Temperature Sensing

MI Cable Thermocouple Assemblies

Style MTA1 — Transition to Lead Wire (Custom Manufactured)

**Design Features**

- Mineral insulated sheath provides flexibility to form and bend the thermocouple to meet design requirements.
- Stainless steel transition with optional Strain Relief Spring
- Standard epoxy potting transition provides greater moisture resistance rated to 450°F (232°C). Optional ceramic based potting rated to 1000°F (538°C). Ceramic potting not recommended with Teflon® leads, nor for high humidity applications.

**Ordering Information**

Thermocouples are offered with the options listed in the worksheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

**Ordering Code:**

- **MTA1**
- **Calibration Code**
  - ANSI Standard: J K E T N R S
  - Special Tolerances: 3 4 5 6 7
- **Number of Conductors**
  - 2 = Single (Standard)
  - 4 = Duplex
- **Insulation**
  - M = 96% min. MgO (Standard)
  - H = 99.4% min. MgO
- **Sheath Material**
  - A = Alloy 600
  - B = 304 SS
  - C = 316 SS
- **Sheath O.D.**
  - A = .020” ±.001
  - B = .032” ±.001
  - C = .040” ±.001
  - D = .063” ±.001
  - E = .093” ±.002
  - F = .125” ±.002
  - G = .188” ±.002
  - H = .250” ±.003/−.002
  - J = .313” ±.003/−.002
- **Sheath Length “L”**
  - Whole inches
  - For lengths over 99 in. consult TEMPCO.
  - 01 to 99

**Optional Installation**

Compression Fitting

See Box 13

**Junction**

- Single
  - Grounded: G
  - Ungrounded: U
  - Exposed: E
- Dual, common: 4 5 6
- Dual, isolated: 7 8

**Lead Wire Construction**

- Fiberglass 900°F (482°C) S B A
- Teflon 400°F (204°C) T D F

Depending on availability, .040” to .125” uses 24 gauge lead wire. Larger than .125” thermocouples use 20 gauge lead wire depending on availability and insulation type.

**Lead Wire Length**

- In inches 001 to 999
- 12” (012) Standard

**Lead Wire Termination**

- P = Standard Male Plug
- J = Standard Female Jack
- K = Std. Plug with Mating Conn.
- D = Miniature Male Plug
- E = Miniature Female Jack

**Optional Compression Fitting**

- 1 = 1/8” NPT SS
- 4 = 1/8” NPT Brass
- 2 = 1/4” NPT SS
- 5 = 1/4” NPT Brass
- 3 = 1/2” NPT SS
- 6 = 1/2” NPT Brass
- 0 = None Required

**Strain Relief Spring**

- O = Not Required
- Y = Required

**Special Requirements**

- H = High temp potting 1000°F (538°C)
- O = Standard Epoxy Potting 450°F (232°C)
- X = Other (Specify)

**WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

(800) 323-6859 • Email: sales@tempco.com

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Rev 2 (8-18)