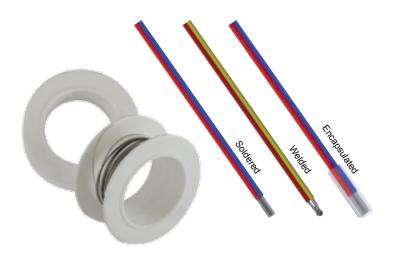
## **Micro-Thermocouples**



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

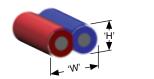


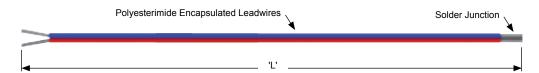
# **Micro-Thermocouples**



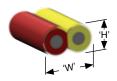
## dimensions

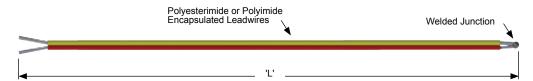
#### Soldered Junction, Non-Insulated



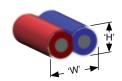


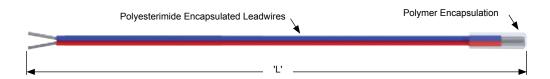
#### Welded Junction, Non-Insulated



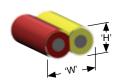


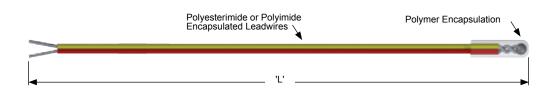
#### Soldered Junction, Insulated



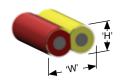


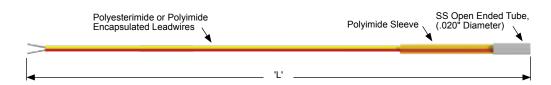
#### Welded Junction, Insulated





#### Welded Junction, Hypo Tube





## **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

Specifications listed above are standard.

Other options are avaiable upon request. Consult factory for details.

#### **Commonly Stocked Wire**

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

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### 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								
	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				
С	Custom	Consult Factory	Consult Factory	No				