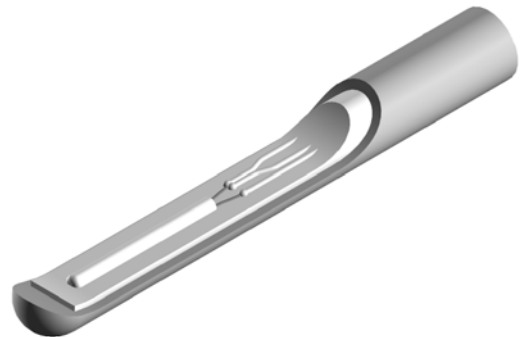
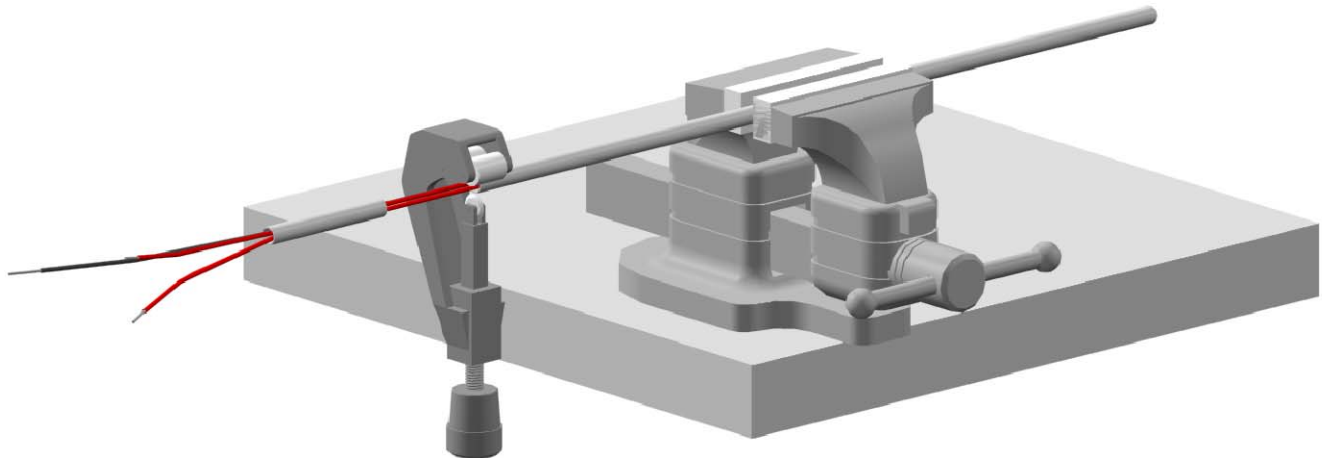




THERMO ELECTRIC

IMMERSION RTD's

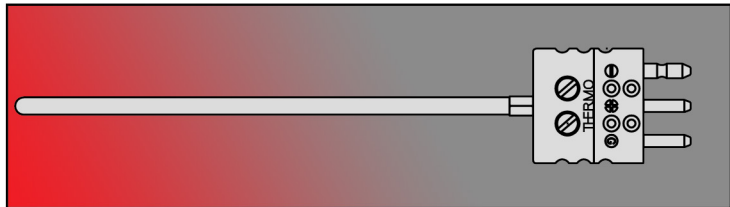
Section IMRD



Resistance Temperature Detectors (RTD's) operate under the principle that the electrical resistance of certain metals increases or decreases in a repeatable and predictable manner with a temperature change. RTD's may have a lower temperature range than some thermocouples and a slower response time, however, they are more accurate and repeatable over long periods of time. RTD's higher signal output make them easier to interface with computers and data loggers and reduces the effects of radio frequency interference. They are generally inserted in or attached directly to the media to be measured, instrument termination is available in a quick disconnect connector directly mounted to the end of the sheath or an epoxy filled transition securing flexible lead wires of various insulation depending on the conditions. Each type is available in a wide variety of configurations which may be fabricated from developed part numbers on the following pages or designed by Thermo Electric to conform to any given application. RTD's for your surface mounting requirements can be found in our SUTR section or where a more rugged style of connection head and well is required, refer to our industrial INRD section.

The standard RTD employs either thin film or wire wound bulb depending on the temperature range desired. The most common is the platinum, 100 OHM with a temperature coefficient of resistance of 0.00385 ohms/ohm/°C. Standard tolerance is a grade B to ASTM E1137. For tighter accuracy the grade A is available.

IMMERSION RTD'S

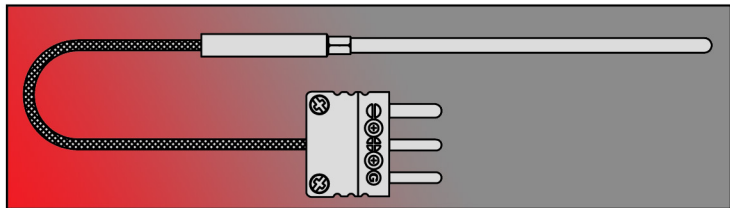


Quick disconnect connector secured directly onto the end of the sheath allows for easy assembling and disassembling using a mating connector and extension lead wire.

Element Type: Platinum Diameter: 1/8", 3/16" or 1/4"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Sheath Material: 316 Stainless Steel

Termination: Quick disconnect connectors

Temperature Range: -58 to 500°F (-50 to 260°C)(LT):	See Doc. TE-CO010109-IMRD-010
Temperature Range: -58 to 752°F (-50 to 400°C)(MT):	See Doc. TE-CO010109-IMRD-020
Temperature Range: -292 to 932°F (-180 to 500°C)(CE):	See Doc. TE-CO010109-IMRD-030
Temperature Range: -292 to 1202°F (-180 to 650°C)(HT):	See Doc. TE-CO010109-IMRD-040

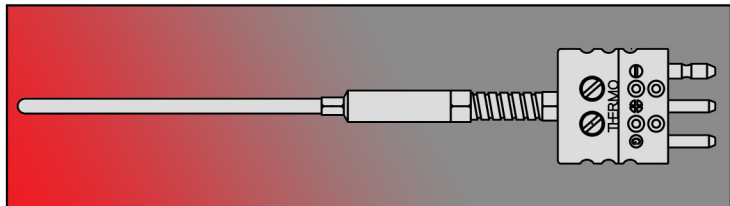


Terminated to flexible fiberglass insulated or TEFLON® lead wire with an epoxy filled transition allows for a direct run from the process to the control panel. The fiberglass insulation is unaffected by heat zones of up to 950° F. TEFLON® provides additional corrosive protection up to 500° F.

Element Type: Platinum Diameter: 1/8", 3/16" or 1/4"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Sheath Material: 316 Stainless Steel

Termination: Quick disconnect connectors

Temperature Range: -58 to 500°F (-50 to 260°C)(LT):	See Doc. TE-CO010109-IMRD-050
Temperature Range: -58 to 752°F (-50 to 400°C)(MT):	See Doc. TE-CO010109-IMRD-060
Temperature Range: -292 to 932°F (-180 to 500°C)(CE):	See Doc. TE-CO010109-IMRD-070
Temperature Range: -292 to 1202°F (-180 to 650°C)(HT):	See Doc. TE-CO010109-IMRD-080

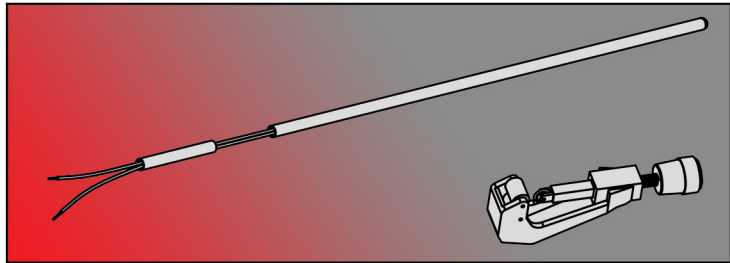


Lead wire is available in fiberglass or TEFLON® with a flexible stainless armor tubing overall. Armor is hex crimped to the transition and crimp boss or bracketed to connectors to resist extreme physical abuse. Available with connector termination or bare ends with six inches of lead wire extending past the armor for junction box connection.

Element Type: Platinum Diameter: 1/8", 3/16" or 1/4"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Sheath Material: 316 Stainless Steel

Termination: Quick disconnect connectors

Temperature Range: -58 to 500°F (-50 to 260°C)(LT):	See Doc. TE-CO010109-IMRD-090
Temperature Range: -58 to 752°F (-50 to 400°C)(MT):	See Doc. TE-CO010109-IMRD-100
Temperature Range: -292 to 932°F (-180 to 500°C)(CE):	See Doc. TE-CO010109-IMRD-110
Temperature Range: -292 to 1202°F (-180 to 650°C)(HT):	See Doc. TE-CO010109-IMRD-120

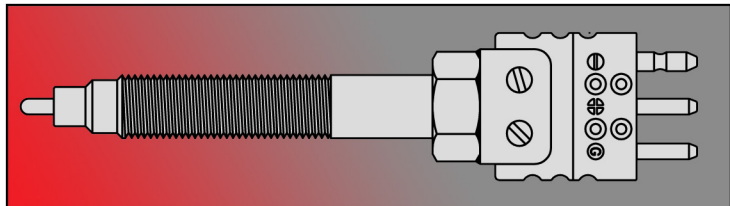


Field adjustable RTD's recommended for application up to 500°F (260°C). A thin film bulb calibrated to ASTM standard to Class B or Class A accuracy with a temperature coefficient of 0.00385 offers both excellent resistance to vibration and fast response. Available in a three wire construction, they are stocked in 1/4" O.D. , 28.5" inches long and features a 316 stainless steel sheath that can be easily cut to length for a variety of applications.

Element Type: Platinum Diameter: 1/4"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Sheath Material: 316 Stainless Steel

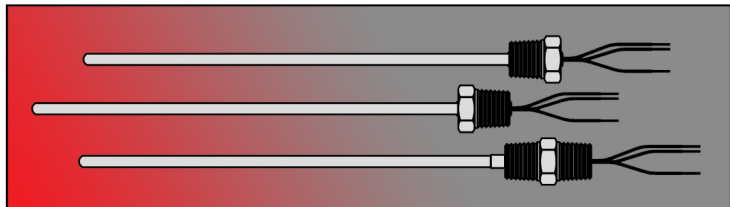
Termination: Bare Ends

Temperature Range: -58 to 500°F (-50 to 260°C)(LT):	See Doc. TE-CO010109-IMRD-130
---	-------------------------------



Plastic melt used in plastic extruders and injection molding machines. Connection allows insertion directly into the melt stream. The short immersion length prevents the tip from interfering with the process flow.

Element Type: Platinum Diameter: 1/8"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Bolt Size: 1/2-20UNF Bolt Length: 3", 6", 9", 12"
Plastic Melt Bolt RTD See Doc. TE-CO010109-IMRD-140

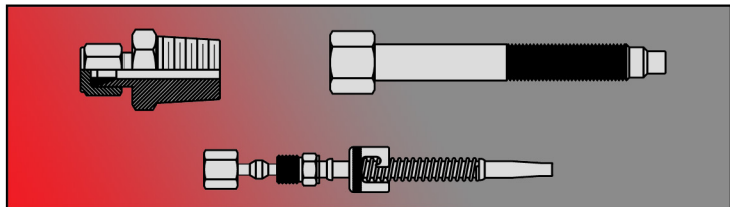


RTD's with a single ended or double ended fitting provides water tight connection into the process. Single ended fitting facing the lead wires can be used to attached conduit, junction boxes, connection heads with terminal block or transmitter. Compressing fittings are available for mounting into the process. RTD's with a double ended fitting can be used to attached conduit, junction boxes, connection heads with terminal block or transmitter.

Element Type: Platinum Diameter: 1/8", 3/16" or 1/4"
TRC: .00385 ohms/ohm/°C Resistance @ 0°C: 100 ohms @ 0°C
Sheath Material: 316 Stainless Steel

Fitting Material: Stn. Stl., Size: 1/8, 1/4 or 1/2"NPT

RTD'S with Single Ended Fitting:	See Doc. TE-CO010109-IMRD-010
RTD'S with Double Ended Fitting:	See Doc. TE-CO010109-IMRD-020

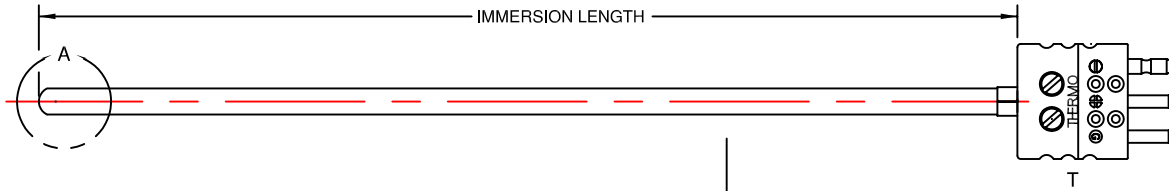


Complete supply of stainless steel or brass fitting accessories provides the means to mount any immersion RTD into an NPT threaded opening. Fittings can be adjusted once or readjusted using TEFLON® or Lava ferrules. Adjustable Melt Bolt RTD Adapter converts any 1/8" diameter immersion RTD into a plastic melt bolt. Adjustable spring loaded adapter converts 1/8" diameter immersion RTD into a surface type bayonet.

Bore Through Compression Fittings, Adjustable Bayonet Adapters, Plastic Melt Bolt Adapters, Waterproof Fittings, Strain Relief Bell Springs, BX Connectors See Doc. TE-CO010109-IMRD-170

IMMERSION RTD'S

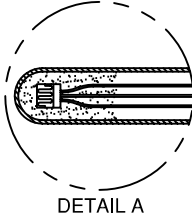
TEMPERATURE RANGE: -58°F to 500°F (-50°C to 260°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Teflon(FEP)



Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK) *
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

RTD - 14 - LT - 12 - 0 - T - T1 - CLA -

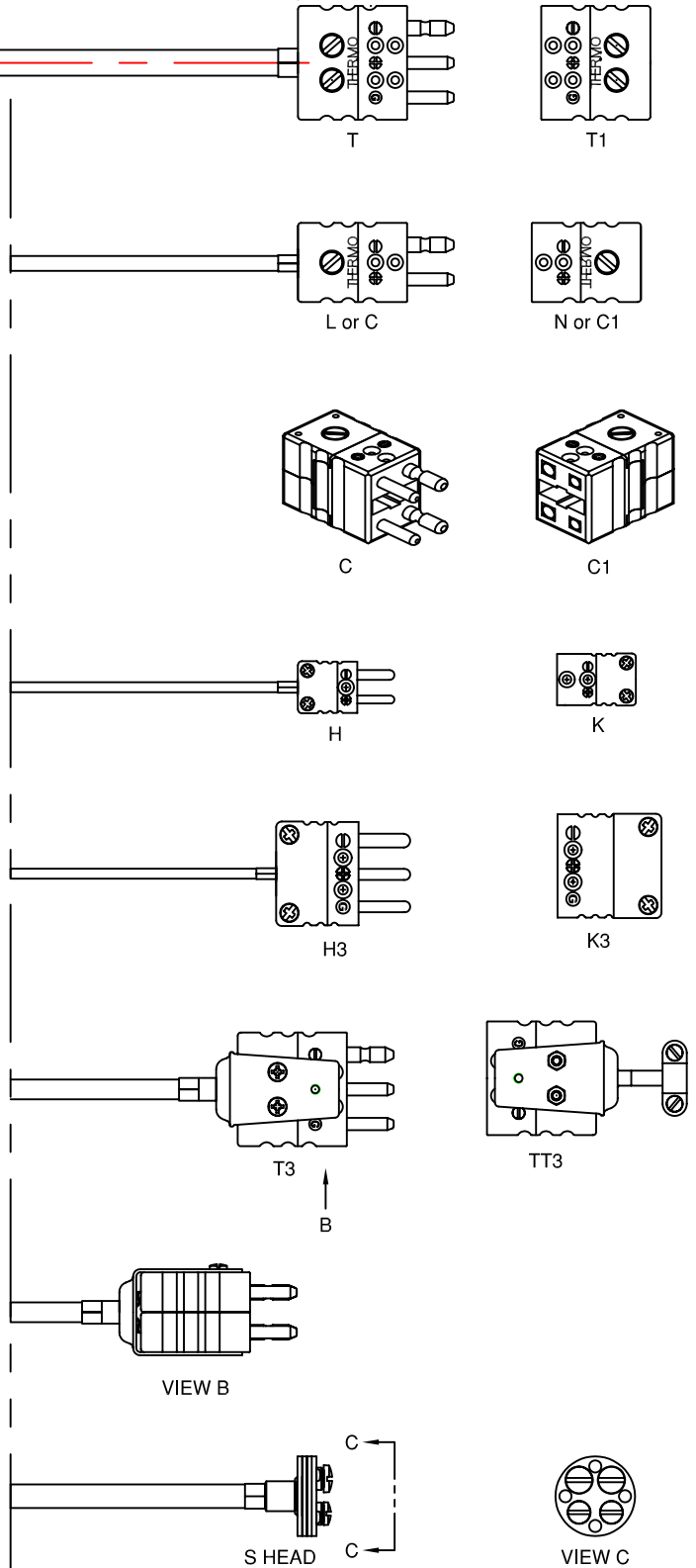
CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	TERMINATION
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG
S	COOLANT HEAD (4WIRES MAX.)

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK
	WIRE ONLY

Notes:

- (1) Available in 1/8" diameters only.
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



TEMPERATURE MEASUREMENT DESIGNER'S GUIDE
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SECTION IMRD

TYPE "LT"

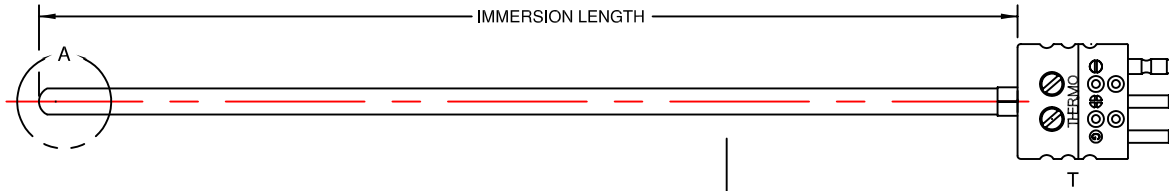
IMMERSION RTD'S with CONNECTORS
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-010

IMMERSION RTD'S

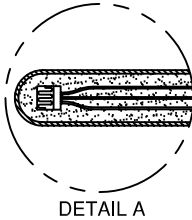
TEMPERATURE RANGE: -58°F to 752°F (-50°C to 400°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Fiberglass



Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
CLA	CLASS B (LEAVE BLANK) CLASS A

CODE	IMMERSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
3W	3 WIRE (LEAVE BLANK) *
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

RTD - 14 - MT - 12 - 0 - T - T1 - CLA -

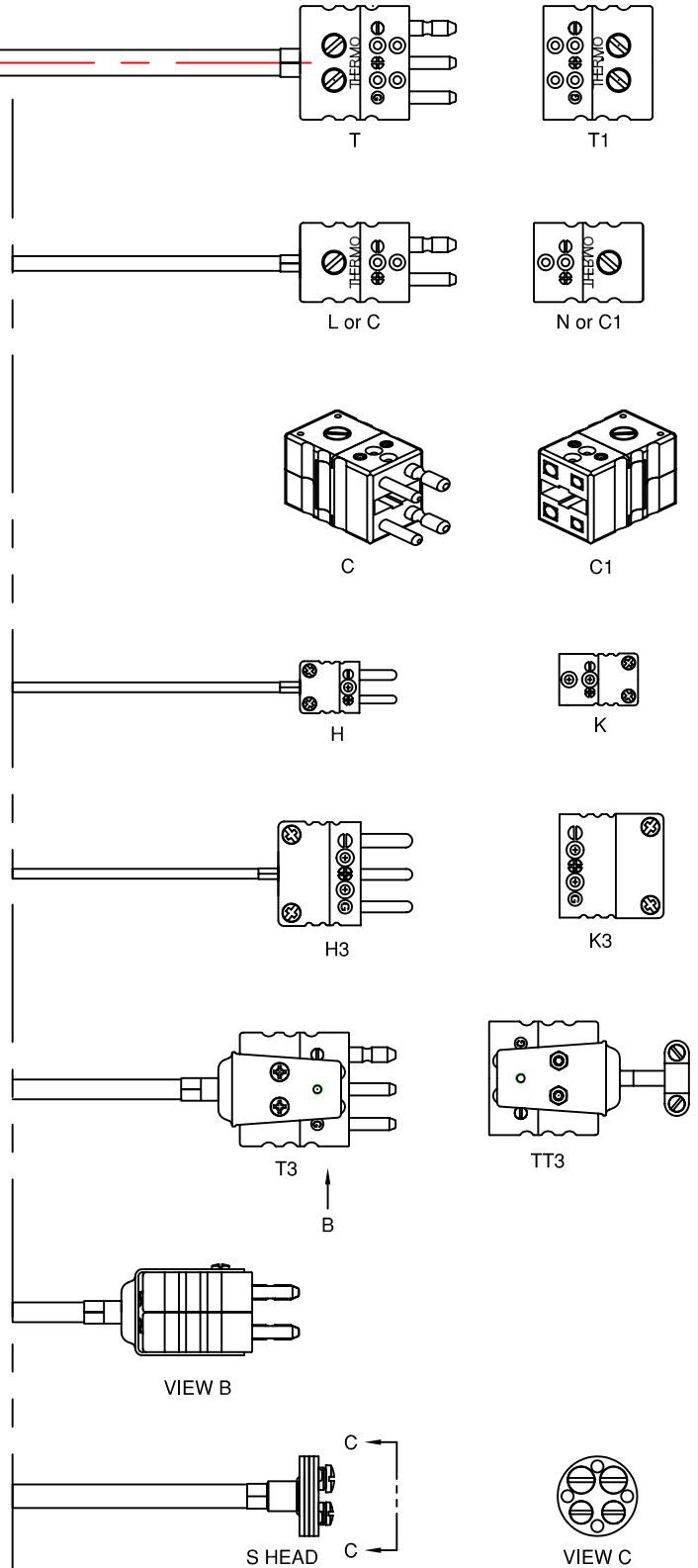
CODE	STRUCTURE
D	SINGLE (LEAVE BLANK) DUPLEX

CODE	TERMINATION
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG
S	COOLANT HEAD (4 WIRES MAX.)

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK
	WIRE ONLY

Notes:

- (1) Available in 1/8" diameters only.
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



TEMPERATURE MEASUREMENT DESIGNER'S GUIDE
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SECTION IMRD

TYPE "MT"

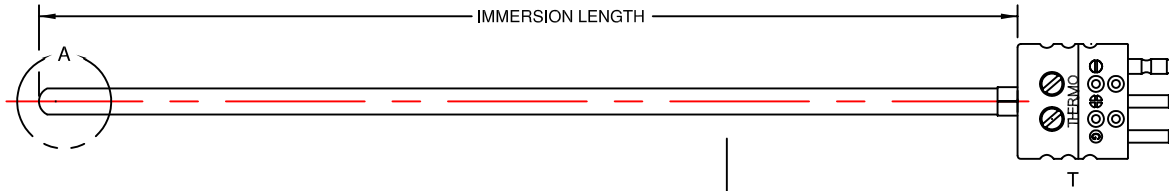
IMMERSION RTD'S with CONNECTORS
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-020

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 932°F (-180°C to 500°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Hard Packed MgO



DETAIL A

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSION LENGTH
	IN INCHES

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK) *
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

RTD - 14 - CE - 12 - 0 - T - T1 - CLA -

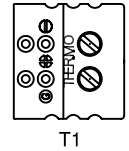
CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	TERMINATION
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG
S	COOLANT HEAD (4WIRES MAX.)

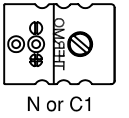
CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK
	WIRE ONLY

Notes:

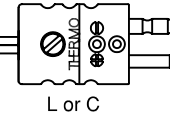
- (1) Available in 1/8" diameters only.
- (2) Sheath may be bent to up to a diameter of twice the radius from 2" past tip.
- (3) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



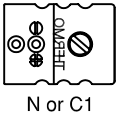
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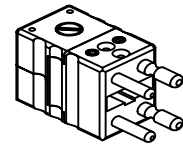
T1



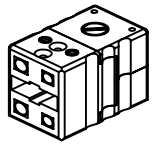
L or C



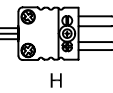
N or C1



C



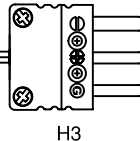
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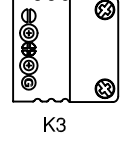
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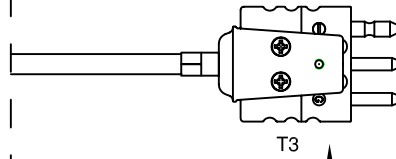
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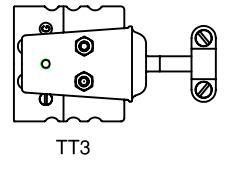
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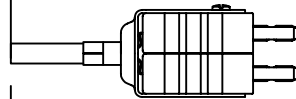
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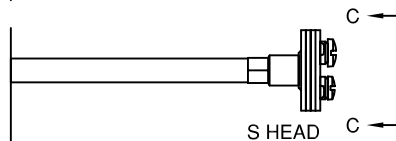
T3



TT3



VIEW B



S HEAD



VIEW C



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SECTION IMRD

TYPE "CE"

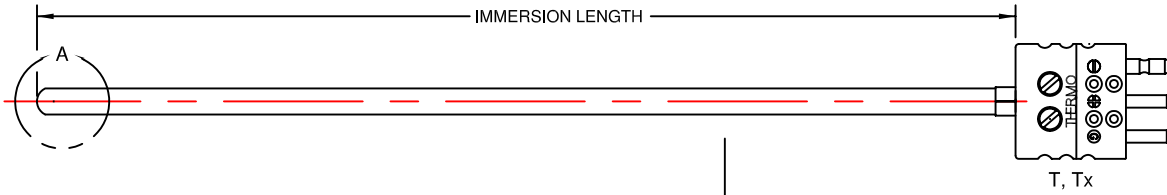
IMMERSION RTD'S with CONNECTORS
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-030

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 1202°F (-180°C to 650°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: Inconel 600
Insulation: Hard Packed MgO



DETAIL A

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)						
316	3/16" (4.8mm)	●	●	●			
14	1/4" (6.4mm)	●	●	●	●	●	

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK) *
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

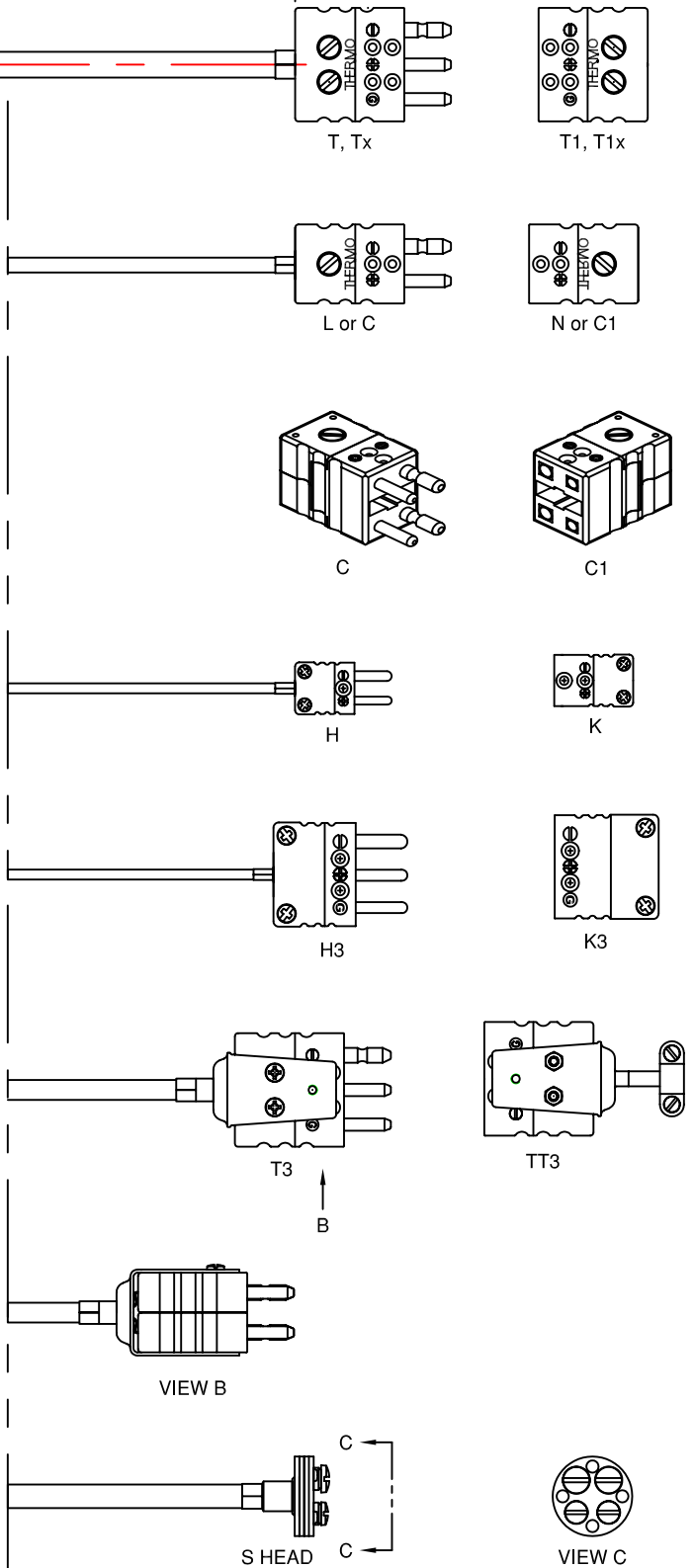
CODE	IMMERSION LENGTH
	IN INCHES

RTD - 14 - HT - 12 - 0 T / T1

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	TERMINATION
T	STANDARD SIZE 3 PIN PLUG
Tx	EXTENDED LIMITS 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
T1x	EXTENDED LIMITS 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK



Notes:

- (1) Sheath may be bent to up to a diameter of twice the radius from 2" past tip on single and 3" on duplex.
- (2) Type "HT" not available in Class A accuracy.
- (3) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



TEMPERATURE MEASUREMENT DESIGNER'S GUIDE
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SECTION IMRD

TYPE "HT"

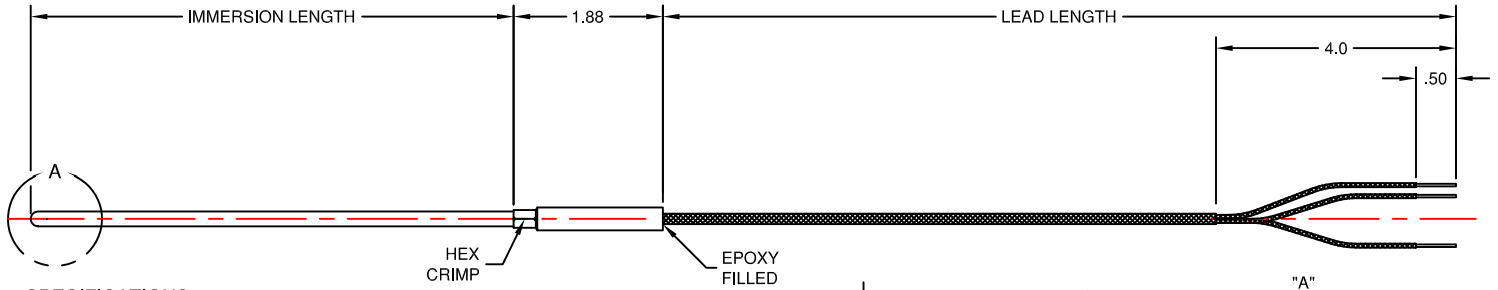
IMMERSION RTD'S with CONNECTORS
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-040

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 500°F (-50°C to 260°C)



SPECIFICATIONS

RTD Element

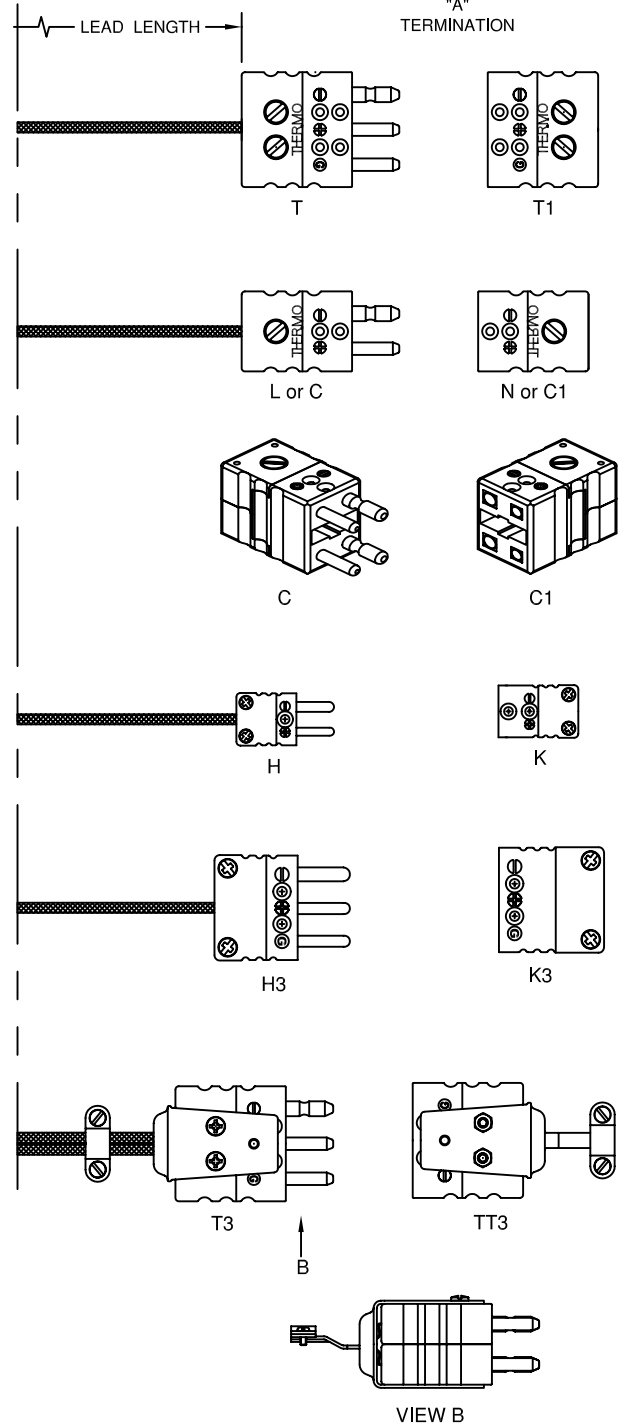
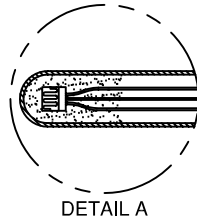
Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)



ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	LEAD LENGTH
	(IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
4W	3 WIRE (LEAVE BLANK)* 4 WIRE

*Single or Duplex

RTD - 14 - LT - 12 - 36 - 1 - A

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	LEAD WIRE INSULATION
1	FIBERGLASS
5	TEFLON

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "LT"

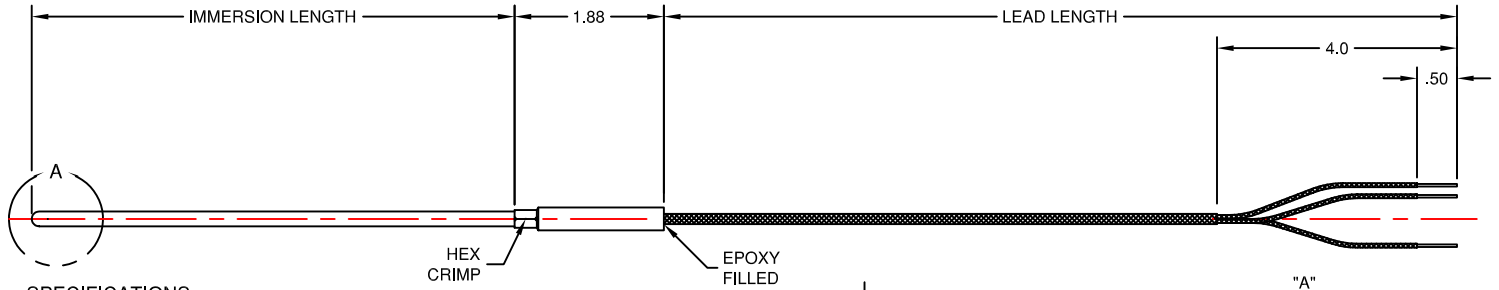
IMMERSION RTD'S with LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-050

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 752°F (-50°C to 400°C)



SPECIFICATIONS

RTD Element

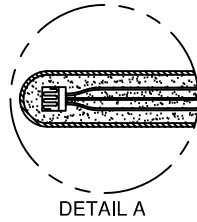
Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Teflon(FEP)

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Fiberglass

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)



DETAIL A

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	LEAD LENGTH
	(IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK)*
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

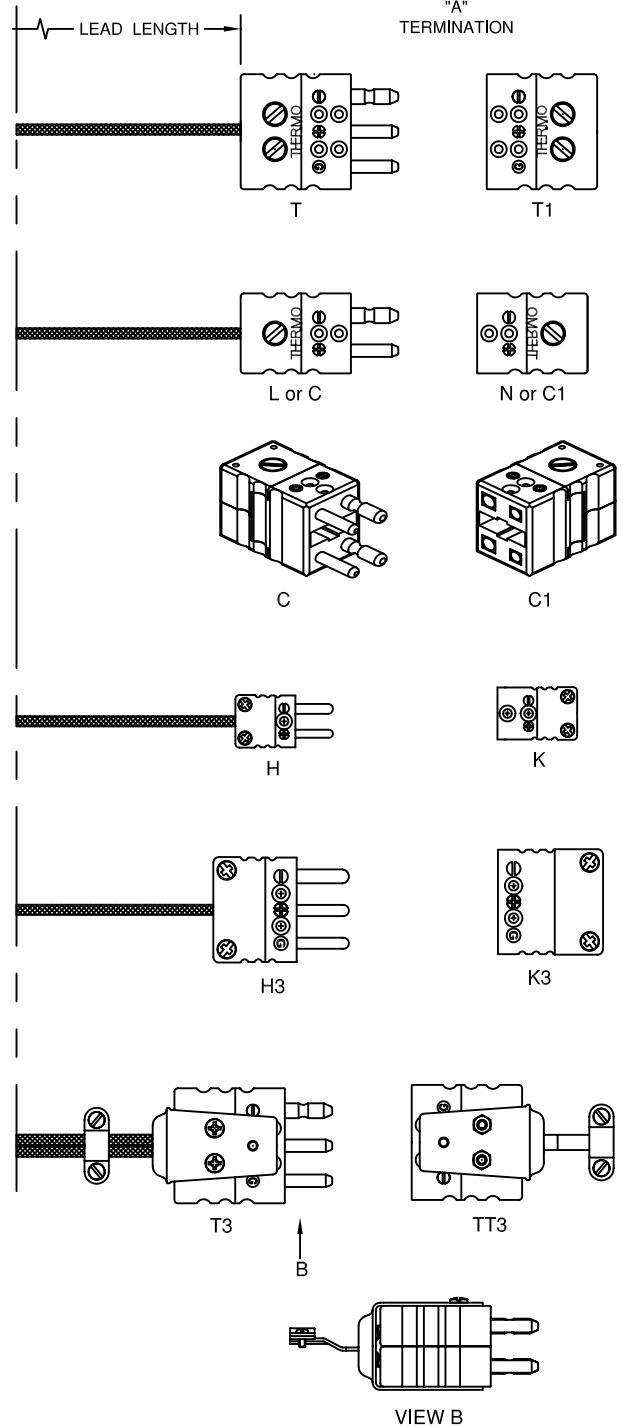
RTD - 14 - MT - 12 - 36 - 1 - A

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	LEAD WIRE INSULATION
1	FIBERGLASS
5	TEFLON

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK



Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "MT"

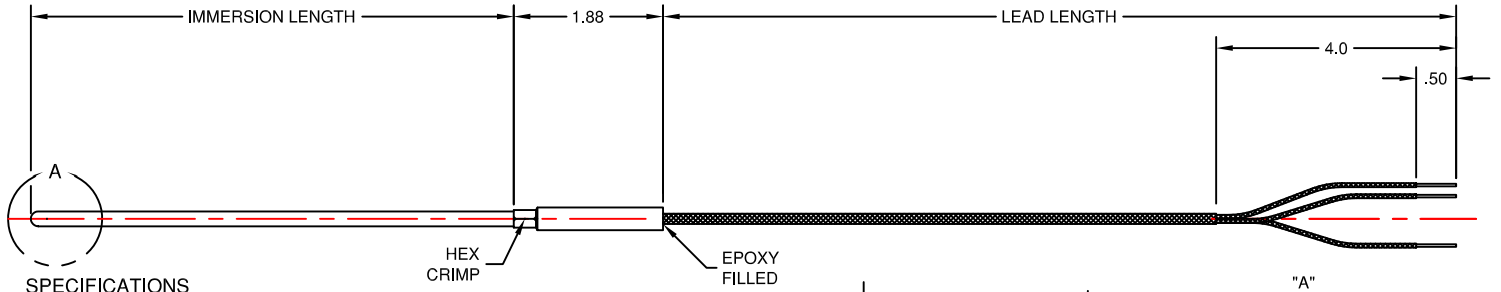
IMMERSION RTD'S with LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-060

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 932°F (-180°C to 500°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)



DETAIL A

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSION LENGTH IN INCHES

CODE	LEAD LENGTH (IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
4W	3 WIRE (LEAVE BLANK)* 4 WIRE

*Single or Duplex

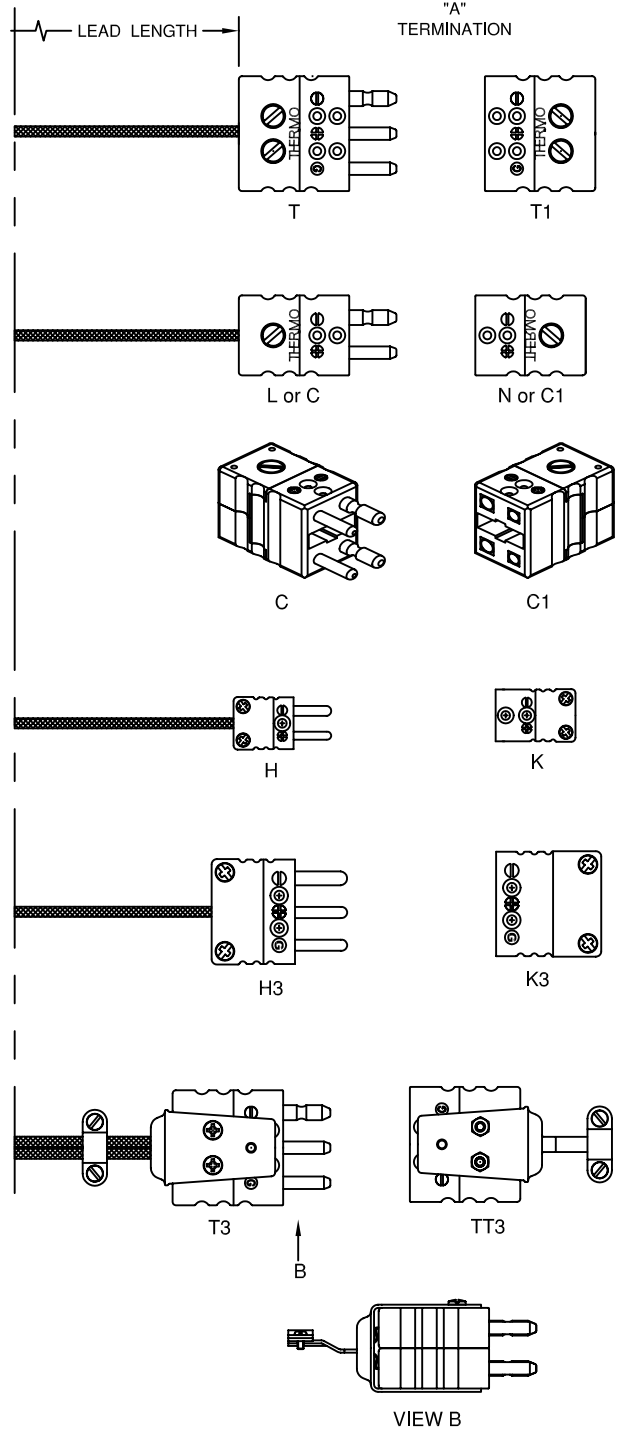
RTD - 14 - CE - 12 - 36 - 1 - A

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	LEAD WIRE INSULATION
1	FIBERGLASS
5	TEFLON

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG (SEE NOTE 1)
H3	MINIATURE 3 PIN PLUG (SEE NOTE 1)
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK



Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "CE"

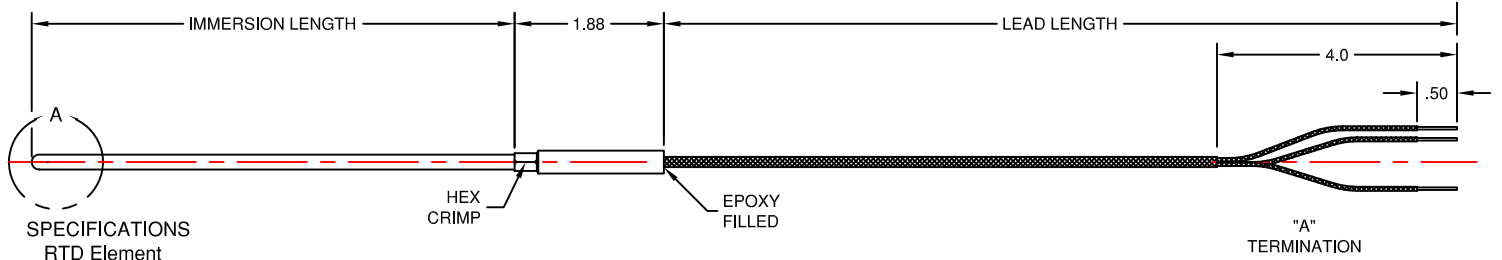
IMMERSION RTD'S with LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-070

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 1202°F (-180°C to 650°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: Inconel 600
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper



DETAIL A

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)						
316	3/16" (4.8mm)	•	•	•	•		
14	1/4" (6.4mm)	•	•	•	•	•	

CODE	IMMERSION LENGTH
	IN INCHES

CODE	LEAD LENGTH
	(IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
4W	3 WIRE (LEAVE BLANK)* 4 WIRE (SINGLE ONLY)

*Single or Duplex

RTD 14 HT 12 36 1 A

CODE	STRUCTURE
D	SINGLE (LEAVE BLANK) DUPLEX

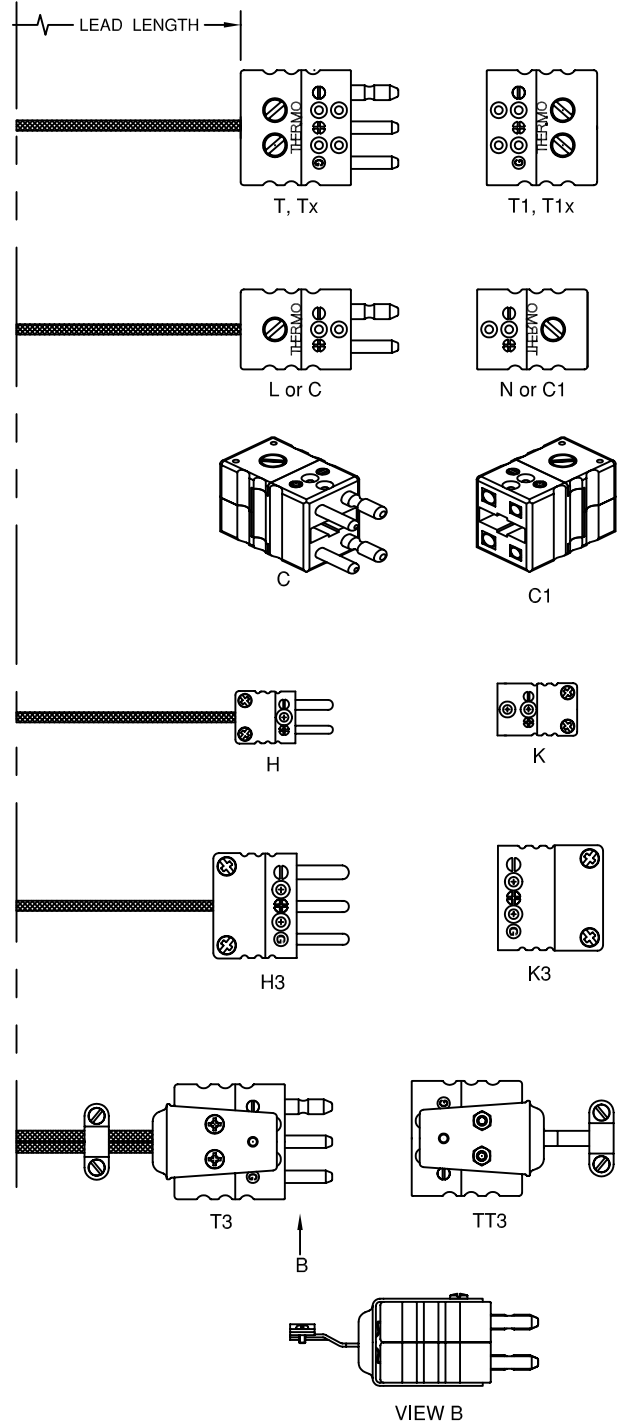
CODE	LEAD WIRE INSULATION
1	FIBERGLASS
5	TEFLON

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
Tx	EXTENDED LIMITS 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
T1x	EXTENDED LIMITS 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) Sheath may be bent to up to a diameter of twice the radius from 2" past tip on single and 3" on duplex.
- (3) Type "HT" not available in Class A accuracy.
- (4) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "HT"

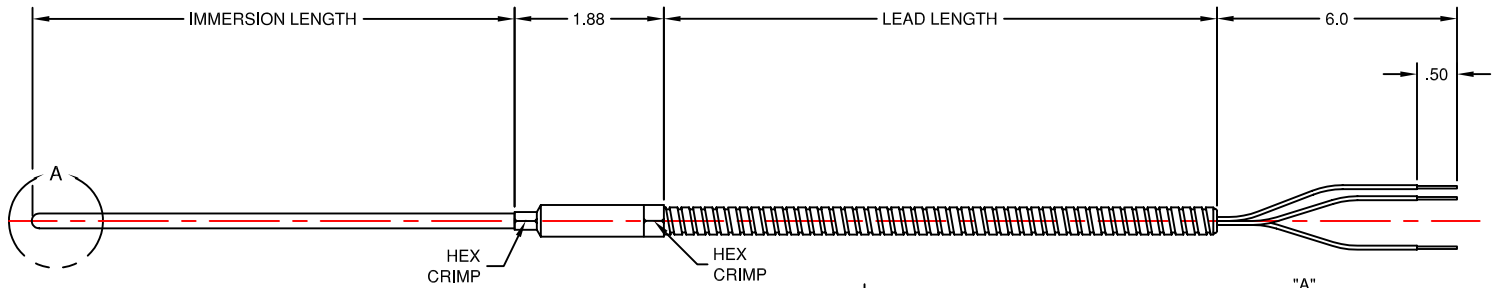
IMMERSION RTD'S with LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-080

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 500°F (-50°C to 260°C)



SPECIFICATIONS

RTD Element

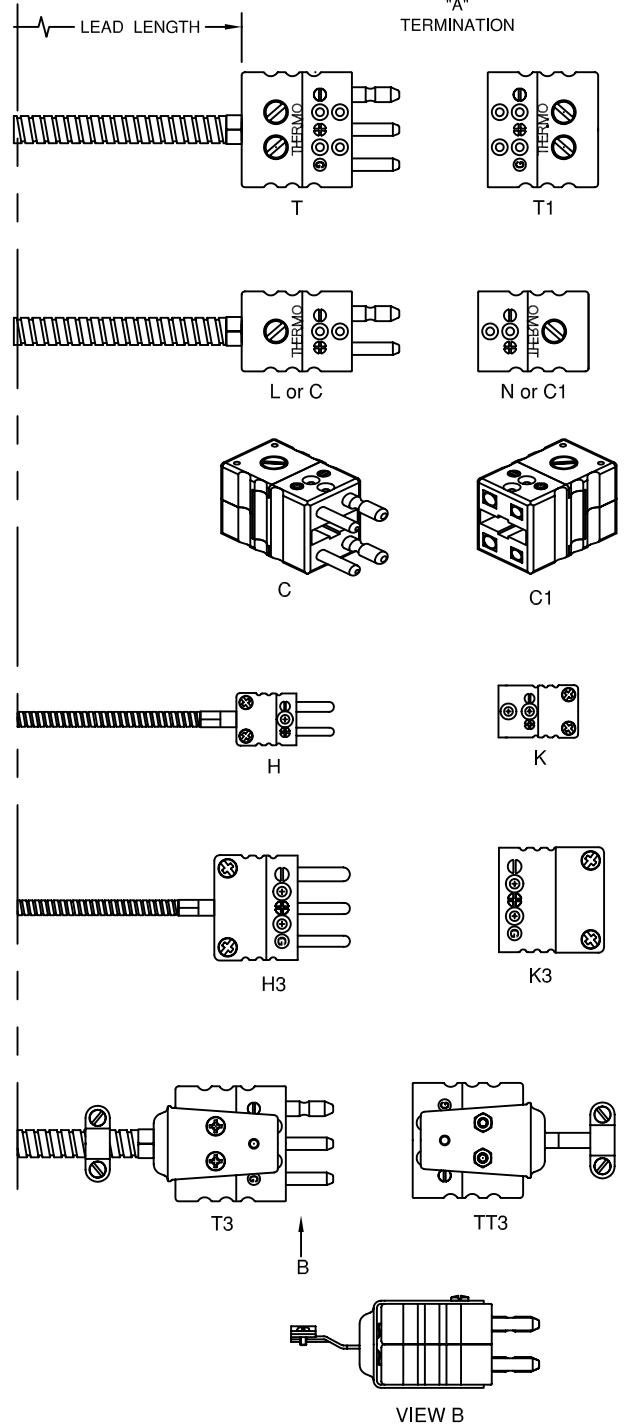
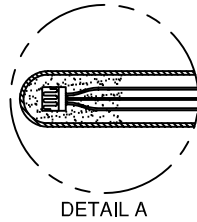
Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper
Insulation: Fiberglass or Teflon(FEP)
Armor: Stainless Steel, Flexible

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)



ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	LEAD LENGTH
	(IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK)*
4W	4 WIRE

*Single or Duplex

D - RTD - 14 - LT - 18 - 96 - 2 - C / C1 - CLA - 2W

CODE	STRUCTURE
D	SINGLE (LEAVE BLANK)
	DUPLEX

CODE	LEAD WIRE INSULATION
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



THERMO ELECTRIC

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SECTION IMRD

TYPE "LT"

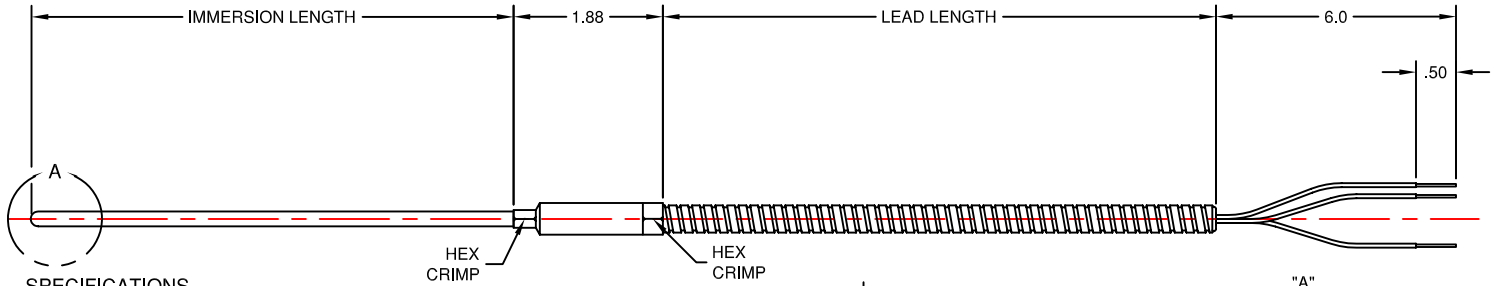
IMMERSION RTD'S with ARMORED LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-090

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 752°F (-50°C to 400°C)



SPECIFICATIONS

RTD Element

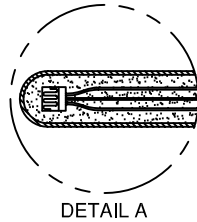
Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Fiberglass

Lead Wire

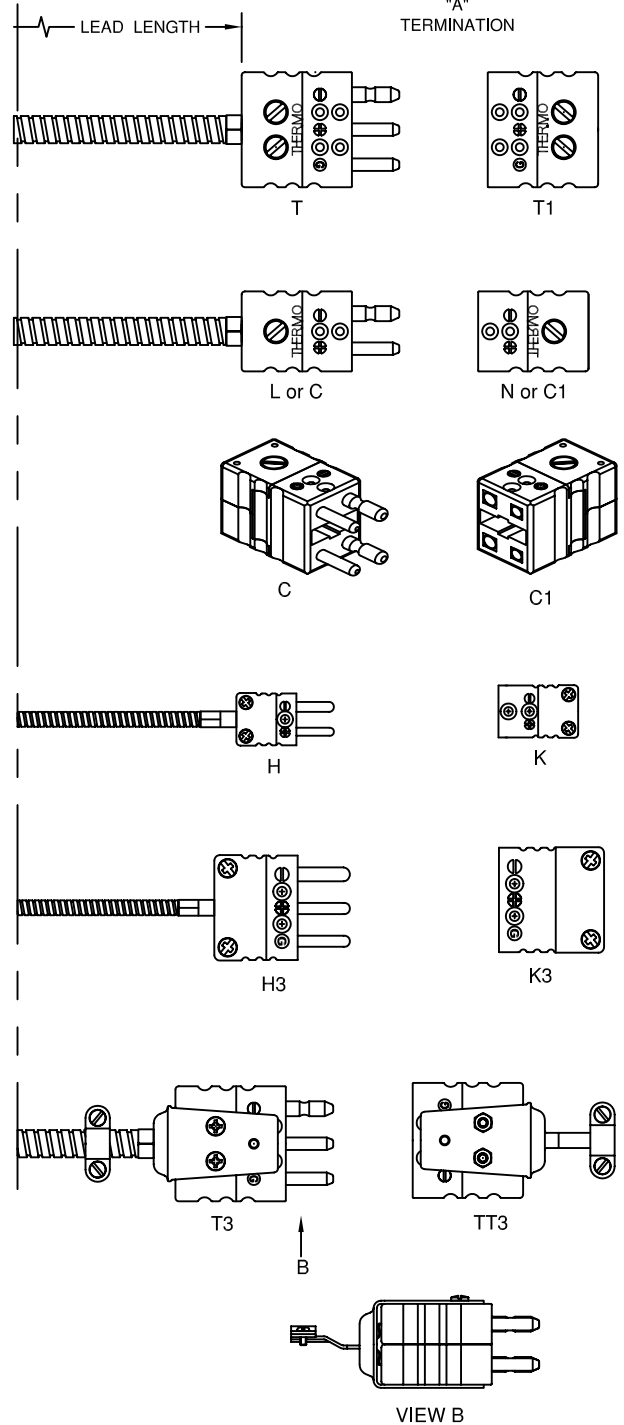
Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper
Insulation: Fiberglass or Teflon(FEP)
Armor: Stainless Steel, Flexible

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)



DETAIL A



ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	IMMERSION LENGTH
	IN INCHES (28" MAX. LENGTH)

CODE	LEAD LENGTH
	(IN INCHES)

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
4W	3 WIRE (LEAVE BLANK)* 4 WIRE

*Single or Duplex

D - RTD - 14 - MT - 18 - 96 - 2 - C - C1 - CLA - 2W

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	LEAD WIRE INSULATION
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "MT"

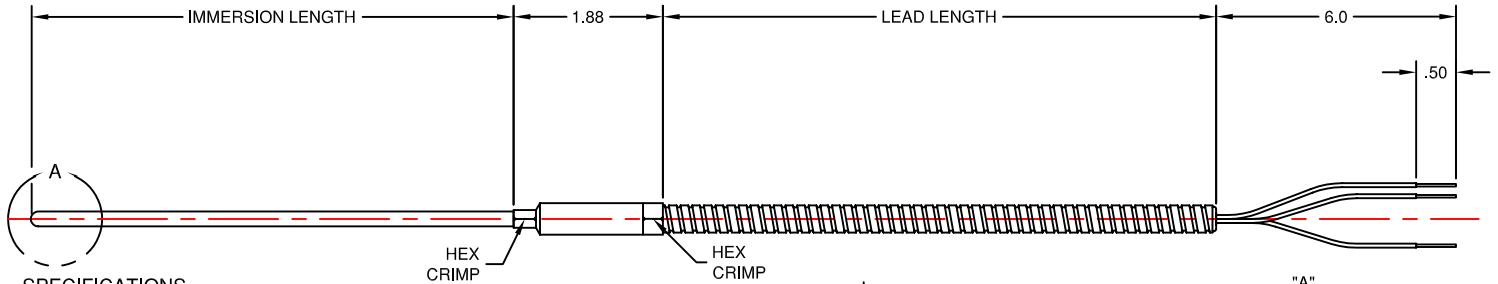
IMMERSION RTD'S with ARMORED LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-100

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 932°F (-180°C to 500°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper
Insulation: Fiberglass or Teflon(FEP)
Armor: Stainless Steel, Flexible

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	•	•	•	•	•	•
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	ACCURACY (ASTM E1137)
CLA	CLASS B (LEAVE BLANK) CLASS A

CODE	IMMERSION LENGTH (IN INCHES)
------	---------------------------------

CODE	LEAD LENGTH (IN INCHES)
------	----------------------------

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
4W	3 WIRE (LEAVE BLANK)* 4 WIRE

*Single or Duplex

D - RTD - 14 - CE - 18 - 96 - 2 - C - C1 - CLA - 2W

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

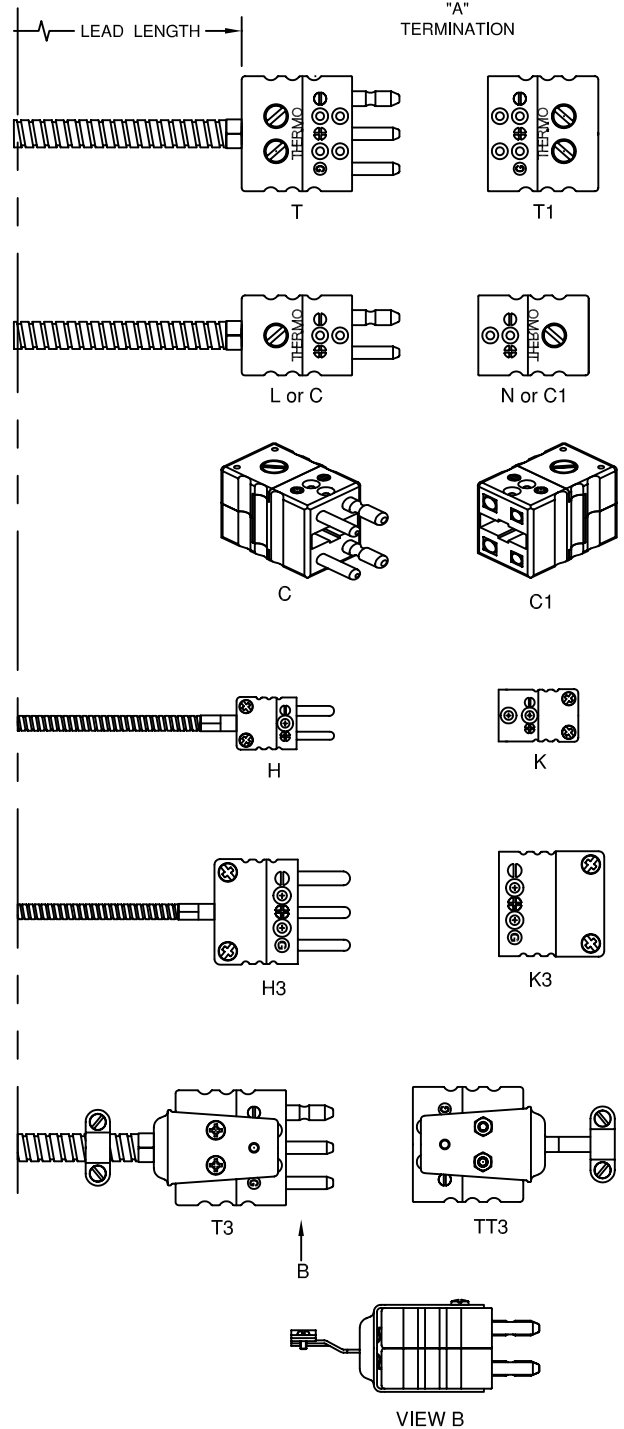
CODE	LEAD WIRE INSULATION
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) Sheath may be bent to up to a diameter of twice the radius from 2" past tip.
- (3) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

TYPE "CE"

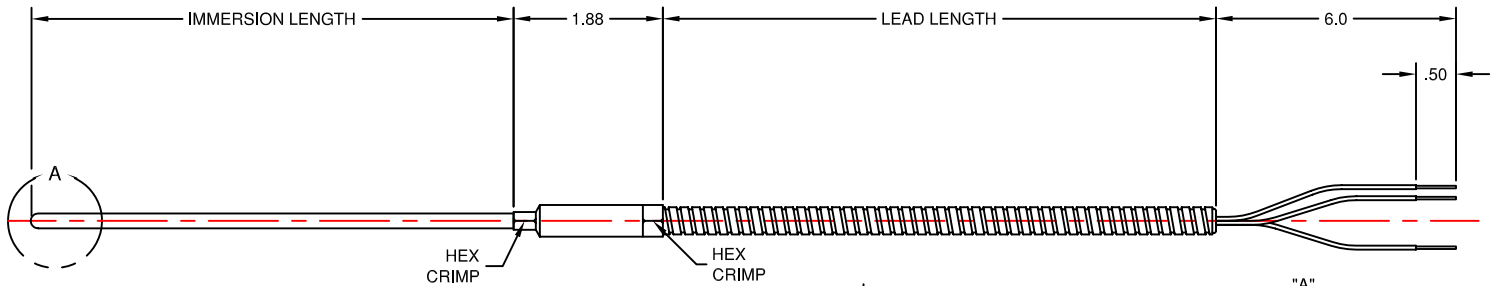
IMMERSION RTD'S with ARMORED LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-110

IMMERSION RTD'S

TEMPERATURE RANGE: -292°F to 1202°F (-180°C to 650°C)



SPECIFICATIONS

RTD Element

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: Inconel 600
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper
Insulation: Fiberglass or Teflon(FEP)
Armor: Stainless Steel, Flexible

Connectors

Body Material: Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

ORDERING CODE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES, T=TOTAL)					
		SINGLE			DUPLEX		
316	3/16" (4.8mm)	•	•	•	•	•	•
14	1/4" (6.4mm)	•	•	•	•	•	•

CODE	IMMERSION LENGTH IN INCHES
14	14
18	18
96	96

CODE	LEAD LENGTH (IN INCHES)
2	2
18	18
96	96

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
3W	3 WIRE (LEAVE BLANK) *
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex

D - RTD - 14 - HT - 18 - 96 - 2 - C - C1

CODE	STRUCTURE
D	SINGLE (LEAVE BLANK)
	DUPLEX

CODE	LEAD WIRE INSULATION
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

CODE	TERMINATION
A	BARE ENDS (NOTE 1)
T	STANDARD SIZE 3 PIN PLUG
Tx	EXTENDED LIMITS 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG
T3	STANDARD SIZE 6 PIN PLUG

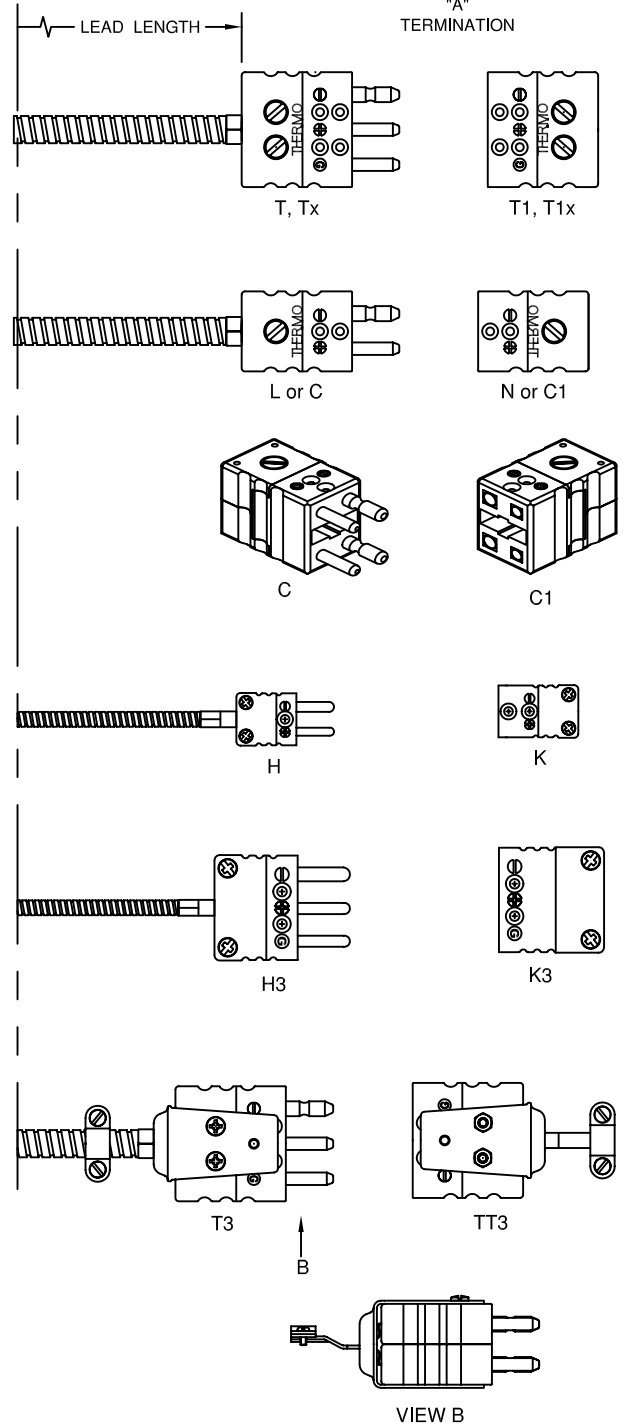
CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
T1x	EXTENDED LIMITS 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK
TT3	STANDARD SIZE 6 PIN JACK

Notes:

- (1) Available with spade lugs, replace "A" with "LG".
- (2) Sheath may be bent to up to a diameter of twice the radius from 2" past tip on single and 3" on duplex.
- (3) Type "HT" not available in Class A accuracy.
- (4) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



DETAIL A



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SECTION IMRD

TYPE "HT"

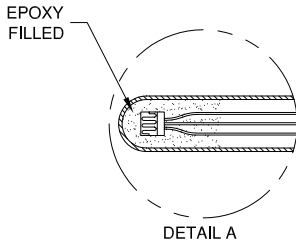
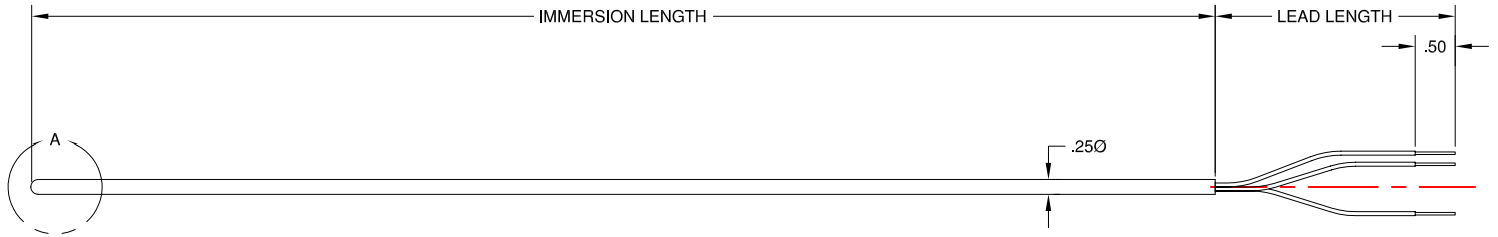
IMMERSION RTD'S with ARMORED LEAD WIRE
SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-120

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 500°F (-50°C to 260°C)

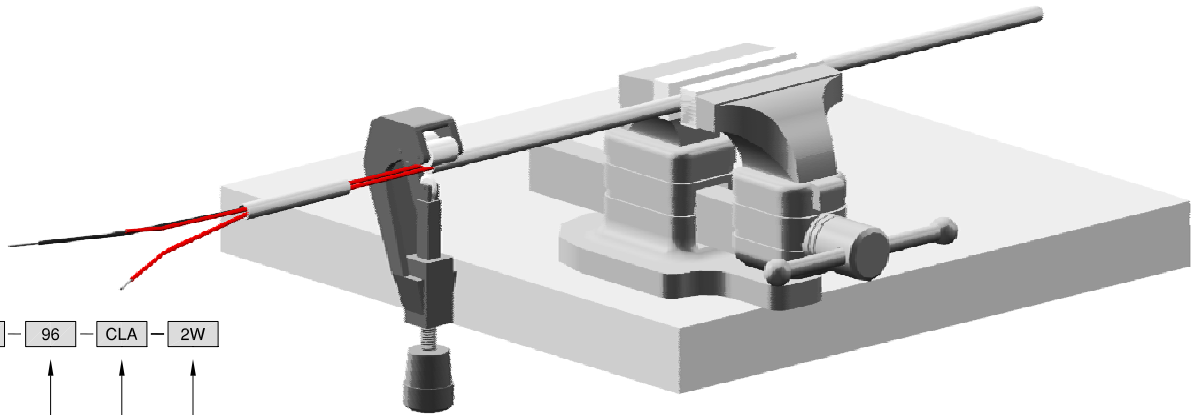


These RTD's are ideal when the immersion length is undetermined until actual time of installation.

As spare elements, they also provide the advantage of stocking the longest length only in a desired quantity to be used as a replacement in any of the shorter assemblies. This offers economy and constant availability.

To reduce the length for a particular installation, simply remove the TEFLON® insert from the lead wire end of the tube. Then cut the tube with a tube cutter to avoid damaging the wires or deforming the tube. Once the tube is cut, remove burrs and reinsert the TEFLON® insert.

Adjustable RTD's are available from stock in standard 28.5" immersion and 6" lead length.



ORDERING CODE

D - RTD29605 - 18 - 96 - CLA - 2W

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK)*
4W	4 WIRE (8 DUPLEX)

*Single or Duplex

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

CODE	LEAD LENGTH (IN INCHES)

CODE	IMMERSION LENGTH (IN INCHES (28" MAX. LENGTH))

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

SPECIFICATIONS

RTD Element

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Sheath Diameter: 1/4" (.25)
Insulation: Teflon(FEP)

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Plated Copper
Insulation: Teflon(FEP)

Notes:

- (1) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

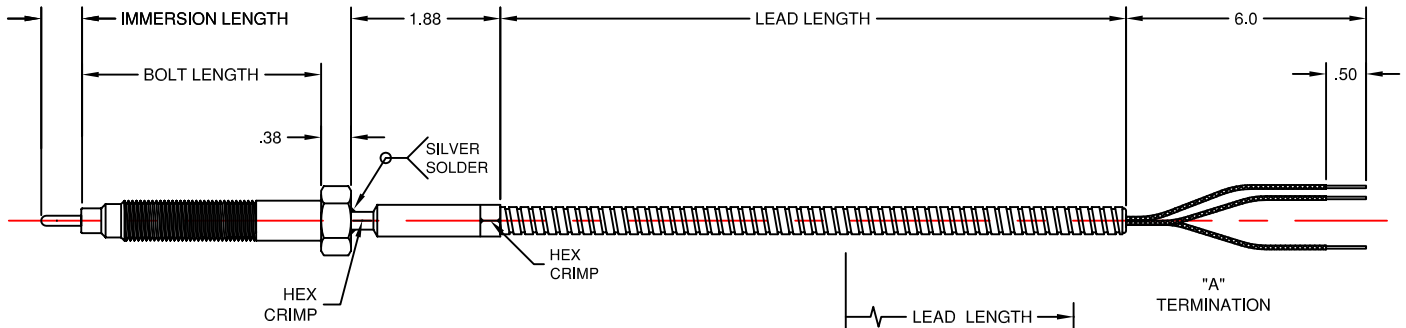
FIELD ADJUSTABLE RTD,S SINGLE & DUPLEX CONSTRUCTION

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Doc. No.: TE-CO010109-IMRD-130

IMMERSION RTD'S

TEMPERATURE RANGE: -58°F to 752°F (-50°C to 400°C)



ORDERING CODE (with ARMORED LEAD WIRE)

CODE	IMMERSION LENGTH	CODE	BOLT LENGTH
1/2	1/2 INCH	3"	3 INCHES
3/4	3/4 INCH	6"	6 INCHES
1	1 INCH	9"	9 INCHES
		12"	12 INCHES

PMRTD - 18 - MT - 1/2 - 3 - 96 - 2 - C - C1 - CLA - 2W

CODE	LEAD LENGTH (IN INCHES)
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

CODE	LEAD WIRE INSULATION
2	FIBERGLASS W/ARMOR OVERALL
8	TEFLON W/ARMOR OVERALL

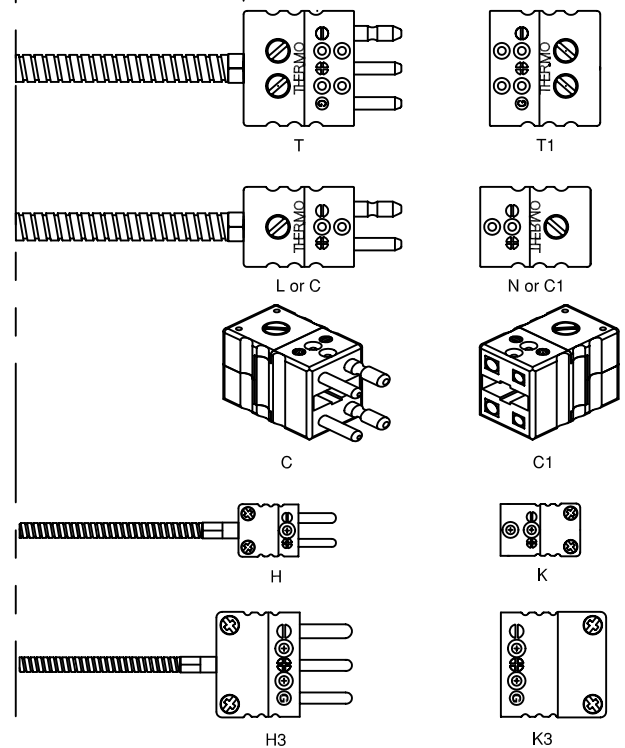
CODE	TERMINATION
A	BARE ENDS (NOTE 2)
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG
C	STANDARD SIZE 4 PIN PLUG
H	MINIATURE 2 PIN PLUG
H3	MINIATURE 3 PIN PLUG

CODE	ACCURACY (ASTM E1137)
CLA	CLASS B (LEAVE BLANK)
	CLASS A

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK
C1	STANDARD SIZE 4 PIN JACK
K	MINIATURE 2 PIN JACK
K3	MINIATURE 3 PIN JACK

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK)*
4W	4 WIRE (SINGLE ONLY)

*Single or Duplex



SPECIFICATIONS

RTD Element

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Insulation: Fiberglass with Powder Filled MgO
Sheath Material: 316 Stainless Steel
Bolt Material: Carbon Steel, (NOTE 1)

Connectors

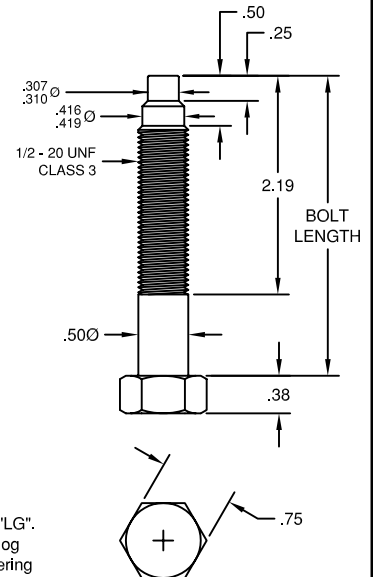
Body Material: Glass Filled Thermoplastic
Polarized Pins
Spring Loaded Inserts
Maximum Temperature Limit: 390°F (200°C)

Lead Wire:

Conductor Size: 24 Gauge Stranded
Conductor Material: Nickel Clad Copper
Insulation: Fiberglass
Jacket: Flexible Armor, 300 Series Stn. Stil.

Notes:

- (1) Bolt and Sheath available in other materials (Hastelloy C276, 300 Series Stn. Stil.).
- (2) Available with spade lugs, replace "A" with "LG".
- (3) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



ORDERING CODE (RIGID MOUNT CONNECTOR)

PMRTD - 18 - MT - 1/2 - 3 - 0 - T - T1 - CLA -

CODE	IMMERSION LENGTH
1/2	1/2 INCH
3/4	3/4 INCH
1	1 INCH

CODE	BOLT LENGTH
3"	3 INCHES
6"	6 INCHES
9"	9 INCHES
12"	12 INCHES

CODE	SYSTEM
2W	2 WIRE (4 DUPLEX)
	3 WIRE (LEAVE BLANK)

CODE	ACCURACY (ASTM E1137)
CLA	CLASS B (LEAVE BLANK)
	CLASS A

CODE	TERMINATION
T	STANDARD SIZE 3 PIN PLUG
L	STANDARD SIZE 2 PIN PLUG

CODE	MATING CONNECTOR (OMIT IF NOT ORDERED)
T1	STANDARD SIZE 3 PIN JACK
N	STANDARD SIZE 2 PIN JACK



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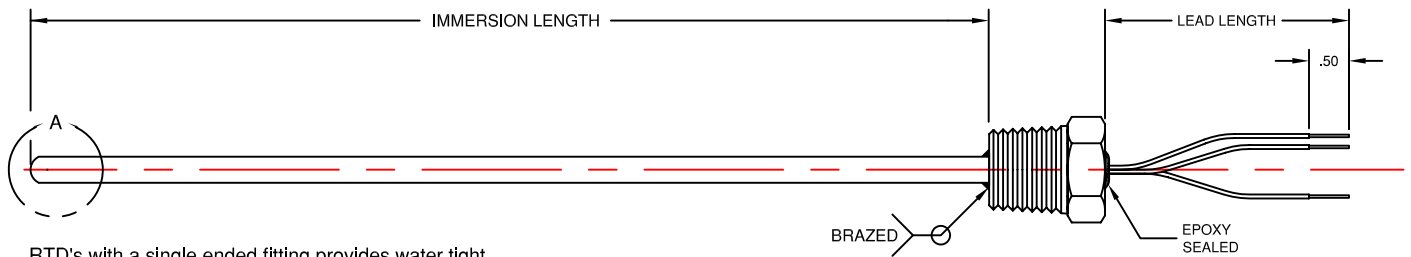
SECTION IMRD

PLASTIC MELT BOLT RTD'S SINGLE CONSTRUCTION

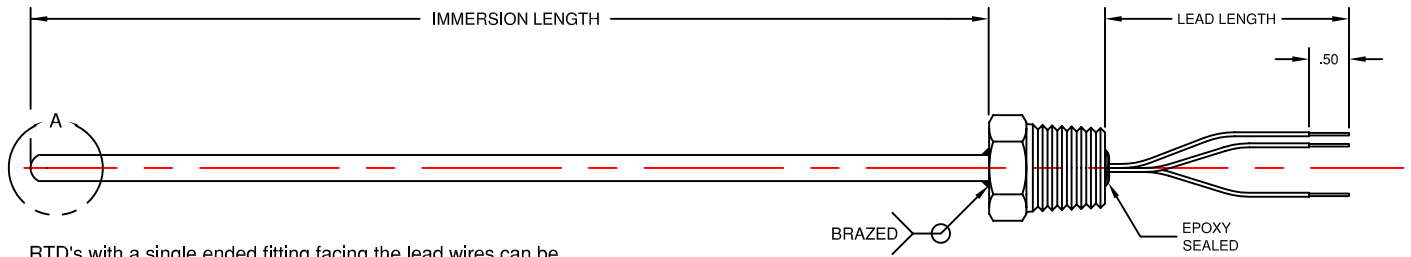
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Doc. No.: TE-CO010109-IMRD-140

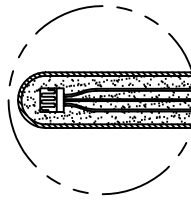
IMMERSION RTD'S



RTD's with a single ended fitting provides water tight connection into the process. lead wire can be connected to a terminal strip mounted anywhere on the equipment.



RTD's with a single ended fitting facing the lead wires can be used to attached conduit, junction boxes, connection heads with terminal block or transmitter. Compressing fittings are available for mounting into the process.



DETAIL A
(LT & MT)



DETAIL A
(CE & HT)

ORDERING CODE

HT TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	●	●	●	●	●	●
316	3/16" (4.8mm)	●	●	●	●	●	●
14	1/4" (6.4mm)	●	●	●	●	●	●

MT TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	●	●	●	●	●	●
316	3/16" (4.8mm)	●	●	●	●	●	●
14	1/4" (6.4mm)	●	●	●	●	●	●

LT & CE TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	●	●	●	●	●	●
316	3/16" (4.8mm)	●	●	●	●	●	●
14	1/4" (6.4mm)	●	●	●	●	●	●

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	TEMPERATURE RANGE
LT	-58° F to 500° F (-50° C to 260° C)
MT	-58° F to 752° F (-50° C to 400° C)
CE	-292° F to 932° F (-180° C to 500° C)
HT	-292° F to 1202° F (-180° C to 650° C)

CODE	IMMERSION LENGTH (IN INCHES)
	LT & MT 28 INCHES MAXIMUM

CODE	LEAD LENGTH (IN INCHES)

CODE	THREAD SIZE
1/8	1/8" NPT
1/4	1/4" NPT
1/2	1/2" NPT

CODE	THREAD DIRECTION
P	PROCESS
H	HEAD

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A
HT NOT AVAILABLE IN CLASS A	

CODE	SYSTEM
2W	2 WIRE
	3 WIRE (LEAVE BLANK)*
4W	4 WIRE
*Single or Duplex	

-1642-14-CE-12-6-1/2-P-CLA-

SPECIFICATIONS

RTD Element, LT & MT

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Teflon(FEP)

RTD Element, CE

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Hard Packed MgO

RTD Element, HT

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: Inconel 600
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: TEFLON

Fitting

Material: 316 Stn. Stl.

Notes:

(1) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION INRD

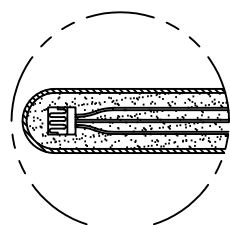
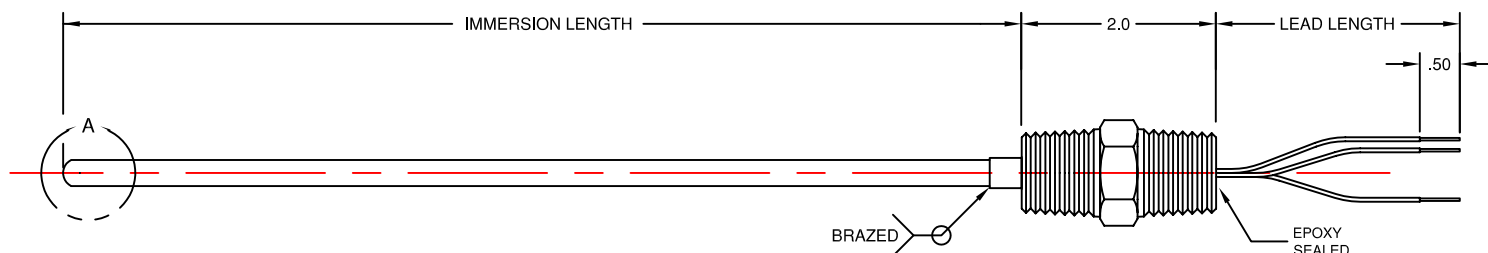
RTD'S with SINGLE ENDED HEX FITTINGS

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Doc. No.: TE-CO010109-IMRD-150

IMMERSION RTD'S

RTD's with a double ended fitting provides water tight connection into the process and used to attached conduit, junction boxes, connection heads with terminal block or transmitter.



DETAIL A
(LT & MT)



DETAIL A
(CE & HT)

SPECIFICATIONS

RTD Element, LT & MT

Type: Platinum, Thin Film
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Teflon(FEP)

RTD Element, CE

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: 316 Stainless Steel
Insulation: Hard Packed MgO

RTD Element, HT

Type: Platinum, Wire Wound
Resistance @ 0° C: 100 OHMS
Temperature Coefficient of Resistance: .00385
Sheath Material: Inconel 600
Insulation: Hard Packed MgO

Lead Wire

Conductor Size: 24 Gauge Stranded
Conductor Material: TEFLON

Fitting

Material: 316 Stn. Stl.

ORDERING CODE

HT TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)						
316	3/16" (4.8mm)	●	●	●			
14	1/4" (6.4mm)	●	●	●	●	●	

MT TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	●	●	●	●	●	
316	3/16" (4.8mm)	●	●	●	●	●	
14	1/4" (6.4mm)	●	●	●	●	●	

LT & CE TEMPERATURE RANGE

CODE	SHEATH DIAMETER	AVAILABILITY (W=WIRES,T=TOTAL)					
		SINGLE			DUPLEX		
		2W	3W	4W	2W(4T)	3W(6T)	4W(8T)
18	1/8" (3.2mm)	●	●	●	●	●	
316	3/16" (4.8mm)	●	●	●	●	●	
14	1/4" (6.4mm)	●	●	●	●	●	

CODE	STRUCTURE
	SINGLE (LEAVE BLANK)
D	DUPLEX

CODE	TEMPERATURE RANGE
LT	-58° F to 500° F (-50° C to 260° C)
MT	-58° F to 752° F (-50° C to 400° C)
CE	-292° F to 932° F (-180° C to 500° C)
HT	-292° F to 1202° F (-180° C to 650° C)

CODE	IMMERSION LENGTH (IN INCHES)
	LT & MT 28 INCHES MAXIMUM

CODE	LEAD LENGTH (IN INCHES)

CODE	THREAD SIZE
1/8	1/8" NPT
1/4	1/4" NPT
1/2	1/2" NPT

CODE	ACCURACY (ASTM E1137)
	CLASS B (LEAVE BLANK)
CLA	CLASS A

HT NOT AVAILABLE IN CLASS A

CODE	SYSTEM
2W	2 WIRE
	3 WIRE (LEAVE BLANK) *
4W	4 WIRE

*Single or Duplex

-1632- 14 - CE - 12 - 6 - 1/2 - CLA - CLA

Notes:

(1) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.



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SECTION IMRD

RTD'S with DOUBLE
ENDED HEX FITTING

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Doc. No.: TE-CO010109-IMRD-160

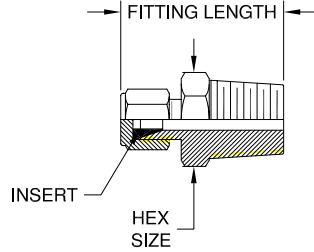
IMMERSION MOUNT RTD'S

BORE THROUGH COMPRESSION TUBE FITTINGS

PROCESS THREAD SIZE	SHEATH (TUBE) DIAMETER	FITTING LENGTH	HEX SIZE	ORDERING CODE				
				BRASS FITTINGS		STAINLESS STEEL FITTINGS		
				BRASS INSERT	TEFLON® INSERT	STN. STL. INSERT	TEFLON® INSERT	LAVA INSERT
1/8"NPT	1/8" (.125)	1.20	7/16	AF4350-2-B	AF4350-2-T	AF2485-3-S	AF2485-3-T	AF2485-3-L
1/8"NPT	3/16" (.188)	1.23	7/16	AF4350-3-B	AF4350-3-T	AF2485-3-S	AF2485-3-T	AF2485-3-L
1/8"NPT	1/4" (.250)	1.29	1/2	AF4350-4-B	AF4350-4-T	AF2485-3-S	AF2485-3-T	AF2485-3-L
1/4"NPT	1/8" (.125)	1.40	9/16	AF4173-3-B	AF4173-3-T	AF2502-5-S	AF2502-5-T	AF2502-5-L
1/4"NPT	3/16" (.188)	1.43	9/16	AF4173-2-B	AF4173-2-T	AF2502-4-S	AF2502-4-T	AF2502-4-L
1/4"NPT	1/4" (.250)	1.49	9/16	AF4173-1-B	AF4173-1-T	AF2502-1-S	AF2502-1-T	AF2502-1-L

SPECIFICATIONS

- Service: 5000 PSI @ 68° F.
- Fittings with Brass & Stainless Steel Inserts
- Can not be relocated once tightened
- Fittings with Teflon Inserts
- Can be relocated if used below 400° F.
- Fittings with Lava Inserts
- Can be relocated if insert is replaced

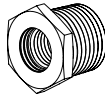


ORDERING CODE	PROCESS THREAD SIZE	SHEATH (TUBE) DIAMETER	INSERT MATERIAL	FITTING LENGTH	HEX SIZE
AF2817-2-S	1/2"NPT	1/4" (.250)	STN. STL.	1.87	7/8
AF2817-2-T	1/2"NPT	1/4" (.250)	TEFLON®	1.87	7/8
AF2817-2-L	1/2"NPT	1/4" (.250)	LAVA	1.87	7/8
AF2817-5-S	1/2"NPT	3/16" (.188)	STN. STL.	1.87	7/8
AF2817-5-T	1/2"NPT	3/16" (.188)	TEFLON®	1.87	7/8
AF2817-5-L	1/2"NPT	3/16" (.188)	LAVA	1.87	7/8
AF2817-6-S	1/2"NPT	3/16" (.188)	STN. STL.	1.87	7/8
AF2817-6-T	1/2"NPT	3/16" (.188)	TEFLON®	1.87	7/8
AF2817-6-L	1/2"NPT	3/16" (.188)	LAVA	1.87	7/8

REDUCING BUSHING

ORDERING CODE
RE1086-4

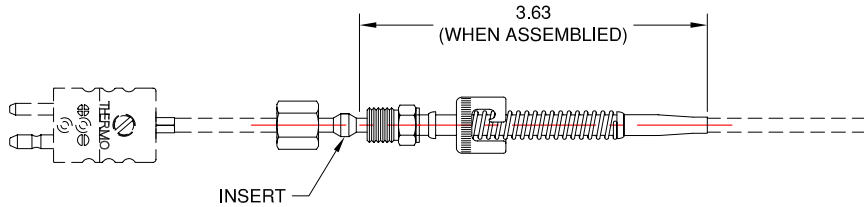
Size: 1/4"NPT Female
by 1/2"NPT Male



REPLACEMENT INSERTS

SHEATH(TUBE) DIAMETER	BRASS FITTINGS	
	TEFLON® INSERT	LAVA INSERT
1/8" (.125)	FRC6443-2	BS5712-1
3/16" (.188)	FRC6443-3	BS5712-4
1/4" (.250)	FRC6443-4	BS5712-2

ADJUSTABLE BAYONET MOUNTING ADAPTERS

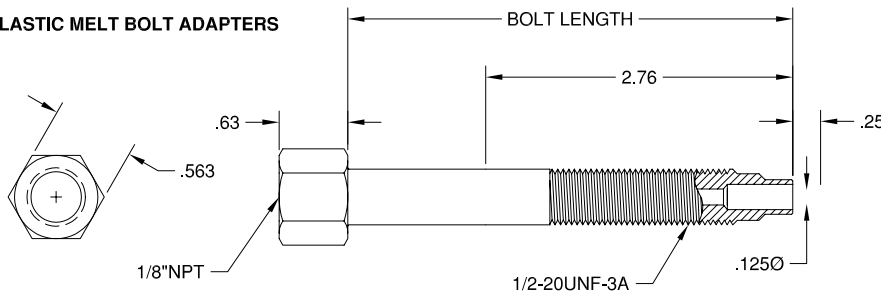


ORDERING CODE	INSERT MATERIAL	SHEATH (TUBE) DIAMETER
BY21240-4	TEFLON	1/8" (.125)
BY21240-6	BRASS	1/8" (.125)

SPECIFICATIONS

- Bayonet mounting adapters suitable for any 1/8" diameter immersion element.
- Adapters with Teflon inserts are re-adjustable and rated to 500° F

PLASTIC MELT BOLT ADAPTERS

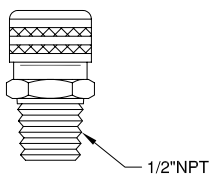


ORDERING CODE	BOLT LENGTH	SHEATH (TUBE) DIAMETER
FTPM28870-4	3"	1/8" (.125)
FTPM28870-5	6"	
FTPM28870-6	12"	

SPECIFICATIONS

- Open end plastic melt fitting suitable for any 1/8" diameter immersion element.
- Fitting material - 304 Stainless Steel

WATERPROOF FITTINGS



ORDERING CODE	WIRE or ARMOR DIAMETER
CCB1637-1	.125 to .250
CCB1637-2	.250 to .375
CCB1637-3	.375 to .500

SPECIFICATIONS

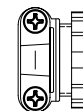
- Fits connection heads and junction boxes with 1/2"NPT openings.
- Steel body and cap.
- Rubber bushing.
- Other NPT sizes available on request.

STRAIN RELIEF BELL SPRING

E:\New TE Catalog\Renderings\Bell Spring.tif

ORDERING CODE
SG1118

BX CONNECTORS



ORDERING CODE

CC2852-1

SPECIFICATIONS

- Connects armor lead wire to electrical outlet boxes.
- Material - Cast Zinc.



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SECTION IMRD

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Doc. No.: TE-CO010109-IMRD-170

INTRODUCTION

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Sensor Solutions from
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