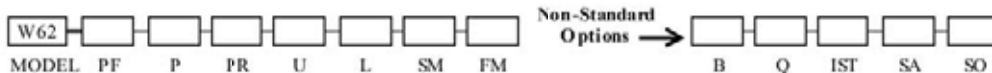
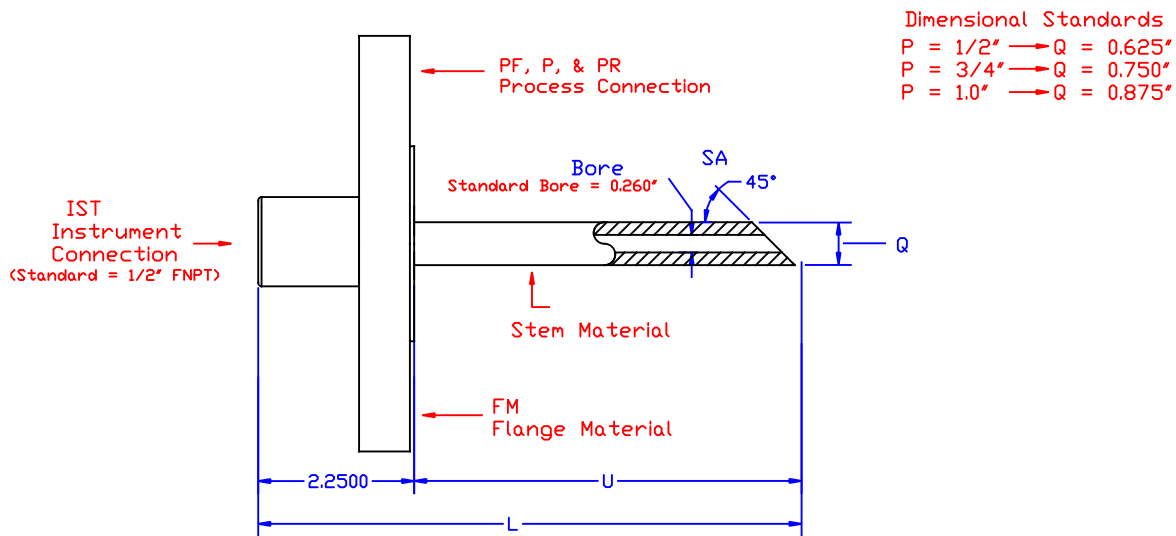
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W61	P	U	L	M																																																		
	MNPT Process Connection	Code U length in inches Insert "U" followed by inches	Code L length in inches Insert "L" followed by inches	Well Material																																																		
	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th>Size -MNPT</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>.25"</td><td>4</td></tr> <tr><td>.375"</td><td>6</td></tr> <tr><td>.5"</td><td>8</td></tr> <tr><td>.75"</td><td>12</td></tr> <tr><td>1.0"</td><td>16</td></tr> <tr><td>1.25"</td><td>20</td></tr> <tr><td>1.5"</td><td>24</td></tr> </tbody> </table>	Size -MNPT	Code	.25"	4	.375"	6	.5"	8	.75"	12	1.0"	16	1.25"	20	1.5"	24	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <tbody> <tr> <td colspan="2">Example: U dimension = 12.5"</td> </tr> <tr> <td colspan="2">Code: U12.5</td> </tr> </tbody> </table>	Example: U dimension = 12.5"		Code: U12.5		<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <tbody> <tr> <td colspan="2">Example: L dimension = 14.25"</td> </tr> <tr> <td colspan="2">Code: L14.25</td> </tr> </tbody> </table>	Example: L dimension = 14.25"		Code: L14.25		<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th></th> <th>Code</th> </tr> </thead> <tbody> <tr><td>304SS</td><td>A</td></tr> <tr><td>304LSS</td><td>AL</td></tr> <tr><td>304H</td><td>AH</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>310LSS</td><td>BL</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>316LSS</td><td>CL</td></tr> <tr><td>316HSS</td><td>CH</td></tr> <tr><td>I-600</td><td>D</td></tr> <tr><td>I-601</td><td>E</td></tr> <tr><td>Hast.B</td><td>F</td></tr> <tr><td>Hast.C</td><td>H</td></tr> </tbody> </table>		Code	304SS	A	304LSS	AL	304H	AH	310SS	B	310LSS	BL	316SS	C	316LSS	CL	316HSS	CH	I-600	D	I-601	E	Hast.B	F	Hast.C	H
Size -MNPT	Code																																																					
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.375"	6																																																					
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304SS	A																																																					
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Model "W62" Thermowell - Flanged, Straight, Open Ended, Angled Tip



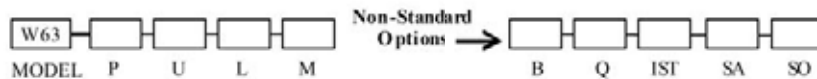
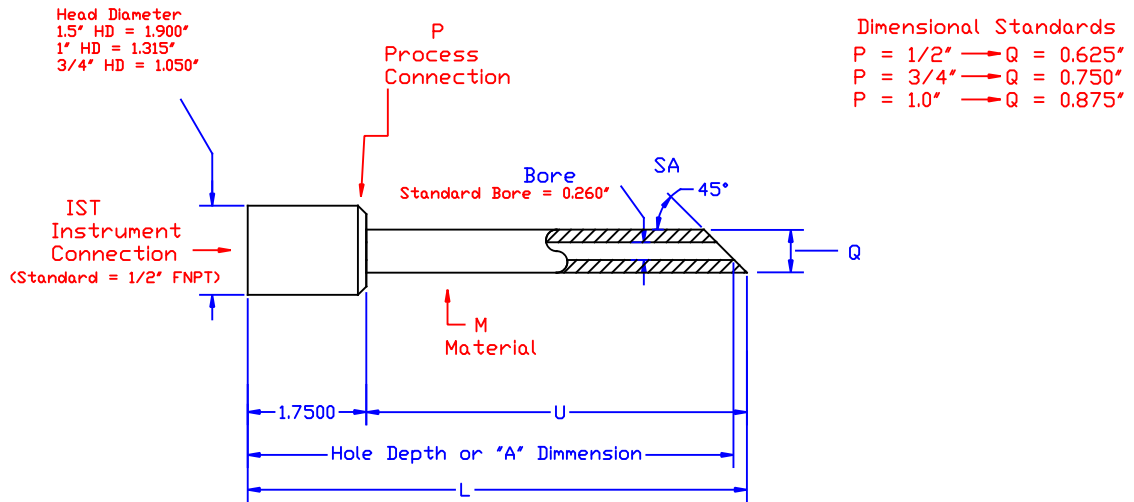
These 8 PN entries are all that is needed when the standard dimensions shown in the drawing above apply.

W62	PF	P	PR	U	L	SM	FM
	Flange Type	Flange Size	Flange Rating	Code	Code	Stem Material	Flange Material
	Raised Face Flat Face Ring Joint	1" 1.5" 2" 3" 4" 6"	150 300 600 900 1500 2500	U length in inches insert "U" followed by inches  Example: U = 12.5" Code: U12.5	L length in inches insert "L" followed by inches  Example: L = 14.75" Code: L14.75	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS 1-600 1-601 Hast.B Hast.C	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS 1-600 1-601 Hast.B Hast.C
	Code A B C	Code A B C D E F	Code A B C D E F			Code A AL AH B BL C CL CH D E F H	Code A AL AH B BL C CL CH D E F H

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B	Q	IST	SA	SO
Bore Diameter in inches if different from standard in drawing.	Diameter in inches if different from standard in drawing.	Instrument Connection	Stem Angle in degrees if different from standard in drawing.	Special Options
Code Decimal Inches	Code Decimal Inches	Size	Code Degrees	None    Code X
		1/4"    4 5/16"    5 3/8"    6 1/2"    8 5/8"    10 3/4"    12		
		Type		
		FNPT    A MNPT    B FNPS    C MNPS    D		

Model "W63" Thermowell - Socket Weld, Straight, Open Ended, Angled Tip



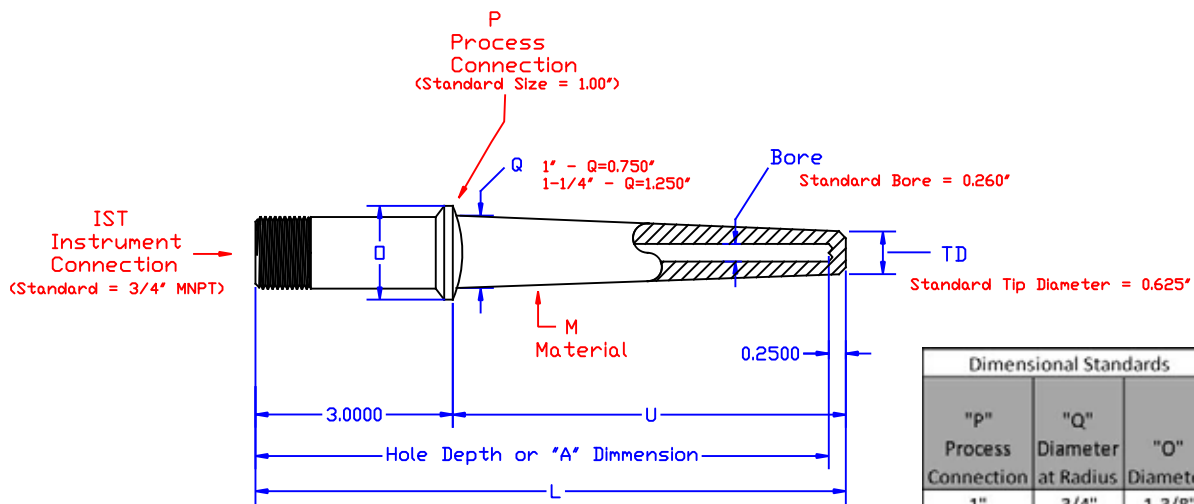
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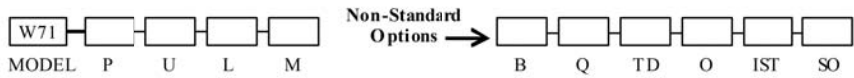
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Model "W71" Thermowell - Ground Joint, Tapered



Dimensional Standards		
"p" Process Connection	"Q" Diameter at Radius	"O" Diameter
1"	3/4"	1-3/8"
1-1/4"	1-1/4"	1-3/4"



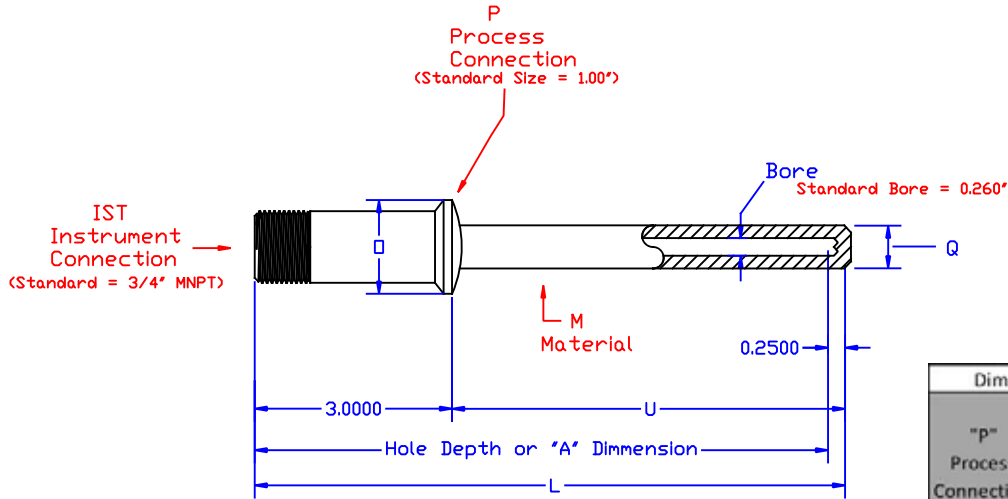
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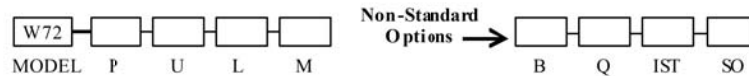
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Model "W72" Thermowell - Ground Joint, Straight



Dimensional Standards		
"P" Process Connection	"Q" Diameter at Radius	"O" Diameter
1"	3/4"	1-3/8"
1-1/4"	1-1/4"	1-3/4"



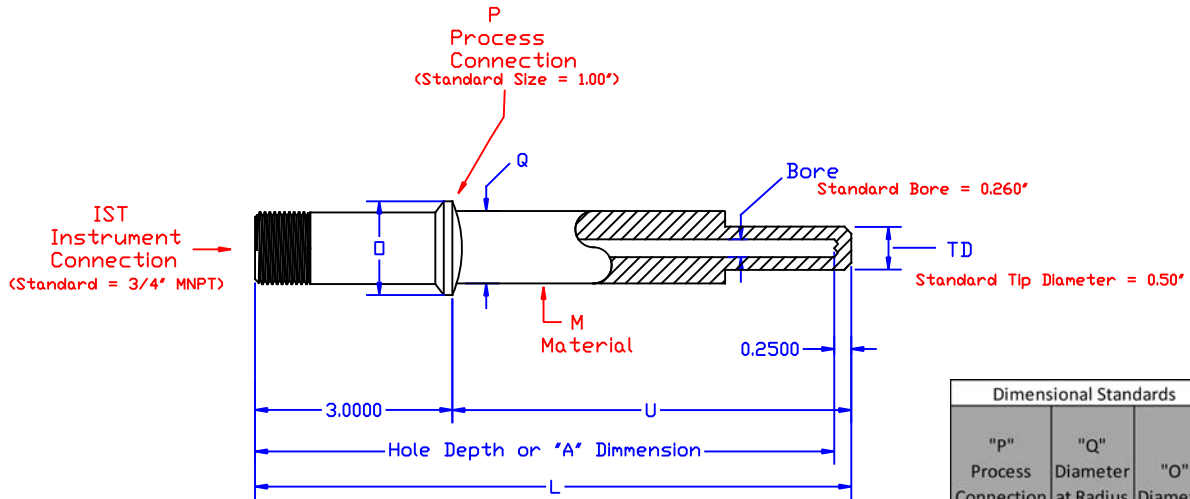
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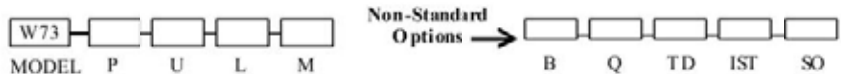
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Model "W73" Thermowell - Ground Joint, Reduced Tip



Dimensional Standards		
"p" Process Connection	"Q" Diameter at Radius	"O" Diameter
1"	3/4"	1-3/8"
1-1/4"	1-1/4"	1-3/4"



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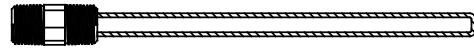
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Ceramic Quick Selection Sheet



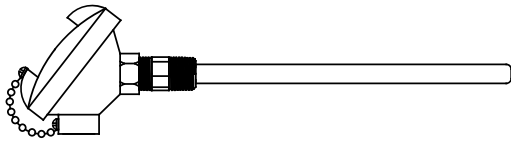
Model C01  
Ceramic Insulated Thermocouple  
Page 1



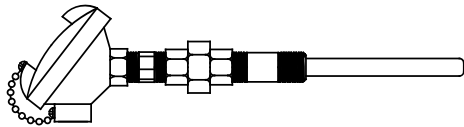
Model CT02  
Ceramic Tube & Hex Fitting Only  
Page 7



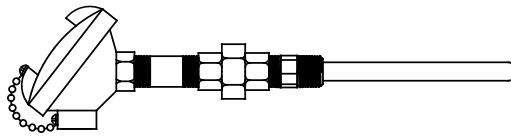
Model C11  
Ceramic Insulated Noble Metal Thermocouple  
Page 2



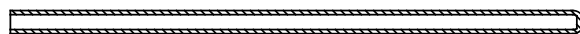
Model CA1  
Ceramic Insulated Thermocouple &  
Ceramic Tube Hex Nipple Assembly  
Page 3



Model CA2  
Ceramic Insulated Thermocouple &  
Ceramic Tube Hex-Union-Nipple Assembly  
Page 4

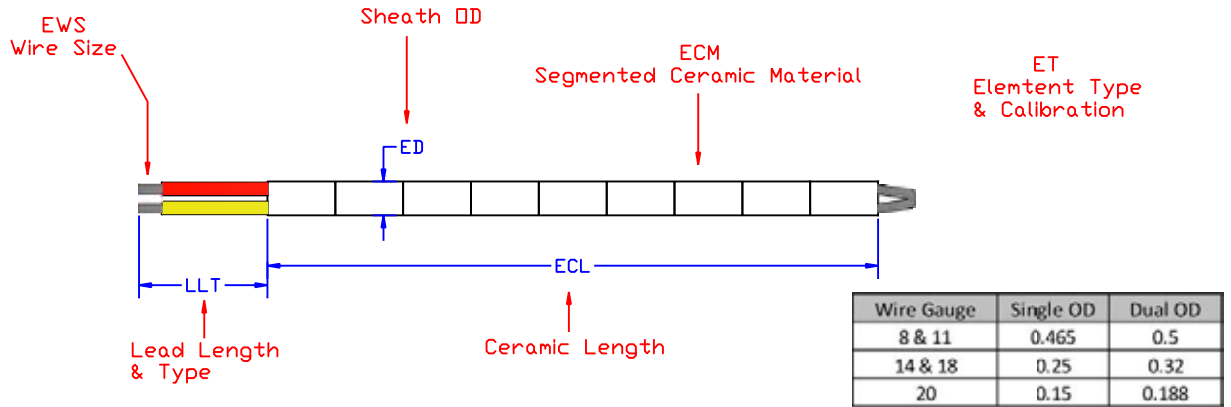


Model CA3  
Ceramic Insulated Thermocouple &  
Ceramic Tube Nipple-Union-Hex Assembly  
Page 5



Model CT01  
Ceramic Tube Only  
Page 6

Model "C01" Ceramic Insulated Thermocouple (No Connection Head or Fitting)

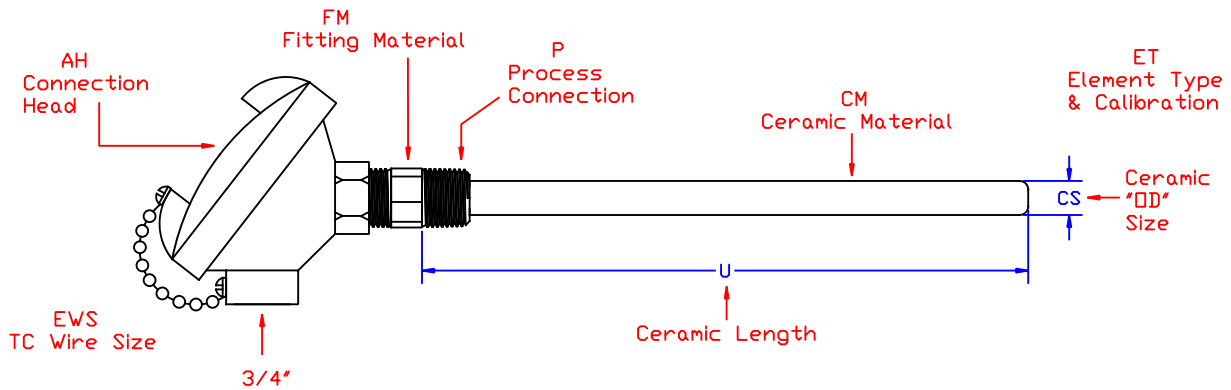


<b>C01</b>	<b>ECL</b>	<b>ET</b>	<b>ED</b>	<b>ECM</b>	<b>LLT</b>
	Ceramic Length	TCType & Calibration	Sheath OD	Ceramic Material	Lead Length & Type
	Code Decimal Inches	Single Code Dual Code	Code	Code	Length Code Decimal Inches
		J K T E N	1/16" 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	Alumina Mullite Cordierite	Type Code
		JJ KK TT EE NN	1 2 3 4 5 6 8 10 12	A B C	B H G F
		For special limits insert P after the code.			

<b>EWS</b>	<b>SO</b>
Wire Size	Special Options
Code	Code
8 Ga. 8 14 Ga. 14 16 Ga. 16 20 Ga. 20	None X



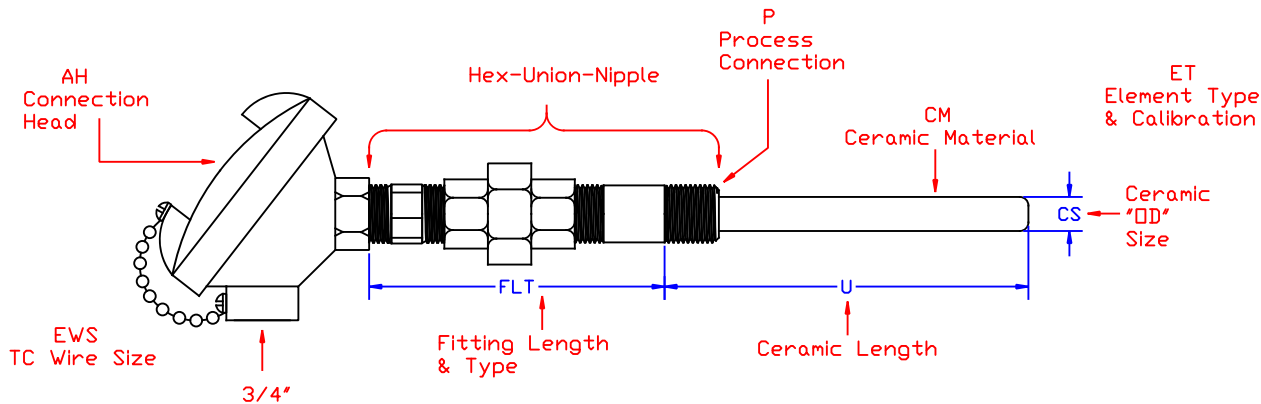
Model "CA1" Ceramic Insulated Thermocouple & Ceramic Tube Hex Nipple Assembly



CA1	ET	EWS	P	FM	U																																																																							
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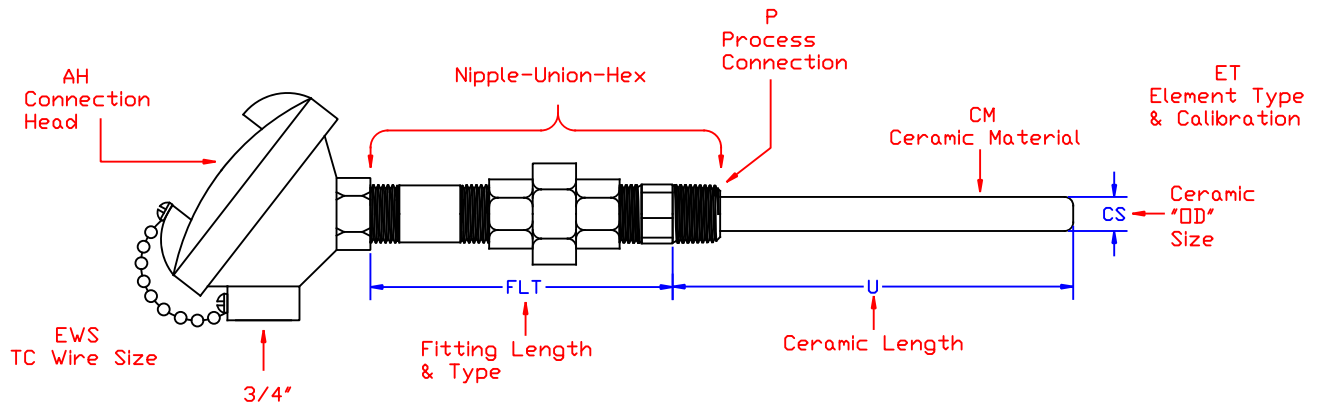
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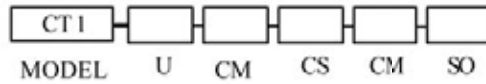
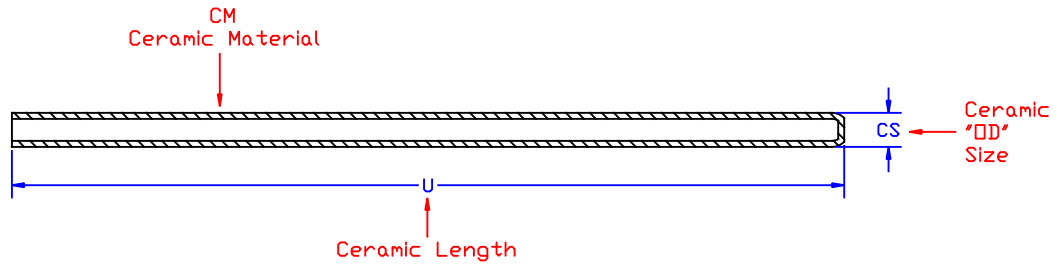
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Alum. screwtop	5B																																																																																																																																																										
Epoxy coated Al. screwtop	5L																																																																																																																																																										
Cast iron screwtop	1A																																																																																																																																																										
Black poly screwtop	1N																																																																																																																																																										
SS Screw top	5K																																																																																																																																																										
Alum. Flip top	3A																																																																																																																																																										
Poly Flip top	3B																																																																																																																																																										
Alum. explosion proof	1E																																																																																																																																																										
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Option	Code																																																																																																																																																										
None	X																																																																																																																																																										

Model "CT01" Ceramic Tube Only



CT1

-

U
Ceramic Length
Code
Decimal Inches

-

CM
Ceramic Material
Code
Alumina    A
Mullite    B
Cordierite C
Hexoloy    D

-

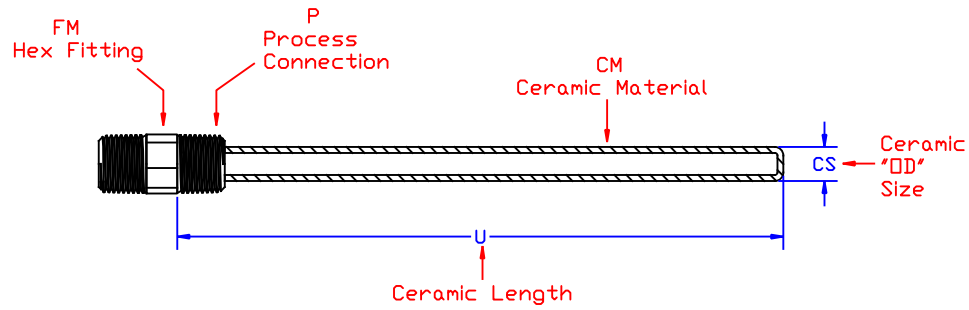
CS
Ceramic OD Size
Code
3/8"    6
9/16"   9
5/8"    10
11/16" 11
3/4"    12
1"      16
1 1/4" 20

-

SO
Special Options
Code
None    X



Model "CT02" Ceramic Tube & Hex Fitting Only



CT2	P	FM	U	CM	CS	SO																																																												
	<b>MNPT Process Connection</b>	<b>Fitting Material</b>	<b>Ceramic Length</b>	<b>Ceramic Material</b>	<b>Ceramic OD Size</b>	<b>Special Options</b>																																																												
	<table border="1"> <thead> <tr> <th>Size-MNPT</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>.25"</td><td>4</td></tr> <tr><td>.375"</td><td>6</td></tr> <tr><td>.5"</td><td>8</td></tr> <tr><td>.75"</td><td>12</td></tr> <tr><td>1.0"</td><td>16</td></tr> <tr><td>1.25"</td><td>20</td></tr> <tr><td>1.5"</td><td>24</td></tr> </tbody> </table>	Size-MNPT	Code	.25"	4	.375"	6	.5"	8	.75"	12	1.0"	16	1.25"	20	1.5"	24	<table border="1"> <thead> <tr> <th></th> <th>Code</th> </tr> </thead> <tbody> <tr><td>304SS</td><td>A</td></tr> <tr><td>310SS</td><td>B</td></tr> <tr><td>316SS</td><td>C</td></tr> <tr><td>Carbon Steel</td><td>M</td></tr> </tbody> </table>		Code	304SS	A	310SS	B	316SS	C	Carbon Steel	M	<table border="1"> <thead> <tr> <th>Code</th> <th>Decimal Inches</th> </tr> </thead> <tbody> <tr><td></td><td></td></tr> </tbody> </table>	Code	Decimal Inches			<table border="1"> <thead> <tr> <th></th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Alumina</td><td>A</td></tr> <tr><td>Mullite</td><td>B</td></tr> <tr><td>Cordierite</td><td>C</td></tr> <tr><td>Hexoloy</td><td>D</td></tr> </tbody> </table>		Code	Alumina	A	Mullite	B	Cordierite	C	Hexoloy	D	<table border="1"> <thead> <tr> <th></th> <th>Code</th> </tr> </thead> <tbody> <tr><td>3/8"</td><td>5</td></tr> <tr><td>9/16"</td><td>9</td></tr> <tr><td>5/8"</td><td>10</td></tr> <tr><td>11/16"</td><td>11</td></tr> <tr><td>3/4"</td><td>12</td></tr> <tr><td>1"</td><td>16</td></tr> <tr><td>1 1/4"</td><td>20</td></tr> </tbody> </table>		Code	3/8"	5	9/16"	9	5/8"	10	11/16"	11	3/4"	12	1"	16	1 1/4"	20	<table border="1"> <thead> <tr> <th>None</th> <th>Code</th> </tr> </thead> <tbody> <tr><td></td><td>X</td></tr> </tbody> </table>	None	Code		X
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# PRESSURE GAUGE RANGES & CODES

Below are codes for standard pressure ranges. Many other ranges are available - consult REOTEMP or your REOTEMP distributor.

## Vacuum Ranges

psi		DUAL SCALE psi & metric				Single Scale-METRIC							
psi		psi & bar		psi & kg/cm2		psi & kPa		bar		kg/cm2		kPa	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
P01	-30/0 "Hg	D01	"Hg & -1/0 bar	G01	"Hg & -1/0 kg/cm2	L01	"Hg & -100/0 kPa	B00	-1/0 bar	K00	-1/0 kg/cm2	A00	-100/0 kPa

## Compound Ranges

psi		DUAL SCALE psi & metric				Single Scale-METRIC							
"Hg/0/psi		psi & bar		psi & kg/cm2		psi & kPa		bar		kg/cm2		kPa	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
P02	-30"Hg/0/15 psi	D02	psi & -1/0/1 bar	G02	psi & -1/0/1 kg/cm2	L02	psi & -100/0/100 kPa	B01	-1/0/1 bar	K01	-1/0/1 kg/cm2	A01	-100/0/100 kPa
P03	-30/0/30	D03	psi & -1/0/2	G03	psi & -1/0/2	L03	psi & -100/0/200	B02	-1/0/2	K02	-1/0/2	A02	-100/0/200
P04	-30/0/60	D04	psi & -1/0/4	G04	psi & -1/0/4	L04	psi & -100/0/400	B04	-1/0/4	K04	-1/0/4	A04	-100/0/400
P05	-30/0/100	D05	psi & -1/0/7	G05	psi & -1/0/7	L05	psi & -100/0/700	B07	-1/0/7	K07	-1/0/7	A07	-100/0/700
P06	-30/0/160	D06	psi & -1/0/11	G06	psi & -1/0/11	L06	psi & -100/0/1,100	B011	-1/0/11	K011	-1/0/11	A011	-100/0/1,100
P07	-30/0/200	D07	psi & -1/0/14	G07	psi & -1/0/14	L07	psi & -100/0/1,400	B014	-1/0/14	K014	-1/0/14	A014	-100/0/1,400
P08	-30/0/300	D08	psi & -1/0/20	G08	psi & -1/0/20	L08	psi & -100/0/2,000	B020	-1/0/20	K020	-1/0/20	A020	-100/0/2,000

## Pressure Ranges

psi		DUAL SCALE psi & metric				Single Scale-METRIC							
psi		psi & bar		psi & kg/cm2		psi & kPa		bar		kg/cm2		kPa	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
P15	0-15 psi	D15	psi & 0-1 bar	G15	psi & 0-1 kg/cm2	L15	psi & 0-100 kPa	B1	0-1 bar	K1	0-1 kg/cm2	A1	0-100 kPa
P16	0-30	D16	psi & 0-2	G16	psi & 0-2	L16	psi & 0-200	B2	0-2	K2	0-2	A2	0-200
P17	0-60	D17	psi & 0-4	G17	psi & 0-4	L17	psi & 0-400	B4	0-4	K4	0-4	A4	0-400
P18	0-100	D18	psi & 0-7	G18	psi & 0-7	L18	psi & 0-700	B7	0-7	K7	0-7	A7	0-700
P19	0-160	D19	psi & 0-11	G19	psi & 0-11	L19	psi & 0-1,100	B11	0-11	K11	0-11	A11	0-1,100
P20	0-200	D20	psi & 0-14	G20	psi & 0-14	L20	psi & 0-1,400	B14	0-14	K14	0-14	A14	0-1,400
P21	0-300	D21	psi & 0-20	G21	psi & 0-20	L21	psi & 0-2,000	B20	0-20	K20	0-20	A20	0-2,000
P22	0-400	D22	psi & 0-28	G22	psi & 0-28	L22	psi & 0-2,800	B28	0-28	K28	0-28	A28	0-2,800
P23	0-600	D23	psi & 0-40	G23	psi & 0-40	L23	psi & 0-4,000	B40	0-40	K40	0-40	A40	0-4,000
P24	0-800	D24	psi & 0-55	G24	psi & 0-55	L24	psi & 0-5,500	B55	0-55	K55	0-55	A55	0-5,500
P25	0-1,000	D25	psi & 0-70	G25	psi & 0-70	L25	psi & 0-7,000	B70	0-70	K70	0-70	A70	0-7,000
P30	0-1,500	D30	psi & 0-100	G30	psi & 0-100	L30	psi & 0-10,000	B100	0-100	K100	0-100	A100	0-10,000
P31	0-2,000	D31	psi & 0-140	G31	psi & 0-140	L31	psi & 0-14,000	B140	0-140	K140	0-140	A140	0-14,000
P32	0-3,000	D32	psi & 0-200	G32	psi & 0-200	L32	psi & 0-20,000	B200	0-200	K200	0-200	A200	0-20,000
P33	0-4,000	D33	psi & 0-280	G33	psi & 0-280	L33	psi & 0-28,000	B280	0-280	K280	0-280	A280	0-28,000
P34	0-5,000	D34	psi & 0-350	G34	psi & 0-350	L34	psi & 0-35,000	B350	0-350	K350	0-350	A350	0-35,000
P35	0-6,000	D35	psi & 0-400	G35	psi & 0-400	L35	psi & 0-40,000	B400	0-400	K400	0-400	A400	0-40,000
P36	0-8,000	D36	psi & 0-550	G36	psi & 0-550	L36	psi & 0-55,000	B550	0-550	K550	0-550	A550	0-55,000
P37	0-10,000	D37	psi & 0-700	G37	psi & 0-700	L37	psi & 0-70,000	B700	0-700	K700	0-700	A700	0-70,000
P38	0-15,000	D38	psi & 0-1,000	G38	psi & 0-1,000	L38	psi & 0-100,000	B1K	0-1,000	K1K	0-1,000	A1K	0-100,000
P39	0-20,000	D39	psi & 0-1,400	G39	psi & 0-1,400	L39	psi & 0-140,000						
P40	0-30,000	D40	psi & 0-2,000	G40	psi & 0-2,000	L40	psi & 0-200,000						
P41	0-40,000	D41	psi & 0-2,800	G41	psi & 0-2,800	L41	psi & 0-280,000						
P42	0-50,000	D42	psi & 0-3,500	G42	psi & 0-3,500	L42	psi & 0-350,000						
P60	3-15 (receiver - several ranges available - specify.)												

## Low Pressure Ranges (for use on PC Series)

INWC		oz/in <sup>2</sup>		mbar		Other Low Pressure Ranges Avail.	CUSTOM RANGES
Code	Range	Code	Range	Code	Range		
P50	0-10"WC					mm H <sub>2</sub> O mmHg(torr) kPa	We will draw a custom range for your application - contact factory or your REOTEMP distributor  examples: Tons on Ram Refrigeration Scales Tank level
P51	0-15	Z51	0-8 oz/in <sup>2</sup>	M51	0-40 mbar		
P52	0-30	Z52	0-20	M525	0-100		
P53	0-60	Z53	0-30	M53F	0-150		
P54	0-100			M54	0-250		
P55	0-160			M55	0-400		
P56	0-200	Z56	0-100	M56	0-500		

# PRESSURE GAUGE TECHNICAL REFERENCE

**PRESSURE CONVERSION TABLE**

psi	atms.	bar	kPa	Kg/cm <sup>2</sup>	oz/in <sup>2</sup>	in. Hg	mm Hg (Torr)	in. H <sub>2</sub> O
1	0.068	0.069	6.895	0.07	16	2.036	51.72	27.68
14.7	1	1.013	101.3	1.033	235.1	29.92	760	406.8
14.5	0.967	1	100	1.02	232.1	29.53	750.1	401.9
0.145	0.01	0.01	1	0.01	2.321	0.295	7.501	4.019
14.22	0.968	0.981	98.07	1	227.6	28.96	735.6	393.7
0.063	0.004	0.004	0.431	0.004	1	0.127	3.232	1.73
0.491	0.033	0.034	3.386	0.035	7.858	1	25.4	13.6
0.019	0.001	0.001	0.133	0.001	0.309	0.039	1	0.535
0.036	0.002	0.002	0.249	0.003	0.578	0.074	1.868	1

**ASME B40.1 ACCURACY GRADES**

Grade	Accuracy	Grade	Accuracy
<b>4A</b>	+/- 0.1% f.s.	<b>A</b>	2-1-2% (+/- 1% f.s. over middle 1/2 of scale)
<b>3A</b>	+/- 0.25% f.s.	<b>B</b>	3-2-3% (+/- 2% f.s. over middle 1/2 of scale)
<b>2A</b>	+/- 0.5% f.s.	<b>C</b>	4-3-4% (+/- 3% f.s. over middle 1/2 of scale)
<b>1A</b>	+/- 1.0% f.s.	<b>D</b>	+/- 5% f.s.

**Chemical Compatibility Table**

Acetic Acid	S	Dextrine	B	Oil (refined)	B
Acetone	S	Ethyl Acetate	B	Oxygen	B
Acetylene	S	Ethyl Cellulose	S	Paraffin	B
Alcohol	B	Ethylene	B	Phosphoric Acid	S
Alums	S	Ethylene Dibromide	S	Photographic Solutions	S
Aluminum Sulfate	S	Ethylene Glycol	B	Pickling Solutions	S
Ammonia	S	Ferric Nitrate	S	Picric Acid	S
Ammonium Carbonate	S	Ferric Sulfate	S	Picric Acid (dry)	S
Beer	B	Formaldehyde	S	Potassium Cyanide	S
Benzine	B	Freon	B	Potassium Permanganate	S
Benzol	B	Gallic Acid	S	Prestone	B
Benzyl Alcohol	S	Gas (for lighting)	B	Salicylic Acid	B
Bleach Liquors	S	Gasoline	B	Sea Water	M
Bordeaux Mixture	B	Gasoline (refined)	S	Silver Nitrate	S
Butane	S	Glucose	M	Sodium Nitrate	S
Butanol	B	Glycerine	B	Sodium Peroxide	S
Butyric Acid	S	Hydrocyanic Acid	S	Sodium Phosphate	S
Calcium Bisulfite	S	Hydrogen	S	Sodium Sulfate	S
Calcium Chloride	M	Hydrogen Peroxide	S	Sodium Sulfite	S
Calcium Hydroxide	S	Kerosene	B	Sulfur Dioxide (dry)	S
Carbon Dioxide (dry)	S	Lacquers	B	Sulfuric (75%)	S
Carbon Bisulfide	S	Lactic Acid	S	Sulfurous Acid	S
Casein	S	Lysol	S	Toluene	B
Chloroform	S	Magnesium Hydroxide	M	Vegetable Oils	S
Chromic Acid	S	Magnesium Sulfate	S	Vinegar	S
Citric Acid	S	Mercury	S	Water	B
Coal Gas	B	Naphtha	B	Whiskey	S
Copper Sulfate	S	Nickel Acetate	S	Wines	S
Cottonseed Oil	S	Nitric Acid (pure)	S	Zinc Sulfate	S
Creosote (crude)	S	Oil (lubricating)	B		

B = Brass (Copper Alloy)

M = Monel

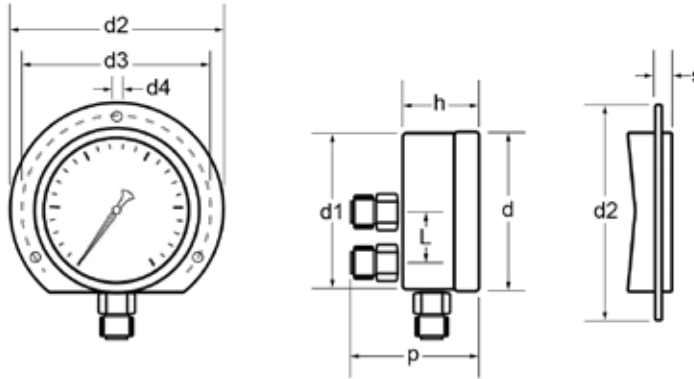
S = Stainless Steel

Note: this table is provided as a reference only and is accurate to the best of Reotemp's knowledge.  
Reotemp assumes no responsibility for the accuracy of this information.



# PRESSURE GAUGE TECHNICAL REFERENCE

## REOTEMP PRESSURE PRODUCTS



**Pressure Gauge Dimensions**

		D	D1	D2	D3	D4	H	L	S	P	P dim based on
PD15N,X	mm	44	40	-	-	-	24	-	-	44	1/8"NPT
	in.	1.73	1.57	-	-	-	0.94	-	-	1.73	
PD20N,X	mm	55	50.8	71	60	3.6	28	-	-	50	1/8"NPT
	in.	2.17	2.00	2.80	2.36	0.14	1.10	-	-	1.97	
PD25N,X	mm	68	62.5	85	75	3.6	29	-	4	50	1/4"NPT
	in.	2.68	2.46	3.35	2.95	0.14	1.14	-	0.16	1.97	
PD40Y,S	mm	101.5	98	130	118	6	42	29.5	5.5	80	1/2"NPT
	in.	4.00	3.86	5.12	4.65	0.24	1.65	1.16	0.22	3.15	
PD60Y,S	mm	160	158	190	178	6	9	29.5	5.5	80	1/2"NPT
	in.	6.30	6.22	7.48	7.01	0.24	1.93	1.16	0.22	3.15	
PD40B	mm	101.5	98	130	118	6	32	-	-	-	-
	in.	4.00	3.86	5.12	4.65	0.24	1.26	-	-	-	
PC25N	mm	62.5	62.5	85	75	3.6	34	-	4	50	1/4"NPT
	in.	2.46	2.46	3.35	2.95	0.14	1.34	-	0.16	1.97	
PC40S	mm	101	98.5	130	116	6	49	-	5.5	80	1/4"NPT
	in.	3.98	3.88	5.12	4.57	0.24	1.93	-	0.22	3.15	
PC60S	mm	160	153	190	178	6	49	-	5.5	80	1/4"NPT
	in.	6.30	6.02	7.48	7.01	0.24	1.93	-	0.22	3.15	
PM25C	mm	68	63	85	75	3.6	30	135	7	54	1/4"NPT
	in.	2.68	2.48	3.35	2.95	0.14	1.18	5.3	0.28	2.13	
PM40C	mm	110	101	130	118	6	47	-	-	-	-
	in.	4.33	3.98	5.12	4.65	0.24	1.85	-	-	-	
PG25C	mm	68	63	85	75	3.6	30	-	7	54	1/4"NPT
	in.	2.68	2.48	3.35	2.95	0.14	1.18	-	0.28	2.13	
PG35S	mm	89	80	110	95	5	31	19	15	60	1/4"NPT
	in.	3.5	3.15	4.32	3.75	0.2	1.23	0.73	0.6	2.36	
PG40C	mm	110	101	130	118	6	47	34.5	12.5	65	1/2"NPT
	in.	4.33	3.98	5.12	4.65	0.24	1.85	1.36	0.49	-	
PR40S	mm	111	101	130	118	6	48	34.5	19	80	1/2"NPT
	in.	4.37	3.98	5.12	4.65	0.24	1.89	1.36	0.75	3.15	
PR60S	mm	161	150	190	175	6	50	53	25	80	1/2"NPT
	in.	6.34	5.91	7.48	6.89	0.24	1.97	2.09	0.98	3.15	
PA40A	mm	114	100	130	118	6	48	-	-	-	-
	in.	4.49	3.94	5.12	4.65	0.24	1.89	-	-	-	
PS40S	mm	111	100	130	116	6	61	-	-	-	-
	in.	4.37	3.94	5.12	4.57	0.24	2.40	-	-	-	
PS60S	mm	162	150	190	175	6	64	-	-	-	1/2"NPT
	in.	6.38	5.91	7.48	6.89	0.24	2.52	-	-	-	
PL60	mm	161	150	190	175	6	50	53	25	88	1/2"NPT
	in.	6.34	5.91	7.48	6.89	0.24	1.97	2.09	0.98	3.46	
PT45P	mm	129	148	148	137	6	87	-	-	-	-
	in.	5.08	5.83	5.83	5.39	0.24	3.43	-	-	-	

Note: diagrams not to scale.

TRADEMARKS: FLOUROLUBE - TM Occidental Petroleum Corp. MONEL - TM Huntington Alloys, Inc. HALOCARBON - TM Halocarbon Corp. Note: All specifications in this catalog are subject to change.

# 2.5" Heavy-Duty Repairable Stainless Gauge

REOTEMP's Series PR gauge offers rugged, all-welded stainless steel construction ideal for heavy-duty industrial applications. The stainless steel case, tube, and socket are welded together for superior case sealing and gauge integrity. The twist-off bayonet ring offers easy-access for field repair and calibration services. Liquid filling (at the factory or in the field) is recommended for applications involving vibration.

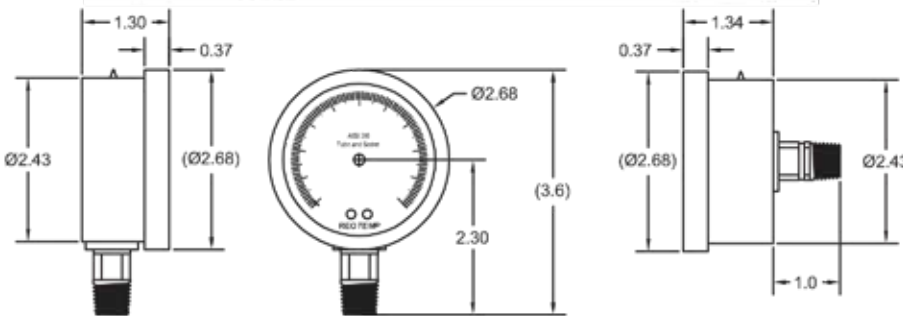


### Features/Benefits:

- All-Welded S.S. Construction
- Removable Bayonet Ring
- Fillable Case
- Rugged, Long-Lasting Design

### Specifications:

- Case:** 304SS
- Ring:** S.S. Twist-Off Bayonet
- Wetted Material:** 316SS (monel available)
- Lens:** Plastic (others available)
- Dial:** Aluminum, Black on White Background
- Pointer:** Black Aluminum, Adjustable
- Accuracy:** 2 - 1 - 2%, Grade A



\*dimensions in inches

## HOW TO ORDER

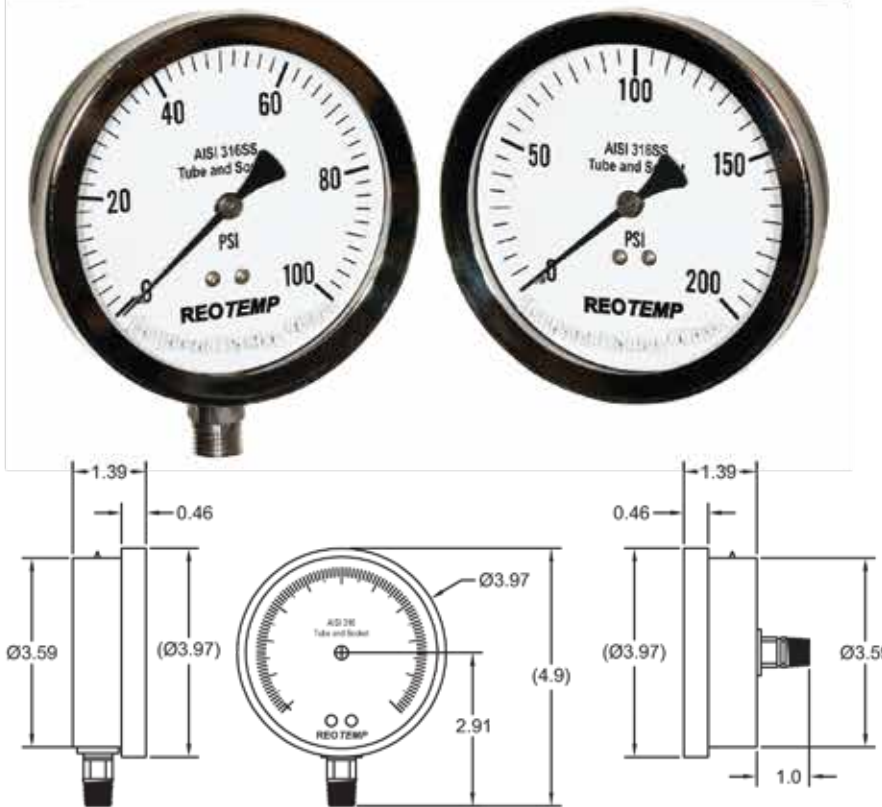
PR — **25** **S** **1** **A** **4** **P18** **G**

<b>Dial:</b> 25 = 2.5"	<b>Case:</b> S = 304SS	<b>Tube &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Center Back D =  Back U-Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 8 = 1/8" NPT (not standard)	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 10,000 PSI	<b>Filling:</b> - - = Dry G = Glycerine S = Silicone	<b>Options:</b> ■ Mini Diaph. Seal ■ Custom Dial ■ Max Pointer ■ Sanitary Tri-clamp Conn.
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# 3.5" Heavy-Duty Repairable Stainless Gauge

REOTEMP's Series PR gauge offers rugged, all-welded stainless steel construction ideal for heavy-duty industrial applications. The stainless steel case, tube, and socket are welded together for superior case sealing and gauge integrity. The twist-off bayonet ring offers easy-access for field repair and calibration services. Liquid filling (at the factory or in the field) is recommended for applications involving vibration.



### Features/Benefits:

- All-Welded S.S. Construction
- Removable Bayonet Ring
- Fillable Case
- Rugged, Long-Lasting Design

### Specifications:

- Case:** 304SS
- Ring:** S.S. Twist-Off Bayonet
- Wetted Material:** 316SS
- Lens:** Plastic (others available)
- Dial:** Aluminum, Black on White Background
- Pointer:** Black Aluminum, Adjustable
- Accuracy:** 2 - 1 - 2%, Grade A

\*dimensions in inches

## HOW TO ORDER

PR — **35** **S** **1** **A** **4** **P18** **G**

<b>Dial:</b> 35 = 3.5"	<b>Case:</b> S = 304SS	<b>Tube &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Center Back D =  Back U-Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT (not standard)	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 10,000 PSI	<b>Filling:</b> - - = Dry G = Glycerine S = Silicone	<b>Options:</b> ■ Mini Diaph. Seal ■ Custom Dial ■ Max Pointer ■ Sanitary Tri-clamp Conn.
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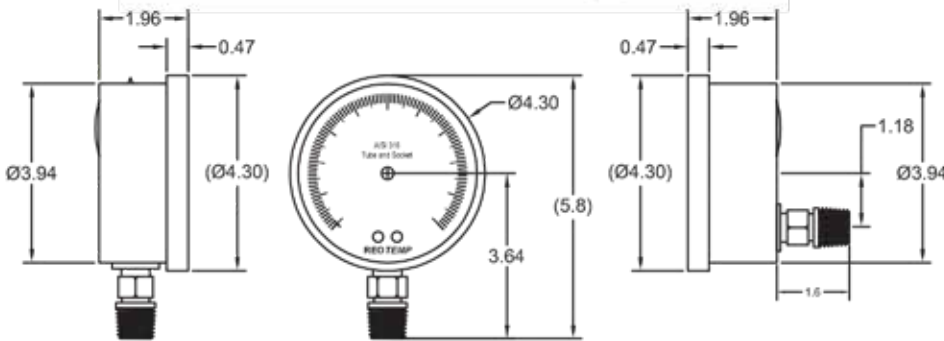
# 4" Heavy-Duty Repairable Stainless Gauge

REOTEMP's Series PR gauge offers rugged, all-welded stainless steel construction ideal for heavy-duty industrial applications. The stainless steel case, tube, and socket are welded together for superior case sealing and gauge integrity. The twist-off bayonet ring offers easy-access for field repair and calibration services. Liquid filling (at the factory or in the field) is recommended for applications involving vibration. For high-corrosive, high-temp, or severe service applications, a diaphragm seal is recommended.



### Features/Benefits:

- All-Welded S.S. Construction
- Removable Bayonet Ring
- Liquid Fillable Case
- Rugged, Long-Lasting Design
- Safety Blow-out Relief



\*dimensions in inches

### Specifications:

- Case:** 304SS
- Ring:** S.S. Twist-Off Bayonet
- Wetted Material:** 316SS (Monel available)
- Lens:** Tempered Safety Glass (others avail.)
- Dial:** Aluminum, Black on White Background
- Pointer:** Black Aluminum, Adjustable
- Accuracy:** 1%, Grade 1A

## HOW TO ORDER

PR — **40** **S** **1** **A** **4** **P18** **G**

<b>Dial:</b> 40 = 4"	<b>Case:</b> S = 304SS	<b>Tube &amp; Socket:</b> 1 = 316SS 3 = Monel	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Lower Back D =  Back U-Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT 5 = 1/4" Female High - Pressure	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 20,000 PSI	<b>Filling:</b> -- = Dry G = Glycerine S = Silicone	<b>Options:</b> ■ Custom Dial ■ Max Pointer ■ Hi-Vis Dial ■ Diaph. Seal
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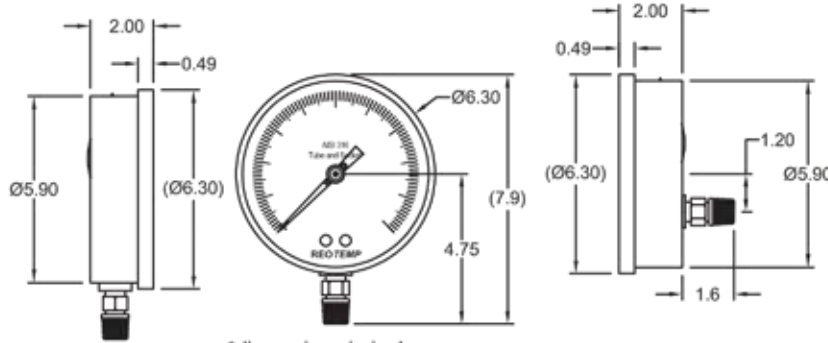
# 6" Heavy-Duty Repairable Stainless Gauge

REOTEMP's Series PR gauge offers rugged, all-welded stainless steel construction ideal for heavy-duty industrial applications. The stainless steel case, tube, and socket are welded together for superior case sealing and gauge integrity. The twist-off bayonet ring offers easy-access for field repair and calibration services. Liquid filling (at the factory or in the field) is recommended for applications involving vibration. For high-corrosive, high-temp, or severe service applications, a diaphragm seal is recommended.



### Features/Benefits:

- All-Welded S.S. Construction
- Removable Bayonet Ring
- Liquid Fillable Case
- Rugged, Long-Lasting Design
- Safety Blow-out Relief



\*dimensions in inches

### Specifications:

- Case:** 304SS
- Ring:** S.S. Twist-Off Bayonet
- Wetted Material:** 316SS
- Lens:** Tempered Safety Glass (others avail.)
- Dial:** Aluminum, Black on White Background
- Pointer:** Black Aluminum, Adjustable
- Accuracy:** 1%, Grade 1A

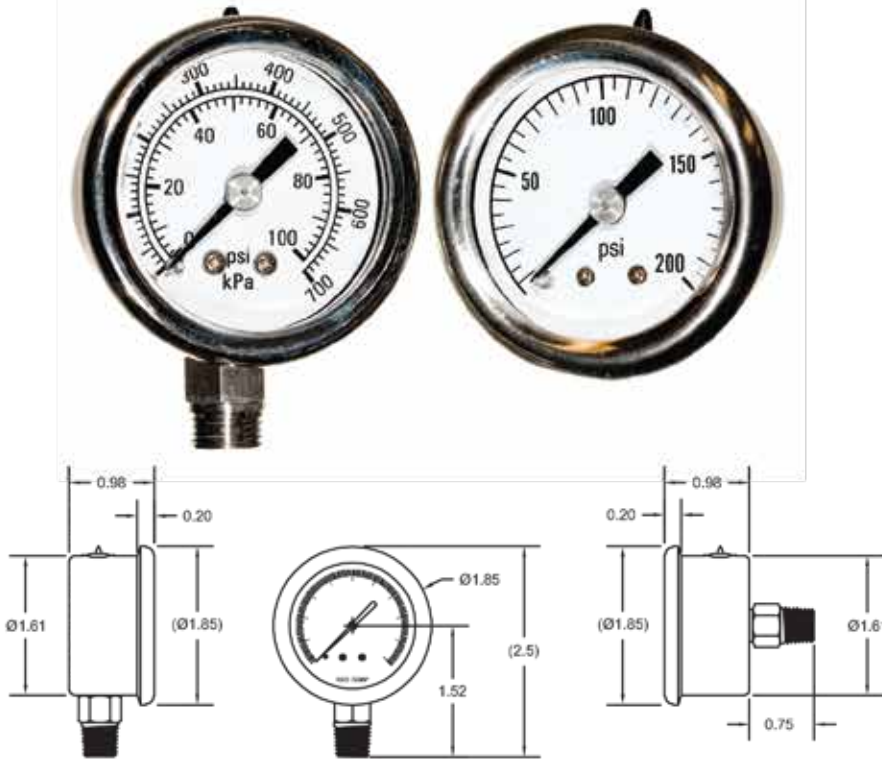
## HOW TO ORDER

PR — **60** **S** **1** **A** **4** **P18** **G**

<b>Dial:</b> 60 = 6"	<b>Case:</b> S = 304SS	<b>Tube &amp; Socket:</b> 1 = 316SS 3 = Monel	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Lower Back D =  Back U-Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 20,000 PSI	<b>Filling:</b> - - = Dry G = Glycerine S = Silicone	<b>Options:</b> ■ Custom Dial ■ Max Pointer ■ Hi-Vis Dial ■ Diaph. Seal
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# 1.5" Industrial Stainless Steel Gauge

REOTEMP's Series PM features stainless steel tube, socket and case, making the gauge resistant to corrosion from both environment and media. Liquid filling is recommended for severe service. The economical and attractive crimp ring design, along with a variety of convenient panel mounting adapters, make this popular gauge the right choice for many applications.



- Features/Benefits:**
- S.S. Case & Crimped Ring
  - Stainless Steel Wetted Parts
  - Glycerine Filled or Dry/Fillable

- Specifications:**
- Case:** 304SS
  - Ring:** Stainless Steel, Crimped
  - Wetted Material:** 316SS w/ restrictor screw
  - Lens:** Plastic
  - Dial:** Aluminum, Black Figures on White Background
  - Accuracy:** 3-2-3%, Grade B

## HOW TO ORDER

PM — **15** **S** **1** **A** **8** **P23** **G**

<b>Dial:</b> 15 = 1.5"	<b>Case:</b> S = 304SS, Crimped Ring	<b>Tube &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom C =  Center Back D =  Back "U" or "O" Clamp E =  Back/Front Flange	<b>Connection:</b> 8 = 1/8" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 8,000 PSI	<b>Case Filling:</b> - - = Dry (Fillable) G = Glycerine  Other fills on request
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# 2.5" Industrial Stainless Steel Gauge

REOTEMP's Series PM features stainless steel tube, socket and case, making the gauge resistant to corrosion from both environment and media. Liquid filling is recommended for severe service. The economical and attractive crimp ring design, along with a variety of convenient panel mounting adapters, make this popular gauge the right choice for many applications.

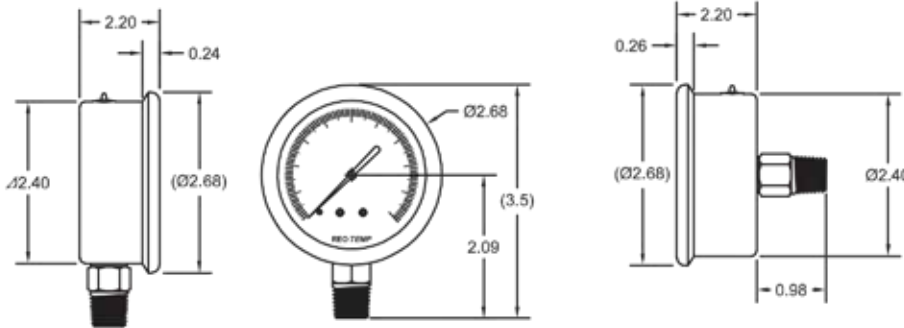


### Features/Benefits:

- S.S. Case & Crimped Ring
- Stainless Steel Wetted Parts
- Glycerine Filled or Dry/Fillable

### Specifications:

- Case:** 304SS
- Ring:** Stainless Steel, Crimped
- Wetted Material:** 316SS w/ restrictor screw
- Lens:** Plastic
- Dial:** Aluminum, Black Figures on White Background
- Accuracy:** 2-1.6-2%, Grade B+



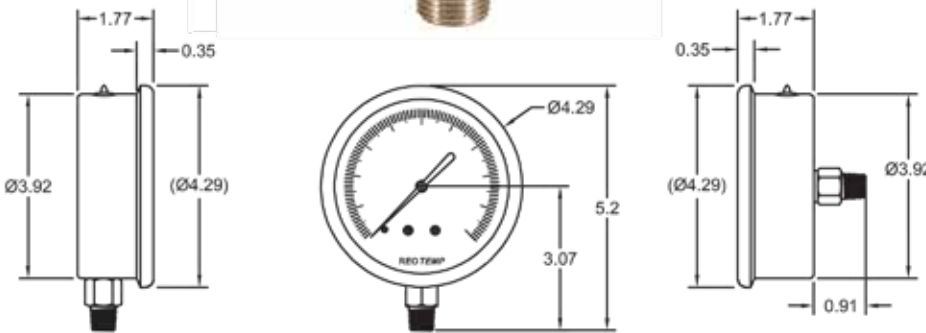
## HOW TO ORDER

PM — **25** **S** **1** **A** **4** **P23** **G**

<b>Dial:</b> 25 = 2.5"	<b>Case:</b> S = 304SS, Crimped Ring	<b>Tube &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A = Bottom B = Bottom/Rear Flange C = Center Back D = Back "U" or "O" Clamp E = Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT	<b>Range Code:</b> See front of Press. Product Catalog for Range Codes  Vac. to 8,000 PSI	<b>Case Filling:</b> -- = Dry (Fillable) G = Glycerine  Other fills on request	<b>Options:</b> ■ Custom/Logo Dials ■ Chemical Seals
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# 4" Industrial Stainless Steel Gauge

REOTEMP's Series PM features stainless steel tube, socket and case, making the gauge resistant to corrosion from both environment and media. Liquid filling is recommended for severe service. The economical and attractive crimp ring design, along with a variety of convenient panel mounting adapters, make this popular gauge the right choice for many applications.



### Features/Benefits:

- S.S. Case & Crimped Ring
- Stainless Steel Wetted Parts
- Field Fillable

### Specifications:

- Case:** 304SS
- Ring:** Stainless Steel, Crimped
- Wetted Material:** 316SS w/ restrictor screw
- Lens:** Plastic
- Dial:** Aluminum, Black Figures on White
- Accuracy:** 1.6% Full Scale, Grade A+

## HOW TO ORDER

PM — **40** **S** **1** **A** **4** **P23** **G**

<b>Dial:</b> 40 = 4"	<b>Case:</b> S = 304SS, Crimped Ring	<b>Tube &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Center Back D =  Back "U" or "O" Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 8,000 PSI	<b>Filling:</b> - - = Dry (Fillable) G = Glycerine  Other fills on request	<b>Options:</b> ■ Custom/Logo Dials ■ Chemical Seals
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# 1.5" Industrial Stainless/Brass Gauge

REOTEMP's Series PG gauge is an economical choice where ambient corrosion and vibration are of concern. It's stainless steel case and ring offer excellent corrosion resistance, and the PG is fillable for vibration applications. Suitable for all fluids compatible with copper alloys.

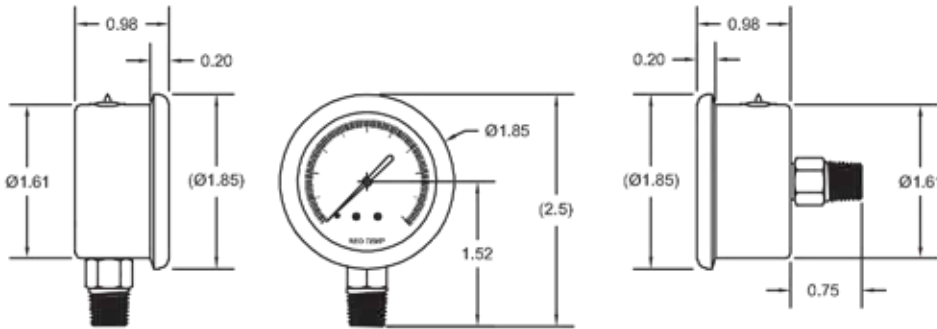


### Features/Benefits:

- Stainless Steel Case
- Copper Alloy Wetted Parts
- Glycerine Filled or Dry/Fillable
- Convenient Panel Mounting Adapters

### Specifications:

- Case:** Stainless Steel
- Ring:** Stainless Steel Crimped
- Wetted Material:** Copper Alloy
- Lens:** Plastic
- Dial:** Aluminum, Black on White
- Temperature:** 0° to 150°F
- Accuracy:** 3-2-3%, Grade B



## HOW TO ORDER

PG — **15** **C** **2** **A** **8** **P23** **G**

<b>Dial:</b> 15 = 1.5"	<b>Case:</b> C = S.S. Crimped Ring	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A =  Bottom C =  Center Back D =  Back "U" or "O" Clamp E =  Back/Front Flange	<b>Connection:</b> 8 = 1/8" NPT	<b>Range Code:</b> See front of Press. Product Catalog for Range Codes  Vac. to 6,000 PSI Higher Ranges Available on Request	<b>Filling:</b> - - = Dry G = Glycerine  Other fills on request.	<b>Options:</b> ■ Custom/Logo Dials
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# 2.5" Repairable Stainless/Brass Gauge

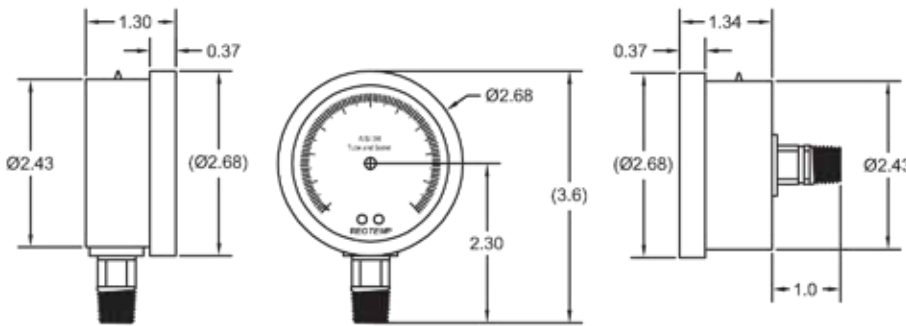
REOTEMP's Series PG gauge is an economical choice where ambient corrosion and vibration are of concern. It's stainless steel case and ring offer excellent corrosion resistance, and the PG is fillable for vibration or pulsation applications. Suitable for all fluids compatible with copper alloys.



- Features/Benefits:**
- Stainless Steel Case
  - Copper Alloy Wetted Parts
  - Glycerine Filled or Dry/Fillable
  - Removable Bayonet

**Specifications:**

- Case:** Stainless Steel
- Ring:** Stainless Steel Bayonet Ring
- Wetted Material:** Copper Alloy
- Lens:** Glass
- Dial:** Aluminum, Black on White
- Temperature:** 0° to 150°F
- Accuracy:** 2-1-2%, Grade A



**HOW TO ORDER**

PG — **25** **S** **2** **A** **4** **P23** **G**

<b>Dial:</b> 25 = 2.5"	<b>Case:</b> S = S.S. Bayonet Ring	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A = Bottom B = Bottom/Rear Flange C = Center Back D = Back "U" or "O" Clamp E = Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT	<b>Range Code:</b> See front of Press. Product Catalog for Range Codes  Vac. to 6,000 PSI	<b>Filling:</b> - - = Dry G = Glycerine  Other fills on request.	<b>Options:</b> ■ Custom/Logo Dials ■ Peak Indicator
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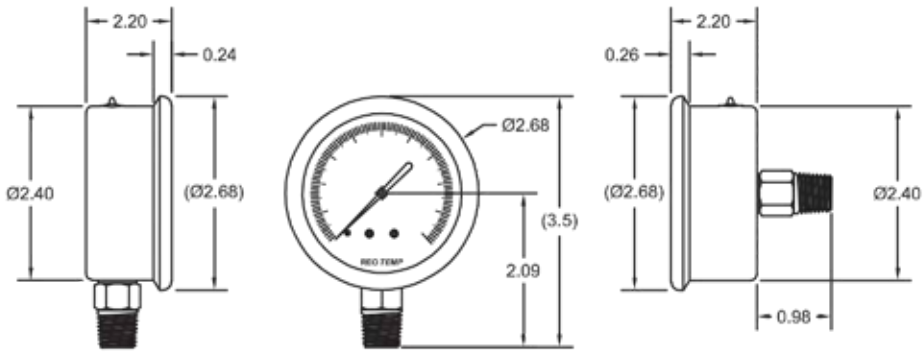
# 2.5" Industrial Stainless/Brass Gauge

REOTEMP's Series PG gauge is an economical choice where ambient corrosion and vibration are of concern. It's stainless steel case and ring offer excellent corrosion resistance, and the PG is fillable for vibration or pulsation applications. Suitable for all fluids compatible with copper alloys.



### Features/Benefits:

- Stainless Steel Case
- Copper Alloy Wetted Parts
- Glycerine Filled or Dry/Fillable
- Convenient Panel Mounting Adapters



### Specifications:

- Case:** Stainless Steel
- Ring:** Stainless Steel Crimped
- Wetted Material:** Copper Alloy
- Lens:** Glass
- Dial:** Aluminum, Black on White
- Temperature:** 0° to 150°F
- Accuracy:** 3-2-3%, Grade B

## HOW TO ORDER

PG — **25** **C** **2** **A** **4** **P23** **G**

<b>Dial:</b> 25 = 2.5"	<b>Case:</b> C = S.S. Crimped Ring	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A = Bottom B = Bottom/Rear Flange C = Center Back D = Back "U" or "O" Clamp E = Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT	<b>Range Code:</b> See front of Press. Product Catalog for Range Codes  Vac. to 6,000 PSI	<b>Filling:</b> - - = Dry G = Glycerine  Other fills on request.	<b>Options:</b> ■ Custom Logo Dials
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# 4" Industrial Stainless/Brass Gauge

REOTEMP's Series PG gauge is an economical choice where ambient corrosion and vibration are of concern. It's stainless steel case and ring offer excellent corrosion resistance, and the PG is fillable for vibration or pulsation applications. Suitable for all fluids compatible with copper alloys.



### Features/Benefits:

- Stainless Steel Case
- Copper Alloy Wetted Parts
- Glycerine Filled or Dry/Fillable
- Removable Bezel with Adjustable Pointer

### Specifications:

**Case:** Stainless Steel

**Ring:** Stainless Steel Bayonet Ring

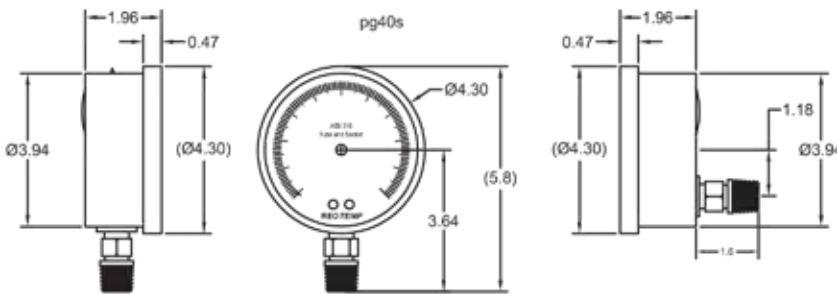
**Wetted Material:** Copper Alloy w/Restrictor Screw

**Lens:** Tempered Safety Glass

**Dial:** Aluminum, Black on White Background

**Temperature:** 0° to 150°F

**Accuracy:** 1.0% Full Scale, Grade 1A



## HOW TO ORDER

PG — **40** **S** **2** **A** **4** **P23** **G**

<b>Dial:</b> 40 = 4"	<b>Case:</b> S = S.S. Bayonet Ring	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Lower Back D =  Back "U" or "O" Clamp E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 6,000 PSI Higher Ranges Available on Request	<b>Filling:</b> -- = Dry G = Glycerine  Other fills on request.	<b>Options:</b> ■ Custom/Logo Dials ■ Peak Indicator
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# 1.5" General Purpose Gauge (Dry)

REOTEMP's Series PD offers a wide variety of economical gauges for applications where ambient or process corrosion are not of concern. Suitable for non-vibrating applications.



### Features/Benefits:

- Black Steel or Stainless Cases
- Copper Alloy Wetted Parts
- Cost Effective Design

### Specifications:

**Case:** Black Painted Steel or S.S.

**Ring:** Snap-In Window or Push-On Bezel

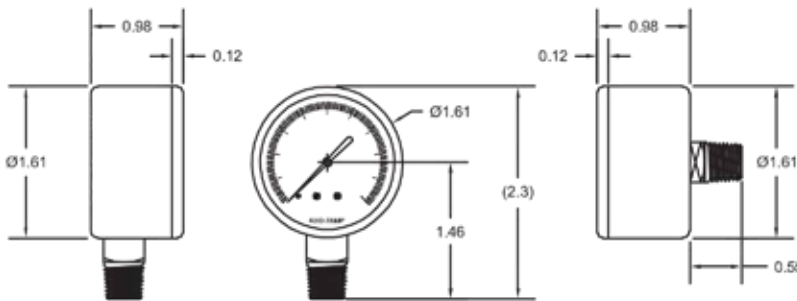
**Wetted Material:** Copper Alloy

**Lens:** Snap-In Plastic or Glass

**Dial:** Aluminum, Black Figures on White

**Temperature:** -10° to 140°F

**Accuracy:** 3-2-3%, Grade B



## HOW TO ORDER

PD — **15** **N** **2** **A** **8** **P23**

<b>Dial:</b> 15 = 1.5"	<b>Case:</b> N = Black Steel Snap-In Plastic Lens *X = S.S. Snap-In Plastic Lens *B = Blk Steel Push-On Bezel w/ Glass Window *Z = S.S. Push-On Bezel with Glass Window * = Not Standard	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A = Bottom C = Center Back	<b>Connection:</b> 8 = 1/8" NPT	<b>Range Code:</b> See front of Press. Product Catalog for Range Codes  Vac. to 6,000 PSI	<b>Options:</b> ■ Custom/Logo Dials
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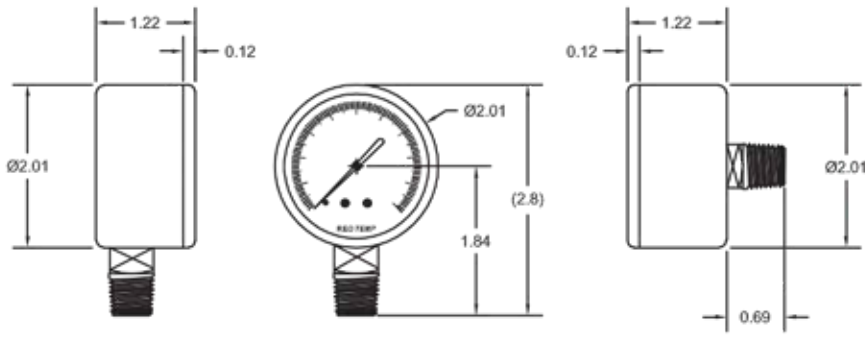
# 2" General Purpose Gauge (Dry)

REOTEMP's Series PD offers a wide variety of economical gauges for applications where ambient or process corrosion are not of concern. Suitable for non-vibrating applications.



- Features/Benefits:**
- Black Steel or Stainless Cases
  - Copper Alloy Wetted Parts
  - Cost Effective Design

- Specifications:**
- Case:** Black Painted Steel or S.S.
  - Ring:** Snap-In Window or Push-On Bezel
  - Wetted Material:** Copper Alloy
  - Lens:** Snap-In Plastic or Glass
  - Dial:** Aluminum, Black Figures on White
  - Temperature:** -10° to 140°F
  - Accuracy:** 3-2-3%, Grade B



## HOW TO ORDER

PD — **20** **N** **2** **A** **8** **P23**

<b>Dial:</b> 20 = 2"	<b>Case:</b> N = Black Steel Snap-In Plastic Lens *X = S.S. Snap-In Plastic Lens *B = Blk Steel Push-On Bezel w/ Glass Window *Z = S.S. Push-On Bezel with Glass Window * = Not Standard	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A =  Bottom C =  Center Back	<b>Connection:</b> 8 = 1/8" NPT 4 = 1/4" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 6,000 PSI	<b>Options:</b> ■ Custom/Logo Dials
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# 2.5" General Purpose Gauge (Dry)

REOTEMP's Series PD offers a wide variety of economical gauges for applications where ambient or process corrosion are not of concern. Suitable for non-vibrating applications.



### Features/Benefits:

- Black Steel or Stainless Cases
- Copper Alloy Wetted Parts
- Cost Effective Design

### Specifications:

**Case:** Black Painted Steel or S.S.

**Ring:** Snap-In Window or Push-On Bezel

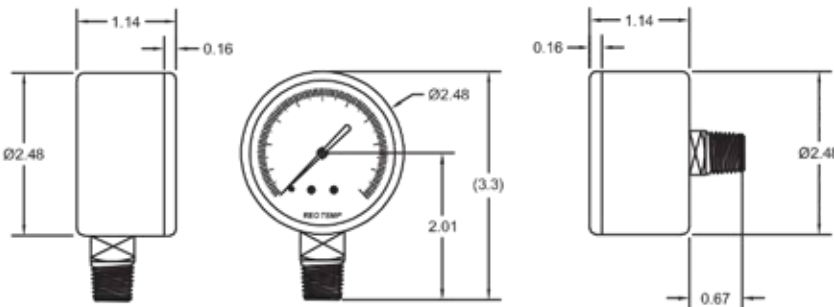
**Wetted Material:** Copper Alloy

**Lens:** Snap-In Plastic or Glass

**Dial:** Aluminum, Black Figures on White

**Temperature:** -10° to 140°F

**Accuracy:** 3-2-3%, Grade B



## HOW TO ORDER

PD — **25** **N** **2** **A** **4** **P23**

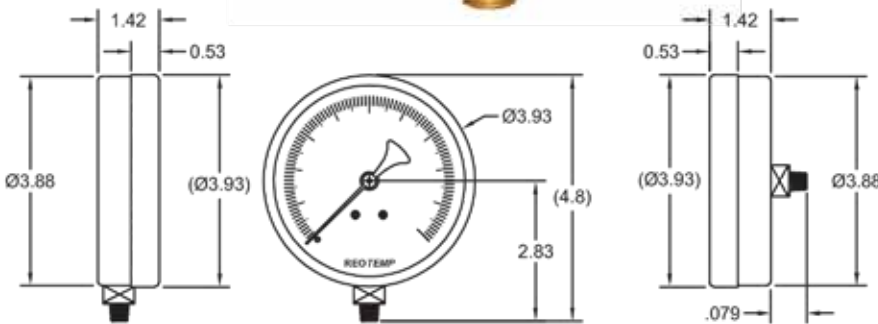
Dial:	Case:	Tube & Socket:	Mounting:	Connection:	Range Code:	Options:
25 = 2.5"	<b>N</b> = Black Steel Snap-In Plastic Lens * <b>X</b> = S.S. Snap-In Plastic Lens * <b>B</b> = Blk Steel Push-On Bezel w/ Glass Window * <b>Z</b> = S.S. Push-On Bezel with Glass Window * = Not Standard	<b>2</b> = Copper Alloy	<b>A</b> = Bottom <b>B</b> = Bottom/Rear Flange <b>C</b> = Center Back <b>D</b> = Back U-Clamp <b>E</b> = Back/Front Flange	<b>4</b> = 1/4" NPT <b>8</b> = 1/8" NPT	See front of Press. Product Catalog for Range Codes  Vac. to 6,000 PSI	■ Custom/Logo Dials ■ Restrictor Screw

# 4" General Purpose Gauge (Dry)

REOTEMP's Series PD offers a wide variety of economical gauges for applications where ambient or process corrosion are not of concern. Suitable for non-vibrating applications.



- Features/Benefits:**
- Black Steel
  - Copper Alloy Wetted Parts
  - Cost Effective Design



**Specifications:**

- Case:** Black Painted Steel or S.S.
- Ring:** Push-On Bezel or Bayonet
- Wetted Material:** Copper Alloy
- Lens:** Snap-In Plastic or Glass
- Dial:** Aluminum, Black Figures on White
- Temperature:** -10° to 140°F
- Accuracy:** 3-2-3%

## HOW TO ORDER

PD — **40** **B** **2** **A** **4** **P23**

<b>Dial:</b> 40 = 4"	<b>Case:</b> B = Blk Steel Push-On Bezel w/ Glass Window *Y = Blk Steel Bayonet Removable Glass Lens * = Not Standard	<b>Tube &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A = Bottom B = Bottom/Rear Flange C = Center Back E = Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 6,000 PSI	<b>Options:</b> ■ Custom/Logo Dials
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# 4.5" Industrial Process Gauge

REOTEMP's Series PT Process Gauge is designed to withstand corrosive atmospheres and media, pulsation and vibration; a very rugged gauge engineered for the process industries. The solid front/blowout back provides a high degree of user safety.



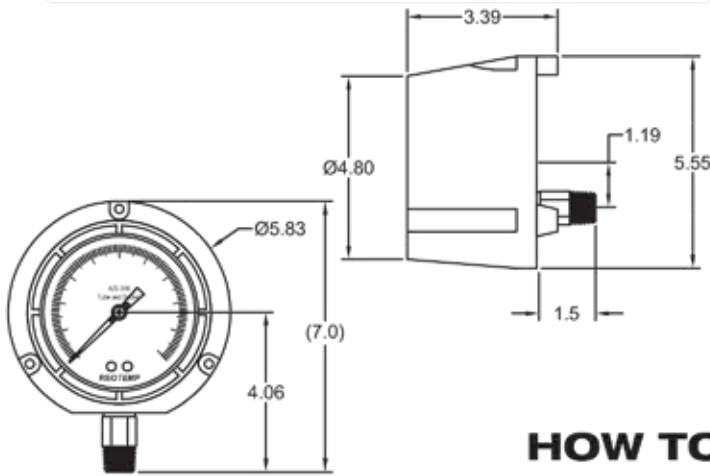
### Features/Benefits:

- Solid Front/Blowout Back
- All Stainless Steel Internal Parts
- Adjustable Pointer
- Glycerine Filled or Dry/Fillable
- Repairable



### Specifications:

- Case:** "Phenolic" (Fiberglass Reinforced Thermoplastic) or Stainless Steel Solid Front, Blowout Back
- Ring:** Fiberglass Reinforced Thermoplastic Screwed Ring, Removable
- Lens:** Tempered Safety Glass (others available)
- Dial:** Aluminum, Black Figures on White Background
- Pointer:** Adjustable, Aluminum, Black
- Wetted Parts:** 316SS Socket/316L Tube
- Temperature:** Ambient: 0 to 150°F (Glycerine Filled)  
Process: -30 to 400°F (Dry)
- Accuracy:** 0.5% Full Scale, Grade 2A



### HOW TO ORDER

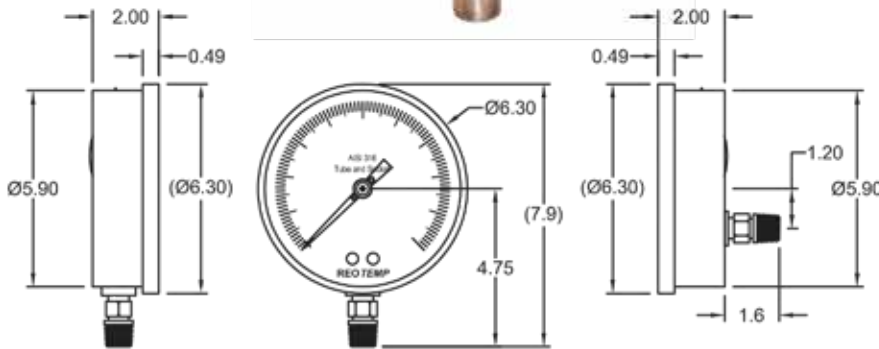
PT — **45** **P** **1** **A** **2** **P23** **G**

<b>Dial:</b> 45 = 4.5"	<b>Case:</b> P = Fiberglass Reinforced Thermoplastic S* = Stainless St. <small>*See factory for drawing.</small>	<b>Tube &amp; Socket:</b> 1 = 316SS 3 = Monel	<b>Mounting:</b> A =  Bottom C =  Lower Back	<b>Connection:</b> 2 = 1/2" NPT 4 = 1/4" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 20,000 PSI	<b>Filling:</b> -- = Dry G = Glycerine  <small>Other fills on request.</small>	<b>Options:</b> ■ Hi-Vis Dial ■ Diaphragm Seal ■ Custom Ranges ■ Plastic Lens
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# 6" Test Gauge Industrial, Stainless Steel

REOTEMP's Series PL test gauge is designed for use in laboratories, testing or recalibration facilities, or wherever accuracy and repeatability are of prime importance. Rugged, all-welded stainless steel construction makes this gauge suitable for almost any test application. Reading error due to parallax is eliminated by use of a knife-edge pointer and mirror dial.



### Features/Benefits:



- S.S. Case & Bayonet Ring
- S.S. Wetted Parts, Repairable
- All-Welded Construction

### Specifications:

- Case:** 304 Stainless Steel (non-fillable)
- Ring:** S.S., Bayonet, Repairable
- Wetted Material:** 316SS
- Lens:** Tempered Safety Glass
- Dial:** Aluminum, Black Figures on Light Background, Anti-Parallax Mirror
- Pointer:** Micro-Adjustable, Knife Edge
- Temperature:** Calibrated at 70°F (20°C)  
Ambient Temp. Error: +.03%  
Per +10°F & -.03% Per -10°F
- Accuracy:** 0.25% Full Scale

## HOW TO ORDER

PL — **60** **M** **1** **A** **4** **P23**

<b>Dial:</b> 60 = 6"	<b>Case:</b> M = 304 S.S., Bayonet, 0.25% Accuracy	<b>Tube &amp; Socket:</b> 1 = 316S.S.	<b>Mounting:</b> A =  Bottom C =  Lower Back	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 10,000 PSI Consult Factory For Higher Ranges	<b>Options:</b> ■ Custom/Logo Dials
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# 2.5" Low Pressure Diaph. (Capsule) Gauge

REOTEMP's Series PC gauges are designed for use in low pressure applications, such as exhaust systems, blowers, etc., with dry gasses that are compatible with bronze and brass.

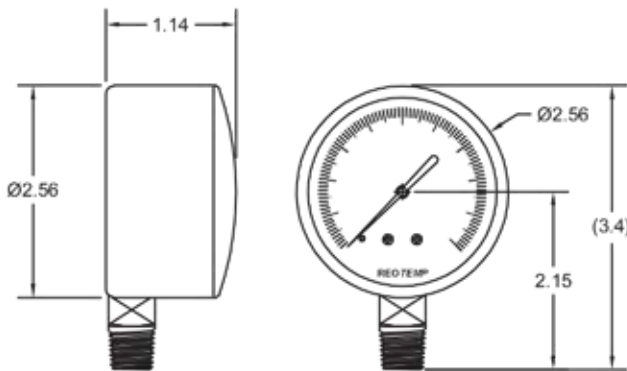


### Features/Benefits:

- Sensitive Diaphragm/ Capsule Mechanism
- Black Steel
- Zero Reset



### Specifications:

- Case:** Black Painted Steel
- Ring:** Snap In Window
- Wetted Material:** Copper Alloy
- Lens:** Snap In Plastic
- Dial:** Aluminum, Black Figures on White
- Temperature:** 0° to 150°F
- Accuracy:** 2-1.6-2%, Grade B+



## HOW TO ORDER

PC — **25** **N** **2** **A** **4** **P52**

<b>Dial:</b> 25 = 2.5"	<b>Case:</b> N = Blk. Steel, Snap In Plastic Window Zero Correction	<b>Capsule &amp; Socket:</b> 2 = Copper Alloy	<b>Mounting:</b> A =  Bottom C =  Center Back	<b>Connection:</b> 4 = 1/4" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 300" Water Column	<b>Options:</b> ■ Custom/Logo Dials
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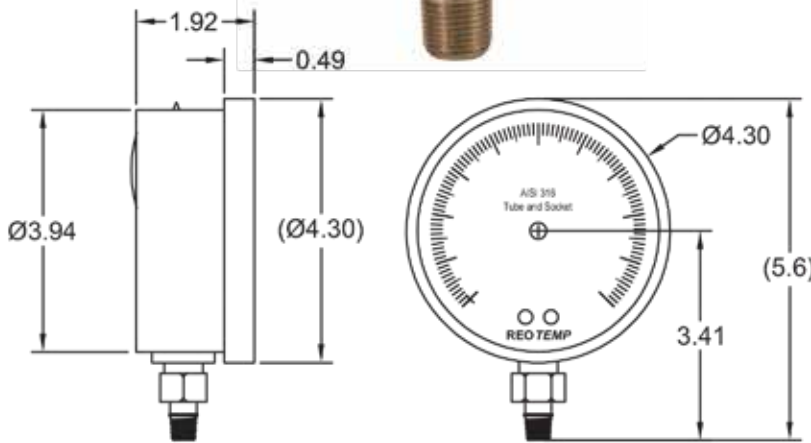
# 4" Stainless Low Pressure Gauge

REOTEMP's Series PC low pressure gauges offer accurate and reliable measurements of gaseous media. Offered with stainless steel internals, the Series PC40S is designed to withstand corrosive media and ensure a long-lasting instrument.



### Features/Benefits:

- Sensitive Diaphragm/ Capsule Mechanism
- 316 Stainless Steel or Brass
- Zero Reset on Dial



### Specifications:

- Case:** 304 S.S.
- Ring:** Bayonet, Twist-off
- Wetted Material:** Copper Alloy or 316SS
- Lens:** Tempered Safety Glass
- Dial:** Aluminum, Black Figures on White
- Temperature:** 0° to 150°F
- Accuracy:** 1.6% Full Scale, Grade A+

## HOW TO ORDER

PC — **40** **S** **1** **A** **4** **P52**

<b>Dial:</b> 40 = 4"	<b>Case:</b> S = S.S. Bayonet Removavble Zero Correction From Front	<b>Capsule &amp; Socket:</b> 1 = 316SS 2 = Copper Alloy	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Lower Back E =  Back/Front Flange	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 300" Water Column	<b>Options:</b> ■ Custom/Logo Dials ■ Restrictor Screw ■ Diaphragm Seal
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# 4.5" Low Pressure Diaph. (Capsule) Gauge

REOTEMP's Series PC low pressure gauges offer accurate and reliable measurements of gaseous media. Offered with stainless steel internals, the Series PC45P is designed to withstand corrosive media and ensure a long-lasting instrument.



### Features/Benefits:

- Sensitive Diaphragm/ Capsule Mechanism
- Solid Front/Blowout Back
- Zero Reset



### Specifications:

**Case:** "Phenolic" (Fiberglass Reinforced Thermoplastic Solid Front, Blowout Back)

**Ring:** Turret-style, Screw-off

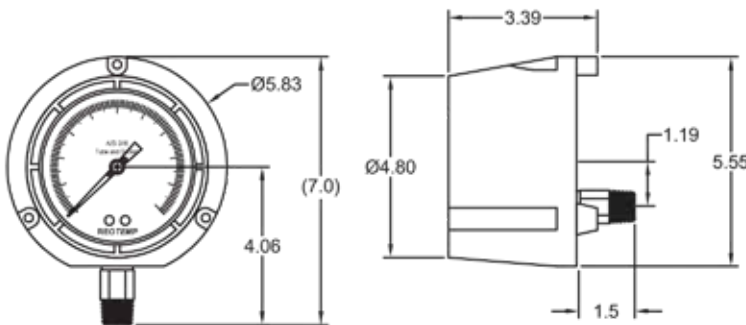
**Wetted Material:** 316SS

**Lens:** Tempered Safety Glass

**Dial:** Aluminum, Black Figures on White



**Temperature:** 0° to 150°F

**Accuracy:** 1.6% Full Scale, Grade A+



## HOW TO ORDER

PC — **45** **P** **1** **A** **4** **P52**

<b>Dial:</b> 45 = 4.5"	<b>Case:</b> P = Fiberglass Reinforced Thermoplastic	<b>Capsule &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom C =  Lower Back	<b>Connection:</b> 4 = 1/4" NPT 2 = 1/2" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 300" Water Column	<b>Options:</b> ■ Custom/Logo Dials ■ Restrictor Screw ■ Diaphragm Seal
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# 6" Stainless Low Pressure Gauge

REOTEMP's Series PC low pressure gauges offer accurate and reliable measurements of gaseous media. Offered with stainless steel internals, the Series PC60S is designed to withstand corrosive media and ensure a long-lasting instrument.



### Features/Benefits:





- Sensitive Diaphragm/ Capsule Mechanism
- 316 Stainless Steel
- Zero Reset or Dial

### Specifications:

- Case:** 304 S.S.
- Ring:** Bayonet
- Wetted Material:** 316SS
- Lens:** Tempered Safety Glass
- Dial:** Aluminum, Black Figures on White
- Temperature:** 0° to 150°F
- Accuracy:** 1.6% Full Scale, Grade A+

## HOW TO ORDER

PC — **60** **S** **1** **A** **2** **P52**

<b>Dial:</b> 60 = 6"	<b>Case:</b> S = S.S. Bayonet Removavble Zero Correction From Front	<b>Capsule &amp; Socket:</b> 1 = 316SS	<b>Mounting:</b> A =  Bottom B =  Bottom/Rear Flange C =  Lower Back E =  Back/Front Flange	<b>Connection:</b> 2 = 1/2" NPT 4 = 1/4" NPT	<b>Range Code:</b> <i>See front of Press. Product Catalog for Range Codes</i>  Vac. to 300" Water Column	<b>Options:</b> ■ Custom/Logo Dials ■ Restrictor Screw ■ Diaphragm Seal
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**DIFFERENTIAL PRESSURE GAUGES**

**SERIES 20**



- Simple, Rugged Piston Design
- Use for Filters, Strainers, Flow indication
- Cost effective Differential Pressure

**Specifications:**

**Temperature Limitations:** -40°F (-40 °C) to 200 °F (93 °C)

**Max Working Pressure:** 6,000 psi (5,000 psi for Monel)

**Proof Pressure:** 2x rated working pressure or 10,000 psi, whichever is lower, at ambient

**Accuracy:** 3-2-3%

**Sensing Element:** Piston

0-5psid to 110psid

D20 — 25 — P — SS — B — B — 50P — TS

Dial Size	Dial Case	Body/Internals	Seals	Connections	Range	Options
25 = 2.5"	P = Plastic	SS = 316SS/316SS	B = Buna N (std.)	B = 1/4" NPTF Back (std.)	See range table in front	See front for all options & accessories
35 = 3.5"	A = Aluminum	AS = Aluminum/316SS	V = Viton	L = 1/4" NPTF end	e.g. 50P = 0/50 psid	
40 = 4.0"		MM = Monel/Monel ZM = Alum. Bronze/Monel	N = Neoprene T = Teflon	7 = 7/16" - 20 SAE/O-ring (back only)		

**SERIES 40&42**



Series 40



Series 42

- Convoluted Diaphragm Design
- Ideal for dissimilar fluids, wet gas
- Recommended for fluids with high solids content
- For use with Diaphragm Seals

**Specifications:**

**Temperature Limitations:** -40°F (-40 °C) to 200 °F (93 °C)

**Max Working Pressure:** 3,000 psi (1,500 psi for Brass)

**Proof Pressure:** 2x rated working pressure or 6,000 psi, whichever is lower at ambient

**Accuracy:** 3-2-3% or 5% (10" H<sub>2</sub>O or lower)

**Sensing Element:** Diaphragm

40 - 0-30psid to 100psid  
42 - 0-20"H<sub>2</sub>O to 690"H<sub>2</sub>O (25psi)

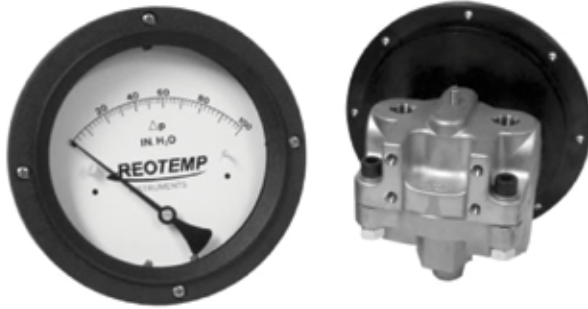
D — 40 — 25 — P — AS — B — B — 50P — TS

Dial Size	Dial Case	Body/Internals	Seals & Diaphragm	Connections	Range	Options
25 = 2.5"	P = Plastic	AS = Aluminum/316SS	B = Buna N (std.)	B = 1/4" NPTF Back (std.)	See range table in front	See front for all options & accessories
35 = 3.5"	A = Aluminum	BS = Brass/316SS	V = Viton (60" H <sub>2</sub> O min.)	D = 1/4" NPTF Dual Top & Bottom	e.g. 50P = 0/50 psid	
45 = 4.5"		SS = 316SS/316SS	S = Silicone N = Neoprene (25psid max)			

\*Other consult Factory

# SERIES 30

## DIFFERENTIAL PRESSURE GAUGES



0-5" H<sub>2</sub>O to 400" H<sub>2</sub>O (15 psid)

- Convoluted Diaphragm Design
- General Purpose Differential Pressure
- Works with vacuum or pressure
- Suitable for clean liquids/gases

**Specifications:**

**Temperature Limitations:** -40° F (-40° C) to 200° F (93° C)  
**Max Working Pressure:** 500 psi (300 psi for polysulfone)  
**Proof Pressure:** 2x rated working pressure  
**Accuracy:** 3-2-3% (above 10" H<sub>2</sub>O)  
 5% (0-5" H<sub>2</sub>O to 9.9" H<sub>2</sub>O)  
**Sensing Element:** Diaphragm

D30 — **35** — **P** — **PS** — **B** — **B** — **50P** — **TS**

Dial Size	Dial Cases	Body/Internals	Seals & Diaphragm	Connections	Range	Options
35 = 3.5"	P = Plastic	PS = Polysulfone/316SS	B = Buna N (std.)	B = 1/4" NPTF Back (std.)	See range table in front	See front for all options & accessories
45 = 4.5"	A = Aluminum	AS = Aluminum/316SS	V = Viton	T = 1/4" NPTF Top	e.g. 50P = 0/50 psid	
		BS = Brass/316SS	S = Silicone	L = 1/4" NPTF bottom		
		SS = 316SS/316SS	E = Ethylene Propylene (100 INWC max)			
		HH = Hast C/Hast C				

# SERIES 05, 06, 09



**05 - 0-10" H<sub>2</sub>O to 80" H<sub>2</sub>O**  
**06 - 0-100" H<sub>2</sub>O to 400" H<sub>2</sub>O**  
**09 - 0-15 psid to 6000 psid**

- High Accuracy +/- 1% (F.S.)
- Diaphragm - Bellows type (05, 06)
- Bourdon Tube type (09)

**Specifications:**

**Temperature Limitations:** -40° F (-40° C) to 200° F (93° C)  
**Max Working Pressure:** 1,500 psi (500 psi brass); up to 6,000 psi available  
**Proof Pressure:** 2x rated static pressure or 10,000 psi, whichever is lower at ambient  
**Accuracy:** 1% (std.), 0.5% (avail. 15 psi & up)  
**Sensing Element:** 05 & 06 = Diaphragm/Bellows; 09 = Bourdon Tube

D — **05** — **45** — **P** — **A** — **B** — **D** — **50P** — **TS**

Dial Size	Dial Material	Body/Internals	Seals	Connections	Range	Options
45 = 4.5"	P = Plastic	AB = Alum./ Copper Alloy	B = Buna N (std.)	D = 05 & 06 - 1/4" NPTF Dual, Top & Bottom (std.)	See range table in front	See front for all options & accessories
60 = 6.0"		AS = Aluminum/316SS	V = Viton	B = 09 - 1/4" NPTF Back (std.)	e.g. 50P = 0/50 psid	
		CB = Carbon Stil./ Cu. Alloy	N = Neoprene			
		CS = Carbon Steel/316SS				
		SS = 316SS/316SS				



**OTHER PRESSURE ACCESSORIES & SERVICES**

**PRESSURE ACCESSORIES**

**ELECTRICAL (ALARM) CONTACTS**

- Two easily adjustable setpoints
- Can be used to open or close on rise
- 0.7A max current (higher loads can be run through relay)
- Available on 4" dial (P/N **PXEM21-40**) or 4 1/2" dial (P/N **PXEM21-45**)



**MAX POINTER INDICATORS**

- Indicates max pressure reached
- Easily reset
- Liquid fillable (Works best dry, though)
- Available for:
  - 2 1/2" dial (**MP-PR25**)
  - 4" dial (**MP-PR40**)
  - 4 1/2" dial (**MP-PT45**)



**CUSTOM DIALS**

REOTEMP can provide custom dials with:

- Special Ranges or designs
- Custom logos
- Colored zones

Consult factory for assistance with dial designs



**OPTIONAL WINDOWS**

- Polycarbonate
- Laminated Safety Glass
- Polysulfone (for autoclaving)

**PRESSURE SERVICES**

**Pressure Instrument Repair Services**– Reotemp will be glad to quote on your repair and servicing needs for pressure gauges, transmitters, switches, and diaphragm seal systems.

**Calibration and Certification** – Services include testing, calibration, and certification of pressure gauges, transmitters, switches, and diaphragm seal systems. All certification is NIST traceable.

Certificate Description	Part#
Conformance/ calibration to NIST	<b>CNISTPG</b>
General calibration sticker	<b>CALSTKPG</b>
3 Logged Points - sticker & Cert.	<b>CCALPG-3</b>
5 Logged Points - sticker & Cert.	<b>CCALPG-5</b>
Switch setpoint cert	<b>CCALSW</b>

**Oxygen Cleaning** - removes oil from gauge intended for oxygen service.

**Diaphragm Seal Application Assistance** - REOTEMP will assist you in designing and specifying the most effective diaphragm seal system for your pressure or vacuum application. Contact factory for details.



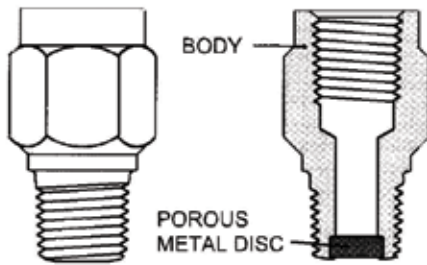
# SNUBBERS

## PRESSURE ACCESSORIES

REOTEMP Snubbers are a simple cost-effective solution to harmful pressure surges and pulsation. When a REOTEMP Snubber is installed it absorbs pulsation and surges - protecting your instrumentation and stabilizing the pointer for easier readings. Available in an adjustable self-cleaning piston design or economical porous disc type.



### POROUS DISC TYPE

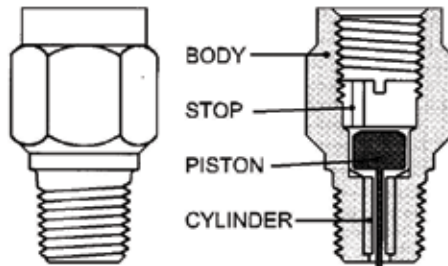


- Economical choice for non-clogging applications
- Different porosities available for various viscosities

Material	Max. PSI	NPT	Porosity	Part #
Brass	5,000	1/4	Liquid Gas	PXS-722BE PXS-722BG
		1/2	Liquid Gas	PXS-723BE PXS-723BG
303SS	15,000	1/4	Liquid Gas	PXS-722SE PXS-722SG
		1/2	Liquid Gas	PXS-723SE PXS-723SG

Other Porosities available: "D"= for thick oils  
"HX" = for Hi-pressure gas

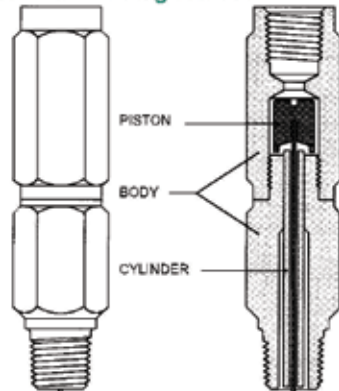
### PISTON TYPE - Short Orifice



- Moving Piston Design for self-cleaning action
- Solid Body for High pressure resistance
- Three pistons included for adjustable snubbing

Material	Max. PSI	NPT	Length (in.)	Part #
Brass Monel	5,000	1/4	1.5	PXS-022B PXS-022M
303SS 316SS	15,000			PXS-022S PXS-022SS
Brass Monel	5,000	1/2	2.0	PXS-023B PXS-023M
303SS 316SS	15,000			PXS-023S PXS-023SS

### PISTON TYPE - Long Orifice



- Moving Piston Design for self-cleaning action
- Long orifice for smoother snubbing
- Three pistons included for adjustable snubbing
- Center Joint (1/4" and brass models) for easier adjustment

Material	Max. PSI	NPT	Length (in.)	Part #
Brass	3,000	1/4	3.46	PXS-010B
303SS 316SS	5,000			PXS-010S PXS-010SS
Brass	5,000	1/2	3.61	PXS-060B
303SS 316SS	10,000			PXS-060S PXS-060SS

REOTEMP PRESSURE PRODUCTS

# PRESSURE GAUGE ACCESSORIES

## Siphons

Pigtail siphons are used in steam service to protect the instrument from direct exposure to high temperature steam.



### Common Siphon Part #'s

NPT	Material	Sched.	180 deg.	90 deg.	360 deg
1/4"	Steel	40	PXS21SS	PXS22SS	PXS24SS
1/4"		80	PXS21SX	PXS22SX	PXS24SX
1/2"		80	PXS51SX	PXS52SX	PXS54SX
1/4"	304SS	40	PXS214S	PXS224S	PXS244S
1/4"		80	PXS214X	PXS224X	PXS244X
1/2"		80	PXS514X	PXS524X	PXS544X
1/2"	316SS	40	PXS516S	PXS526S	PXS546S

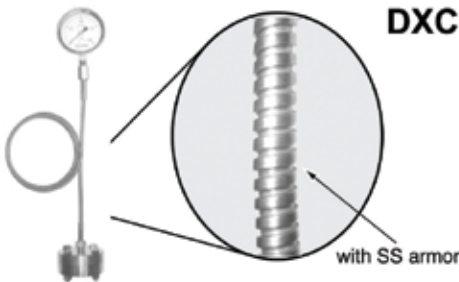
### How to Specify Siphons:

   = normally in stock

PXS Pressure Accessory Siphon	2 (NPT)	1 (Style)	4 (Material)	X (Pipe Schedule)
	2= 1/4" 5= 1/2"	1=180° 2= 90° 3=270° 4=360°	A=Carbon Steel (or alloy Stl Welded) S= Carbon Steel Seamless 4= 304SS 6= 316SS 1= Chrome Moly P11 2= Chrome Moly P22	S= Sch 40 X= Sch: 80 1= Sch 160 (1/2" only) D= xx heavy (1/2" only)

# DIAPHRAGM SEAL ACCESSORIES

Stainless Capillary (2.0mm i.d.)



DXC

Instrument Fitting

4F

Seal Fitting

4M

Length

05

Protection

A

4M = 1/4" NPTM	4M = 1/4" NPTM	05 = 5ft.	A = SS Armor
4F = 1/4" NPTF	4F = 1/4" NPTF	06 = 6ft	B = bare
2M = 1/2" NPTM	2M = 1/2" NPTM	10 = 10ft	
2F = 1/2" NPTF	2F = 1/2" NPTF	etc.	
W = weld fitting (10mm dia.)	W = weld fitting (10mm dia.)		

# MINI SEALS

# MINI SEALS

**MINI-SEALS** are all-welded, gasketless, threaded off-line seals. The mini-seal is an economical choice for isolation of smaller gauges, or where high sensitivity is not required.

### HOW TO ORDER:

**MINI SEAL**

	A	B	C	Min. Range
4G	1.73"	1.5"	1.5"	0-100 psi
6G	2.25"	1.95"	1.6"	0-15 psi
4H	2.0"	1.75"	1.6"	0-100 psi

**Size:**

- 4G - Low volume, for up to 3 1/2" gauge. Max 2000 psi @ 100° F
- 6G - Std. volume with larger diaphragm, for up to 4 1/2" gauge. Max 1,000 psi
- 4H - High Pressure, for up to 3 1/2" gauge. Max 5,000 psi @ 100° F

**Instrument Connection (Female NPT):**

- 4 = 1/4" NPT
- 2 = 1/2" NPT

**Process Connection (Female NPT):**

- 4 - 1/4" NPT 4M = 1/4" NPT Male
- 2 - 1/2" NPT 2M = 1/2" NPT Male

**Material:**

- S = 316 Stainless (Standard)
- H = Hastelloy C
- F = 304 Stainless

**Options:**

- F = Flushing Connection

**MS - 4 G - 4 4 S**

# DIAPHRAGM SEALS

## HOW TO ORDER

TABLE 1 Seal Series	TABLE 2 Seal Size	TABLE 3 Configuration	TABLE 4 Instrument Connection	TABLE 5 Process Connection	TABLE 6 Diaphragm Material	TABLE 7 Lower (process) Housing Material	TABLE 8 Upper (instrument) Housing Material
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EXAMPLE:



**TABLE 1  
Seal Series**

- W** - Welded metal diaphragm
- T** - Teflon diaphragm (high sensitivity, chemical resistance)
- V** - Viton diaphragm - (most sensitive, for low pressures)

**TABLE 2  
Seal Size**

- 5** - Standard size  
Seal dia. = 3.25" in threaded models  
Diaphragm dia. = 2.25"
- 6** - Large size - (Preferred for low pressure, hi displacement, or hi sensitivity.)  
Seal dia. = 4" in threaded models  
Diaphragm dia. = 3"
- 7** - Large size  
Seal diameter; 5.2"  
Diaphragm dia. = 4.1"

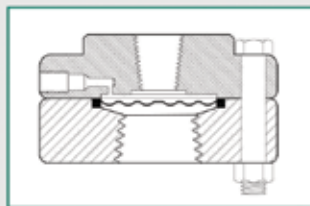
**TABLE 4  
Instrument Connection**

- 4** - 1/4" NPTF
- 2** - 1/2" NPTF

**TABLE 5  
Process Connection**

- 4** - 1/4" NPTF
- 2** - 1/2" NPTF
- 3** - 3/4" NPTF
- 1** - 1" NPTF
- F** - Flanged - specify flange size and pressure rating (e.g. 1 1/2", 150 lb) or insert "V" codes from Table A see p. 24 (e.g. V41=1 1/2" 150#)

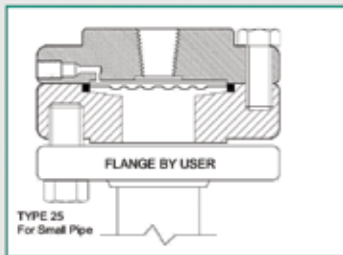
### Threaded, Off-Line



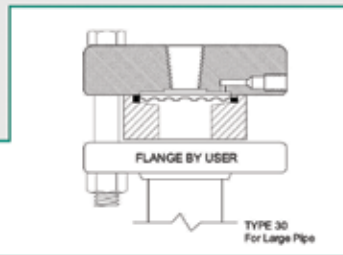
### TABLE 3 - Configuration

- 10** - Replaceable diaphragm - non cleanout (not available with series "W")
- 11** - Same as 10, with flush port
- 15** - Cleanout style - lower housing can be removed without losing fill. (Available with Series W, T, V)
- 16** - Same as 15, with flush port

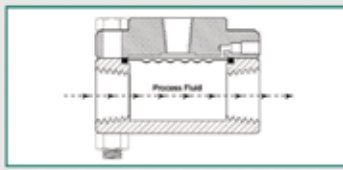
### Flanged, Off-Line - with cleanout



- 25** - for 1/2", 3/4" pipe size (1" in size 6)
- 26** - Same as 25, with flush port
- 30** - for 1 1/2" pipe to 3" pipe size (1" in size 5)
- 31** - Same as 31, with flush port

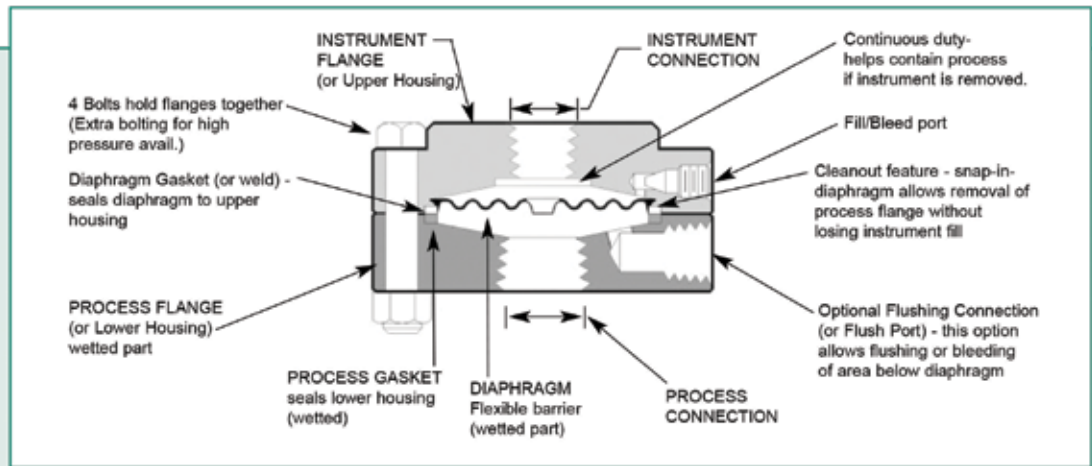


### In-Line, Flow-Thru - with cleanout



- 35** - Threaded (shown) - for 1/4" to 1" pipe
- 40** - Socket Weld - for 1/4" to 1" pipe
- 45** - Saddle Weld - for 1" to 8" pipe
- 50** - Butt Weld - for 1" to 12" pipe





**TABLE 6**  
**Diaphragm Material (wetted)**

MOST COMMON

S - 316 S.S.
T - Teflon
*V - Viton

D - Carpenter 20  
\*F - 304 S.S.  
G - Hastelloy B  
H - Hastelloy C  
J - Titanium  
L - 316LSS, teflon coated  
M - Monel  
N - Nickel  
U - Tantalum  
X - Gold Plated Diaphragm  
\*Y - Inconel

\*Size 5 only.

**TABLE 7**  
**Lower Housing Material (wetted)**

MOST COMMON

S - 316 S.S.	H - Hastelloy C-276
T - Teflon	J - Titanium
*L - Teflon lined	K - Kynar
Z - PVC	M - Monel
B - Brass	N - Nickel
C - Steel	P - Polypropylene
D - Carpenter 20	U - Tantalum
F - 304 S.S.	UL - Tantalum Lined
G - Hastelloy B	W - CPVC
	Y - Inconel

\*Available only on types 25 & 30, 1" and larger.

**TABLE 8**  
**Upper Housing Material (including bolts)**

C - Carbon Steel (standard)
S - 316 Stainless
F - 304 Stainless

**OPTIONS:**

- Hi Pressure bolting
- Non-Stick Teflon coating on metal diaphragm
- Socket weld connections
- High temp. gasketing
- Stainless steel bolting (reduces pressure rating up to 50%)
- Capillary Lines

**Fill Fluids** Fill Fluids should be chosen with care. The fluid must be compatible with the process medium in case the diaphragm is ruptured. Compatibility of fill fluid with process is the user's responsibility.

FLUID	TEMPERATURE LIMITS	VISCOSITY, CS, 77° F	NOTES
Silicone, DC 200	-50 to 450° F	20	our standard fill
Silicone, DC 704	+50 to 600° F	44	Hi-temp fill
Silicone, DC 710	+30 to 700° F	500	Hi-temp fill
Neobee M-20	-4 to 320° F	10	food grade
Glycerin	+30 to 300° F	1110	for food; not recomb. for capillary
Halocarbon	-40 to 400° F	6	inert, for use with oxidizers (must not contact Al, Mg)

Other fills available: consult factory.

*not to be used with strong oxidizers, such as chlorine, oxygen, etc.*

Credits: Viton, Teflon, Kynar, TM DuPont, Inc.; Carpenter 20 - TM Carpenter Steel Co.; Inconel, Monel - TM Huntington Alloys, Inc.; Hastelloy - TM Cabot Corp.; Halocarbon - TM Halocarbon Corp.

# Bimetal Temperature Range Master List

**REOTEMP**

INSTRUMENTS

Measuring your world since 1965

## Fahrenheit

## Celsius

## Fahrenheit & Celsius

Code	°F Ranges	Div	Q	G	H	3,4,5	Code	°C Ranges	Div	Q	G	H	3,4,5	Code	°Dual Ranges	Q	G	H	3,4,5
F03	-100/100°F	2		Y	Y	Y	C03	-70/70°C					Y	D03	-100/100°F & -70/40°C		Y	Y	Y
F07	-80/120°F	2			Y	Y	C07	-50/50°C	1		Y	Y	Y	D15	-50/210°F & -50/100°C				Y
F11	-70/150°F	2				Y	C15	-50/100°C	2		Y	Y	Y	D23	-40/160°F & -40/70°C		Y	Y	Y
F19	-50/300°F	2		Y	Y	Y	C17	-50/200°C	2				Y	+D39	0/150°F & -20/70°C				**Y
+F21	-40/120°F	2				Y	C19	-40/160°C	2				Y	D43	0/200°F & -10/90°C		Y	Y	Y
F23	-40/160°F	2	Y	Y	Y	Y	C23	-40/70°C	1	Y	Y	Y	Y	D47	0/250°F & -20/120°C		Y	Y	Y
+F31	-20/120°F	2		Y		Y	*C31	-20/40°C	1				Y	D53	20/240°F & -10/115°C		Y	Y	Y
*F35	0/100°F	1				Y	*C37	0/60°C					Y	D55	25/125°F & -5/50°C		Y	Y	Y
+F37	0/140°F	2			Y	Y	C43	0/100°C	1	Y	Y	Y	Y	D63	50/300°F & 10/150°C		Y	Y	Y
+F39	0/150°F	1			Y	Y	C47	-20/120°C	2		Y	Y	Y	D65	50/400°F & 10/200°C				**Y
F43	0/200°F	2	Y	Y	Y	Y	C53	-10/110°C	1	Y	Y	Y	Y	D67	50/500°F & 10/260°C		Y	Y	Y
F45	0/220°F	2		Y	Y	Y	*C55	0/50°C	1/2		Y	Y	Y	D69	50/550°F & 10/290°C				Y
F47	0/250°F	2	Y	Y	Y	Y	C56	0/120°C	1				Y	D79	100/800°F & 40/400°C		Y	Y	**Y
F49	0/300°F	2				Y	C59	0/150°C	1	Y	Y	Y	Y	D81	150/750°F & 70/400°C				
F53	20/240°F	2		Y	Y	Y	C65	0/200°C	2	Y	Y	Y	Y	D85	200/1000°F & 100/500°C		Y	Y	Y
*F55	25/125°F	1	Y	Y	Y	Y	C67	0/250°C	2				Y						
F63	50/300°F	2	Y	Y	Y	Y	C69	0/300°C	2				Y						
F65	50/400°F	5				Y	C71	0/300°C	2	Y	Y	Y	Y						
F67	50/500°F	5	Y	Y	Y	Y	C73	0/400°C	5		Y	Y	Y						
F69	50/550°F	5			Y	Y	C75	0/500°C	5				Y						
F73	50/750°F	10				Y	C81	50/400°C	5	Y	Y	Y	Y						
F79	100/800°F	10		Y	Y	Y	C85	100/500°C	5	Y	Y	Y	Y						
F81	150/750°F	10	Y	Y	Y	Y													
F85	200/1000°F	10	Y	Y	Y	Y													

Note: Other ranges available on application.

Y = Available

\* = Min. 4" stem with these ranges.

+ = Min. 4" stem, Bottom & Adjustable Angle models.

\*\* = Available with 3" & 5" only.



# Back Connect Bimetal Thermometer

# REOTEMP

## INSTRUMENTS

Measuring your world since 1965

REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. Back Connect Thermometers are ideal for local, eye-level temperature readings in most process applications. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



Fillable



Dials



Accuracy



Custom Logos



## FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy  $\pm 1\%$  Full Scale (ASME B40.3 Grade A)
- All Stainless Steel Construction
- Hermetically Sealed (ASME B40.3)
- Silicone Fillable for Vibration
- Standard and Custom Stem Lengths
- Standard External Reset for Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- HiVis™ Dials Available

## SPECIFICATIONS

**ACCURACY:**  $\pm 1\%$  Full Scale (ASME B40.3)

**DIAL SIZE:** 3", 4" or 5"

**DIAL MATERIAL:** Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

**STEM LENGTH:** 2" to 80"

**STEM DIAMETER:** 1/4" (std) ; 3/8" & 5/16" available

**HEAD, BEZEL, MOUNTING BUSHING, STEMS:** 300 Series SS, 316SS (optional)

**OPERATING CONDITIONS:** Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

**TEMPERATURE RANGES:** See inside back cover for complete list of ranges.

**CASE RATING:** IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

**LENS:** Glass (std), Acrylic, Polycarbonate, Tempered Glass

**IMMERSION:** Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

**MOUNTING CONNECTION:** 1/2" NPT (std), 1/4" NPT, 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, Sanitary Tri-Clamp

**TEMPERATURE SENSING AREA:** Last 2" to 4" of the stem

**Standard Delivery 3-5 Days**

**Thermowell Recommended**



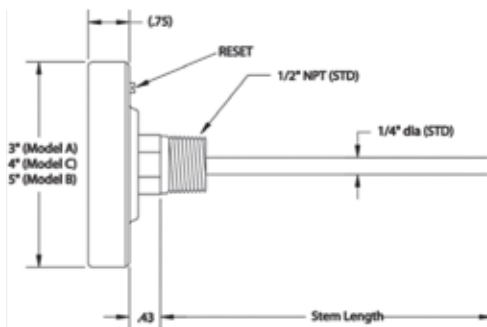
Made in the USA

## Back Connect Bimetal Thermometer

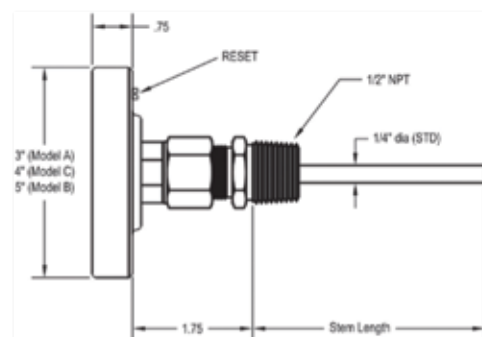
### HOW TO ORDER

<b>AA</b>	<b>025</b>	<b>1</b>	<b>F23</b>	—	<b>SF</b>
<b>Standard Model:</b> <b>AA</b> = 3" Dial w/ Reset <b>CC</b> = 4" Dial w/ Reset <b>BB</b> = 5" Dial w/ Reset  <b>Non-Reset Model:</b> <b>RR</b> = 3" Dial w/o Reset <b>CN</b> = 4" Dial w/o Reset <b>SS</b> = 5" Dial w/o Reset	<b>Stem Length:</b> <b>025</b> = 2.5" <b>040</b> = 4" <b>060</b> = 6" <b>090</b> = 9" <b>120</b> = 12" <b>150</b> = 15" <b>180</b> = 18" <b>240</b> = 24" <b>300</b> = 30" <b>360</b> = 36"  Intermediate stem lengths available up to 80".	<b>Connection:</b> <b>1</b> = 1/2" NPT <b>4</b> = 1/4" NPT <b>5</b> = 3/4" NPT Adapter <b>X</b> = Plain Unthreaded Hex Bushing <b>B</b> = 1/2" BSPT <b>U</b> = 1/2" NPT Union  <b>Sanitary:</b> <b>C</b> = 1.5" Tri-Clamp <b>L</b> = 2" Tri-Clamp <b>A</b> = 2.5" Tri-Clamp <b>P</b> = 3" Tri-Clamp <b>M</b> = 3/4" Tri-Clamp	<b>Temperature Range:</b> Common Ranges: <u>Fahrenheit Ranges</u> <b>F23</b> = -40°F to 160°F <b>*F55</b> = 25°F to 125°F <b>F43</b> = 0°F to 200°F <b>F47</b> = 0°F to 250°F <b>F63</b> = 50°F to 300°F <b>F67</b> = 50°F to 500°F <b>F69</b> = 50°F to 550°F <b>F81</b> = 150°F to 750°F <b>F85</b> = 200°F to 1000°F  <u>Celsius Ranges</u> <b>C23</b> = -40°C to 70°C <b>*C55</b> = 0°C to 50°C <b>C43</b> = 0°C to 100°C <b>C47</b> = -20°C to 120°C <b>C59</b> = 0°C to 150°C <b>C67</b> = 0°C to 250°C <b>C69</b> = 0°C to 300°C <b>C73</b> = 0°C to 400°C <b>C85</b> = 100°C to 500°C  <u>Dual °F/°C Ranges</u> <b>D23</b> = -40°F to 160°F & -40°C to 70°C <b>*D55</b> = 25°F to 125°F & -5°C to 50°C <b>D43</b> = 0°F to 200°F & -10°C to 90°C <b>D47</b> = 0°F to 250°F & -20°C to 120°C <b>D63</b> = 50°F to 300°F & 10°C to 150°C <b>D67</b> = 50°F to 500°F & 10°C to 260°C <b>D69</b> = 50°F to 550°F & 10°C to 290°C <b>F81</b> = 150°F to 750°F & 70°C to 400°C <b>F85</b> = 200°F to 1000°F & 100°C to 500°C  * Not available in 2.5" stem.  See front section for complete list of ranges.	<b>Accessories:</b> <b>HV</b> = Hi-Vis Dial <b>PS</b> = Pointed Stem <b>SF</b> = Silicone Fill (Max. Temp. 550°F) <b>SS</b> = 316SS Stem <b>S3</b> = 3/8" diameter Stem <b>F5</b> = 5/16" diameter Stem <b>PC</b> = Acrylic Window <b>PY</b> = Polycarbonate Window <b>TG</b> = Tempered Glass Window <b>MM</b> = Max./Min. Pointer <b>HT</b> = Heat Transfer Compound (2 oz., 1 lb container) <b>CC</b> = Certificate of Conformance <b>C1</b> = 1 pt. Calibration Certificate <b>C3</b> = 3 pt. Calibration Certificate  For Thermowells, see Thermowell Section	

#### Standard Dimensions



#### Fixed Union



\*dimensions in inches

# Adjustable Angle Bimetal Thermometer

# REOTEMP

## INSTRUMENTS

Measuring your world since 1965

REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. Adjustable Angle Thermometers allow for easy temperature monitoring from any position and they are ideal for local indication. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



**Standard Delivery 3-5 Days**

**Thermowell Recommended**



Made in the USA



Fillable



HiVis  
Dials



Accuracy  
1%



Custom Logos

## FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy  $\pm 1\%$  Full Scale. (ASME B40.3)
- All Stainless Steel Construction
- Hermetically Sealed (ASME B40.3)
- Silicone Fillable for Vibration
- Standard External Reset for Easy Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- HiVis™ Dials Available
- Dial can be adjusted to any position for easy viewing.

## SPECIFICATIONS

**ACCURACY:**  $\pm 1\%$  Full Scale (ASME B40.3)

**DIAL SIZE:** 3", 4" or 5"

**DIAL MATERIAL:** Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

**STEM LENGTH:** 2" to 80"

**STEM DIAMETER:** 1/4" (std)

**HEAD, BEZEL, MOUNTING BUSHING, STEMS:** 300 Series SS, 316SS. (optional)

**OPERATING CONDITIONS:** Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

**CASE RATING:** IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

**LENS:** Glass (std), Acrylic, Polycarbonate, Tempered Glass

**IMMERSION:** Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

**MOUNTING CONNECTION:** 1/2" NPT (std), 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, 1/2" NPT Union, Sanitary Tri-clamp

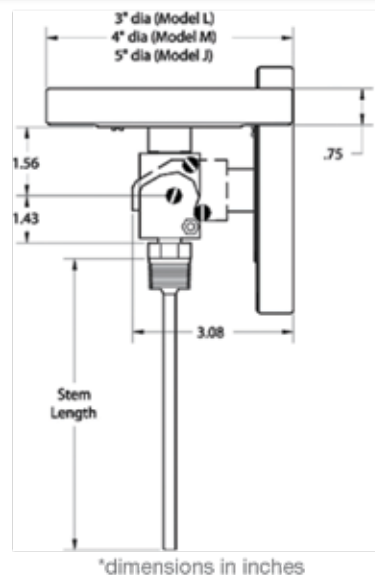
**TEMPERATURE SENSING AREA:** Last 2" to 4" of the stem



## Adjustable Angle Bimetal Thermometer

### HOW TO ORDER

LL	025	1	F23	SF
<b>Model:</b> LL = 3" Dial w/ Reset MM = 4" Dial w/ Reset JJ = 5" Dial w/ Reset	<b>Stem Length:</b> 025 = 2.5" 040 = 4" 060 = 6" 090 = 9" 120 = 12" 150 = 15" 180 = 18" 240 = 24" 300 = 30" 360 = 36"  Intermediate stem lengths available up to 80".	<b>Connection:</b> 1 = 1/2" NPT 4 = 1/4" NPT 5 = 3/4" NPT Adapter U = 1/2" NPT Union X = Plain Unthreaded Hex Bushing  <b>Sanitary:</b> C = 1.5" Tri-Clamp L = 2" Tri-Clamp A = 2.5" Tri-Clamp P = 3" Tri-Clamp M = 3/4" Tri-Clamp	<b>Temperature Range:</b> Common Ranges: <b>Fahrenheit Ranges</b> F23 = -40°F to 160°F *F55 = 25°F to 125°F F43 = 0°F to 200°F F47 = 0°F to 250°F F63 = 50°F to 300°F F67 = 50°F to 500°F F69 = 50°F to 550°F F81 = 150°F to 750°F F85 = 200°F to 1000°F  <b>Celsius Ranges</b> C23 = -40°C to 70°C *C55 = 0°C to 50°C C43 = 0°C to 100°C C47 = -20°C to 120°C C59 = 0°C to 150°C C67 = 0°C to 250°C C69 = 0°C to 300°C C73 = 0°C to 400°C C85 = 100°C to 500°C  <b>Dual °F/°C Ranges</b> D23 = -40°F to 160°F & -40°C to 70°C *D55 = 25°F to 125°F & -5°C to 50°C D43 = 0°F to 200°F & -10°C to 90°C D47 = 0°F to 250°F & -20°C to 120°C D63 = 50°F to 300°F & 10°C to 150°C D67 = 50°F to 500°F & 10°C to 260°C D69 = 50°F to 550°F & 10°C to 290°C F81 = 150°F to 750°F & 70°C to 400°C F85 = 200°F to 1000°F & 100°C to 500°C  * Not available in 2.5" stem.  <b>See front section for complete list of ranges.</b>	<b>Accessories:</b> HV = Hi-Vis Dial PS = Pointed Stem SF = Silicone Fill (Max. Temp. 550°F) SS = 316SS Stem S3 = 3/8" diameter Stem F5 = 5/16" diameter Stem PC = Acrylic Window PY = Polycarbonate Window TG = Tempered Glass Window MM = Max./Min. Pointer HT = Heat Transfer Compound (2 oz., 1 lb container) CC = Certificate of Conformance C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate  For Thermowells, see Thermowell Section



# Bottom Connect Bimetal Thermometer

**REOTEMP**  
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. The Bottom Connect Thermometers are ideal for side and elevated installations on tops or sides of tanks or pipes and are ideal for local indication. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



**Standard Delivery 3-5 Days**

**Thermowell Recommended**



Made in the USA



Fillable



Hi-Vis<sup>TM</sup>  
Dials



Accuracy  
1%



Custom Logos

## FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy  $\pm 1\%$  Full Scale. (ASME B40.3)
- All-Stainless Construction
- Hermetically Sealed (ASME B40.3)
- Silicone Fillable for Vibration
- Standard and Custom Stem Lengths
- Standard External Reset for Easy Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- Hi-Vis<sup>TM</sup> Dials Available

## SPECIFICATIONS

**ACCURACY:**  $\pm 1\%$  Full Scale (ASME B40.3)

**DIAL SIZE:** 3", 4", or 5"

**DIAL MATERIAL:** Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

**STEM LENGTH:** 2" to 80"

**STEM DIAMETER:** 1/4" (std); 3/8" and 5/16" available

**HEAD, BEZEL, MOUNTING BUSHING, STEMS:** 300 Series SS, 316SS (optional)

**OPERATING CONDITIONS:** Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

**CASE RATING:** IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

**LENS:** Glass (std), Acrylic, Polycarbonate, Tempered Glass

**IMMERSION:** Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

**MOUNTING CONNECTION:** 1/2" NPT (std), 1/4" NPT, 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, 1/2" NPT Union, Sanitary Tri-Clamp

**TEMPERATURE SENSING AREA:** Last 2" to 4" of the stem

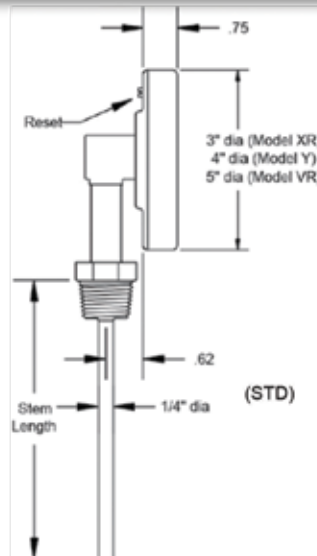


## Bottom Connect Bimetal Thermometer

### HOW TO ORDER



Standard Model:	Stem Length:	Connection:	Temperature Range:	Accessories:
<p><b>XR</b> = 3" Dial w/ Reset  <b>YY</b> = 4" Dial w/ Reset  <b>VR</b> = 5" Dial w/ Reset</p> <p><b>Non-Reset Model:</b>  <b>XX</b> = 3" Dial w/o Reset  <b>YN</b> = 4" Dial w/o Reset  <b>VN</b> = 5" Dial w/o Reset</p>	<p><b>025</b> = 2.5"  <b>040</b> = 4"  <b>060</b> = 6"  <b>090</b> = 9"  <b>120</b> = 12"  <b>150</b> = 15"  <b>180</b> = 18"  <b>240</b> = 24"  <b>300</b> = 30"  <b>360</b> = 36"</p> <p>Intermediate stem lengths available up to 80".</p>	<p><b>1</b> = 1/2" NPT  <b>4</b> = 1/4" NPT  <b>5</b> = 3/4" NPT Adapter  <b>U</b> = 1/2" NPT Union  <b>X</b> = Plain Unthreaded Hex Bushing</p> <p><b>Sanitary:</b>  <b>C</b> = 1.5" Tri-Clamp  <b>L</b> = 2" Tri-Clamp  <b>A</b> = 2.5" Tri-Clamp  <b>P</b> = 3" Tri-Clamp  <b>M</b> = 3/4" Tri-Clamp</p>	<p><b>Common Ranges:</b></p> <p><u>Fahrenheit Ranges</u>  <b>F23</b> = -40°F to 160°F  <b>*F55</b> = 25°F to 125°F  <b>F43</b> = 0°F to 200°F  <b>F47</b> = 0°F to 250°F  <b>F63</b> = 50°F to 300°F  <b>F67</b> = 50°F to 500°F  <b>F69</b> = 50°F to 550°F  <b>F81</b> = 150°F to 750°F  <b>F85</b> = 200°F to 1000°F</p> <p><u>Celsius Ranges</u>  <b>C23</b> = -40°C to 70°C  <b>*C55</b> = 0°C to 50°C  <b>C43</b> = 0°C to 100°C  <b>C47</b> = -20°C to 120°C  <b>C59</b> = 0°C to 150°C  <b>C67</b> = 0°C to 250°C  <b>C69</b> = 0°C to 300°C  <b>C73</b> = 0°C to 400°C  <b>C85</b> = 100°C to 500°C</p> <p><u>Dual °F/°C Ranges</u>  <b>D23</b> = -40°F to 160°F &amp; -40°C to 70°C  <b>*D55</b> = 25°F to 125°F &amp; -5°C to 50°C  <b>D43</b> = 0°F to 200°F &amp; -10°C to 90°C  <b>D47</b> = 0°F to 250°F &amp; -20°C to 120°C  <b>D63</b> = 50°F to 300°F &amp; 10°C to 150°C  <b>D67</b> = 50°F to 500°F &amp; 10°C to 260°C  <b>D69</b> = 50°F to 550°F &amp; 10°C to 290°C  <b>F81</b> = 150°F to 750°F &amp; 70°C to 400°C  <b>F85</b> = 200°F to 1000°F &amp; 100°C to 500°C</p> <p>* Not available in 2.5" stem.</p> <p>See front section for complete list of ranges.</p>	<p><b>HV</b> = Hi-Vis Dial  <b>PS</b> = Pointed Stem  <b>SF</b> = Silicone Fill (Max. Temp. 550°F)  <b>SS</b> = 316SS Stem  <b>S3</b> = 3/8" diameter Stem  <b>F5</b> = 5/16" diameter Stem  <b>PC</b> = Acrylic Window  <b>PY</b> = Polycarbonate Window  <b>TG</b> = Tempered Glass Window  <b>MM</b> = Max./Min. Pointer  <b>HT</b> = Heat Transfer Compound (2 oz., 1 lb container)  <b>CC</b> = Certificate of Conformance  <b>C1</b> = 1 pt. Calibration Certificate  <b>C3</b> = 3 pt. Calibration Certificate</p> <p>For Thermowells, see Thermowell Section</p>



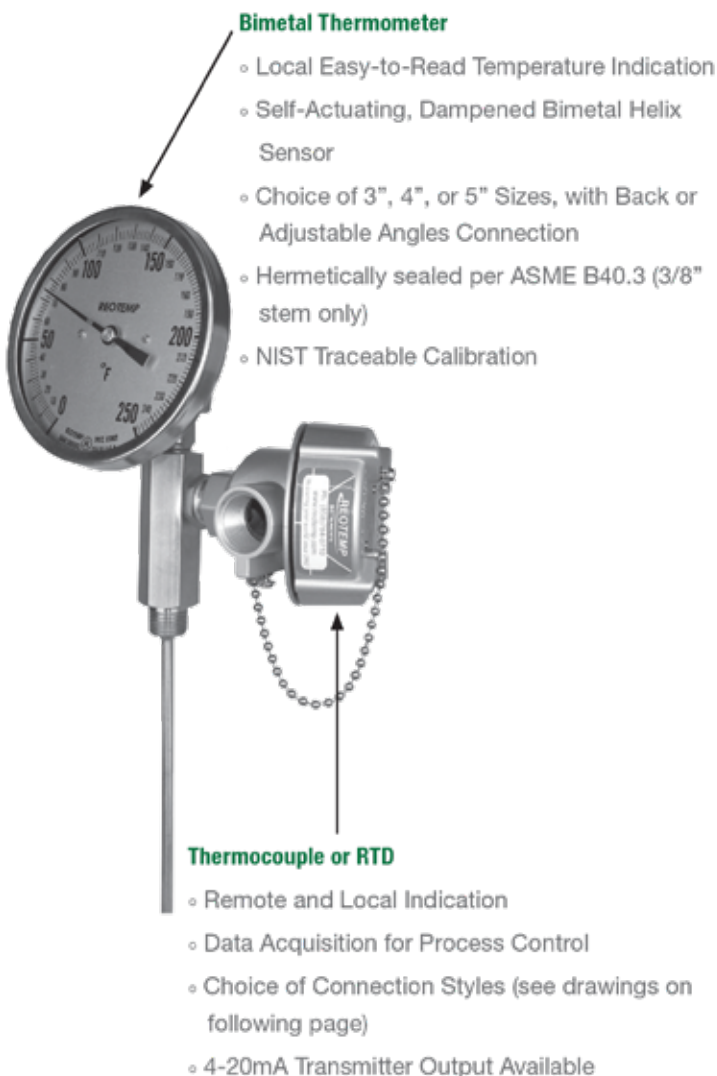
\*dimensions in inches

# Dual Mode Thermometer

**REOTEMP**  
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Dual Mode Thermometer (DMT) is a convenient, multi-purpose indicator for local and remote temperature monitoring. This rugged dual-sensor system puts TWO independent sensors in ONE THERMOWELL, and allows easy tie-in to process controls. Both sensors are NIST traceable. Special sensor encapsulation and optional liquid filling make the DMT the most rugged, durable instrument of its kind.



**Standard Delivery 5-7 Days**  
Intended for use with Thermowell



## FEATURES / BENEFITS

- Allows independent local and remote reading (Up to 1000°F) from one thermowell.
- Redundant sensors for simple, effective calibration or spot checking without removing instrument from thermowell.
- Easily installed in any standard thermowell.
- Interchangeable with existing thermometer, RTD, or Thermocouple.

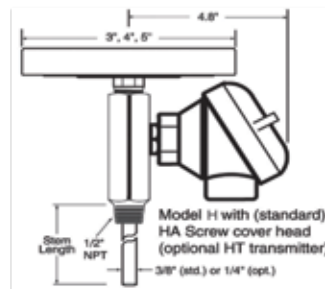
## SPECIFICATIONS

- CASE & BEZEL:** 304SS (std), 316SS (optional)  
**CASE STYLE:** Back or Adjustable Angle Connection  
**DIAL SIZE:** 3", 4", or 5"  
**PROCESS CONNECTION:** 1/2" NPT (std), 1/2" NPT Union (optional)  
**EXTERNAL RESET:** Slotted Hex Screw  
**CRYSTAL:** Glass (std), Plastic or Tempered Glass (optional)  
**HERMETIC SEAL:** Bimetal Thermometer per ASME B40.3 (3/8" stem only)  
**STEM MATERIAL:** 304SS  
**STEM DIAMETER:** 0.375" O.D. or 1/4" O.D.  
**STEM LENGTH:** 2 1/2" to 36"  
**TC/RTD TEMPERATURE LIMITS:**  
-100°F to 1000°F (Thermocouple);  
-100°F to 600°F (RTD - DM4 Model)  
-100°F to 900°F (RTD - DMT Model)  
**RTD:** 100 Ω Platinum; 0.00385 Ω/0°C, 3-wire (std.), others available - contact factory  
**RTD ACCURACY:** 0.12%°C (std). Others available upon request.  
**THERMOCOUPLE:** Type K Gounded Junction (std), Types T, E, J, and Ungrounded (optional)  
**THERMOCOUPLE ACCURACY:** Type K ± 2.2°C or 0.75% (-200°C to 1260°C), whichever is greater. Others available upon request.  
**BIMETAL RANGES:** Standard Ranges and Divisions up to 800°F (538°C). See inside of back page.  
**BIMETAL OVER RANGES:** 50% over range to 550°F, 1000°F max.  
**BIMETAL ACCURACY:** ± 1% of Full Scale  
**THERMOWELL:** Model DMT fits any standard 0.385" bore thermowell or Model DM4 fits 0.260" bore.  
**OPTIONS:** Silicone case fill for vibration (3/8" stem only); 1 pt. or 3 pt. calibration, Hi-Vis Dial for bimetal, sanitary tri-clamp fittings, SS tag

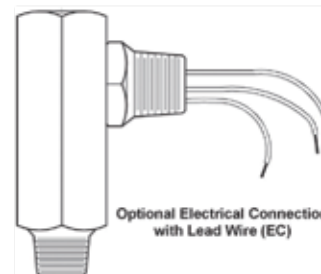
# Dual Mode Thermometer

## HOW TO ORDER

DM	TA	040	F23	TK	A	A	—	HV	
<b>Style &amp; Stem Diameter:</b>  <b>3/8" Stem</b> TA = 3" Back Connect TC = 4" Back Connect TB = 5" Back Connect TL = 3" Adjustable-Angle TM = 4" Adjustable-Angle TJ = 5" Adjustable-Angle  <b>1/4" Stem</b> 4A = 3" Back Connect 4C = 4" Back Connect 4B = 5" Back Connect 4L = 3" Adjustable-Angle 4M = 4" Adjustable-Angle 4J = 5" Adjustable-Angle	<b>Stem Length:</b> *025 = 2.5" 040 = 4" 060 = 6" 090 = 9" 120 = 12" 150 = 15" 180 = 18" 240 = 24" 300 = 30" 360 = 36"  * Only available on 3/8" stem diameter	<b>Temperature Range:</b> Common Ranges: <b>Fahrenheit Ranges</b> F03 = -100°F to 100°F F23 = -40°F to 160°F *F55 = 25°F to 125°F F43 = 0°F to 200°F F47 = 0°F to 250°F F53 = 20°F to 240°F F63 = 50°F to 300°F F65 = 50°F to 400°F F69 = 50°F to 550°F F79 = 100°F to 800°F  <b>Celsius Ranges</b> C03 = -70°C to 70°C C23 = -40°C to 70°C *C55 = 0°C to 50°C C43 = 0°C to 100°C C47 = -20°C to 120°C C53 = -10°C to 110°C C59 = 0°C to 150°C C65 = 0°C to 200°C C69 = 0°C to 300°C C81 = 50°C to 400°C  <b>Dual °F/°C Ranges</b> D03 = -100°F to 100°F & -70°C to 40°C D23 = -40°F to 160°F & -40°C to 70°C *D55 = 25°F to 125°F & -5°C to 50°C D43 = 0°F to 200°F & -10°C to 90°C D47 = 0°F to 250°F & -20°C to 120°C D53 = 20°F to 240°F & -10°C to 115°C D63 = 50°F to 300°F & 10°C to 150°C D65 = 50°F to 400°F & 10°C to 200°C D69 = 50°F to 550°F & 10°C to 290°C D79 = 100°F to 800°F & 40°C to 400°C  * Not available in 2.5" stem.  <b>See front section for complete list of ranges.</b>	<b>Sensor:</b>  <b>Thermocouple (Single, Grounded)</b> TK = Type K TJ = Type J TE = Type E TT = Type T  <b>Thermocouple (Single, Ungrounded)</b> UK = Type K UJ = Type J UE = Type E UT = Type T  <b>Thermocouple (Dual, Grounded)</b> TKK = Type K TJJ = Type J TEE = Type E TTT = Type T  <b>Thermocouple (Dual, Ungrounded)</b> UKK = Type K UJJ = Type J UEE = Type E UTT = Type T  <b>RTD (Single)</b> RC = RTD, Pt. 100 ohm, 3-wire (max. 600°F - DM4) (max. 900°F - DMT)	<b>Heads/Output Connections:</b>  A = Cast Iron Black C = Poly Plastic Black E = Explosion Proof Aluminum G = 316SS H = Cast Aluminum M = Aluminum Flip Top I = Blue Epoxy-Coated Aluminum J = Explosion Proof 316SS S = Poly Plastic White T = ATEX Explosion Proof Aluminum Z = Window Explosion Proof (Digital Display Required) EC = 1/2" NPT Male Electrical Connection w/ Lead Wire (See Drawing & Ignore Electrical Connection Section)	<b>Electrical Connection:</b>  A = Terminal Block N = No Terminal Block, 6" Leads T = 4-20mA Xmtr D = 4-20mA Hart Xmtr *B = 4-20mA Xmtr w/ Display *H = 4-20mA Hart Xmtr w/ Display  * Only available with Z Head	<b>Accessories:</b>  HV = Hi-Vis Bimet Dial UF = Fixed Union US = Sliding Union SC = 1.5" or 1" Sanitary Tri-Clamp SL = 2" Sanitary Tri-Clamp SA = 2.5" Sanitary Tri-Clamp SP = 3" Sanitary Tri-Clamp PC = Acrylic Window TG = Tempered Glass Window SF = Silicone Fill (max. 500°F) TS = Stainless Steel Tag C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate	<b>Thermowell:</b>  For Thermowells, see Thermowell Section		



\*dimensions in inches





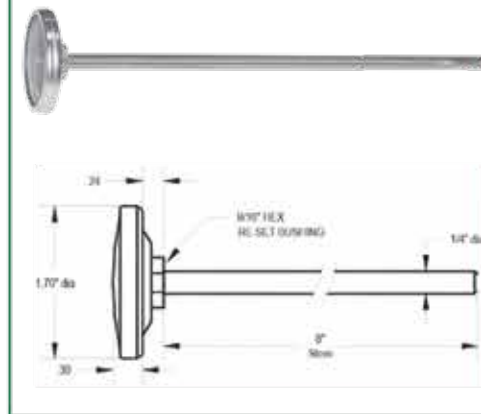
# Hand-Held Laboratory Thermometer

REOTEMP's Laboratory Thermometers (QP, GL & HL) are ideal for testing and spot checking local temperatures in a variety of critical process or lab applications. Pointed stems are available for insertion in semi-solids such as soil, meat, etc.

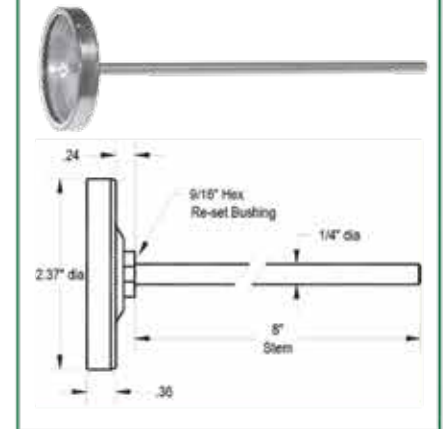
Model **QP** - 1 5/32" Dial  
(with point - Model **QPP**)



Model **GL** - 1 11/16" Dial  
(with point - Model **GLP**)



Model **HL** - 2 3/8" Dial  
(with point - Model **HLP**)



**HOW TO ORDER:** Specify Model and Range (See inside front page for Ranges) - Example **QP - F43**

# Compost Thermometer

**Used By:** Waste Treatment Plants; City, State, and Federal Recycling Programs; Farms and University Compost Programs; Composting Farm and Foods Wastes; Mushroom Farms.

## Heavy-Duty Compost Thermometer

(A36PF)



- 36" Stem Length (24", 48", 60", and 70" available)
- 5/16" Stem Diameter
- Hermetically Sealed
- Rugged, All Stainless Steel Construction

## Super Duty/Fast Response Compost Thermometer

(A36FR)



- 36" Stem Length (24", 48", 60", and 72" available)
- 3/8" Stem Diameter x 1/4" Tip
- Hermetically Sealed
- Rugged, All Stainless Steel Construction

## Moisture Meter

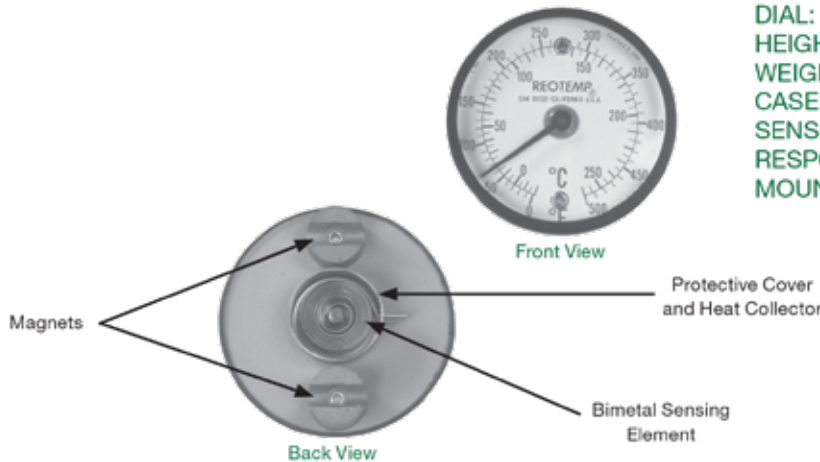
(MM36)



- 36" Stem Length (9", 24", 48", and 60" available)
- 5/16" Stem Diameter
- 0-10 Scale
- Easy to Calibrate

### Surface Bimetal Thermometer

- Measures Temperature of Any Horizontal Surface
- Magnetic Feet Hold to Any Ferrous Surface
- Used on Griddles, Ovens, Motors, Piping, Tanks, etc.



### SPECIFICATIONS

**ACCURACY:** ± 2% Full Scale (ASME B40.3)  
**HEAD:** 2" (5.08cm)  
**DIAL:** White background with blue marks and numbers.  
**HEIGHT:** 1/2" (1.27cm)  
**WEIGHT:** Approximately 2 ounces (56.7g)  
**CASE:** Aluminum with Optically Clear Crystal  
**SENSING ELEMENT:** Precision Calibrated Bimetal Coil  
**RESPONSE TIME:** Approximately 1 minute  
**MOUNTING:** Two Magnets on Back

### HOW TO ORDER

Model:	Temperature Range:
<b>SUR-15</b>	0 to 150°F & -20 to 65°C
<b>SUR-25</b>	0 to 250°F & -20 to 120°C
<b>SUR-50</b>	0 to 500°F & -20 to 260°C
<b>SUR-75</b>	50 to 750°F & 10 to 400°C

### Pocket Bimetal Thermometer



### Analog (Dial) Models

#### Model K-79

- Accurate and Rugged
- Quick Response
- Shock Resistant
- Sensitive Bimetal Element
- External Reset Adjustment
- Waterproof and Dustproof
- Stainless Steel or Plastic Pocket Case

### HOW TO ORDER

Analog:	Temperature Range:
<b>K-79-2</b>	-40°F to 160°F
<b>K-79-3</b>	0°F to 220°F
<b>K-79-4</b>	25°F to 125°F
<b>K-79-5</b>	50°F to 550°F
<b>K-79-7</b>	-10°C to 110°C
<b>K-79-8</b>	0°C to 150°C
<b>K-79-9</b>	0°C to 250°C

### SPECIFICATIONS

**ACCURACY:** ± 2% Full Scale (ASME B40.3)  
**HEAD:** 1" Diameter (25mm)  
**DIAL MATERIAL:** White background with crisp letters, marks, and numbers.  
**STEM LENGTH:** 142 O.D., 5" long, pointed (36mm x 127mm)  
**RESET NUT:** 7/16 Hex (11mm)  
**POCKET CASE:** Plastic with Clip and Holder Loop  
**WEIGHT:** 0.65 OUNCES (18.5g)  
**PACKED:** 1 per box, 12 per carton



# Vapor Actuated Filled System Thermometer

**REOTEMP**  
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Remote Vapor Actuated Thermometers are manufactured to the highest standards for a wide range of uses and may be fitted into almost any temperature indicating application. These instruments are ideal for remote reading, such as panel installations, with capillary lengths of 1 to 100 feet.

Being vapor actuated, they are not subject to indicator error due to ambient temperature variations along the capillary tube system, and will give excellent readings provided the temperature being measured is above or below ambient temperature.

Vapor instruments have progressive non-linear graduations, and are best read in the upper 2/3 of the dial range. Many ranges are available between -40°F and +450°F, and care should be exercised to select a range that will locate the operating temperatures within the upper 2/3 of the dial range.



## FEATURES / BENEFITS

- Accuracy  $\pm 1$  Scale Division (Upper 2/3 Scale)
- Ideal for Remote Reading, such as Panel Installation
- Capillary Lengths of 1 to 100 Feet
- Stainless Steel Sealed Construction
- Variety of Flanged or U-Clamp Mounting Options
- Brass and 316SS Thermowells for Vapor-Actuated Bulbs Available.

## SPECIFICATIONS

**ACCURACY:**  $\pm 1$  Scale Division (Upper 2/3 Scale)

**DIAL SIZE:** 2", 2 1/2", 3 1/2", 4 1/2"

**DIAL MATERIAL:** Aluminum with white finish and black markings. Other colors available upon request.

**POINTER:** Standard Adjustable

**MOVEMENT:** Brass with Precision Gearing

**BOURDON TUBE:** Phosphor Bronze

**CASE:** All-Stainless Steel, except: VA45FL (Aluminum) and VA45TB (Phenolic)

**PROCESS CONNECTION:** Plain Bulb, 1/2" NPT Union, 1/2" NPT sliding union on 12" bendable extension, or thermowell.

Note: Thermowells must be used whenever the bulb would be exposed to pressure, fluid velocity, or corrosive media.

**WINDOW:** Polycarbonate or Glass

**BULB:** Stainless Steel or Copper. Bulb O.D. 7/16" (threaded), 3/8" (plain). Bulb lengths vary from 2 1/2" to 9 1/4" depending on capillary length.

**CAPILLARY:** Copper, copper with bronze braid armor, stainless steel, stainless steel with stainless steel armor. Capillary lengths 5 feet (standard); 1 to 100 feet available.

**RANGES:** Over twenty °F and °F/°C ranges available, from -40°F to 450°F. For higher temperature ranges, please call REOTEMP to inquire about gas-actuated vapor thermometers.

**APPLICATIONS:** Control panels, chemical processing, pipelines, food processing, OEM applications, ovens, solar heating, refrigeration, etc.



**Standard Delivery 3-4 Weeks**  
Thermowell Recommended



Made in the USA

# Vapor Actuated Filled System Thermometer

Measuring your world since 1965

## HOW TO ORDER

Model V  
Vapor  
Actuated

V

Table 1  
Case Style  
& Size

20FR

Table 2  
Temperature  
Range

21

Table 3  
Capillary  
& Bulb

D

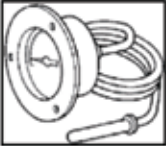
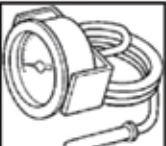
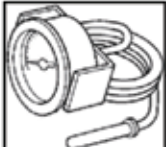

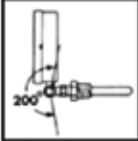
Table 4  
Capillary Length  
in Feet

05

Table 5  
Process  
Connection

L2

Table 1: Case Styles

	Front Flanged (Panel Mount):	Dial:	Case:	Lens:	Connection Location:
	20FR 25FR 35FR 45FR 45FL	2" 2 1/2" 3 1/2" 4 1/2" 4 1/2"	Stainless Steel Stainless Steel Stainless Steel Stainless Steel Black Aluminum (Hinge Ring Type)	**Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate *Glass	Rear Rear Rear Rear Rear
	20UR 25UR 35UR	2" 2 1/2" 3 1/2"	Stainless Steel Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate **Polycarbonate	Rear Rear Rear
	20RR 35RR 35RB 45RR 45RB 45TB	2" 3 1/2" 3 1/2" 4 1/2" 4 1/2" 4 1/2"	Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel Phenolic	**Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate *Glass	Rear Rear Bottom Rear Bottom Bottom (Turret Mount)
	35SB 45SB	3 1/2" 4 1/2"	Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate	Adjustable Bracket Mount Adjustable Bracket Mount
	35DA 45DA	3 1/2" 4 1/2"	Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate	"Direct" Adjustable Mount w/ 3.4" Bulb, 1/2" NPT "Direct" Adjustable Mount w/ 3.4" Bulb, 1/2" NPT

**Notes:**

\*Glass Lens available, specify "Glass Lens"

\*\*Polycarbonate Lens available, specify "Polycarbonate Lens"

For the Other Case Connection Location, specify Model and Range Only. Example: V45DA-80

# Vapor Actuated Filled System Thermometer

# REOTEMP

## INSTRUMENTS

Measuring your world since 1965

**Table 2: Temperature Ranges**

Code (°F Ranges):	Code (°F & °C Ranges):
20 = -40°F to 60°F	21 = -40°F to 60°F & -40°C to 15°C
30 = -40°F to 100°F	31 = -40°F to 100°F & -40°C to 40°C
32 = -20°F to 120°F	33 = -20°F to 120°F & -30°C to 50°C
72 = 0°F to 180°F	73 = 0°F to 180°F & -20°C to 80°C
49 = 0°F to 150°F	79 = 0°F to 150°F & -15°C to 65°C
80 = 20°F to 220°F	81 = 20°F to 220°F & 0°C to 105°C
50 = 40°F to 240°F	51 = 40°F to 240°F & 0°C to 115°C
56 = 0°F to 250°F	57 = 0°F to 250°F & -20°C to 120°C
60 = 30°F to 300°F	61 = 30°F to 300°F & 0°C to 150°C
*68 = 100°F to 350°F	66 = 100°F to 350°F & 40°C to 175°C
*70 = 200°F to 450°F	*71 = 200°F to 450°F & 100°C to 230°C
*F0 = 150°F to 450°F	*D1 = 150°F to 450°F & 70°C to 230°C

\* Ranges 350°F & over come with a 316SS Capillary Only.  
 Note: For higher temperature ranges, please call REOTEMP to inquire about gas-actuated vapor thermometers.

**Table 3: Capillary & Bulbs**

Code:	Capillary & Bulb Material:	Capillary Protection:
A	Tin Plated Copper	None
C	Tin Plated Copper	302SS
D	316SS	None
E	316SS	SS Armor

**Table 4: Capillary Length**

Specify Length in Feet  
 Standard Length = 5 Feet  
 Available Capillary Length = 1-100 Feet  
 Note: Capillary lengths over 5 feet affect bulb length.  
 See table at the bottom of the page.

**Table 5: Process Connection**

Code:	Connection Type:	Material:
J1	None (Plain Bulb)	--
J2	Jam Nut Only	Brass (For Existing Brass Well)
J3	Jam Nut Only	316SS (For SS Well)
K2	1/2" NPT Union	Nickel Plated Brass
L2	1/2" NPT Union	316SS
M2	1/2" NPT Sliding Union on Bendable Extension	316SS (Only Available with 316SS Capillary)

Thermowells for Vapor Actuated Bulbs (Except M2):	Brass:		316SS:	
	1/2" NPT	3/4" NPT	1/2" NPT	3/4" NPT
For 1-10 ft. Capillary (Bulb #1)	12B	13B	12S	13S
For 11-25 ft. Capillary (Bulb #2)	22B	23B	22S	23S
For 26-50 ft. Capillary (Bulb #3)	32B	33B	32S	33S
For 51-75 ft. Capillary (Bulb #4)	42B	43B	42S	43S
For 76-100 ft. Capillary (Bulb #5)	52B	53B	52S	53S

**Bulb Configurations**



**Standard Bulb Dimensions**

Capillary Length:	Plain Bulb:			Union Connection:			Bendable Extension:			Thermowell:		
	L		D	U	S	D	L	S	D	U	S	D
1-10 ft. (Bulb #1)	2 1/2" (1-5 ft.); 3 7/16" (6-10 ft.)		3/8"	1 13/16"	2 3/8"	7/16"	2 1/2" (1-5 ft.); 3 7/16" (6-10 ft.)	3-13; 4-14	3/8"	1 15/16"	2 1/2"	9/16"
11/25 ft. (Bulb #2)	3 7/16"		3/8"	1 1/2"	3 1/4"	7/16"	3 7/16"	4-14	3/8"	2 5/8"	3 3/8"	9/16"
26-50 ft. (Bulb #3)	4 7/8"		3/8"	4 1/2"	5 1/4"	7/16"	4 7/8"	5-15	3/8"	4 5/8"	5 3/8"	9/16"
51-75 ft. (Bulb #4)	7 7/8"		3/8"	6 1/2"	7 1/4"	7/16"	7 7/8"	8-18	3/8"	6 5/8"	7 3/8"	9/16"
76-100 ft. (Bulb #5)	10 7/8"		3/8"	8 1/2"	9 1/4"	7/16"	10 7/8"	11-21	3/8"	8 5/8"	9 3/8"	9/16"



# Vapor Actuated Filled System Thermometer

# REOTEMP

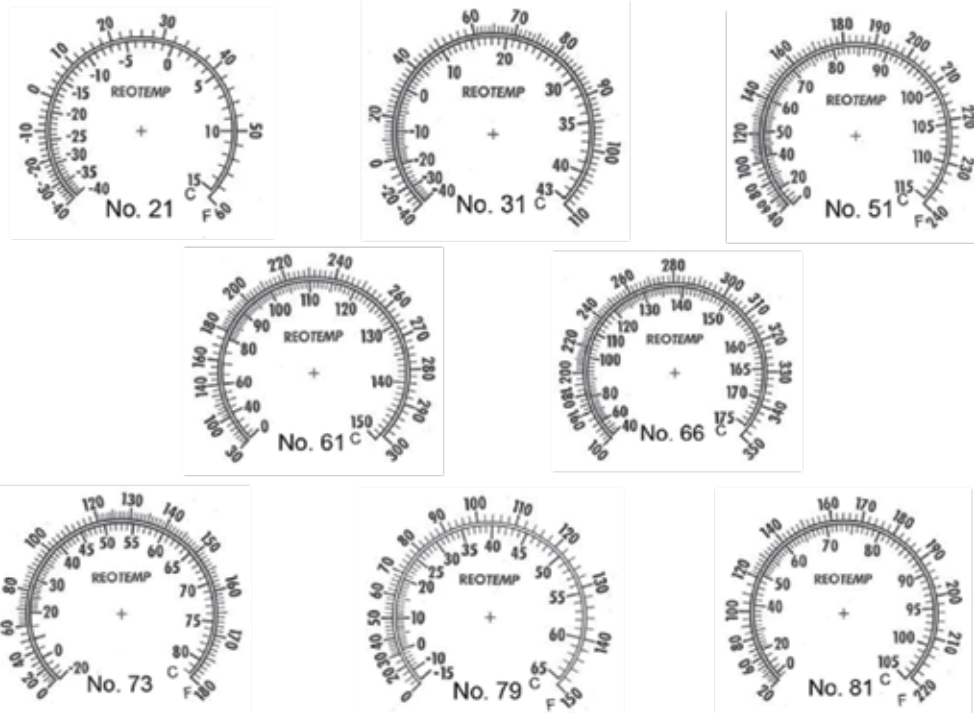
## INSTRUMENTS

Measuring your world since 1965

### Dial Faces

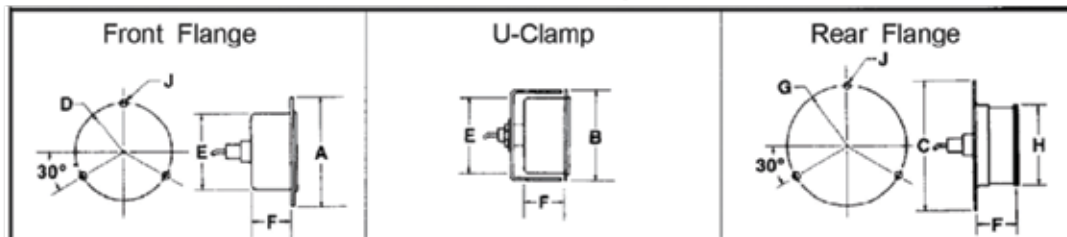
Typical dial faces shown below.

Operating temperatures should be in upper 2/3 of selected range.



For temperatures above or below those shown, ask for information on REOTEMP Gas Actuated Thermometers.

### Case and Mounting Dimensions



Dial:	A	B	C	D	E	F	G	H	J
2"	2.94"	2.25	2.94	1.25 R	2.05	0.98	1.28 R	2.3	0.14
2 1/2"	3.69"	2.81	--	1.66 R	2.56	1	--	--	0.17
3 1/2"	4.75"	3.97	4.75	2.16 R	3.59	1.41 RF 0.75 UC, FF	2.16 R	3.69	0.16
4 1/2"	5.88" FR 6.31" FL	--	5.88 RR, RB 5.83 TB	2.69 R --	4.59 FR 4.7 RR, RB, FL	1.41 RF 0.75 UC, FF 2.56TB 1.63 FL	2.69 R	4.69	0.22

# Gas Actuated Filled System Thermometer

# REOTEMP

## INSTRUMENTS

Measuring your world since 1965

REOTEMP's Gas Actuated Thermometers combine advanced gas coil technology with a state-of-the-art adsorbent- (Class IV) thermal system, producing a superior temperature measurement instrument that can be fitted to a wide variety of applications.

Features include high accuracy, low ambient error, no head error, and a high degree of over-range protection. The compact (3/8" diameter x 3" active length) bulb, and a wide range of case styles and thermal systems, allow great flexibility in installation.

The linear dial on all REOTEMP gas thermometers provides a consistent 1% accuracy across the full span of each range. This, combined with over twenty Fahrenheit and dual ranges, from -320°F to +1200°F, provides complete coverage of all normal temperature requirements.



**Standard Delivery 4-5 Weeks**



Made in the USA

## FEATURES / BENEFITS

- Accuracy  $\pm$  1% Full Scale
- Can Handle a Wide Temperature Range Up to 1200°F
- Wide Variety of Wall, Panel and Direct Mounting Options
- Capillary Lengths Up to 99 Feet
- OEM Logo Dials/Custom Dials
- One Year Warranty

## SPECIFICATIONS

**ACCURACY:**  $\pm$  1% Full Scale. Calibration to NIST traceable standards.

**RANGES:** Twenty °F and °F & °C ranges available from -320°F to 1200°F.

**OVERRANGE:** Minimum 50% of span above top of range, or 1300°F, whichever is less.

**AMBIENT ERROR:** 1/4% of span per 25°F change in ambient temperature at midscale.

**DIAL SIZES:** 4 1/2" & 6". Dials are white with black markings. For smaller sized dials, please call REOTEMP to inquire about gas-actuated vapor thermometers.

**CASE MATERIALS:** Stainless steel, Polypropylene, or Aluminum

**CASE STYLES:** Panel Mount, Surface Mount, or Direct (stem) Mount

**WINDOWS:** Glass (standard) . Shatterproof glass and acrylic (optional). Gas with aluminum ring (4 1/2" and 6") are glass only.

**POINTERS:** Aluminum, slotted adjustable type to permit zero-set adjustments.

**BULBS:** 316SS, 3/8" diameter x 3" active length. Other diameters and lengths are available.

**PROCESS CONNECTIONS:** Plain bulb; 1/2" NPT sliding union; 1/2" NPT fixed (on All-Angle); or thermowell. Note: Thermowells should be used whenever the bulb would be exposed to pressure, fluid velocity, or corrosive or abrasive media.

**THERMAL SYSTEMS:** Stainless steel capillary with stainless steel spring armor (up to 40ft). Over 40 feet, stainless steel interlock armor is standard. Direct mount stems, 316 SS, 4" to 48".



# Gas Actuated Filled System Thermometer

# REOTEMP

## INSTRUMENTS

Measuring your world since 1965

### HOW TO ORDER

**Table 1**  
Case Style  
& Size

**G45ER**

**Table 2**  
Thermal System  
& Bulb

**87**

**Table 3**  
Capillary Length  
in Feet

**L15**

**Table 4**  
Temperature

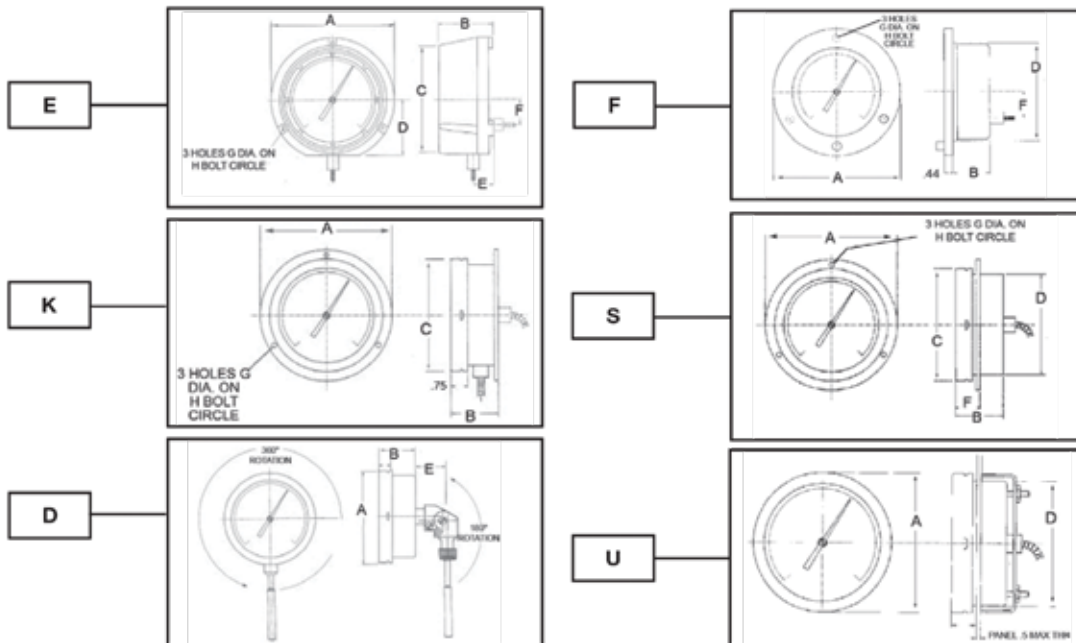
**FB**

**Table 5**  
Options

**XAW**

**Table 1: Case Styles**

Wall Mount:	Case Code:	Connection:	Case Diameter:	Case Dimensions:							
				A	B	C	D	E	F	G	H
E = Polypropylene Turret Mount	G45ER G45EL	Rear	4 1/2"	5.83	2.41	5.08	2.62	1.00	0.20	0.24	5.39
		Lower	4 1/2"	5.83	2.41	5.08	2.62	1.00	0.20	0.24	5.39
K = Stainless Steel Back Flange	G45KR G45KL G60KR G60KL	Rear	4 1/2"	5.88	2.15	5.04	--	--	--	0.22	5.38
		Lower	4 1/2"	5.88	2.15	5.04	--	--	--	0.22	5.38
		Rear	6"	7.50	2.15	6.38	--	--	--	0.25	6.84
		Lower	6"	7.50	2.15	6.38	--	--	--	0.25	6.84
Direct Mount:	G45DA G60DA	Adjustable	4 1/2"	5.04	2.00	--	--	1.70	--	--	--
		Adjustable	6"	6.38	2.15	--	--	1.70	--	--	--
Panel Mount:	G45FR G60FR	Rear	4 1/2"	6.31	1.63	--	4.88	--	1.35	0.19	5.38
		Rear	6"	7.87	1.59	--	6.34	--	1.75	0.19	6.69
S = Stainless Steel Semi-Flush Front Flange	G45SR G60SR	Rear	4 1/2"	5.88	2.15	5.04	4.51	--	1.00	0.22	5.38
		Rear	6"	7.50	2.15	6.38	5.88	--	1.00	0.25	6.84
U = Stainless Steel "U" Clamp	G45UR G60UR	Rear	4 1/2"	5.04	--	--	4.51	--	--	--	--
		Rear	6"	6.38	--	--	5.88	--	--	--	--

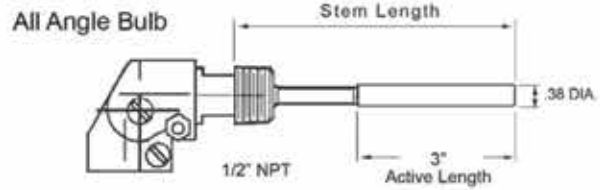


# Gas Actuated Filled System Thermometer

**Table 2: Thermal Systems** (All Bulbs & Capillaries Are 316SS)

**All-Angle Direct Mount with 1/2" NPT  
(with "D" Case Only):**

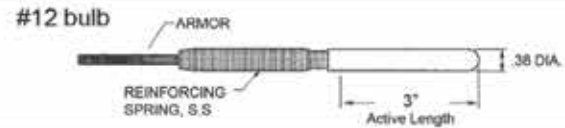
- 04 = 4" Stem x 3/8" Diameter
- 06 = 6" Stem x 3/8" Diameter
- 09 = 9" Stem x 3/8" Diameter
- \*0X = 12" or Longer Stem x 3/8" Diameter  
(specify stem length)



\*dimensions in inches

**Plain Bulbs:**

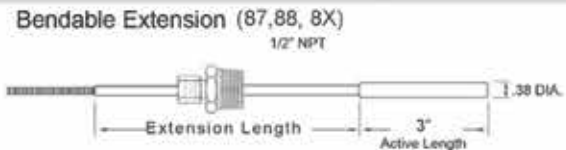
- 11 = Plain Bulb, 3/8" x 3" Active,  
+12" Rigid Extension
- 12 = Plain Bulb, 3/8" x 3" Active



\*dimensions in inches

**Sliding Union 1/2" NPT on  
Bendable Extension:**

- 87 = 3/8" x 3" Active, 12" Bendable Extension
- 88 = 3/8" x 3" Active, 18" Bendable Extension
- 8X = 3/8" x 3" Active, Over 18" Bendable Extension  
(specify stem length)



\*dimensions in inches

\* Specify stem length  
Example: **G45DA - 0X - 12" - FB**

**Table 3: Capillary Length**

Specify Armored Capillary Length in Feet, up to 99 Feet (omit for "D" case).

**L05** = 5 Feet      **L10** = 10 Feet      **L15** = 15 Feet

Note: Stainless steel spring armor is standard protection on all capillary.  
Capillary over 40 ft. requires XSI Spiral Interlock Armor option.

**Table 4: Temperature Ranges**

**Code (°F or °C Ranges, Div.):**

- FB = -320°F to 100°F, 5°
- FE = -120°F to 120°F, 2°
- FG = -40°F to 180°F, 2°
- FH = 0°F to 120°F, 1°
- FJ = 60°F to 120°F, 1°
- FL = 20°F to 240°F, 2°
- FN = 0°F to 300°F, 5°
- FP = 50°F to 550°F, 5°
- FR = 50°F to 750°F, 5°
- FT = 400°F to 1200°F, 10°
- CD = -200°C to 100°C

**Code (°F & °C Ranges, Div.):**

- DB = -320°F to 100°F & -200°C to 40°C, 5° & 2°
- DE = -120°F to 120°F & -85°C to 50°C, 2° & 1°
- DG = -40°F to 180°F & -40°C to 80°C, 2° & 2°
- DH = 0°F to 120°F & -15°C to 50°C, 1° & 1°
- DJ = 60°F to 120°F & -15°C to 50°C, 1° & 1/2°
- DL = 20°F to 240°F & -5°C to 110°C, 2° & 1°
- DN = 0°F to 300°F & -10°C to 150°C, 5° & 1°
- DP = 50°F to 550°F & 10°C to 290°C, 5° & 5°
- DR = 50°F to 750°F & 0°C to 400°C, 5° & 5°
- DT = 400°F to 1200°F & 200°C to 650°C, 10° & 5°

# Gas Actuated Filled System Thermometer

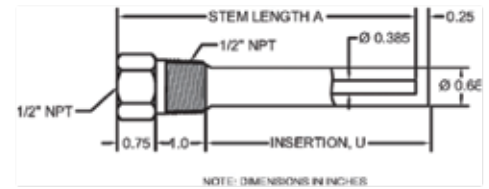
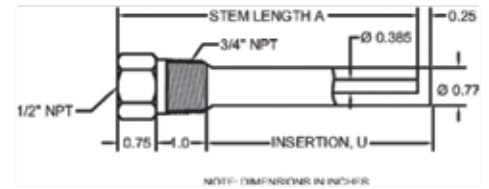
**Table 5: Accessories & Options**

<p><b>Code:</b></p> <p>*XAW = Acrylic Window                  *XSG = Safety Glass Window                  XFR = Flush Mounting Ring for "E" Case                  XBF = 1/2" NPT Fitting for #11 Bulb (Fits on Bulb or Extension)                  XCF = 1/2" NPT Fitting (Fastens on Spiral Interlock Armor - Requires XSI Option)                  XSI = Spiral Interlock Armor (Required over 40 Feet)                  XVD = Vibration Dampening Feature (Dampens Vibration - Available in all Rear Connected Models)                  XTW = Thermowell (See Thermowell Table Below for Order Codes)</p> <p style="text-align: center;">* = 4 1/2" Cases Only; Not Available in "F" Case</p>
--

## Thermowells for 3/8" Diameter Elements

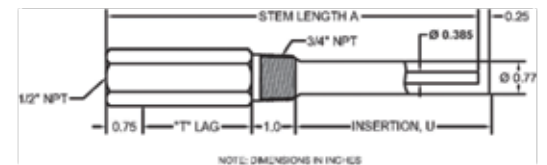
### Standard Wells

"P" External Length:	"A" Stem Length:	"U" Insert Length:	Order Code:	
			304SS	316SS
3/4" NPT	4"	2 1/2"	ST4304-SB3	ST4316-SB3
	6"	4 1/2"	ST6304-SB3	ST6316-SB3
	9"	7 1/2"	ST9304-SB3	ST9316-SB3
	12"	10 1/2"	ST12304-SB3	ST12316-SB3
	15"	13 1/2"	ST15304-SB3	ST15316-SB3
	18"	16 1/2"	ST18304-SB3	ST18316-SB3
1/2" NPT	4"	2 1/2"	ST4304-HSB3	ST4316-HSB3
	6"	4 1/2"	ST6304-HSB3	ST6316-HSB3
	9"	7 1/2"	ST9304-HSB3	ST9316-HSB3
	12"	10 1/2"	ST12304-HSB3	ST12316-HSB3
	15"	13 1/2"	ST15304-HSB3	ST15316-HSB3
	18"	16 1/2"	ST18304-HSB3	ST18316-HSB3
24"	22 1/2"	ST24304-HSB3	ST24316-HSB3	



### Lagging Wells

"P" External Length:	"A" Stem Length:	"U" Insert Length:	"T" Lag Extension:	Order Code:	
				304SS	316SS
3/4" NPT	6"	2 1/2"	2"	LG6304-SB3	LG6316-SB3
	9"	4 1/2"	3"	LG9304-SB3	LG9316-SB3
	12"	7 1/2"	3"	LG12304-SB3	LG12316-SB3
	15"	10 1/2"	3"	LG15304-SB3	LG15316-SB3
	18"	13 1/2"	3"	LG18304-SB3	LG18316-SB3
	24"	19 1/2"	3"	LG24304-SB3	LG24316-SB3





# Direct Drive Gas Actuated Thermometer

**REOTEMP**  
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Rugged Direct Drive System makes our series 45G the right choice for temperature indication in heavy-duty or high vibration applications. The all-stainless steel case and internals, along with the direct drive system, result in superior instrument life in severe environments.

## Available in Four Styles

<b>45GW</b>	WALL MOUNTED
<b>45GF</b>	FLUSH MOUNTED
<b>45GFF</b>	FRONT FLANGE
<b>45GAW</b>	ADJUSTABLE WALL

## FEATURES / BENEFITS

- Accuracy  $\pm 1\%$  of Range Span
- Can handle a wide temperature range up to 1200°F.
- Heavy-Duty Vibration and Shock Resistant
- Stainless Steel Sealed Construction
- Various mounting options available.

## SPECIFICATIONS

**CASE:** Stainless Steel

**ACCURACY:**  $\pm 1\%$  of Range Span

**DIAL FACE:** 4 1/2" Satin finish aluminum with black lines and numbers.

**LENS:** Gasket Sealed Glass (standard) ; Plexi Glass (optional)

**POINTER:** Micrometer Adjustment Type

**CAPILLARY:** Stainless steel protected by 1/4" diameter, Flexible Stainless Steel Armor or 3/16" diameter Plain Armor

**BULB:** Stainless Steel Welded Construction

**ACTUATION:** Nitrogen thru Stainless Steel Direct Drive Bourdon Coil



**Standard Delivery 4-5 Weeks**

**Thermowell Recommended**



Made in the USA

# Direct Drive Gas Actuated Thermometer

## HOW TO ORDER

**45GW**

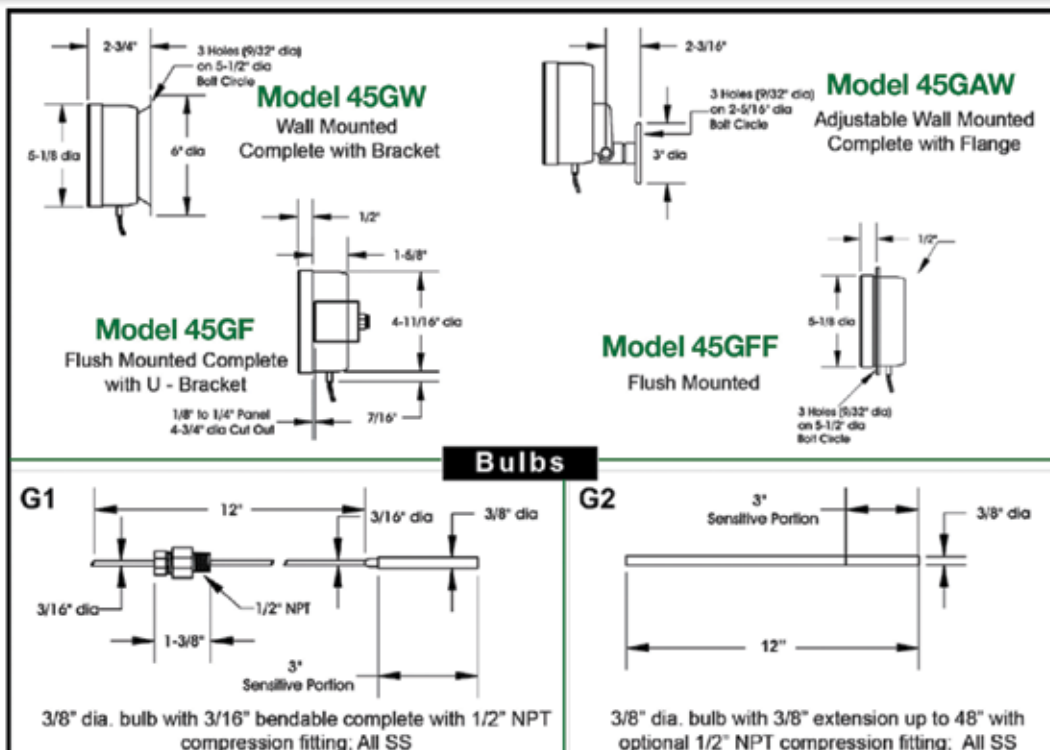
**05**

**00**

**G112**

**EC**

Standard Model:	Armored Capillary Length:	Temperature Range:	Bulb Type:	Accessories:
<p><b>45GW</b> = Wall Mount  <b>45GF</b> = Flush Mount  <b>45GFF</b> = Front Flange  <b>45GAW</b> = Adjustable Wall Mount</p>	<p><b>05</b> = 5 Feet  <b>06</b> = 6 Feet  <b>10</b> = 10 Feet  <b>Other</b> = Specify Length in Feet</p>	<p><b>Fahrenheit Ranges</b></p> <p><b>16</b> = -350°F to 150°F  <b>17</b> = -100°F to 100°F  <b>19</b> = -30°F to 120°F  <b>20</b> = -40°F to 200°F  <b>23</b> = 0°F to 150°F  <b>25</b> = 0°F to 200°F  <b>26</b> = 0°F to 240°F  <b>27</b> = 0°F to 300°F  <b>30</b> = 0°F to 400°F  <b>31</b> = 0°F to 500°F  <b>32</b> = 0°F to 600°F  <b>34</b> = 0°F to 800°F  <b>36</b> = 0°F to 1200°F</p> <p><b>Celsius Ranges</b></p> <p><b>00</b> = -200°C to 100°C  <b>01</b> = -100°C to 100°C  <b>02</b> = -30°C to 60°C  <b>05</b> = -30°C to 120°C  <b>06</b> = -10°C to 150°C  <b>07</b> = 0°C to 100°C  <b>08</b> = 0°C to 200°C  <b>09</b> = 0°C to 240°C  <b>10</b> = 0°C to 300°C  <b>11</b> = 0°C to 400°C  <b>13</b> = 0°C to 500°C  <b>14</b> = 0°C to 600°C</p>	<p><b>G112</b> = 12" Bendable Extension with 1/2" NPT Compression Fitting  <b>G118</b> = 18" Bendable Extension with 1/2" NPT Compression Fitting  <b>G212</b> = 12" Plain Bulb with Rigid Extension  <b>G224</b> = 24" Plain Bulb with Rigid Extension</p>	<p><b>EC</b> = Electrical Contacts  <b>MP</b> = Max. Hand Pointer  <b>SG</b> = Tempered Glass  <b>PY</b> = Polycarbonate Crystal</p>



\*dimensions in inches



# Direct Drive Gas and Liquid Filled Thermometer

REOTEMP's Rugged Direct Drive System makes our 45GR and 45LR the right choice for temperature indication in heavy-duty or high vibration applications. The all-stainless steel case and internals, along with the direct drive system, result in superior instrument life in severe environments.

## Model 45GR

## Model 45LR



### FEATURES / BENEFITS

- Accuracy  $\pm 1\%$  of Range Span
- Can handle a wide temperature range up to 1200°F.
- Heavy-Duty Vibration and Shock Resistant
- Stainless Steel Sealed Construction
- Adjustable to any angle.

### SPECIFICATIONS

**CASE:** Stainless Steel (SS)

**ACCURACY:**  $\pm 1\%$  of Range Span

**DIAL FACE:** 4 1/2" Satin finish aluminum with black lines and numbers.

**LENS:** Gasket Sealed Glass (std) ; Polycarbonate (optional)

**POINTER:** Micrometer Adjustment Type

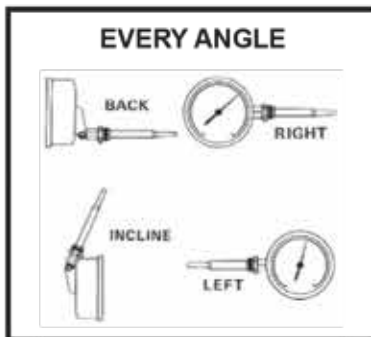
**BULB:** Stainless Steel Welded Construction

**ACTUATION:** 45LR - Inert Liquid thru Stainless Steel Direct Drive Bourdon Coil.

45GR - Nitrogen thru Stainless Steel Direct Drive Bourdon Coil.

## Standard Delivery 4-5 Weeks

### Thermowell Recommended



Made in the USA

### Direct Drive Gas and Liquid Filled Thermometer

### HOW TO ORDER

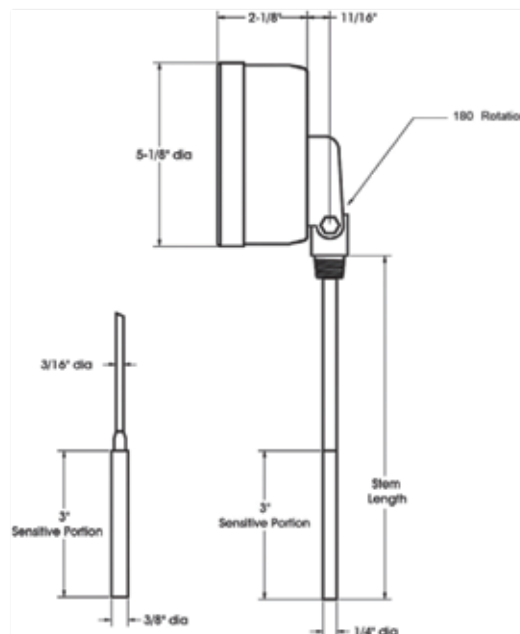
**45GR**

**04**

**00**

**ST6316**

<b>Model:</b>  45GR = Gas Actuated, 3/8" Stem 45LR = Inert Liquid Actuated, 1/4" Stem	<b>Stem Length:</b>  04 = 4" 06 = 6" 09 = 9" 12 = 12" 15 = 15" 18 = 18" 24 = 24"	<b>Temperature Range:</b>  <b>Fahrenheit Ranges</b> 16 = -350°F to 150°F 17 = -100°F to 100°F 19 = -30°F to 120°F 20 = -40°F to 200°F 21 = 0°F to 100°F 23 = 0°F to 150°F 24 = 25°F to 125°F 25 = 0°F to 200°F 26 = 0°F to 240°F 27 = 0°F to 300°F 30 = 0°F to 400°F 31 = 0°F to 500°F 32 = 0°F to 600°F 34 = 0°F to 800°F 36 = 0°F to 1200°F  <b>Celsius Ranges</b> 00 = -200°C to 100°C 01 = -100°C to 100°C 02 = -30°C to 60°C 04 = -10°C to 80°C 05 = -30°C to 120°C 06 = -10°C to 150°C 07 = 0°C to 100°C 08 = 0°C to 200°C 09 = 0°C to 240°C 10 = 0°C to 300°C 11 = 0°C to 400°C 13 = 0°C to 500°C 14 = 0°C to 600°C	<b>Accessories:</b>  Standard Thermowells (3/4" NPT, 316 S.S.) <table border="1"> <thead> <tr> <th>Stem Length</th> <th>"U" Dim.</th> <th>1/4" Element</th> <th>3/8" Element</th> </tr> </thead> <tbody> <tr> <td>4"</td> <td>2.5"</td> <td>ST4316</td> <td>ST4316-B3</td> </tr> <tr> <td>6"</td> <td>4.5"</td> <td>ST6316</td> <td>ST6316-B3</td> </tr> <tr> <td>9"</td> <td>7.5"</td> <td>ST9316</td> <td>ST9316-B3</td> </tr> </tbody> </table> More Thermowells in Thermowell Section  EC = Electrical Connection MP = Max. Pointer SG = Tempered Glass PY = Plastic Crystal	Stem Length	"U" Dim.	1/4" Element	3/8" Element	4"	2.5"	ST4316	ST4316-B3	6"	4.5"	ST6316	ST6316-B3	9"	7.5"	ST9316	ST9316-B3
Stem Length	"U" Dim.	1/4" Element	3/8" Element																
4"	2.5"	ST4316	ST4316-B3																
6"	4.5"	ST6316	ST6316-B3																
9"	7.5"	ST9316	ST9316-B3																



\*dimensions in inches

# Liquid-In-Glass Industrial Thermometer

**REOTEMP**  
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Liquid-In-Glass Industrial Thermometers are used in pipelines of all types, commercial building application (heating & cooling), process piping, tanks, boilers, etc.



Made in the USA

## FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy  $\pm 1\%$  Full Scale. (ASME B40.3)
- One Year Warranty

## SPECIFICATIONS

**ACCURACY:**  $\pm 1\%$  Full Scale. (ASME B40.3)

**CASE:** Modern V-shape design with parts molded of polyester, in black textured finish. Heavy glass protected front firmly secured by spring action.

**STEM:** Tapered bulb chambers are made of precision ground aluminum. The tapered chamber forms a metal contact with matching taper in the sockets assuring maximum speed of response to temperature changes. Graphite is used as a conducting media between bulb chamber and glass tube.

**LOCKING DEVICE:** Adjustable case locknut and angle adjusting screw work independently to provide full 360° positioning of thermometer case and stem.

**TUBE & CAPILLARY:** Blue Spirit filled magnifying lens tube. Precision made to guarantee accuracy within 1% of scale range. Silicone shock mounting for lasting durability.

**SCALE:** 9" scale with white coated aluminum and permanently baked bold black markings.

### HOW TO ORDER

1. Part #
  2. Range Code
  3. Accessories
- \*Items normally in stock

**9VS35**

**016**

**SOC35B**

Stem:	Temperature Range/Divisions:	Thermowell:		
		"A" Stem Length	"U" Insertion Length	"T" Extension Length
<b>9VS35</b> = 3 1/2" <b>9VS06</b> = 6" <b>9VS09</b> = 9"	<b>411</b> = -40°F to 110°F; 2° <b>118</b> = -10°F to 180°F; 2° <b>212</b> = -20°F to 120°F; 2° <b>012</b> = 0°F to 120°F; 1° <b>016</b> = 0°F to 160°F; 2° <b>318</b> = 30°F to 180°F; 2° <b>324</b> = 30°F to 240°F; 2° <b>330</b> = 30°F to 300°F; 2°	<b>Brass:</b>		
		Standard: <b>SOC35B</b> 3 1/2"      2 1/2"      -- <b>SOC06B</b> 6"      5"      -- <b>SOC09B</b> 9"      8"      --		
		Extension Neck: <b>SEN06B</b> 6"      2 1/2"      2 1/2" <b>SEN09B</b> 9"      5 1/2"      2 1/2"		
		<b>304SS:</b>		
		Standard: <b>SOC35S</b> 3 1/2"      2 1/2"      -- <b>SOC06S</b> 6"      5"      -- <b>SOC09S</b> 9"      8"      --		
		Extension Neck: <b>SEN06S</b> 6"      2 1/2"      2 1/2" <b>SEN09S</b> 9"      5 1/2"      2 1/2"		

### Separable Sockets (Thermowells)



\*dimensions in inches



## Calibration

REOTEMP uses a combination of fixed point calibration cells and fluid-filled calibration equipment to perform calibrations from -196°C to 1,100°F. We provide calibrations for metrology and industrial customers in most industrial markets. Our friendly and knowledgeable calibration technicians will ensure your sensors have the accuracy required for your application.



Note: See Product Specific Pages for Pricing and Part #.

## Certification

**Certification of Conformance** (General conformance to published specs)

**Certification of Calibration** (Includes logged points and sticker)

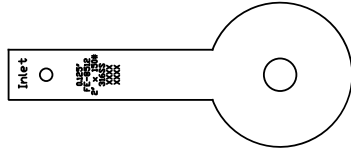
**3A Sanitary Certificates**

**Compliance and material certs** for all wetted components

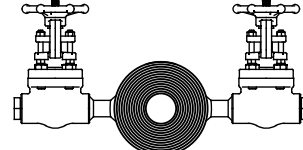
Note: See Product Specific Pages for Pricing and Part #.



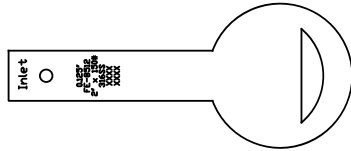
Orifice Plate Quick Selection Sheet



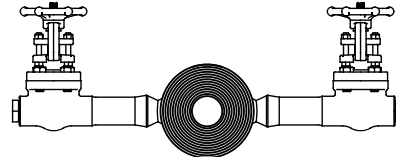
Model DP1  
Paddle Type Orifice Plate  
Page 1



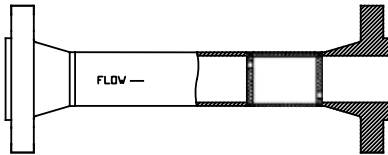
Model BR3  
Bleed Ring with 2 Valves  
Page 7



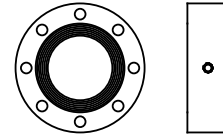
Model DP2  
Segmental Orifice Plate  
Page 2



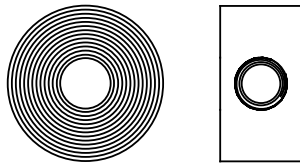
Model BR3X  
Bleed Ring with 2 Extended Body Valves  
Page 8



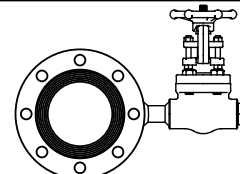
Model DP3  
Flow Restriction Tube  
Page 3



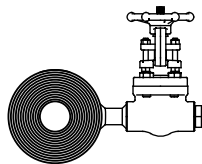
Model FR1  
Flush Ring  
Page 9



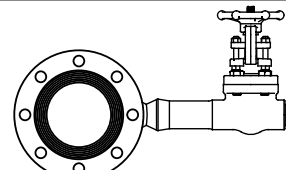
Model BR1  
Bleed Ring  
Page 4



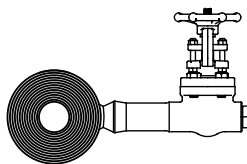
Model FR2  
Flush Ring with 1 Valve  
Page 10



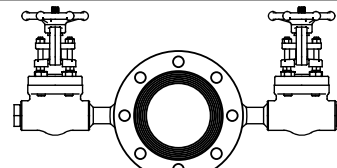
Model BR2  
Bleed Ring with 1 Valve  
Page 5



Model FR2X  
Flush Ring with 1 Extended Body Valve  
Page 11

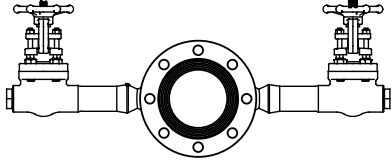


Model BR2X  
Bleed Ring with 1 Extended Body Valve  
Page 6



Model FR3  
Flush Ring with 2 Valves  
Page 12

Orifice Plate Quick Selection Sheet



Model FR3X  
Flush Ring with 2 Extended Body Valves  
Page 13

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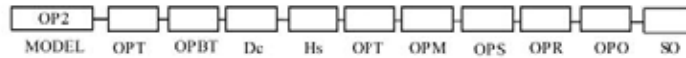
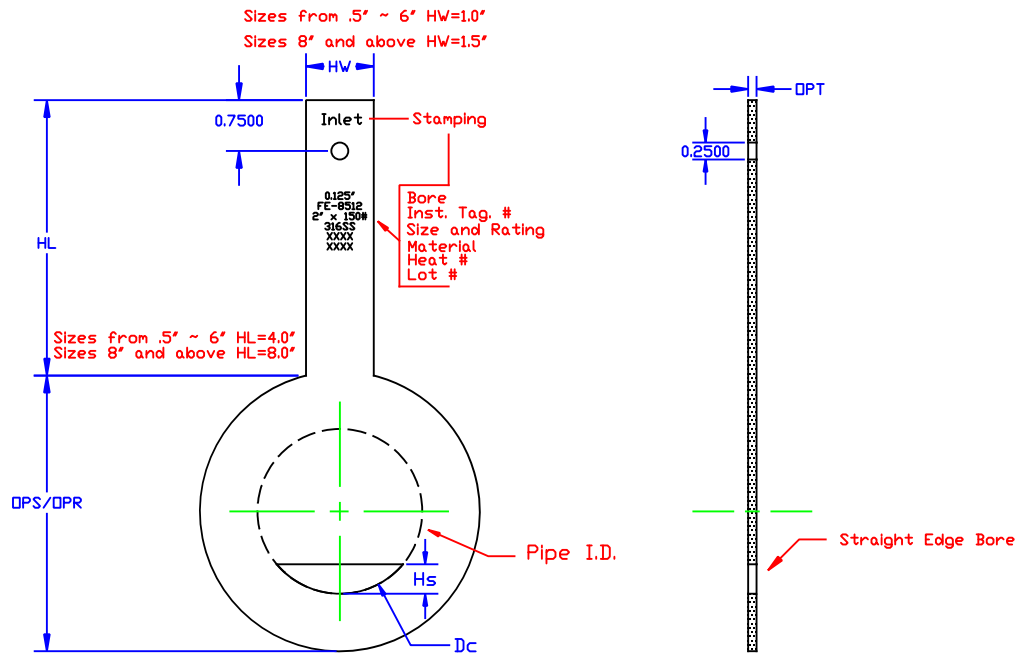
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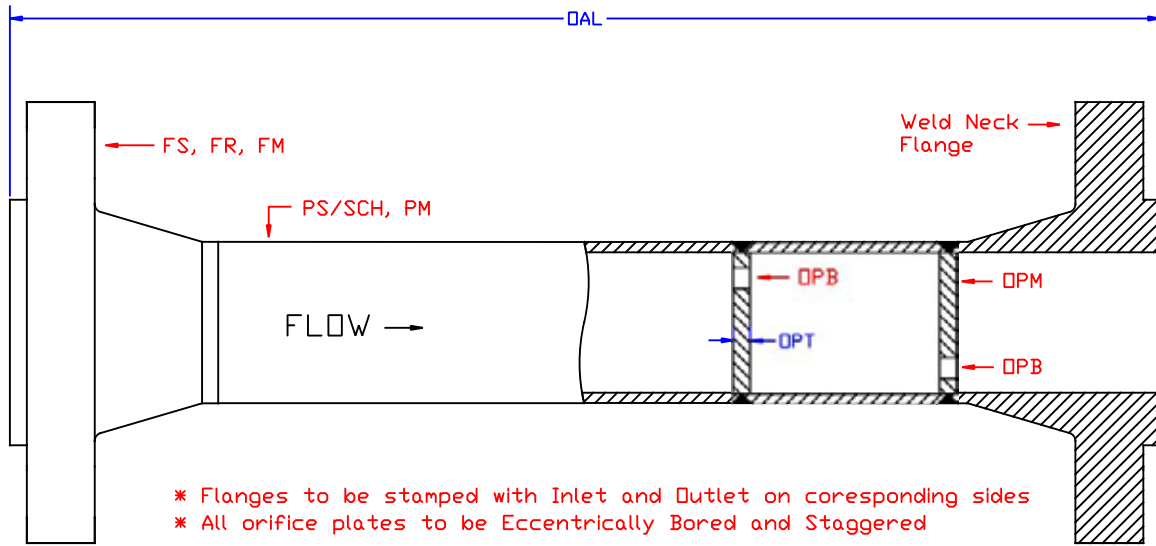


Model "OP2" Segmental Orifice Plate



<b>OP2</b>	<b>OPT</b>	<b>OPBT</b>	<b>Dc</b>	<b>Hs</b>	<b>OPT</b>	<b>OPM</b>	<b>OPS</b>
Orifice Plate Type	Orifice Plate Bore Type	Segment Diameter	Segment Height	Orifice Thickness	Orifice Plate Material	Orifice Plate Size	
Restrictive Code R	Concentric Straight Edge Code CS	Code Decimal Inches	Code Decimal Inches	Code	Code	Code Decimal Inches	
				1/16" 1	304SS A	0.5"	
				1/8" 2	304LSS AL	0.75"	
				3/16" 3	304H AH	1"	
				1/4" 4	310SS B	1.5"	
				5/16" 5	310LSS BL	2"	
				3/8" 6	316SS C	3"	
				1/2" 8	316LSS CL	4"	
				5/8" 10	316HSS CH	6"	
				3/4" 12	I-600 D	8"	
					I-601 E	10"	
					Hast.B F	12"	
					Hast.C H	16"	
						24"	
<b>OPR</b>	<b>OPO</b>	<b>SO</b>					
Orifice Plate Rating	Orifice Plate Options	Special Options					
Code 150 300 600 900 1500 2500	No Options Code X Vent V	None Code X					

Model "OP3" Flow Restriction Tube



- \* Flanges to be stamped with Inlet and Outlet on corresponding sides
- \* All orifice plates to be Eccentrically Bored and Staggered
- \* Maximum of nine (9) orifice plates
- \* All welds liquid dye penetrant tested
- \* Flow direction painted on OD of assembly

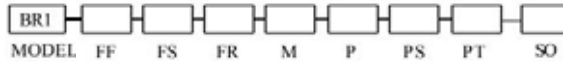
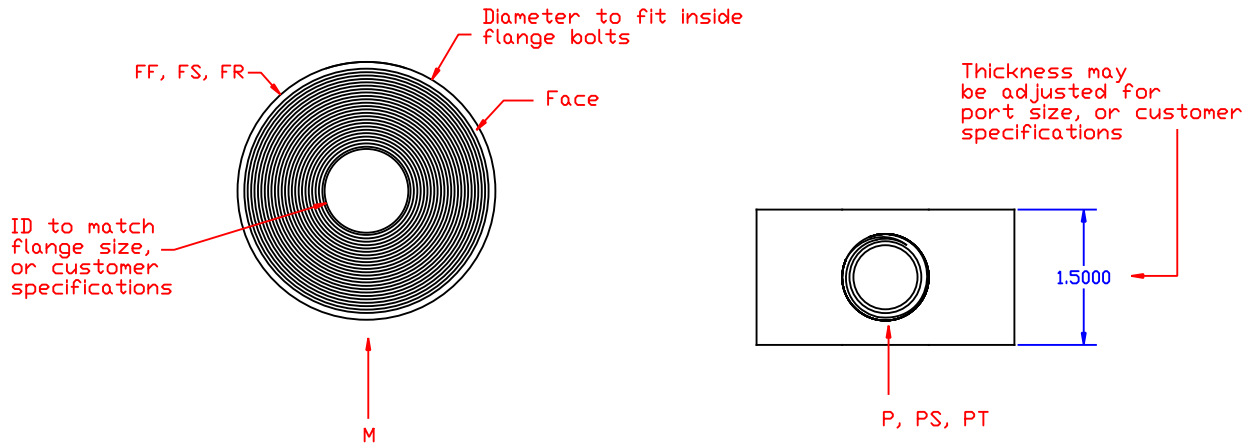


OP3	OP	OPB	OPT	OPM	FM	FS	FR
	Number of Orifice Plates	Orifice Plate Bores	Orifice Thickness	Orifice Plate Material	Flange Material	Flange Size	Flange Rating
	Code Decimal Inches	Example of Qty. 2 Orifice Plates: 0.125/0.250  *For more than Qty. 2 plates fill out the below table, and enter "*" in P/N.	Code 1/16" 1 1/8" 2 3/16" 3 1/4" 4 5/16" 5 3/8" 6 1/2" 8 5/8" 10 3/4" 12	Code 304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	Code 304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	Code Decimal Inches 0.5" 0.5" 0.75" 0.75" 1" 1" 1.5" 1.5" 2" 2" 3" 3" 4" 4" 6" 6" 8" 8" 10" 10" 12" 12" 16" 16" 24" 24"	Code 150 300 600 900 1500 2500

OAL	PSSCH	PM	SO	Plate #	Bore Dia.
Restriction Tube Overall Length	Pipe Size / Pipe Sch.	Pipe Material	Special Options		
Code Decimal Inches	Code Decimal Inches Sch	Code 304SS A 304LSS AL 304H AH 310SS B 310LSS BL 316SS C 316LSS CL 316HSS CH I-600 D I-601 E Hast.B F Hast.C H	None Code X	1	
				2	
				3	
				4	
				5	
				6	
				7	
				8	
				9	

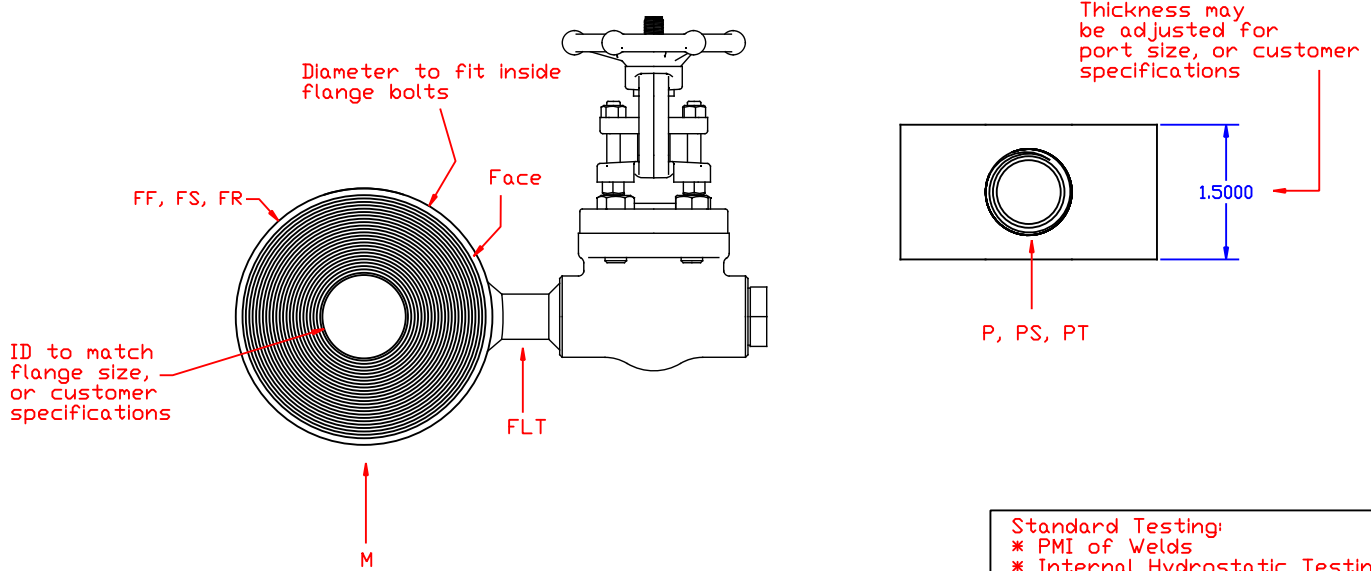


Model "BR1" Basic Bleed Ring



BR1	FF	FS	FR	M	P	PS																																																																																												
	<b>Flange Type</b>	<b>Flange Size</b>	<b>Flange Rating</b>	<b>Material</b>	<b>Number of Ports (Ports evenly spaced on the Bleed Ring)</b>	<b>Port Size</b>																																																																																												
	<table border="1"> <tr><td>Raised Face</td><td>A</td></tr> <tr><td>Flat Face</td><td>B</td></tr> <tr><td>Ring Joint</td><td>C</td></tr> </table>	Raised Face	A	Flat Face	B	Ring Joint	C	<table border="1"> <tr><th>Code</th><th>Size</th></tr> <tr><td>A</td><td>1"</td></tr> <tr><td>B</td><td>1.5"</td></tr> <tr><td>C</td><td>2"</td></tr> <tr><td>D</td><td>3"</td></tr> <tr><td>E</td><td>4"</td></tr> <tr><td>F</td><td>6"</td></tr> </table>	Code	Size	A	1"	B	1.5"	C	2"	D	3"	E	4"	F	6"	<table border="1"> <tr><th>Code</th><th>Rating</th></tr> <tr><td>A</td><td>150</td></tr> <tr><td>B</td><td>300</td></tr> <tr><td>C</td><td>600</td></tr> <tr><td>D</td><td>900</td></tr> <tr><td>E</td><td>1500</td></tr> <tr><td>F</td><td>2500</td></tr> </table>	Code	Rating	A	150	B	300	C	600	D	900	E	1500	F	2500	<table border="1"> <tr><th>Code</th><th>Material</th></tr> <tr><td>A</td><td>304SS</td></tr> <tr><td>AL</td><td>304LSS</td></tr> <tr><td>AH</td><td>304H</td></tr> <tr><td>B</td><td>310SS</td></tr> <tr><td>BL</td><td>310LSS</td></tr> <tr><td>C</td><td>316SS</td></tr> <tr><td>CL</td><td>316LSS</td></tr> <tr><td>CH</td><td>316HSS</td></tr> <tr><td>D</td><td>I-600</td></tr> <tr><td>E</td><td>I-601</td></tr> <tr><td>F</td><td>Hast.B</td></tr> <tr><td>H</td><td>Hast.C</td></tr> </table>	Code	Material	A	304SS	AL	304LSS	AH	304H	B	310SS	BL	310LSS	C	316SS	CL	316LSS	CH	316HSS	D	I-600	E	I-601	F	Hast.B	H	Hast.C	<table border="1"> <tr><th>Code</th><th>Number</th></tr> <tr><td>1</td><td>2</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>3</td><td>5</td></tr> <tr><td>4</td><td>6</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>10</td></tr> <tr><td>7</td><td>12</td></tr> </table>	Code	Number	1	2	2	4	3	5	4	6	5	8	6	10	7	12	<table border="1"> <tr><th>Code</th><th>Size</th></tr> <tr><td>2</td><td>1/8"</td></tr> <tr><td>4</td><td>1/4"</td></tr> <tr><td>5</td><td>5/16"</td></tr> <tr><td>6</td><td>3/8"</td></tr> <tr><td>8</td><td>1/2"</td></tr> <tr><td>10</td><td>5/8"</td></tr> <tr><td>12</td><td>3/4"</td></tr> </table>	Code	Size	2	1/8"	4	1/4"	5	5/16"	6	3/8"	8	1/2"	10	5/8"	12	3/4"
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Model "BR2" Bleed Ring with 1 Valve

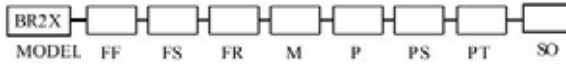
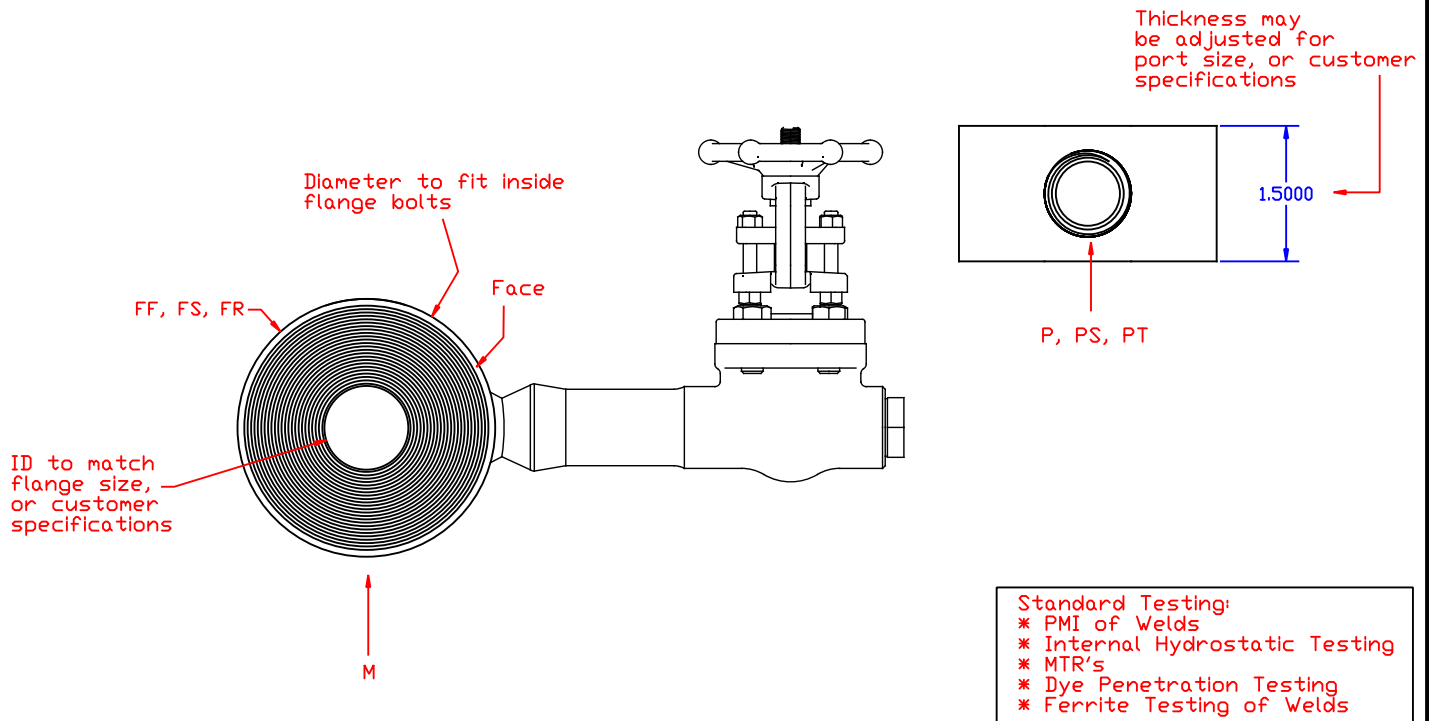


- Standard Testing:
- \* PMI of Welds
  - \* Internal Hydrostatic Testing
  - \* MTR's
  - \* Dye Penetration Testing
  - \* Ferrite Testing of Welds



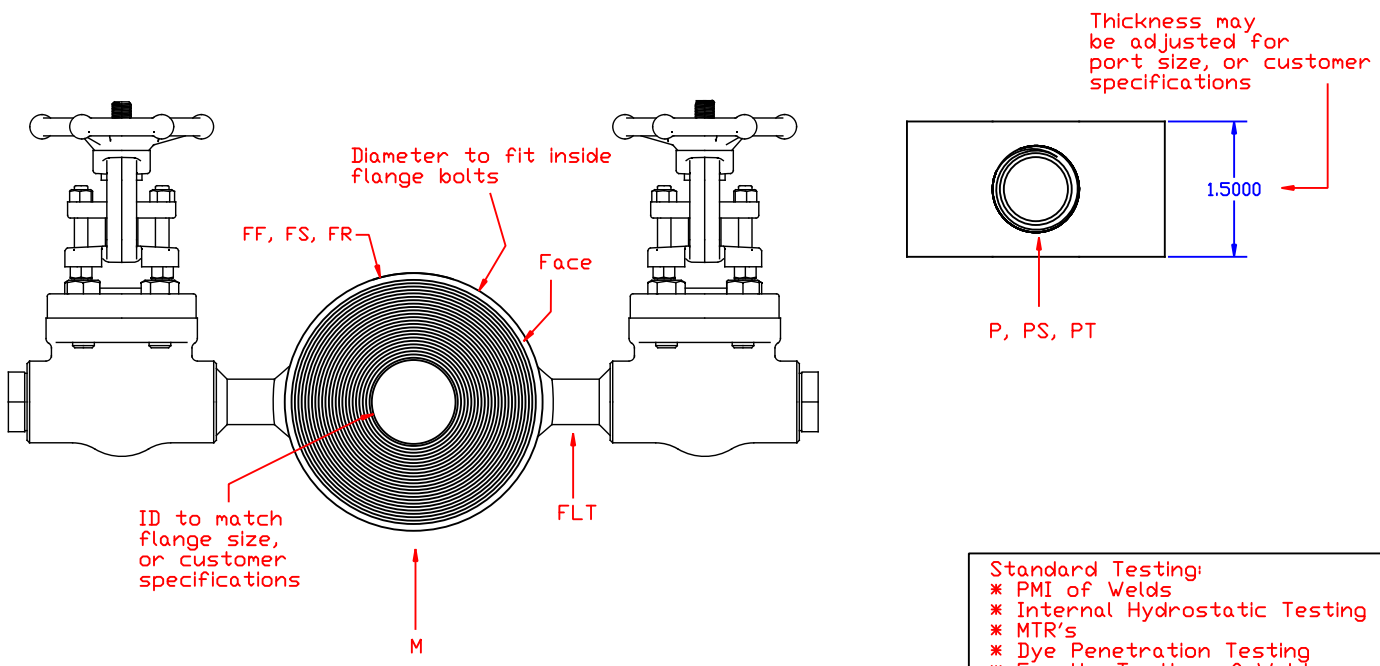
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Model "BR2X" Bleed Ring with 1 Extended Body Valve

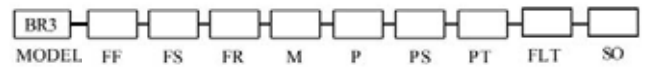


BR2X	FF	FS	FR	M	P	PS																																																																													
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Model "BR3" Bleed Ring with 2 Valves



- Standard Testing:
- \* PMI of Welds
  - \* Internal Hydrostatic Testing
  - \* MTR's
  - \* Dye Penetration Testing
  - \* Ferrite Testing of Welds



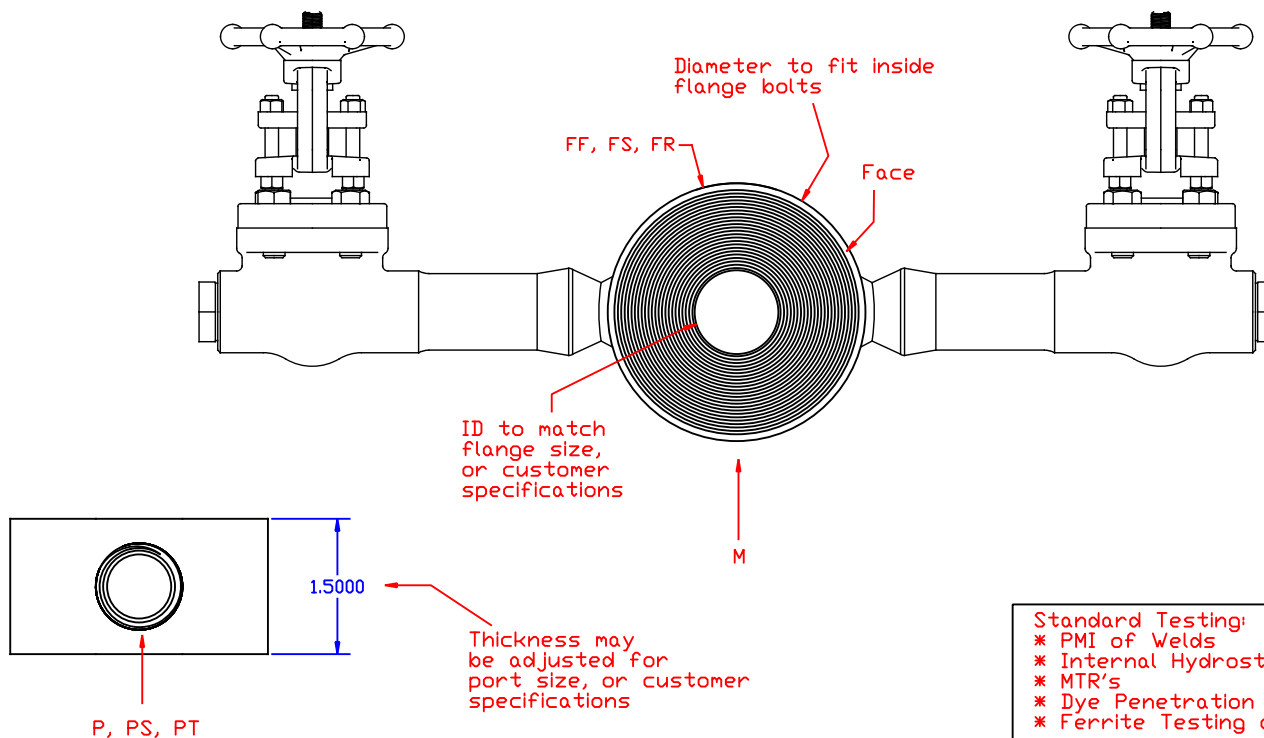
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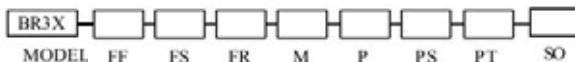
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	(Example)
	S -- Smith Valve
	1500 -- 1500# Valve Rating
	J -- 316L Stainless Steel
	S -- 316 Stainless Steel Trim
	O -- Braided Graphite Packing
	G -- 316 + Graphite
	U -- Female SWx Female NPT Valve Connection
	075 -- 3/4" Valve Pipe Size

Model "BR3X" Bleed Ring with 2 Extended Body Valves



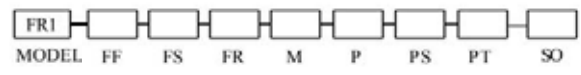
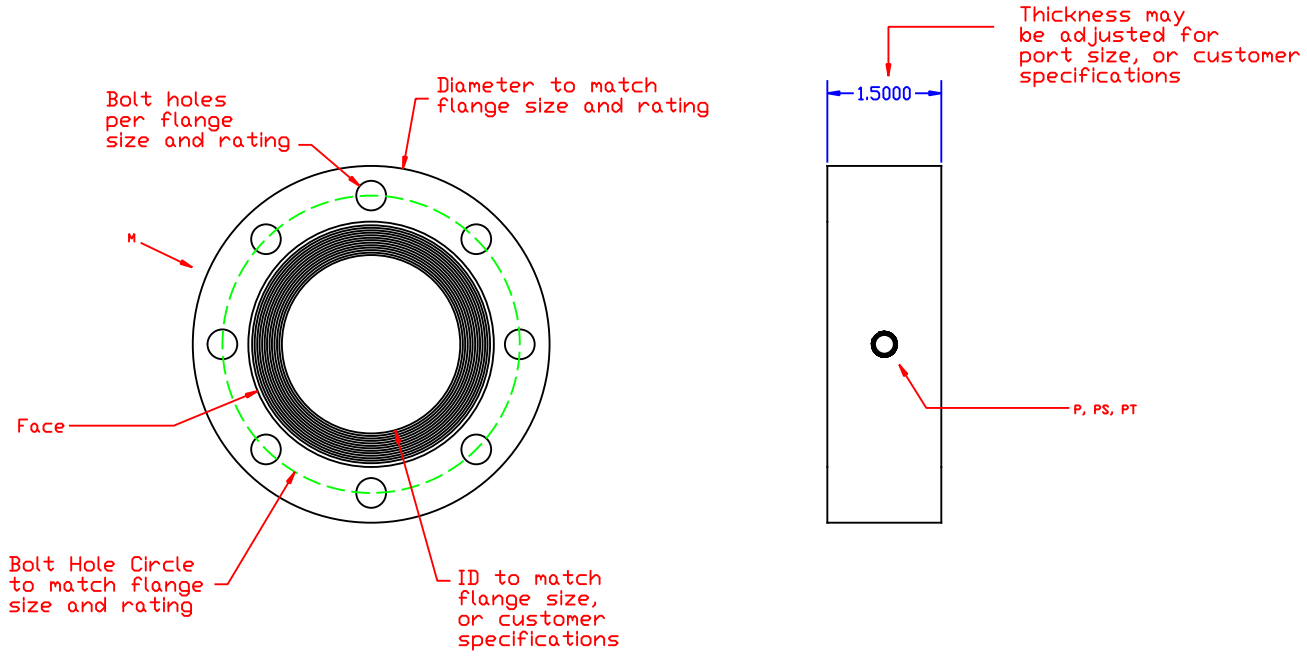
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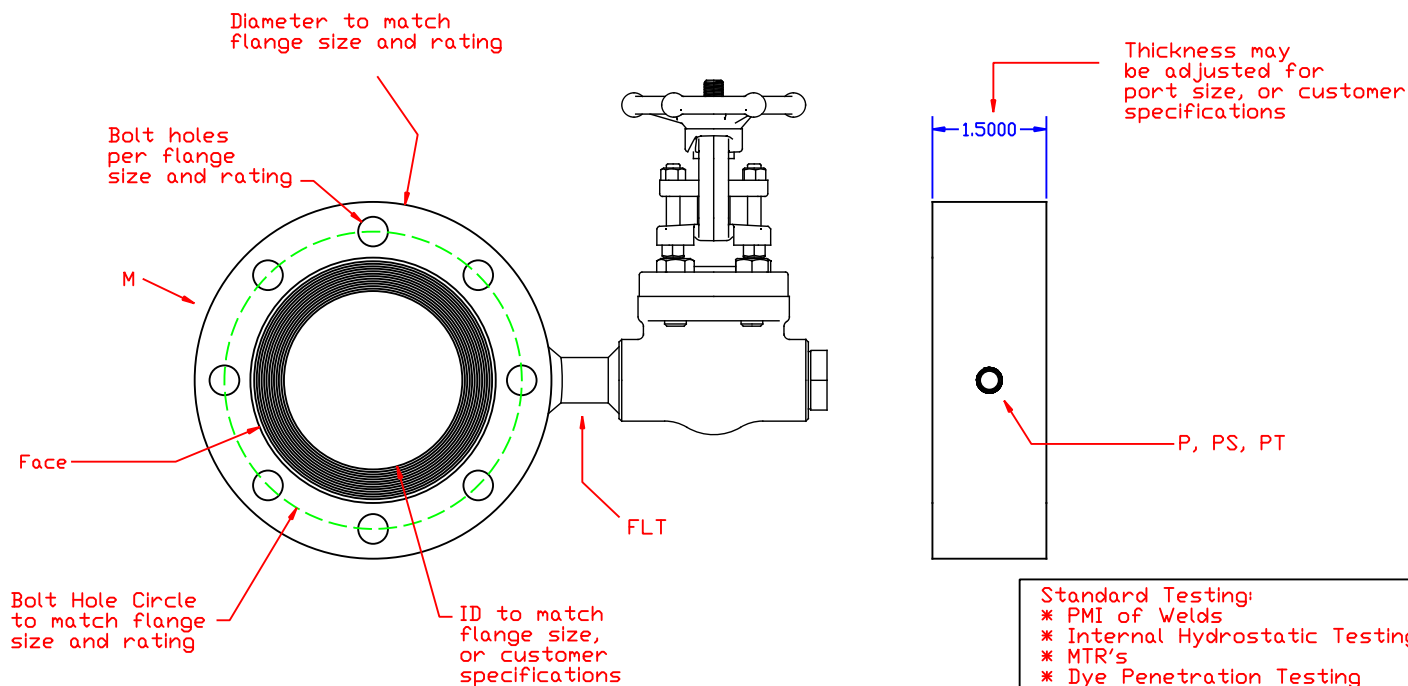


Model "FR1" Basic Flush Ring

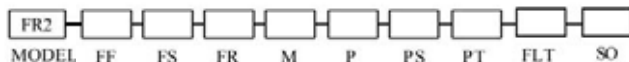


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Model "FR2" Flush Ring with 1 Valve

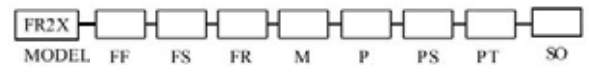
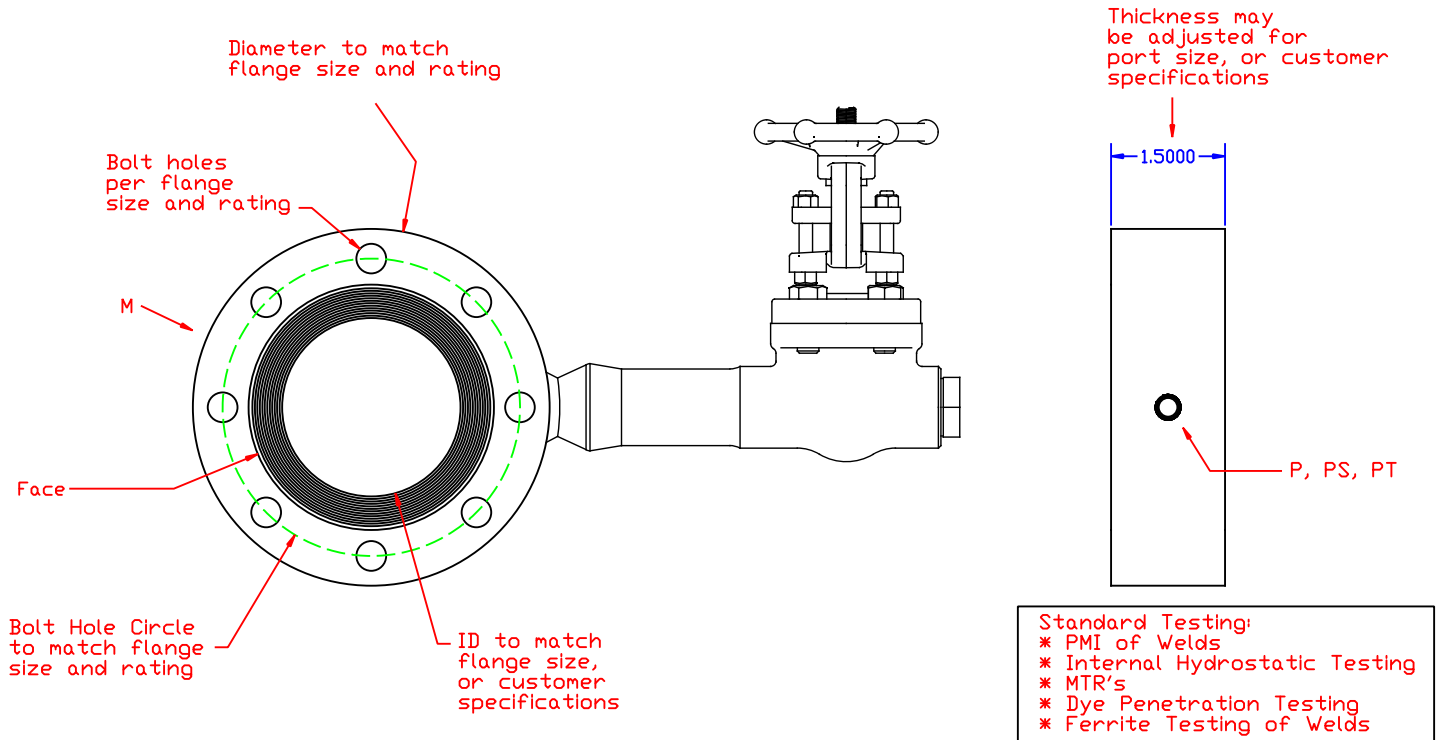


- Standard Testing:
- \* PMI of Welds
  - \* Internal Hydrostatic Testing
  - \* MTR's
  - \* Dye Penetration Testing
  - \* Ferrite Testing of Welds



FR2	FF	FS	FR	M	P	PS																																										
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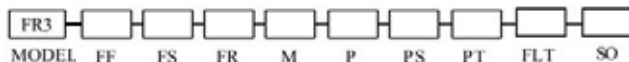
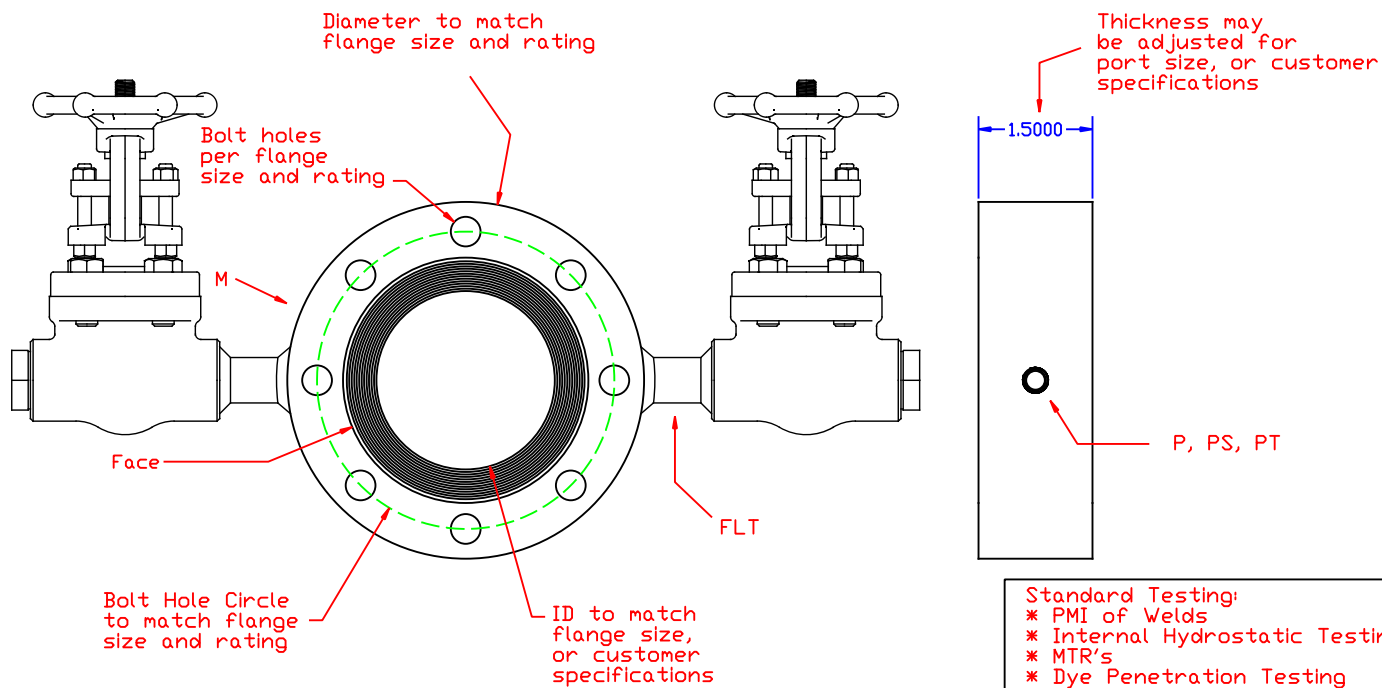
Model "FR2X" Flush Ring with 1 Extended Body Valve



<b>FR2X</b>	<b>FF</b>	<b>FS</b>	<b>FR</b>	<b>M</b>	<b>P</b>	<b>PS</b>																																																																																						
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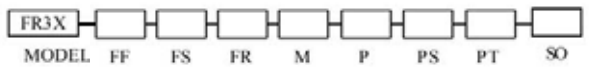
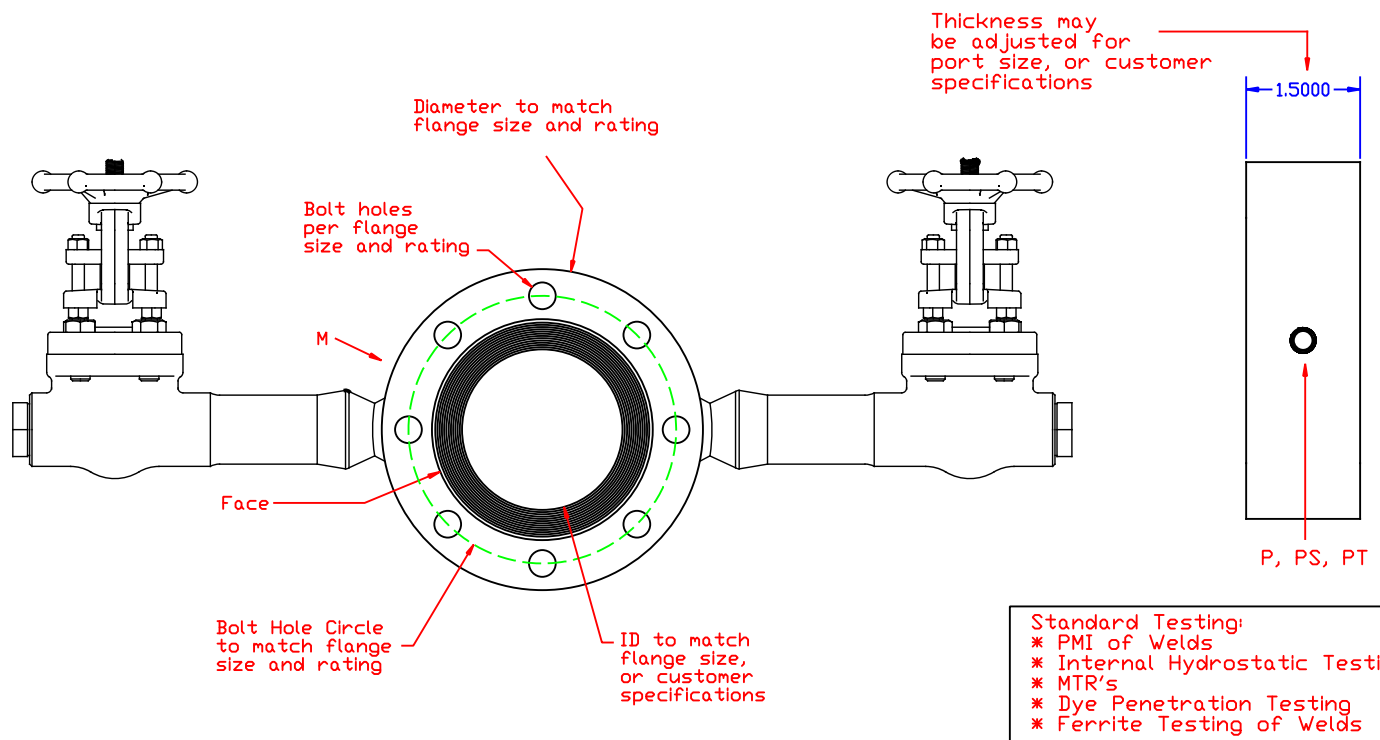
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Model "FR3" Flush Ring with 2 Valves



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Model "FR3X" Flush Ring with 2 Extended Body Valves



FR3X	FF	FS	FR	M	P	PS						
	Flange Type		Flange Size		Flange Rating		Material		Number of Ports (Ports evenly spaced on the Bleed Ring)		Port Size	
	Raised Face Flat Face Ring Joint	Code A B C	1" 1.5" 2" 3" 4" 6"	Code A B C D E F	150 300 600 900 1500 2500	Code A B C D E F	304SS 304LSS 304H 310SS 310LSS 316SS 316LSS 316HSS I-600 I-601 Hast.B Hast.C	Code A AL AH B BL C CL CH D E F H	Code Number * Std. = 1 Port	Size 1/8" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	Code 2 4 5 6 8 10 12	

PT	SO
Instrument Connection	Valve P/N Breakdown & Special Options
Type	(Example)
FNPT MNPT FNPS MNPS Socket Weld Butt Weld	Code A B C D SW BW
	S -- Smith Valve 1500 -- 1500# Valve Rating J -- 316L Stainless Steel S -- 316 Stainless Steel Trim O -- Braided Graphite Packing G -- 316 + Graphite U -- Female SW x Female NPT Valve Connection 075 -- 3/4" Valve Pipe Size



Example of Orifice Plate Calculations available by request *\*Red indicates customer supplied information.*

SERVICE DATA			
Tag:	Customer Supplied	Client:	
Serv:	Wet Gaseous Chlorine	Project:	Customer Supplied
Line No.:	Customer Supplied	J.O / P.O. No.:	Customer Supplied

CALCULATION METHOD AND BASE CONDITIONS			
Sizing Parameter:	Flowmeter Bore	C-Std:	ASME MFC-3M (1989) / ISO 5167 (1991)
Atm Press, Patm:	14.696 psia	Tap Loc:	UPSTREAM
Base Press, Pb:	1.000000	Base Temp, Tb:	0.00 deg C

METER / PIPE DATA			
Meter Type:	Orifice Plate	Meter Matl:	TEFLON
Meter Style:	CONCENTRIC	Tap Style:	FLANGE TAPS
Nom Pipe Size:	8.00 in	Pipe Matl:	Carbon Steel
Pipe I.D., D (ref)	7.741 in	Pipe Sched.:	Non-Std

SIZING DATA	
Maximum Flow, Qm:	1000.00 Nm <sup>3</sup> /h
Normal Flow, Qn:	1000.00 Nm <sup>3</sup> /h
Maximum Differential, dPm (ref dP – H <sub>2</sub> O @ 20.0 deg C):	15.0000 mbar-d

FLUID DATA	
Fluid:	Wet Chlorine
State-Units-Equation-Condition:	Gas-Volume-PVT-BASE
Specific Gravity, Gg:	2.3696
Compressibility (Base), Zb:	0.98880
Compressibility (Flowing), Zfl:	0.9906
Pressure (Flowing), Pfl:	0.1000 bar-ga
Temperature (Flowing), Tfl:	45.0 deg C
Viscosity, U:	0.01509 cPoise
Specific Heat Ratio (Cp/Cv), k:	1.3236

CALCULATED RESULTS	
Sizing Factor, Sm:	0.298771
Pipe Reynolds Number @ Maximum Flow, RD:	364191
Pipe Reynolds Number @ Normal Flow, RD:	364191
Discharge Coefficient, C:	0.605860
Expansion Factor, Y1:	0.995124
Bore Expansion Factor, FaD:	1.000243
Pipe Expansion Factor, FaD:	1.000278
Permanent dP Loss:	55.31%
Throat Velocity @ Max Flow:	70.85 ft/s
Beta, B (20.0 deg C):	0.66637
Orifice Bore, d (20.0 deg C):	5.1584 in
Normal Differential, dPn (ref dp – h <sub>2</sub> O @ 20.0 deg. C):	15.0000 mbar-d
Orifice Uncertainty, Uo:	0.61%

## Information Request Form

Please send to [bbpsensors@bbpsales.com](mailto:bbpsensors@bbpsales.com).

Tag #:

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Restriction [    ] or Measuring plate [    ]

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PO #:

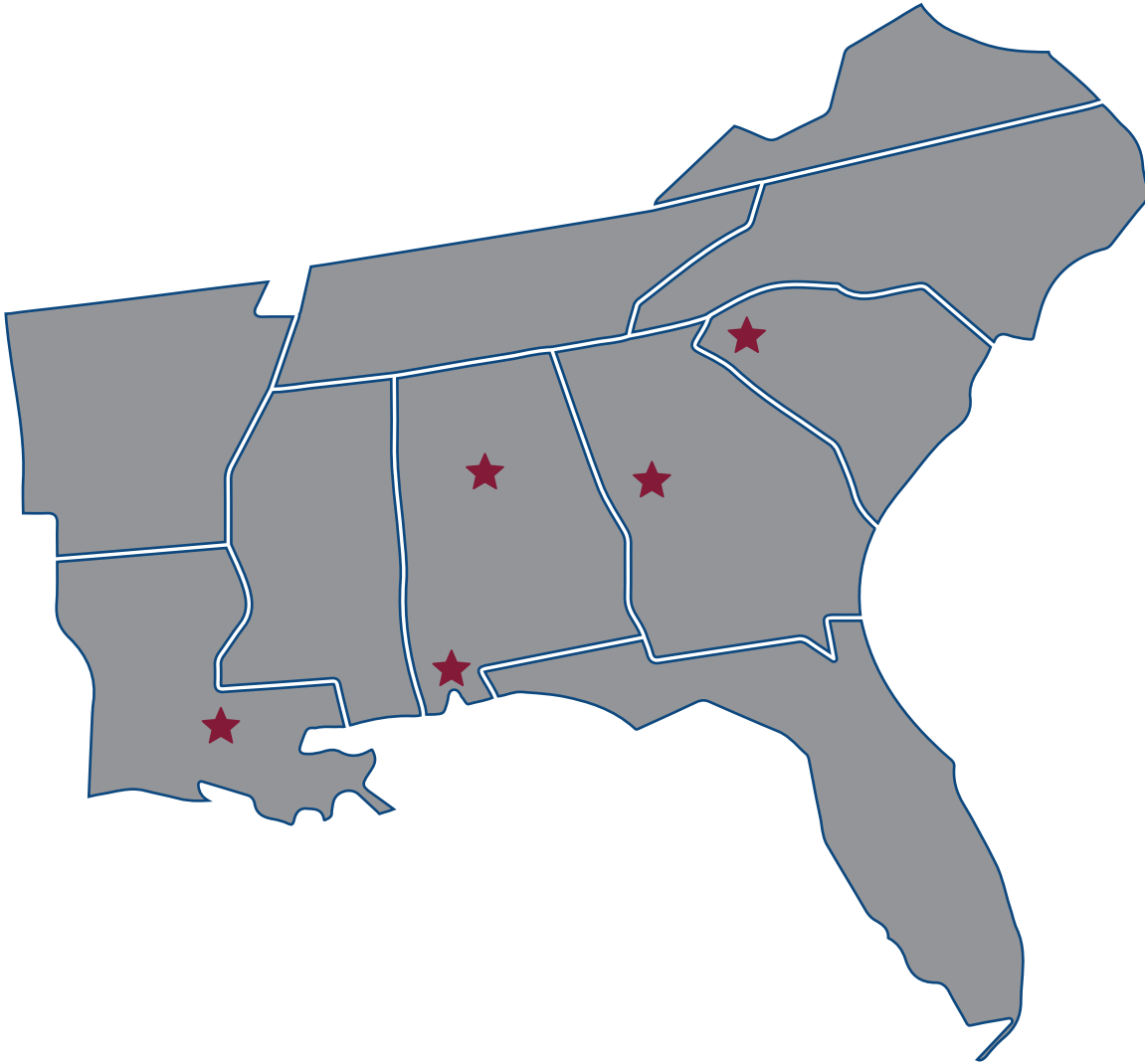
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Company Name #:

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Please ensure units are provided for all data.	
Process Pipe Size and Schedule:	
Process Pipe Material:	
Orifice Plate Material:	
Taps Location:	
Media Type:	
Operating Temperature:	
Operating Inlet Pressure:	
Full scale flow / Normal for restriction:	
Density:	
Viscosity:	
DP Range / Permanent Pressure Drop:	
If Gas; Isentropic Exponent:	

Additional Information:



**BBP - Baton Rouge**  
337 Highlandia Drive  
Baton Rouge, LA 70810  
(225) 751-4142

**BBP - Birmingham**  
1994 McCain Parkway  
Pelham, AL 35124  
(205) 969-1750

**BBP - Mobile**  
6215 Rangeline Road  
Theodore, AL 36582  
(251) 432-4192

**BBP - Atlanta**  
43 Hillwood Circle  
Newnan, GA 30265  
(770) 253-8454

**BBP - East**  
9 Anderson Street  
Greenville, SC 30265  
(704) 209-4449

