

Thermocouple Components Thermocouple Elements

Replacement Elements for High Temperature T/C

Elements consist of .020" (0,5 mm) Diameter Wire with Double Bore Round Insulators. Overall Length of Element is 8" (203 mm) longer than immersion length of assembly. As an example, an assembly with 5" (127 mm) immersion uses an element 13" long.			
CALIBRATION			TU-5% Rhen. vs TU-26% Rhen.
INSULATOR MATERIAL			ALUMINUM OXIDE
PART NUMBER			30691987-Item
ITEM NO.	OVERALL LENGTH	INSULATED LENGTH	PRICES
-013	13" (330 mm)	7" (178 mm)	CONSULT FORT WASHINGTON
-019	19" (483 mm)	13" (330 mm)	
-025	25" (635 mm)	19" (483 mm)	
-028	28" (711 mm)	22" (559 mm)	
-031	31" (787 mm)	25" (635 mm)	
-037	37" (940 mm)	31" (787 mm)	

Replacement Elements for Iridium - Rhodium T/C

These elements consist of .020" Diameter With Double Bore Round Insulators. The Calibration is 40% Iridium - 60% Rhodium vs. Iridium. Length Shown is Immersion of Thermocouple Assembly.			
INSULATOR MATERIAL			ALUMINUM OXIDE
PART NUMBER			30692077-Item
ITEM NO.	OVERALL LENGTH	INSULATED LENGTH	PRICES
-001	1" (25,4 mm)	5" (127 mm)	CONSULT FORT WASHINGTON
-002	2" (50,8 mm)	11" (279 mm)	
-003	3" (76,2 mm)	17" (432 mm)	
-004	4" (102 mm)	20" (508 mm)	
-005	5" (127 mm)	23" (584 mm)	
-006	6" (152 mm)	29" (737 mm)	

Replacement Element for High Temperature Noble Metal T/C

Consist of .020" (.5 mm) Diameter Platinum - 30% Rhodium vs. Platinum - 6% Rhodium Wire with Aluminum Oxide Insulators.		
SPECIFY: #30691975-Item		
ITEM NUMBER	LENGTH	PRICES
-001	12" (305 mm)	CONSULT FORT WASHINGTON
-002	18" (457 mm)	
-003	24" (610 mm)	
-004	30" (762 mm)	
-005	36" (914 mm)	

Thermocouple Components

Elements for T/C Assembly with Thin Wall Wells

Basic Model Number	Description
9J13AD #	Copper Constantan #20 Gage Fiberglass Insulated Regular Grade
9J33AD #	Iron Constantan #20 Gage Fiberglass Insulated Regular Grade
#	Follow with Length in inches as calculated from following table.

Calculate Element Length as Follows:

For 1D35 or 3D35: Immersion Length of Well plus Extension Length
plus additional 2" (51 mm) (plus lag if for special well)

For 1D73 or 3D73: Immersion Length of Well plus Extension Length
plus additional 1" (25,4 mm)

Table II - Construction

Specify	Description
6	For Use with Open Type Head
7	For Use with General Purpose or Screw Cover Head

Glass Tank Crown Block for Noble Metal T/C

9R1	Silica Block 60 square x 140 long. Two 1-3/160 diameter, holes for thermocouples; opposite sides are sloped to fit into crown of glass tanks.	9R1
30000230-000	14" High x 6" Square	**

Replacement Elements for Short Immersion Thermocouples

9J63	Replacement Element for Hartford-Element T/C Number 6J74 (QR)			9J63
9J72	Replacement Element for Hartford-Empire T/C Number 7J74 (HER)			9J72
S1	Spout Type	7" (178 mm) Radius	Without Thimble	Consult FW For Pricing
S2	Spout Type	10" (254 mm) Radius	Without Thimble	
C1	Channel Type	10" (254 mm) Radius	Without Thimble	
C2	Channel Type	7" (178 mm) Radius	Without Thimble	
C3	Channel Type	6" (152 mm) Radius	Without Thimble	
SP1	Spout Type	7" (178 mm) Radius	With Platinum Thimble	
SP2	Spout Type	10" (254 mm) Radius	With Platinum Thimble	
CP1	Channel Type	10" (254 mm) Radius	With Platinum Thimble	
CP2	Channel Type	7" (178 mm) Radius	With Platinum Thimble	
CP3	Channel Type	6" (152 mm) Radius	With Platinum Thimble	

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Components

METAL PROTECTING TUBES

Material	Inconel		Resistat (446 S.S.)			
Tube O.D. in. (mm)	.840 (21,3)	1.315 (33,4)	.840 (21,3)	1.315 (33,4)	1 (25,4)	3/4 (19)
Tube I.D. in. (mm)	.622 (15,8)	1.049 (26,6)	.622 (15,8)	1.049 (26,6)	.562 (13,2)	.375 (9,5)
Max. Temp. (Oxidizing) °F (°C)	2200 (1204)	2200 (1204)	1800 (982)	1800 (982)	1800 (982)	1800 (982)
Max. Temp. (Reducing) °F (°C)	2200 (1204)	2200 (1204)	1800 (982)	1800 (982)	1800 (982)	1800 (982)
Head Thread in. (mm)	1/2 (12,7)	1 (25,4)	1/2 (12,7)	1 (25,4)	1/2 (12,7)	1 (25,4)
For use with T/C Gage	8	8	8	8	8	14
Part Number	30351440-	30357727-	30352649-	30355841-	30006993-	30006994-
12" Length	**	**	**	**	**	**
Additional 6" Increments	**	**	**	**	**	**
Maximum Length in. (mm)	60 (1524)	60 (1524)	60 (1524)	36 (914)	30 (762)	24 (610)

Material	Carbon Steel	304 St. St.	316 St. St.	Carbon Steel		
Tube O.D. in. (mm)	.840 (21,3)	.540 (13,7)	.405 (10,3)	.405 (10,3)	.540 (13,7)	1.315 (33,4)
Tube I.D. in. (mm)	.622 (15,8)	.364 (9,2)	.269 (6,8)	.269 (6,8)	.364 (9,2)	.599 (15,2)
Max. Temp. (Oxidizing) °F (°C)	1200 (649)	1800 (982)	1800 (982)	1000 (538)	1000 (538)	1000 (538)
Max. Temp. (Reducing) °F (°C)	1300 (704)	1800 (982)	1800 (982)	1000 (538)	1000 (538)	1000 (538)
Head Thread in. (mm)	1/2 (12,7)	1/4 (6,4)	1/8 (3,2)	1/8 (3,2)	1/4 (6,4)	1 (25,4)
For use with T/C Gage	8	14	20	20	14	8
Part Number (Closed End)	30003957-	30351270-	30351271-	30009405-	30009406-	30357725-
Part Number (Open End)	30071457-	30351274-	-	30071401-	30071402-	-
12" Length	**	**	**	**	**	**
Additional 6" Increments	**	**	**	**	**	**
Maximum Length in. (mm)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)

Material	Nickel			Cast-T
Tube O.D. in. (mm)	.840 (21,3)	1-1/4 (31,8)	3/4 (19)	1.050 (26,7)
Tube I.D. in. (mm)	.622 (15,8)	5/8 (15,9)	3/8 (9,5)	.824 (21)
Max. Temp. (Oxidizing) °F (°C)	1200 (649)	1800 (982)	1800 (982)	2000 (1093)
Max. Temp. (Reducing) °F (°C)	1300 (704)	1800 (982)	1800 (982)	2000 (1093)
Head Thread in. (mm)	1/2 (12,7)	3/4 (19)	3/8 (9,5)	3/4 (19)
For use with T/C Gage	8	8	14	8
Part Number	30009410-	30008507-	30008287-	30071491-
12" Length				
Additional 6" Increments				
Maximum Length in. (mm)	60 (1524)	30 (762)	24 (610)	60 (1524)

** Refer to Honeywell Order Entry System for Parts Pricing.

METAL PROTECTING TUBES (continued)

Tube Material		Kanthal	Cast Iron
Tube O.D. in. (mm)		.750 (19)	1-5/8 (41,3)
Tube I.D. in. (mm)		.648 (12,2)	7/8 (22,2)
Max. Temp. (Oxidizing) °F (°C)		2300 (1260)	2300 (1260)
Max. Temp. (Reducing) °F (°C)		2300 (1260)	1600 (871)
Head Thread in. (mm)		3/4 (19)	1 (25,4)
For use with T/C Gage		8	8
Part Number		30362975-Item	30042667-Item
Specify	Length in. (mm)	Price	
-001	12 (305)	**	**
-002	18 (457)	**	**
-003	24 (610)	**	**
-004	30 (762)	**	**
-005	36 (914)	**	**
-006	42 (1067)	**	**
-007	48 (1219)	**	**

CERAMIC PROTECTING TUBES

Primary Tubes - No Fitting (9N3)

Material	Sillramic						
Type of Hot End	Closed						
Tube O.D. in. (mm)	0.25 (6,4)	5/16 (8)	7/16 (11,1)	5/8 (15,9)	11/16 (17,5)	7/8 (22,2)	1 (25,4)
Tube I.D. in. (mm)	0.375 (9,5)	1/2 (12,7)	11/16 (17,5)	7/8 (22,2)	15/16 (25,4)	1 1/8 (28,6)	1 1/4 (31,8)
Part Number	30005467	30003914	30003901	30003917	30077795	30003918	30003919
12" Length	**	**	**	**	**	**	**
Additional 6" Increments	**	**	**	**	**	**	**
Maximum Length in. (mm)	48 (1219)	48 (1219)	48 (1219)	48 (1219)	48 (1219)	48 (1219)	48 (1219)

Primary Tubes - With Fitting - For Noble Metal T/C (9N6)

Tube Material	Sillramic	
Tube O.D. in. (mm)	0.25 (6,4)	15/16 (25,4)
Tube I.D. in. (mm)	0.375 (9,5)	23/64 (9,1)
Head Thread	1/2 (12,7)	1/2 (12,7)
Mounting Thread	1/2 (12,7)	3/4 (19)
Part Number	30014708	30014705
12" Length	**	**
Additional 6" Increments	**	**
Maximum Length in. (mm)	48 (1219)	48 (1219)

Secondary Tubes - No Fitting (9N3)

Tube Material	Mullite			Sill. Carb.
Type of Hot End	Closed			Closed
Tube O.D. in. (mm)	1 (25,4)	1 (25,4)	1-5/8 (41,3)	1 (25,4)
Tube I.D. in. (mm)	2 (51)	3 (76)	3 (76)	1 3/4 (44,5)
Part Number	30042226	30042227	30042228	30003906
12" Length	**	**	**	**
Additional 6" Increments	**	**	**	**
Maximum Length in. (mm)	36 (914)	36 (914)	36 (914)	36 (914)

Note: Available up to 48 but prices not in accordance with increment schedule.

** Refer to Honeywell Order Entry System for Parts Pricing.

CERAMIC PROTECTING TUBES (continued)

Tubes with Refractoroy Collars (9N7)

Tube Material	Sillicon Carb.
Type of Hot End	Closed
Tube O.D. in. (mm)	1 (25,4)
Tube I.D. in. (mm)	1 3/4 (44,5)
Collar Diameter	2 1/8 (54)
Part Number	30351533
12" Length	**
Additional 6" Increments	Call FTW
Maximum Length in. (mm)	36 (914)

Collar is at open end of all tubes.

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Components

Ceramic Protecting Tubes

T/C (9N4, 9N5, 9N8)

Tube Material	Sillramic	
Tube I.D.	7/16" (11,1 mm)	11/16" (17,5 mm)
Tube O.D.	11/16" (17,5 mm)	15/16" (23,8 mm)
Head Thread	1/2" (12,7 mm)	3/4" (19 mm)
Mounting Thread	3/4" (19 mm)	1-1/4" (31,8 mm)
Part Number	30077800	30077803
12" Length	**	**
Additional 6" Increment	**	**
Maximum Length	48" (1219 mm)	48" (1219 mm)

Metal-Ceramic (Chromium-Alumina)		
5/8" (15,9 mm)		
7/8" (22,2 mm)		
4/5" (20,3 mm)		
None		
30362976-Item		
Specify	Length	**
-001	12" (305 mm)	**
-002	18" (457 mm)	**
-003	24" (610 mm)	**
-004	30" (762 mm)	**
-005	36" (914 mm)	**

Refrax Protecting Tubes

2-1/8" (54 mm) Diameter Collar
1" (25,4 mm) I.D.
1-3/4" (44,5 mm) O.D.
30373080-Item **
For 12" (305 mm) Length
Consult FW Per 6" Increment
Maximum Length 36" (914 mm)

Tube for PT. - 30% TH vs PT. - 6% RH. T/C

Material	Aluminum Oxide
Tube I.D.	1/4" (6,4 mm)
Tube O.D.	3/8" (9,5 mm)
Head Thread	1/2" (12,7 mm)
Mounting Thread	1/2" (12,7 mm)
Part Number	30692630
12" Length	Consult Ft. Washington
Additional 6" Increment	Consult Ft. Washington
Maximum Length	36" (914 mm)

Tubes for High Temperature T/C

Tube Material	Aluminum Oxide	
Tube I.D.	1/4" (6,4 mm)	
Tube O.D.	3/8" (9,5 mm)	
Mounting Thread	1/2" (12,7 mm)	
Construction of Tube	Open End	Closed End
Part Number	30692672	30692602
Maximum Length 29" (737 mm)	Consult Ft. Washington	

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Heads

Construction			Screw Cover		General Purpose
Material			Cast Iron	Aluminum	Cast Iron
Part Number			51500767-Item	30757551-Item	30366504-Item
Tube Thread	Conduit Thread	Item	Price	Price	Price
1/2" (12,7 mm)	1/2" (12,7 mm)	-001	**	**	**
3/4" (19 mm)	1/2" (12,7 mm)	-002	**	**	**
1" (25,4 mm)	1/2" (12,7 mm)	-003	**	**	**
1/2" (12,7 mm)	3/4" (19 mm)	-004	**	**	N/A
3/4" (19 mm)	3/4" (19 mm)	-005	**	**	N/A
1" (25,4 mm)	3/4" (19 mm)	-006	**	**	N/A

Thermocouple Heads

Construction			Screw Cover	Construction			Screw Cover
Material			Explosion Proof Aluminum	Material			Polypropylene
Part Number			30757553-Item	Part Number			30757555-Item
Tube Thread	Conduit Thread	Item	Price	Tube Thread	Conduit Thread	Item	Price
1/2" (12,7 mm)	3/4" (19 mm)	-001	**	1/2" (12,7 mm)	1/2" (12,7 mm)	-001	**
3/4" (19 mm)	3/4" (19 mm)	-002	**	1/2" (12,7 mm)	3/4" (19 mm)	-002	**

Terminal Blocks

Part Number	Description	Price
30074456-007	Block for Single T/C General Purpose Head	**
30359804-003	Block for Megopak & Springloaded T/C General Purpose Head	**
30757552-001	Block for Single T/C	**
30757552-002	Block for Duplex T/C	**
30757554-001	Block for Explosion Proof Head with Six Terminals	**
30757556-001	Block for Single T/C - Polypropylene Head Only	**
30757556-002	Block for Duplex T/C - Polypropylene Head Only	**
Maximum wire gauge for 30074456 is #7 for element and #12 for extension wire.		
Maximum wire gauge for 30359804 is #14 for element and #12 for extension wire.		
Duplex block can be used only in screw cover head.		

Miniature Thermocouple Head and Accessories

Part Number	Description	Price
30682116-001	Miniature Head - Aluminum Mtl, 1/2" NPT Conduit, 1/4" Tube Thread	**
30682117-001	Terminal Block for Single T/C	**
30682117-002	Terminal Block for Duplex T/C	**
30681512-001	Mounting Plate only for T/C O.D. 1/16" (1,6 mm)	**
30681512-002	Mounting Plate only for T/C O.D. 1/8" (3,2 mm)	**
30681512-003	Mounting Plate only for T/C O.D. 3/16" (4,8 mm)	**
30681512-004	Mounting Plate only for T/C O.D. 1/4" (6,4 mm)	**
30681513-001	Mounting Plate and Bushing for T/C O.D. 1/16" (1,6 mm)	**
30681513-002	Mounting Plate and Bushing for T/C O.D. 1/8" (3,2 mm)	**
30681513-003	Mounting Plate and Bushing for T/C O.D. 3/16" (4,8 mm)	**
30681513-004	Mounting Plate and Bushing for T/C O.D. 1/4" (6,4 mm)	**

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Components

TC-A11 Issue 4

Single Bore Cylindrical Type Insulators for Base Metal Thermocouples

9E1	Maximum Operating Temperature 2400°F (1315°C)				
	Wire Size	Length in. (mm)	I.D. in. (mm)	O.D. in. (mm)	Per 100 Minimum Quantity
30004680-003	8 gage	3" (76)	.156" (4 mm)	.250" (6,4 mm)	**
30004677-002	20 gage	2" (50,8)	.036" (0,91 mm)	.090" (2,3 mm)	**

Bead (Fish Spine) Type Insulators for Base Metal Thermocouples

9E2	Maximum Operating Temperature 2400°F (1315°C)				
	Wire Size		I.D. in. (mm)	O.D. in. (mm)	Per 100 Minimum Quantity
30040882-002	8 gage		.152" (3 mm)	.260" (6,6 mm)	**
30040882-004	14 gage		.068" (1,73 mm)	.170" (4,3 mm)	**
30040882-005	20 gage		.056" (1,4 mm)	.110" (2,8 mm)	**

Double Bore Oval Type Insulators for Base Metal Thermocouples

	Maximum Operating Temperature 2400°F (1315°C)				
	Wire Size	Length in. (mm)	I.D. in. (mm)	O.D. in. (mm)	Per 100 Minimum Quantity
30042345-001	8 gage	1" (25,4)	.468" x .281"	.156" (4 mm)	**
30042345-002	8 gage	1/4" (6,4)	.468" x .281"	.156" (4 mm)	**
30042345-003	8 gage	3" (76)	.468" x .281"	.156" (4 mm)	**
30042345-004	8 gage	3/4" (19)	.468" x .281"	.156" (4 mm)	**
30042345-005	8 gage	2" (50,8)	.468" x .281"	.156" (4 mm)	**
30042346-001	14 gage	1" (25,4)	.313" x .188"	.080" (2 mm)	**
30042346-002	14 gage	1/4" (6,4)	.313" x .188"	.080" (2 mm)	**
30042346-003	14 gage	3" (76)	.313" x .188"	.080" (2 mm)	**
30042346-004	14 gage	1/2" (12,7)	.313" x .188"	.080" (2 mm)	**
30042346-005	14 gage	2" (50,8)	.313" x .188"	.080" (2 mm)	**
30042347-001	20 gage	1" (25,4)	.172" x .118"	.042" (1mm)	**
30042347-002	20 gage	2" (50,8)	.172" x .118"	.042" (1mm)	**
30042347-003	20 gage	3" (76)	.172" x .118"	.042" (1mm)	**
30042347-004	20 gage	1/2" (12,7)	.172" x .118"	.042" (1mm)	**
30042347-005	20 gage	1/4" (6,4)	.172" x .118"	.042" (1mm)	**

** Refer to Honeywell Order Entry System for Parts Pricing.

4-Hole Cyclindrical Type Insulators for Duplex Base Metal T/C

9E7	Maximum Operating Temperature 2400°F (1315°C)				
	Wire Size	Length in. (mm)	I.D. in. (mm)	O.D. in. (mm) of Holes	Per 100 Minimum Quantity
30350258-000	14 gage	1" (25,4)	.300" (7,6 mm)	.078" (2 mm)	**
30730224-001	20 gage	1" (25,4)	.187" (4,7 mm)	.046" (11,7 mm)	**
30730224-002	20 gage	2" (50,8)	.187" (4,7 mm)	.046" (11,7 mm)	**
30730224-003	20 gage	3" (76)	.187" (4,7 mm)	.046" (11,7 mm)	**

Sillramic Insulators for Noble Metal T/C

Construction Number of Holes For Wire Size O.D. of Insulator I.D. of Holes	Maximum Operating Temperature 2900°F (1593°C)								
	No Collar 2			With Collar 2			No Collar 4		
	.022" (0,56 mm) Dia.			.022" (0,56 mm) Dia.			.022" (0,56 mm) Dia.		
	.200" (5 mm)			.200" (5 mm)			.200" (5 mm)		
	.052" (1,3 mm)			.052" (1,3 mm)			.052" (1,3 mm)		
Part Number	30005454-Item			30017760-Item			30702497-Item		
	Length	Item	Price	Length	Item	Price	Length	Item	Price
	6" (15,2 cm)	001	**	11" (27,9 cm)	015	**	6" (15,2 cm)	001	**
	11" (27,9 cm)	015	**	12" (30,5 cm)	002	**	12" (30,5 cm)	002	**
	12" (30,5 cm)	002	**	17" (43,2 cm)	014	**	18" (45,7 cm)	003	**
	17" (43,2 cm)	014	**	18" (45,7 cm)	005	**	24" (61 cm)	004	**
	18" (45,7 cm)	005	**	23" (58,4 cm)	006	**	30" (76,2 cm)	005	**
	23" (58,4 cm)	006	**	29" (73,7 cm)	007	**	36" (91,4 cm)	006	**
	29" (73,7 cm)	007	**	35" (90 cm)	008	**	42" (106,7 cm)	007	**
	35" (90 cm)	008	**	41" (104 cm)	009	**	48" (121,9 cm)	008	**
	41" (104 cm)	009	**	47" (119,4 cm)	010	**			**
	47" (119,4 cm)	010	**						**

Double Bore Insulators for High Temperature Thermocouples

Material	Aluminum Oxide
Length	6" (152,4 mm)
O.D. of Insulator	.150" (3,8 mm)
I.D. of Holes	.040" (1 mm)
Part Number	30702206
Price	**

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Components

Compression Fittings

Part Number	Material	Mtg. Thread	For Tube O.D.	Price
30363275-001	Brass	1/8" (3,2 mm)	1/16" (16 mm)	**
30076520-002		1/8" (3,2 mm)	3/16" (4,8 mm)	**
30076520-004		1/2" (12,7mm)	3/8" (9,5 mm)	**
30363275-004	316 St. St.	1/8" (3,2 mm)	3/16" (4,8 mm)	**
30363275-006		1/2" (12,7 mm)	3/8" (9,5 mm)	**
30366672-002	304 S.S. (re-adjustable)	1/8" (3,2 mm)	1/8" (3,2 mm)	**
30366672-003		1/8" (3,2 mm)	3/16" (4,8 mm)	**
30366672-004		1/4" (6,4 mm)	1/4" (6,4 mm)	**
30366672-005		1/2" (12,7 mm)	3/8" (9,5 mm)	**

Cast Iron Flanged Elbows

Part Number	Pipe Sizes	Prices
30014194-001	1" x 1" (25,4 x 25,4 mm)	**
30014194-002	1" x 1/2" (25,4 x 12,7 mm)	**
30014194-003	3/4" x 3/4" (19 x 19 mm)	**
30014194-004	3/4" x 1/2" (19 x 12,7 mm)	**
30014194-005	1/2" x 1/2" (12,7 x 12,7 mm)	**
30014194-006	1/2" x 3/8" (12,7 x 9,5 mm)	**
30014194-007	1/2" x 1/4" (12,7 x 6,4 mm)	**
30014194-008	1/4" x 1/4" (6,4 x 6,4 mm)	**
30014194-009	3/8" x 3/8" (9,5 x 9,5 mm)	**
30014194-010	3/8" x 1/4" (9,5 x 6,4 mm)	**

Gasket for 30014194-001 thru -004 is

30353400-002 @ **

Gasket for 30014194-005 thru -010 is

30353400-001 @ **

Adjustable Flanges

Part Number	30000388-000	30352055-000	30352045-000	30000244-000
Inside Diameter	29/32" (23 mm)	29/32" (23 mm)	1-3/8" (35 mm)	2-3/16" (55.6 mm)
Outer Diameter	3-1/4" (82.6 mm)	3-1/4" (82.6 mm)	3-1/2" (90 mm)	4-1/2" (114 mm)
For Tube Size	1/2" (12.7 mm)	1/2" (12.7 mm)	1" (25.4 mm)	2" (50.8 mm)
Face of Flange	No Holes	With Holes	With Holes	No Holes
Price	**	**	**	**

** Refer to Honeywell Order Entry System for Parts Pricing.

Thermocouple Calibration

Limits of Error for Regular and Premium Grade Thermocouple Wire

Type of Wire	Temperature Range (°F)	LIMITS OF ERROR*	
		Reg. Grade	Prem. Grade
Type T Copper-Constantan	-300 to -75 -75 to 200 200 to 700	$\pm 2\%$ $\pm 1\text{-}1/2^\circ\text{F}$ $\pm 3/4\%$	$\pm 1\%$ $\pm 3/4^\circ\text{F}$ $\pm 3/8\%$
Type J Iron-Constantan	0 to 800 800 to 1400	$\pm 4^\circ\text{F}$ $\pm 1/2\%$	-
	0 to 600 600 to 1000	- -	$\pm 2\%$ $\pm 1/3\%$
Type E	0 to 600 600 to 1600	$\pm 3^\circ\text{F}$ $\pm 1/2\%$	- -
Type K	0 to 530 530 to 2300	$\pm 4^\circ\text{F}$ $\pm 3/4\%$	$\pm 2^\circ\text{F}$ $\pm 3/8\%$
Type R or S Platinum-Platinum Rhodium	0 to 1200 1200 to 2700	$\pm 3^\circ\text{F}$ $\pm 1/4\%$	- -
Type B Platinum 30% Rhodium/Platinum 6% Rhodium	800 to 1700°C 1600 to 3100°F	$\pm 0.5\%$ $\pm 0.5\%$	- -

* When the limit of error is given in %, the percentage applies to the temperature being measured, not the range.

Limits of Error for Regular and Premium Grade Extension Wire

Type of Wire	Temperature Limits (°F)	LIMITS OF ERROR*	
		Reg. Grade	Prem. Grade
Type TX Copper-Constantan	-75 to +200	$\pm 3/4^\circ\text{F}$ or $\pm 1\text{-}1/2^\circ\text{F}$	$\pm 1/2\%$ or $\pm 3/4^\circ\text{F}$
Type JX Iron-Constantan	0 to 400	$\pm 1\text{-}1/4\%$ or $\pm 4^\circ\text{F}$	$\pm 3/4\%$ or $\pm 2^\circ\text{F}$
Type EX	0 to 400	$\pm 2\%$ or $\pm 3^\circ\text{F}$	-
Type KX	0 to 400	$\pm 2\text{-}1/2\%$ or $\pm 4^\circ\text{F}$	Consult FW
Type SX Platinum-Platinum Rhodium	75 to 400	$\pm 6\%$ or $\pm 9^\circ\text{F}$	

* Limits apply to temperatures at connection head and reference junction.

** When the limit of error is given in percent, the percentage applies to the temperature differential between temperatures at the connection head and between temperatures at the connection head and reference junction. Use this figure when smaller than the 0°F limit.

*** For temperatures below 0°F, limits of error for regular grade may be $\pm 2\%$, for premium grade $\pm 1\text{-}1/4\%$ of the temperature differential.

Thermocouple Calibration and Certification

Prices for Special Calibration on T/C and Wire

* Thermocouples

Temperature Checks	First T/C	Each Additional TC Checked at Same Points
Each Temperature Point		

Wire-Bare or Insulated

Temperature Checks	First 1000 Ft. Length	Each Additional 1000 Ft. Length Checked at Same Points
Each Temperature Point		

Minimum calibrated length is 18" (457 mm) for Base Metal and 15" (381 mm) for Platinum.

For shorter length, price to these lengths and we will cut to required length.

Above charges apply for any points specified 0 to 2000°F (1093°C) maximum.

Contact Ft. Washington for sub-zero check points.

Charges include one copy of certificate stating corrections in degrees fahrenheit at temperatures specified.

Additional copies available at \$8.00 each. When checking wire, samples are taken from each end of each 1000' (305 m) checked.

- * Additional couples or wire must be checked at same temperature points.
- * There are no discounts associated with calibration.

Thermocouple Components

Multipoint Quik Kconnect Jack Panels

Unit consists of Jack Strip or Number of Jack Strips mounted on Black Anodized Aluminum frame for Panel Mounting. They can be supplied either horizontally or vertically with no limitations as to the intermixing of calibrations or numerical identification. The only limitation on the number of points is that they must be evenly divisible by the number of rows.

To order, specify:

- A - Part Number 30722395
- B _ Horizontal or Vertical Mounting
- C - Total Number of Points
- D - Number of Rows
- E - Calibration for each point or group of points
- F - Numeral identification for each point or group of points.

Price at ** per point This price does not include wiring or mounting.

** Refer to Honeywell Order Entry for Parts Pricing

Panel Dimension Formula

Rows

	1	2	3	4
	4-3/4"	9-1/2"	14-1/4"	19"
	120,6 mm	241,3 mm	362 mm	482,6 mm
Points	1 2-1/4" (57 mm)	2 4-1/8" (105 mm)	3 6" (152 mm)	4 7-7/8" (200 mm)
	5 9-3/4" (248 mm)	6 11-5/8" (295 mm)	7 13-7/8" (352 mm)	

For additional rows or columns, add 4-3/4" x 1-7/8" (120,6 x 47,6 mm)

Thermocouple Components

Quik Konnect Connectors

Plug

Part Number	Calibration	Body Color	Price
30728096-001	J	Black	**
30728096-003	R-S	Green	**
30728096-004	T	Blue	**
30728096-005	K	Yellow	**
30728096-006	UN	White	**
30728096-008	E	Purple	**

Jack

Part Number	Calibration	Body Color	Price
30728097-001	J	Black	**
30728097-003	R-S	Green	**
30728097-004	T	Blue	**
30728097-005	K	Yellow	**
30728097-006	UN	White	**
30728097-008	E	Purple	**

Tube Adapters

Part Number	Tube Size	Price
51453550-001	1/16"	**
51453550-002	1/8"	**
51453550-003	3/16"	**
51453550-004	1/4"	**
Cable Adapter	51453550-005	**

Single Circuit Panel

Part Number	Calibration	Body Color	Price
30372756-001	J	Black	**
30372756-002	K	Yellow	**
30372756-003	R-S	Green	**
30372756-004	T	Blue	**
30372756-005	UN	White	**
30372756-006	E	Purple	**
30372756-007	N	Orange	**

** Refer to Honeywell Order Entry for Parts Pricing