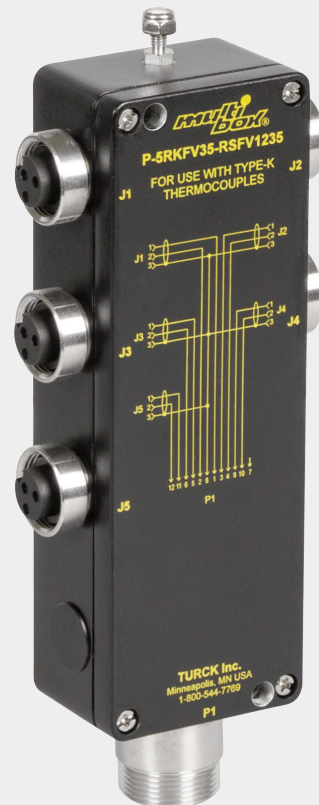


Your Global Automation Partner

TURCK

Thermocouple Wiring Installation Guide



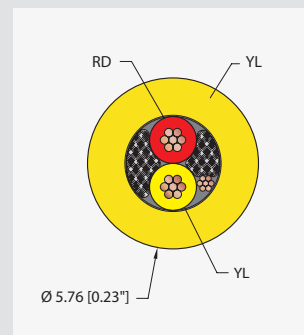
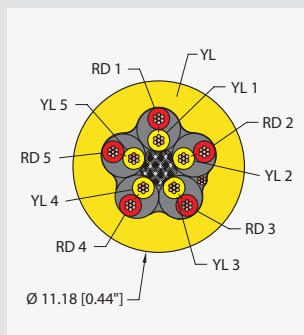
Thermocouple Type K Process Wiring



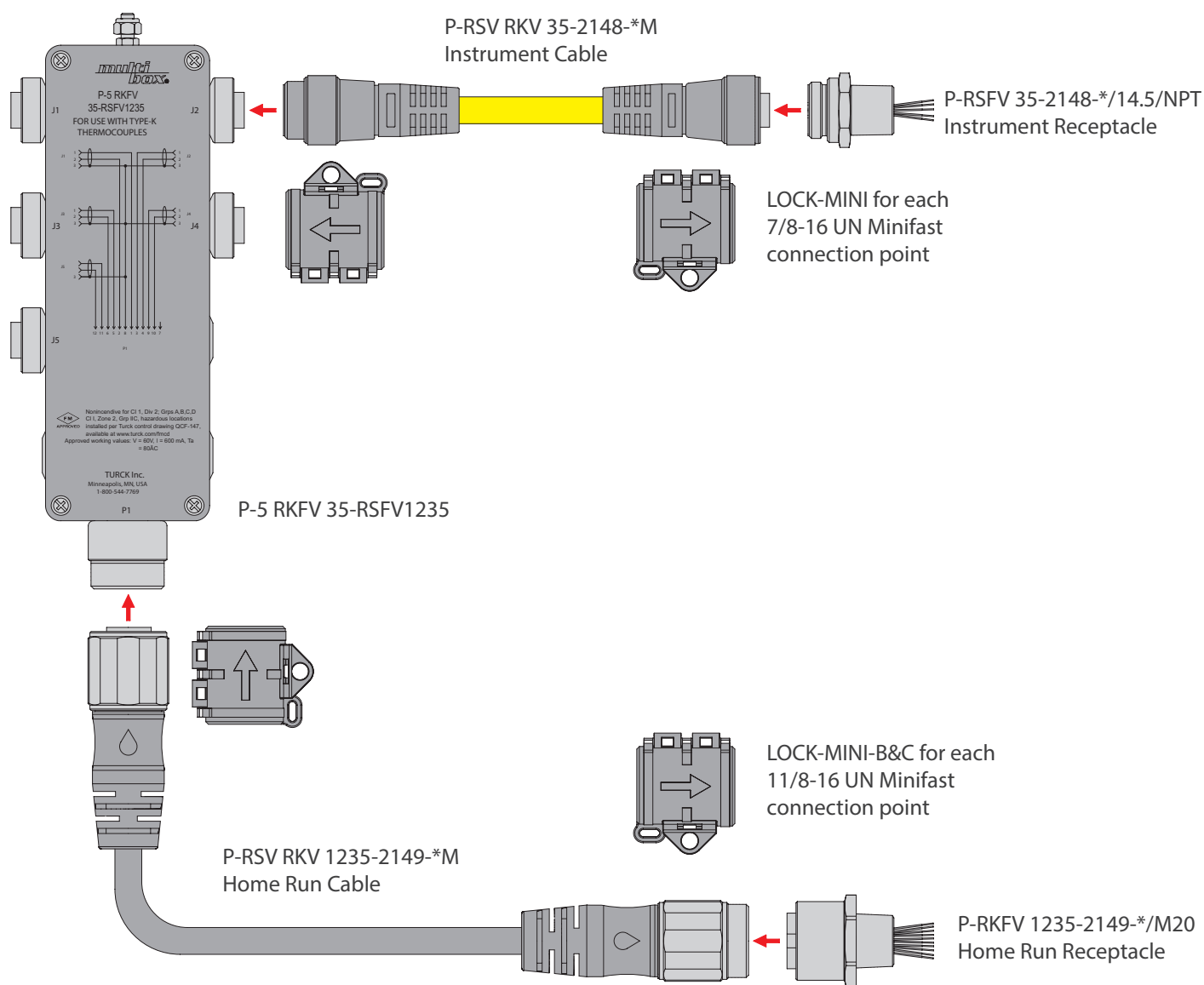
Turck's thermocouple wiring solution allows you to consolidate up to 5 thermocouples into a junction box, creating a single home run connection with multiple thermocouple signals all bundled into one cable to the panel. This frees up installation space and reduces labor costs while maintaining signal integrity.

Features:

- Chromel® and Alumel® contacts and wires throughout the system resulting in no cold junction compensation required
- Shielded and twisted thermocouple wiring to reduce magnetic and electric noise
- Type PLTC – Power Limited Tray Cable – (NEC Article 725)



Thermocouple Type K Process Wiring



* asterisk designates length of cable or wire in meters.

Approvals:



CSA PA



RoHS (Lead Free)



UL Listed



FM Class I/II Division 2

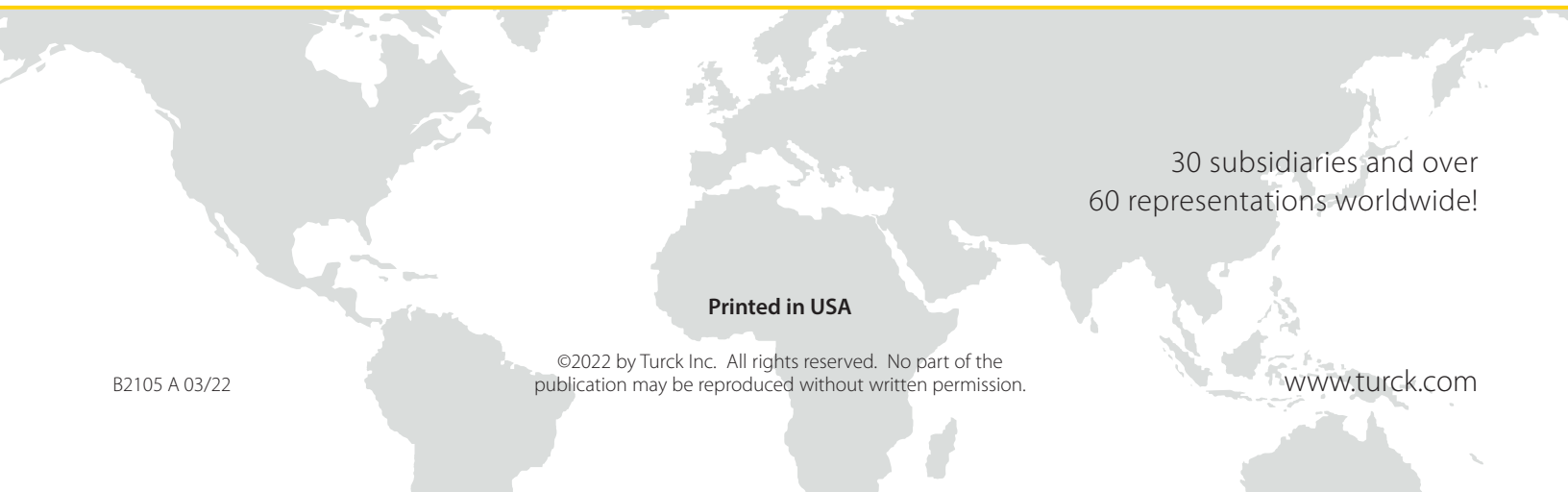


CE Approved

Installation Methods:

<p>Non Incendive for Class I Division 2 Group A, B, C, or D; or Class II Division 2, Group E, F, or G; or Class I, Zone 2, Group IIC Hazardous Location</p>	<p>Intrinsically Safe for Class I, Division 1, Groups A, B, C,D; Class II, Division 1, Groups E, F, G; Class III Division 1 Hazardous locations with I/S Barrier</p>
<p>Requires the use of approved/certified cable, connectors, and installation method in accordance with the National Electric Code (NEC), ANSI/NFPA 70.</p> <p>Specific requirements for the installation of PLTC rated cable found in Article 725. (Not suitable for use in Class I, Division 1, Zone 0 or Zone 1 locations)</p>	<p>Thermocouples are defined as simple apparatus and with the appropriate IS barrier and wiring practices are allowed for use in any classified area.</p> <p>Simple Apparatus. An electrical component or combination of components of simple construction with well-defined electrical parameters that does not generate more than 1.5 volts, 100 milliamps, and 25 milliwatts, or a passive component that does not dissipate more than 1.3 watts and is compatible with the intrinsic safety of the circuit in which it is used.</p> <p>FPN: The following apparatus are examples of simple apparatus:</p> <ul style="list-style-type: none"> (a) Passive components, for example, switches, junction boxes, resistance temperature devices, and simple semiconductor devices such as LEDs (b) Sources of stored energy consisting of single components in simple circuits with well-defined parameters, for example, capacitors or inductors, whose values are considered when determining the overall safety of the system (c) Sources of generated energy, for example, thermocouples and photocells, which do not generate more than 1.5 V, 100 mA, and 25 mW

Install per Turck drawing QCF-147 Control Drawing for Process Wiring System, available at turck.com/fmcd.



30 subsidiaries and over
60 representations worldwide!

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