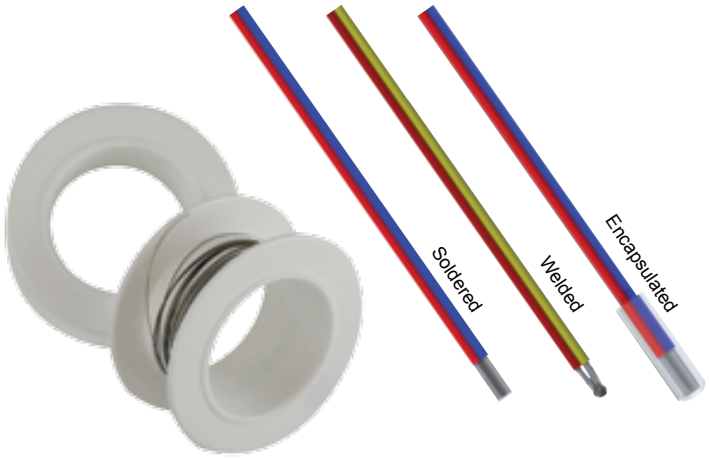
Micro-Thermocouples

Welded or Soldered
Insulated or Non-Insulated
Bifilar Construction
Moisture Seal
Flexible Tip
High Volume, Low Cost
Custom Packaging



Our **Micro-Thermocouples** are flexible fine gage thermocouples used whenever fast, accurate temperature measurements are required. The thermocouple consists of two dissimilar metals, joined together at one end. A small voltage is produced by the two metals, which can be measured and interpreted by a thermocouple thermometer. The dissimilar metals are individually insulated, and an overcoat is present to maintain an intimate bifilar configuration.

FEATURES

- Junction Types:
  - Welded, Soldered
- Joint Encapsulation Types:
  - Polymer Encapsulated, Bare
- Thermocouple Types:
  - T, K
- Thermocouple Gauges:
  - 44 AWG, 40 AWG, 38 AWG, 36 AWG
- Wire Insulation:
  - Polyesterimide, Polyimide

APPLICATIONS

- Medical

Bulk Packaging

Individual Packaging

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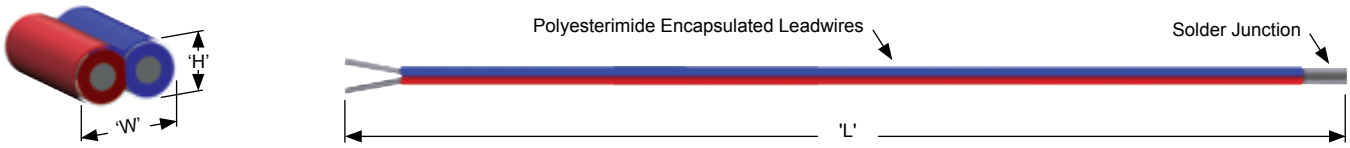
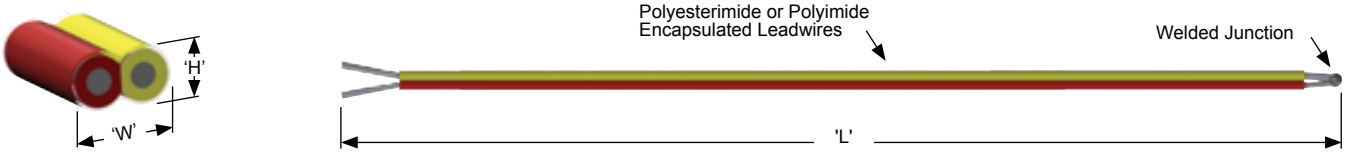
Micro-Thermocouples

dimensions

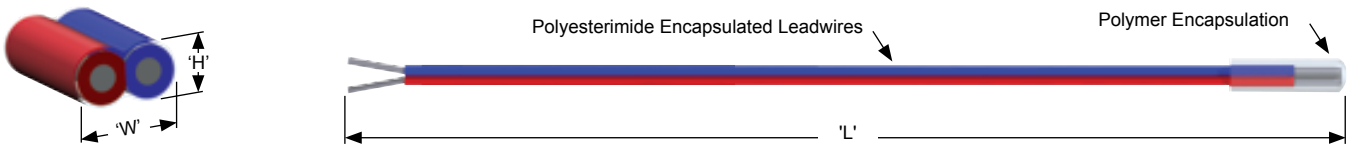
Soldered Junction, Non-Insulated



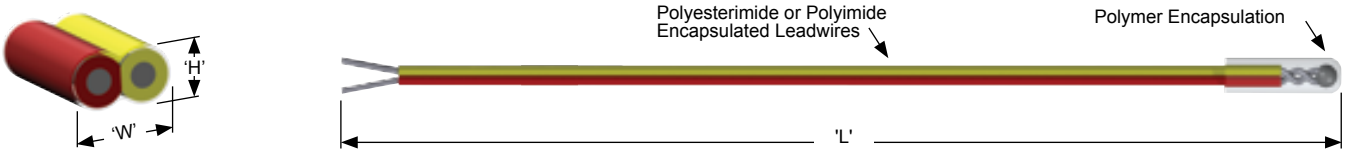
Welded Junction, Non-Insulated



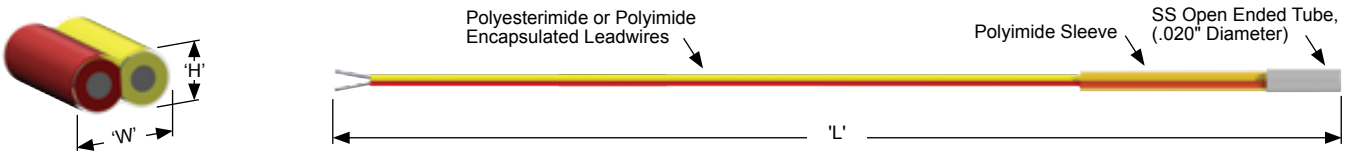
Soldered Junction, Insulated



Welded Junction, Insulated



Welded Junction, Hypo Tube



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Micro-Thermocouples

performance specifications

Wire Strip Length (Tail): 0.50” ± 0.25”

Solder Joint Length: 0.10” Max.

Encapsulation Length: 0.25” Max.

Encapsulation Profile: 0.010” Max. for 44 AWG; 0.013” Max. for 40 AWG; 0.017” Max. for 36 AWG

Wire length tolerance: ± 3.0”

Packaging: Sensors wrapped on white plastic spools

Note:
Specifications listed above are standard.
Other options are avaialble upon request. Consult factory for details.

Commonly Stocked Wire

Type	AWG	Insulation Type	Insulation Color	Limits of Error
T	40	Polyesterimide	Green/Red	Special
T	44	Polyesterimide	Green/Red	Special
T	44	Polyesterimide	Black/Red	Special
T	36	Polyesterimide	Green/Red	Standard

ordering info

Micro-Thermocouples					
Model	**Junction Type**	**Junction Insulation**	**Profile**	**Common**	**Notes**
600	Soldered (Lead Free)	Non-Insulated (Bare)	Low Profile (Flat)	Yes	Model Type T Only.
601	Welded	Non-Insulated (Bare)	Round Profile	Yes	---
605	Soldered (Lead Free)	Insulated	Low Profile (Flat)	Yes	Model Type T Only. Encapsulation Rated to 200°C.
606	Welded	Insulated	Round Profile	Yes	Encapsulation Rated to 200°C.
602	Welded	Insulated	Round Profile	No	Junction Epoxy Potted in SS Hypo Tube. Rated to 140°C.
Model	**Thermocouple Type**	**Stocked Wire Gauges**	**Special Order Gauges**	**Common**	
T	T [Constantan/Copper]	40 AWG, 44 AWG	38 AWG, 36 AWG	Yes	
K	K [Alumel/Chromel]	40 AWG	44 AWG, 38 AWG, 36 AWG	Yes	
Model	**Thermocouple Gauge**	**Bare Conductor Diameter**	**Bifilar Insulated Wire Profile**	**Common**	
44	44 AWG	0.002”	0.0030” x 0.0060” (H x W) Max.	Yes	
40	40 AWG	0.003”	0.0041” x 0.0081” (H x W) Max.	Yes	
38	38 AWG	0.004”	0.0052” x 0.0104” (H x W) Max.	No	
36	36 AWG	0.005”	0.0065” x 0.0128” (H x W) Max.	No	
Model	**Wire Insulation Type**	**Max. Temp**		**Common**	
PE	Polyesterimide	180°C	Nylon Bondcoat	Yes	
PI	Polyimide	240°C	Nylon Bondcoat	No	
Model	**Wire Length ‘Y’**				
---	Define ‘Y’ length in inches (120 = 120.0”)				
Model	**Limits of Error**	**Limits for Type T**	**Limits for Type K / J**	**Common**	
ST	Standard	± 1.0°C	± 2.2°C	Yes	
SP	Special	± 0.5°C	± 1.1°C	Yes	
C	Custom	Consult Factory	Consult Factory	No	

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