

# High Temperature Thermocouple Assemblies With Molded Transition Junctions $\frac{1}{16}$ to $\frac{1}{4}$ " Diameters

## Standard Dimensions

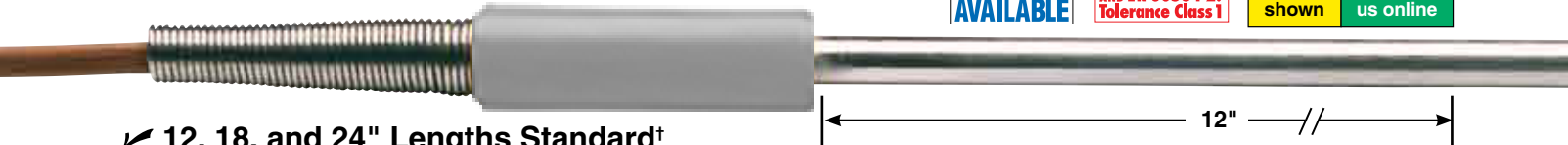
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OMEGACAL™  
Factory CAL  
AVAILABLE

MEETS OR EXCEEDS  
SPECIAL LIMITS  
OF ERROR (SLE)  
AND EN 60584-2:  
Tolerance Class 1

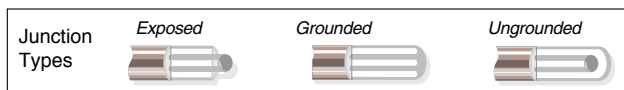
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code visit  
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- ✓ 12, 18, and 24" Lengths Standard†
- ✓ 304, 310, 316, 321 SS, Inconel or Super OMEGACLAD® XL Sheath
- ✓ Molded Junction Rated to 260°C (500°F)
- ✓ 40" PFA Coated Lead Wires
- ✓ Stripped Lead Wire Termination—Connector Options Available

Thermocouple molded assemblies with transition joints of molded LCP high temperature liquid crystal polymer provide an economical yet durable thermocouple probe for a variety of sensing applications. The measuring tip is limited only by thermocouple type and sheath material. Stainless steel sheaths have a maximum temperature of 900°C (1650°F) with Inconel 600 rated to 1150°C (2100°F).



To Order					
Thermocouple Alloy		Sheath Dia. (in)	Model No. 12" Length	Model No. 18" Length	Model No. 24" Length
IRON-CONSTANTAN	J	$\frac{1}{16}$ "	JTIN-116(*)-12	JTIN-116(*)-18	JTIN-116(*)-24
Inconel		$\frac{1}{8}$ "	JTIN-18(*)-12	JTIN-18(*)-18	JTIN-18(*)-24
Sheath		$\frac{3}{16}$ "	JTIN-316(*)-12	JTIN-316(*)-18	JTIN-316(*)-24
		$\frac{1}{4}$ "	JTIN-14(*)-12	JTIN-14(*)-18	JTIN-14(*)-24
IRON-CONSTANTAN	J	$\frac{1}{16}$ "	JTSS-116(*)-12	JTSS-116(*)-18	JTSS-116(*)-24
304 SS		$\frac{1}{8}$ "	JTSS-18(*)-12	JTSS-18(*)-18	JTSS-18(*)-24
Sheath		$\frac{3}{16}$ "	JTSS-316(*)-12	JTSS-316(*)-18	JTSS-316(*)-24
		$\frac{1}{4}$ "	JTSS-14(*)-12	JTSS-14(*)-18	JTSS-14(*)-24
CHROMEGA®-ALOMEGA®	K	$\frac{1}{16}$ "	KTIN-116(*)-12	KTIN-116(*)-18	KTIN-116(*)-24
Inconel		$\frac{1}{8}$ "	KTIN-18(*)-12	KTIN-18(*)-18	KTIN-18(*)-24
Sheath		$\frac{3}{16}$ "	KTIN-316(*)-12	KTIN-316(*)-18	KTIN-316(*)-24
		$\frac{1}{4}$ "	KTIN-14(*)-12	KTIN-14(*)-18	KTIN-14(*)-24
CHROMEGA®-ALOMEGA®	K	$\frac{1}{16}$ "	KTSS-116(*)-12	KTSS-116(*)-18	KTSS-116(*)-24
304 SS		$\frac{1}{8}$ "	KTSS-18(*)-12	KTSS-18(*)-18	KTSS-18(*)-24
Sheath		$\frac{3}{16}$ "	KTSS-316(*)-12	KTSS-316(*)-18	KTSS-316(*)-24
		$\frac{1}{4}$ "	KTSS-14(*)-12	KTSS-14(*)-18	KTSS-14(*)-24
CHROMEGA®-ALOMEGA®	K	$\frac{1}{16}$ "	KTXL-116(*)-12	KTXL-116(*)-18	KTXL-116(*)-24
Super OMEGACLAD® XL		$\frac{1}{8}$ "	KTXL-18(*)-12	KTXL-18(*)-18	KTXL-18(*)-24
Sheath		$\frac{3}{16}$ "	KTXL-316(*)-12	KTXL-316(*)-18	KTXL-316(*)-24
		$\frac{1}{4}$ "	KTXL-14(*)-12	KTXL-14(*)-18	KTXL-14(*)-24
OMEGA-P®-††	N	$\frac{1}{16}$ "	NTXL-116(*)-12	NTXL-116(*)-18	NTXL-116(*)-24
OMEGA-N®		$\frac{1}{8}$ "	NTXL-18(*)-12	NTXL-18(*)-18	NTXL-18(*)-24
Super OMEGACLAD® XL		$\frac{3}{16}$ "	NTXL-316(*)-12	NTXL-316(*)-18	NTXL-316(*)-24
Sheath		$\frac{1}{4}$ "	NTXL-14(*)-12	NTXL-14(*)-18	NTXL-14(*)-24
CHROMEGA®-CONSTANTAN	E	$\frac{1}{16}$ "	ETIN-116(*)-12	ETIN-116(*)-18	ETIN-116(*)-24
Inconel		$\frac{1}{8}$ "	ETIN-18(*)-12	ETIN-18(*)-18	ETIN-18(*)-24
Sheath		$\frac{3}{16}$ "	ETIN-316(*)-12	ETIN-316(*)-18	ETIN-316(*)-24
		$\frac{1}{4}$ "	ETIN-14(*)-12	ETIN-14(*)-18	ETIN-14(*)-24
CHROMEGA®-CONSTANTAN	E	$\frac{1}{16}$ "	ETSS-116(*)-12	ETSS-116(*)-18	ETSS-116(*)-24
304 SS		$\frac{1}{8}$ "	ETSS-18(*)-12	ETSS-18(*)-18	ETSS-18(*)-24
Sheath		$\frac{3}{16}$ "	ETSS-316(*)-12	ETSS-316(*)-18	ETSS-316(*)-24
		$\frac{1}{4}$ "	ETSS-14(*)-12	ETSS-14(*)-18	ETSS-14(*)-24
COPPER-CONSTANTAN	T	$\frac{1}{16}$ "	TTIN-116(*)-12	TTIN-116(*)-18	TTIN-116(*)-24
Inconel		$\frac{1}{8}$ "	TTIN-18(*)-12	TTIN-18(*)-18	TTIN-18(*)-24
Sheath		$\frac{3}{16}$ "	TTIN-316(*)-12	TTIN-316(*)-18	TTIN-316(*)-24
		$\frac{1}{4}$ "	TTIN-14(*)-12	TTIN-14(*)-18	TTIN-14(*)-24
COPPER-CONSTANTAN	T	$\frac{1}{16}$ "	TTSS-116(*)-12	TTSS-116(*)-18	TTSS-116(*)-24
304 SS		$\frac{1}{8}$ "	TTSS-18(*)-12	TTSS-18(*)-18	TTSS-18(*)-24
Sheath		$\frac{3}{16}$ "	TTSS-316(*)-12	TTSS-316(*)-18	TTSS-316(*)-24
		$\frac{1}{4}$ "	TTSS-14(*)-12	TTSS-14(*)-18	TTSS-14(*)-24

\* Specify junction type: "E" (exposed), "G" (grounded) or "U" (ungrounded). † Other lengths are available, consult Sales Department. †† Supplied with stainless steel transition joints. To order with 310, 316 or 321 SS sheath, change "SS" in model number to "310SS", "316SS" or "321SS" respectively; no additional cost. Consult Sales for lengths between 2 to 12", or for lengths over 24". Type N Inconel sheathing is available, contact Sales for model numbers. **Ordering Examples:** JT321SS-116U-24, Type J molded transition probe,  $\frac{1}{16}$ " Dia., 321 SS sheath, ungrounded junction, 24" L. KTSS-18G-12, molded transition junction probe, Type K,  $\frac{1}{8}$ " OD, 304 SS sheath, grounded junction, 12" L.

# High Temperature Thermocouple Assemblies With Molded Transition Junctions 1.5 to 6 mm Diameters

## Metric Dimensions

Shown actual size.

**OMEGACAL™**  
**Factory CAL**  
**AVAILABLE**

**MEETS OR EXCEEDS**  
**SPECIAL LIMITS**  
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**AND EN 60584-2:**  
**Tolerance Class 1**

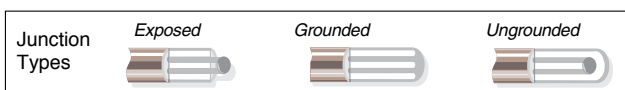
**ANSI**  
**color**  
**code**  
**shown**

**To order**  
**IEC color**  
**code visit**  
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- ✓ 300, 450 and 600 mm Lengths Standard†
- ✓ 304, 310, 316, 321 SS, Inconel or Super OMEGACLAD® XL Sheath
- ✓ Molded Junction Rated to 260°C (500°F)
- ✓ 1 m PFA Coated Lead Wires
- ✓ Stripped Lead Wire Termination—Connector Options Available

Thermocouple molded assemblies with transition joints of molded LCP high temperature liquid crystal polymer provide an economical yet durable thermocouple probe for a variety of sensing applications. The measuring tip is limited only by thermocouple type and sheath material. Stainless steel sheaths have a maximum temperature of 900°C (1650°F) with Inconel 600 rated to 1150°C (2100°F).



To Order					
Thermocouple Alloy		Sheath Dia. (mm)	Model No. 300 mm Length	Model No. 450 mm Length	Model No. 600 mm Length
IRON-CONSTANTAN	J	1.5	JTIN-M15(*)-300	JTIN-M15(*)-450	JTIN-M15(*)-600
Inconel Sheath		3.0	JTIN-M30(*)-300	JTIN-M30(*)-450	JTIN-M30(*)-600
		4.5	JTIN-M45(*)-300	JTIN-M45(*)-450	JTIN-M45(*)-600
		6.0	JTIN-M60(*)-300	JTIN-M60(*)-450	JTIN-M60(*)-600
IRON-CONSTANTAN	J	1.5	JTSS-M15(*)-300	JTSS-M15(*)-450	JTSS-M15(*)-600
304 SS Sheath		3.0	JTSS-M30(*)-300	JTSS-M30(*)-450	JTSS-M30(*)-600
		4.5	JTSS-M45(*)-300	JTSS-M45(*)-450	JTSS-M45(*)-600
		6.0	JTSS-M60(*)-300	JTSS-M60(*)-450	JTSS-M60(*)-600
CHROMEGA®-ALOMEGA®	K	1.5	KTIN-M15(*)-300	KTIN-M15(*)-450	KTIN-M15(*)-600
Inconel Sheath		3.0	KTIN-M30(*)-300	KTIN-M30(*)-450	KTIN-M30(*)-600
		4.5	KTIN-M45(*)-300	KTIN-M45(*)-450	KTIN-M45(*)-600
		6.0	KTIN-M45(*)-300	KTIN-M45(*)-450	KTIN-M45(*)-600
CHROMEGA®-ALOMEGA®	K	1.5	KTSS-M15(*)-300	KTSS-M15(*)-450	KTSS-M15(*)-600
304 SS Sheath		3.0	KTSS-M30(*)-300	KTSS-M30(*)-450	KTSS-M30(*)-600
		4.5	KTSS-M45(*)-300	KTSS-M45(*)-450	KTSS-M45(*)-600
		6.0	KTSS-M60(*)-300	KTSS-M60(*)-450	KTSS-M60(*)-600
CHROMEGA®-ALOMEGA®	K	1.5	KTXL-M15(*)-300	KTXL-M15(*)-450	KTXL-M15(*)-600
Super OMEGACLAD® XL Sheath		3.0	KTXL-M30(*)-300	KTXL-M30(*)-450	KTXL-M30(*)-600
		4.5	KTXL-M45(*)-300	KTXL-M45(*)-450	KTXL-M45(*)-600
		6.0	KTXL-M60(*)-300	KTXL-M60(*)-450	KTXL-M60(*)-600
OMEGA-P® ††	N	1.5	NTXL-M15(*)-300	NTXL-M15(*)-450	NTXL-M15(*)-600
OMEGA-N®		3.0	NTXL-M30(*)-300	NTXL-M30(*)-450	NTXL-M30(*)-600
Super OMEGACLAD® XL Sheath		4.5	NTXL-M45(*)-300	NTXL-M45(*)-450	NTXL-M45(*)-600
		6.0	NTXL-M60(*)-300	NTXL-M60(*)-450	NTXL-M60(*)-600
CHROMEGA®-CONSTANTAN	E	1.5	ETIN-M15(*)-300	ETIN-M15(*)-450	ETIN-M15(*)-600
Inconel Sheath		3.0	ETIN-M30(*)-300	ETIN-M30(*)-450	ETIN-M30(*)-600
		4.5	ETIN-M45(*)-300	ETIN-M45(*)-450	ETIN-M45(*)-600
		6.0	ETIN-M60(*)-300	ETIN-M60(*)-450	ETIN-M60(*)-600
CHROMEGA®-CONSTANTAN	E	1.5	ETSS-M15(*)-300	ETSS-M15(*)-450	ETSS-M15(*)-600
304 SS Sheath		3.0	ETSS-M30(*)-300	ETSS-M30(*)-450	ETSS-M30(*)-600
		4.5	ETSS-M45(*)-300	ETSS-M45(*)-450	ETSS-M45(*)-600
		6.0	ETSS-M60(*)-300	ETSS-M60(*)-450	ETSS-M60(*)-600
COPPER-CONSTANTAN	T	1.5	TTIN-M15(*)-300	TTIN-M15(*)-450	TTIN-M15(*)-600
Inconel Sheath		3.0	TTIN-M30(*)-300	TTIN-M30(*)-450	TTIN-M30(*)-600
		4.5	TTIN-M45(*)-300	TTIN-M45(*)-450	TTIN-M45(*)-600
		6.0	TTIN-M60(*)-300	TTIN-M60(*)-450	TTIN-M60(*)-600
COPPER-CONSTANTAN	T	1.5	TTSS-M15(*)-300	TTSS-M15(*)-450	TTSS-M15(*)-600
304 SS Sheath		3.0	TTSS-M30(*)-300	TTSS-M30(*)-450	TTSS-M30(*)-600
		4.5	TTSS-M45(*)-300	TTSS-M45(*)-450	TTSS-M45(*)-600
		6.0	TTSS-M60(*)-300	TTSS-M60(*)-450	TTSS-M60(*)-600

\* Specify junction type: "E" (exposed), "G" (grounded) or "U" (ungrounded). † Other lengths are available, consult Sales Department. †† Supplied with stainless steel transition joints. To order with 310, 316 or 321 SS sheath, change "SS" in model number to "310SS", "316SS" or "321SS" respectively; no additional cost. Consult Sales for lengths between 50 and 300 mm, or for lengths over 600 mm. Type N Inconel sheathing is available, contact Sales for model numbers. **Ordering Examples: JT321SS-M15U-600**, Type J molded transition probe, 1.5 mm Dia., 321 SS sheath, ungrounded junction, 600 mm L. **KTSS-18G-12**, molded transition junction probe, Type K, 6.0 mm OD, 304 SS sheath, grounded junction, 300 mm L.