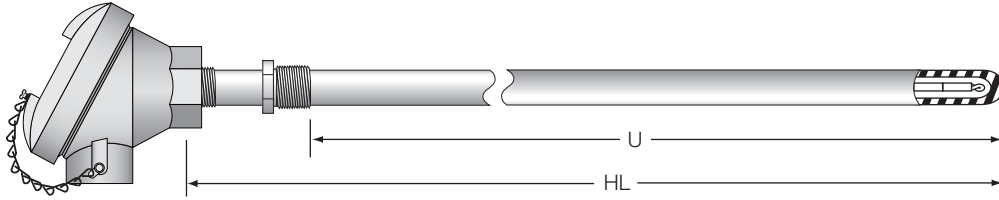


# Straight Metal or Ceramic T/C



Base metal industrial thermocouple assemblies are designed to be used in the most severe and demanding environments. The choice of a specific style is to a large degree determined by the temperature

working range, ambient atmospheric or media conditions, as well as the size and shape required for the application. Control requirements such as accuracy and speed of response may also be considerations.

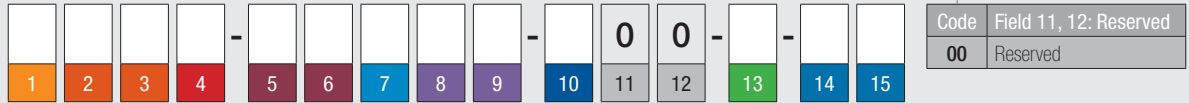


Field 1	Code	Type	Wire Material
Field 1	J	Type J	Iron-Constantan
	K	Type K	Chromel-Alumel
	E	Type E	Chromel-Constantan
	T	Type T	Copper-Constantan

Field 2, 3	Gauge	Code	Limits
Field 2, 3	8*	08	Standard
		09	Special
	14	14	Standard
		15	Special
20	20	Standard	
	21	Special	

\*8 Gauge not available with Type T

Field 4	Elements	Code	Junction Style	Ground
Field 4	Single	I	Twisted	Grounded
		2		Ungrounded
		3	Butt Welded	Grounded
		4		Ungrounded
Dual	H	Twisted	Grounded	
	5	Common, Butt Welded	Ungrounded	
	6	Isolated, Butt Welded	Ungrounded	



Field 5, 6	Code	Size	Protection Tube Material
Field 5, 6	02	1/4" NPT	Low carbon black steel
	03	1/2" NPT	
	04	3/4" NPT	
	05	1" XH NPT	
	06	1/8" NPT	SAE 1020 steel
	07	1/4" NPT	
	08	1" XH NPT	SAE 1020 steel, extra heavy wall, schedule 80 pipe
	11	3/4" NPT	446 stainless steel
	12	1/2" NPT	
	13	1" NPT	
	14	1/2" NPT	
	16	1/2" NPT	Nickel
	17	3/4" NPT	Inconel 601
	18	1/4" NPT	304 stainless steel
	19	1/2" NPT	
	26	1/2" NPT	Incoloy 800
	27	3/4" NPT	
	44	1/2" NPT	316 stainless steel
	47	3/4" NPT	
Ceramic	21	1-3/4" OD	Silicon carbide (Note 3)
	22	1-3/4" OD	Silicon carbide with collar (Note 3)
	23	3/8" OD	High temperature Mullite
	24	11/16" OD	
	25	1" OD	Metal ceramic (Note 3)
	28	7/8" OD	
	29	3/8" OD	
	30	11/16" OD	Aluminum oxide
31	1" OD		
34	7 mm OD		
Other	09	1-5/8" OD	
	41	1-1/4" OD	Steel, ceramic coated (Notes 1, 3)
	42	1-1/4" OD	Steel, ceramic coated, with spring (Notes 2, 3)

Fields 10	Code	Hot End
Fields 10	0	Closed End
	8	Open End, metal pipe protection tube
	9	Open End, ceramic protection tube

Fields 8, 9	Code	Hot Length "HL"
Fields 8, 9	HL	Enter Hot Length in inches using two digits NOTE: If over 98", specify 99 = "length" on order

Field 7	Code	Cold End Termination	Code with Transmitter
Field 7	1	Cast Iron. Obsolete, replace with Code 2	
	3	Aluminum. Obsolete, replace with Code A	
	2	Weatherproof, cast iron head (NEMA 4X)	S*
	A	Weatherproof, aluminum head (NEMA 4X)	T*
	4	Weatherproof, 316 SS (NEMA 4X)	U*
	5	Explosion proof, aluminum head (NEMA 4X)	V*
	6	Explosion proof, blue epoxy, aluminum head (ATEX)	W*
	7	Explosion proof, 316 SS head (NEMA 4X)	X*
	8	Explosion proof, 316 SS head (ATEX)	Y*

\*Must specify the range of the sensor on the order. (i.e., 0°F - 800°F)



Note	Description
1	Immersion depth is 2" less than hot length. Replacement element is A-11711.
2	Immersion depth is 2" less than hot length. Minimum length is 18". Replacement element is A-11888.
3	Available with only in increments of 6".

Field(s) 14, 15	Code	Fitting Location ("U" Dimension)
Field(s) 14, 15	UU	Specify UU in whole inch increments, using two digits. NOTE: If over 98", specify 99 = "length" on order

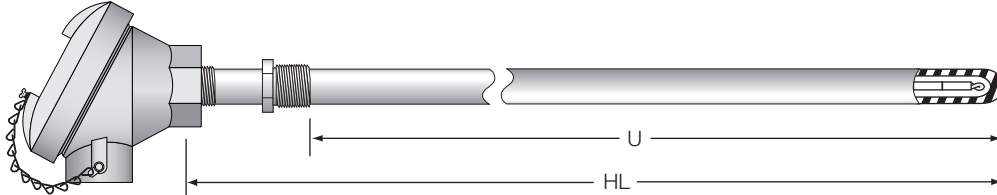
Field 13	Code	Size	Process Mounting Fitting	
Field 13	0		None	
	2		Adjustable Flange	
	Fittings for Metal Pipe Protection Tubes	8	One size larger than pipe	Black Steel Welded Bushing
		A	1/2" NPT	
		B	3/4" NPT	
		C	1" NPT	
		M	1-1/4" NPT	Stainless Steel Welded Bushing
		D	1-1/2" NPT	
		E	1/2" NPT	
		F	3/4" NPT	
	Fittings for Ceramic Protection Tubes	G	1" NPT	Black Steel Sleeve
		N	1-1/4" NPT	
		H	1-1/2" NPT	Black Steel Sleeve and Flange
		1	4"	
		4	4"	Black Steel Sleeve
		R	Specify length on order	
		V	Specify length on order	Stainless Steel Sleeve and Flange
		3	4"	
		5	4"	Stainless Steel Sleeve
T		Specify length on order		
W		Specify length on order	Stainless Steel Sleeve and Flange	
7	1/2" NPT	Double-ended Bushing		
P	1/2" x 3/4"	Double-ended Bushing		

# Straight Metal or Ceramic T/C



## Common Model Numbers

(The numbers below are just some of the more common numbers for this product. There are too many combinations to list them all.)



- |                     |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|
| J08I-03224-800-C-22 | K086-16A42-000-0-00 | K08I-23A26-000-7-24 | K144-12220-000-8-00 | K14I-16324-000-C-19 |
| J08I-03230-800-G-28 | K08H-05236-000-0-00 | K08I-23A36-000-7-34 | K144-16220-000-8-00 | K14I-16A24-000-C-17 |
| J08I-44230-000-G-28 | K08H-17212-000-2-00 | K08I-24212-000-1-00 | K144-16224-000-F-22 | K14I-16A30-000-C-25 |
|                     | K08H-17230-000-G-28 | K08I-24218-000-5-00 | K145-16A19-000-B-00 | K14I-16A42-000-C-35 |
| J14H-44230-000-G-28 |                     | K08I-24A08-000-7-00 | K146-16A30-000-0-00 | K14I-17242-000-G-36 |
| J14I-16312-800-0-00 | K08I-12230-000-8-24 | K08I-24A10-000-7-00 | K146-16A40-000-0-00 | K14I-17B18-000-G-15 |
| J14I-18A18-000-B-12 | K08I-16212-000-8-00 | K08I-24A12-000-7-00 | K146-44236-000-N-27 | K14I-18A25-000-E-21 |
| J14I-18A21-000-B-18 | K08I-16212-000-8-10 | K08I-24A18-000-7-00 |                     | K14I-24A21-000-7-00 |
| J14I-18A30-000-B-23 | K08I-16218-000-0-00 | K08I-24A24-000-R-00 | K14H-16222-000-8-20 | K14I-24A23-000-7-00 |
| J14I-18A42-000-B-36 | K08I-16224-000-0-00 | K08I-24A26-000-7-24 | K14H-16242-000-8-40 | K14I-24A24-000-0-00 |
| J14I-18A44-000-B-38 | K08I-16224-000-8-18 | K08I-25218-000-5-00 | K14H-16A14-000-F-12 | K14I-29A30-000-7-00 |
| J14I-18A87-000-8-85 | K08I-16230-000-0-00 | K08I-25A24-000-T-06 | K14H-16A18-000-0-00 | K14I-18A12-000-8-00 |
| J14I-18A87-000-B-85 | K08I-16230-000-8-24 | K08I-28224-000-7-00 | K14H-19236-000-2-00 |                     |
| J14I-18A99-000-B-97 | K08I-16230-000-F-28 | K08I-29A30-000-7-00 | K14H-25A14-000-0-00 | K202-25A14-000-7-00 |
| J14I-19A12-000-0-00 | K08I-16254-000-8-48 | K08I-30230-000-7-00 | K14H-30A18-000-4-00 | K202-25A26-000-7-00 |
| J14I-19A18-000-0-00 | K08I-16A12-000-F-09 | K08I-30A10-000-4-00 | K14H-47224-000-G-22 | K20I-30A12-000-P-00 |
| J14I-19A18-000-2-00 | K08I-17224-000-G-22 | K08I-30A11-000-P-00 |                     |                     |
| J14I-44A12-000-2-00 | K08I-17230-000-G-28 | K08I-30A15-000-4-00 |                     |                     |
|                     | K08I-17236-000-F-34 | K08I-30A18-000-4-00 |                     |                     |
| J20H-07208-000-8-04 | K08I-17236-000-G-34 | K08I-44224-000-F-20 |                     |                     |
| J20I-18A12-000-B-06 | K08I-19218-000-0-00 | K08I-44224-000-G-20 |                     |                     |
| J20I-18A12-000-F-06 | K08I-19224-000-0-00 |                     |                     |                     |
| J20I-19A12-000-8-10 | K08I-21A18-000-2-00 |                     |                     |                     |
|                     | K08I-23A24-000-R-00 |                     |                     |                     |