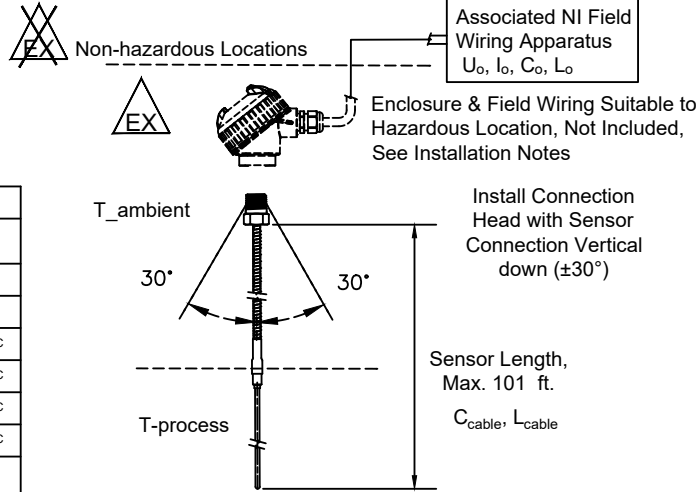


Hazardous (Classified) Location  
 Class I / Division 2 / Groups ABCD  
 Class II / Division 2 / Groups FG  
 Class III  
 US: Class I, Zone 2, IIC; Zone 22, IIIB; Zone 22, IIIA

T-code or T-class: Is determined by the maximum measured temperature.



Temperature Class	T ambient – see Note 1	T Service – see Note 1	T Process
T6	-40°C ≤ Ta ≤ 80°C	-40°C ≤ Ts ≤ 75°C	-40°C ≤ Tp ≤ 75°C
T5	-40°C ≤ Ta ≤ 95°C	-40°C ≤ Ts ≤ 90°C	-40°C ≤ Tp ≤ 90°C
T4	-40°C ≤ Ta ≤ 95°C	-40°C ≤ Ts ≤ 125°C	-40°C ≤ Tp ≤ 125°C
T3	-40°C ≤ Ta ≤ 95°C	-40°C ≤ Ts ≤ 190°C	-40°C ≤ Tp ≤ 190°C
T2	-40°C ≤ Ta ≤ 95°C	-40°C ≤ Ts ≤ 285°C	-40°C ≤ Tp ≤ 285°C
T1	-40°C ≤ Ta ≤ 95°C	-40°C ≤ Ts ≤ 435°C	-40°C ≤ Tp ≤ 435°C

Note 1 - the temperature at the field wiring enclosure end of the sensor shall not exceed T ambient and that of the user supplied field wiring enclosure.

**Installation Notes: Config Code RT01, MG01, BS01 - NI Remote-Mount Temperature Sensor Assemblies**

**Conditions of Acceptability**

- Process Temperature Range: -40°C to 435°C (applies to the sensor and metal sheath)
- The equipment shall be installed in accordance with manufacturer's instructions installation drawings.
- End-user shall ensure proper earthing of the device upon installation in accordance with the Canadian (CSA C22.1) and the National (NFPA 70) Electrical Codes. Mounting of the device for installation must ensure that the metallic body is reliably connected to the system earth; continuity to be checked and confirmed.
- The equipment may only be powered by a power supply unit with a limited energy electric circuit, in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or a Class 2 power source as defined in the Canadian Electrical Code C22.1 and/or the National Electrical Code (NFPA 70).
- Cable entries and blanking elements shall be used that are suitable for the application and correctly installed.
- All designated enclosure entries shall maintain the degree of enclosure protection (Type and/or IP) only by applying a compatible attachment device (e.g., cable gland) having the same or higher degree of enclosure protection.
- When the process temperature range exceeds the service temperature range it shall be verified by on-site temperature measurements, taking the worst-case conditions into account, that the service temperature does not exceed the ambient temperature range of the enclosure. Service Temperature at the Field Wiring Enclosure (including transmitter or terminal block) shall not exceed the T ambient marked on the Equipment assembly.
- User must ensure that each major component of the installed system: sheath materials, sensor assembly leadwire extensions and transmitter assembly are suitable for exposure to the process temperature and resulting service temperature.
- Installation must conform to the respective certification installation drawing for each component assembly of the installed system and the user shall ensure the ambient temperature is not exceeded for either component in the installed system after installation.
- Temperature sensor element must be protected from impact, environmental and / or physical damage by installation.
- This device must be connected to a field wiring enclosure, which provides a minimum ingress protection of IP54 and protects against mechanical impact.
- Temperature sensors with lead-wire extensions not enclosed in (stainless steel) flex armor shall be installed with suitable protection from physical/environment damage.
- All connections shall be terminated within a Division 2/Zone 2 compliant enclosure having a termination connection for use with the conductor and wire size that is tool-secured and maintains the required spacings.

WARNING -EXPLOSION HAZARD - DO NOT REMOVE OR REPLACE WHILE CIRCUIT IS LIVE UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS

WARNING -EXPLOSION HAZARD - DO NOT DISCONNECT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS

AVERTISSEMENT - RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER À MOINS QUE L'ALIMENTATION N'AIT ÉCŒUPÉ OU QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES.

AVERTISSEMENT -RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER PENDANT QUE LE CIRCUIT EST SOUS TENSION À MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES

**Installation, Connection to Field Wiring Enclosure**

- Extension Leadwire must be used with field wiring enclosure fitting (Cord Grip, Strain Relief, Cable Gland) that is suitable for the Hazardous (Classified) Location
- Extension Leadwire with Flexible Armor, to achieve IP56 protection at the field wiring enclosure; must be installed with minimum 6 inch (150mm) of length extending vertical down from field wiring enclosure - as shown in figure.

As applicable: See "Conditions of Acceptability" and ASSEMBLIES w/o Transmitters".

NI Parameters (Maximum 31m (101 feet), 4 wire pairs, Ci ≤ 25 nF, Li ≤ 0.12 mH)

- Sensor assemblies must be connected using appropriate nonincendive field wiring

RTD's Per CSA C22.2 No. 217 7.7.1 c) Ui: N/A,  
 100 ohm Platinum - 1 mA  
 200 ohm Platinum - 0.7 mA  
 500 ohm Platinum - 0.5 mA  
 1000 ohm Platinum - 0.3 mA  
 10 ohm Copper - 3 mA  
 200 ohm Nickel - 1 mA

Thermocouple Per C22.2 No. 217 7.7.1 d) Ui, li: N/A

Capacitance and inductance of field wiring from non-incendive assembly to Associated NI Field Wiring Apparatus shall be measured or calculated and included in the system parameters. As applicable, where cable capacitance and inductance are not known the following values per length of conductor may be used:  
 C\_cable = 200 pF/m, L\_cable = 1uH/m. (Ref: CSA C22.2 No. 60079-25, 60079-14, ISA-RP12.6, ISA-TR12.2)

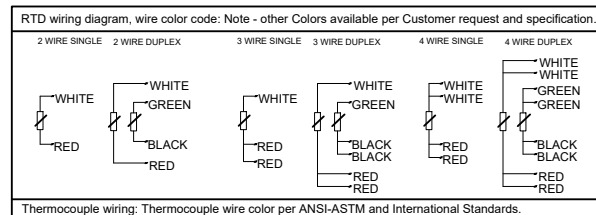
- wiring and Associated NI Field Wiring Apparatus must be suitable for use with RTD, Thermocouple.
- Field wiring must be evaluate:  $C_o \geq C_i + C_{cable}$ ;  $L_o \geq L_i + L_{cable}$

Model Code: Contact factory for additional information  
 PN: (a)-(b)(c)(d)(e)-(f)-(g)-(h)-(i)(j)-(k,l,m...)


(i)(j) Extension Cable construction (insulation and length)  
 5 or 6 characters - first two or three are construction, last three are length in inches

Example:  
 T3T099 = Fluoropolymer insulation, stranded conductor, Fluoropolymer coated stainless steel, armor, 99 inch length  
 K1015 = Polyimide insulation, solid conductor, no braid or armor, 15 inch length  
 Last 3 characters (j) Length in inches - e.g. 012 equals 12 inches

(i) 1st character	Wire insulation	Service Temp
F	Fiberglass	-50...482°C (900°F)
H	Hi-temp fiberglass	-50...704°C (1300°F)
T	Fluoropolymer	-50...200°C (392°F)
P	PVC	-26...105°C (221°F)
K	Polyimide	-50...260°C (500°F)
M	Fluoropolymer, stainless steel overbraid, Fluoropolymer overcoat	-50...200°C (392°F)
S	Silicone	-40...200°C (392°F)



<b>TITLE:</b> Remote-Mount Replacement Sensor Installation / Ctl. Dwg.		<b>PART NUMBER:</b>		<b>REVISION DATE:</b> 08/23/2023	
This document is PROPRIETARY to Pyromation		<b>SIZE:</b> A	<b>DRAWING NO:</b> J280010	<b>REV:</b> -	<b>SCALE:</b> N/A



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