

# Rugged Transition Joint Probes

## With Standard Dimensions

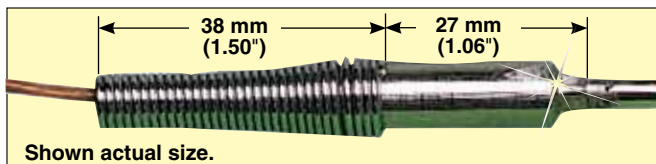


Note: Visit Omega for probe terminations and compression fittings.

- ✓ 304 SS, 310 SS, 316 SS, 321 SS, Inconel® or Super OMEGACLAD™ XL Sheath
- ✓ Diameters from 1/16" to 1/4"
- ✓ 40" PFA Coated Stranded Lead Wire: 20 AWG for 3/16" and 1/4" OD, 24 AWG for 1/16" and 1/8" OD Probes

### Cal-5 Available

Omega heavy-duty transition joint probes offer convenient termination to PFA coated lead wire. The transition joint and spring for strain relief are 66 mm (2.6") long. The joint diameter is 1/4" for 1/16" and 1/8" Dia. probes, 3/16" for 3/16" and 1/4" Dia. probes.



### Dual Element TJ Probes

To Order, add suffix "-DUAL" to model no. Add to base probe price any options (extra probe length, overbraiding, armored cable), then multiply this price x 1.75.  
**Ordering Example: TJ36-CASS-14G-12-DUAL.**

For additional PFA lead wire length, add an additional cost per 12" over 40" and change "36" in part no. to desired length in inches.  
**Ordering Example: TJ120-ICSS-14G-12,** type J transition joint probe with 120" of PFA lead wire, 1/4" OD stainless steel sheath, 12" length.



### 310 Stainless Steel Sheaths

To Order, replace "SS" in model no. with 310SS, no add'l charge. **Ordering Example: TJ36-CA310SS-18G-12,** type K transition joint probe with 310 stainless steel sheath.

### Discount Schedule

1-10 units	Net
11-24 units	10%
25-49 units	20%
50 and up	Consult Sales

## To Order

Alloy/ANSI Color Code	Sheath Dia. (")	Model No. 12" Length	Model No. 18" Length	Model No. 24" Length
IRON-CONSTANTAN Inconel Sheath <b>J</b>	1/16"	TJ36-ICIN-116(*)-12	TJ36-ICIN-116(*)-18	TJ36-ICIN-116(*)-24
	1/8"	TJ36-ICIN-18(*)-12	TJ36-ICIN-18(*)-18	TJ36-ICIN-18(*)-24
	3/16"	TJ36-ICIN-316(*)-12	TJ36-ICIN-316(*)-18	TJ36-ICIN-316(*)-24
	1/4"	TJ36-ICIN-14(*)-12	TJ36-ICIN-14(*)-18	TJ36-ICIN-14(*)-24
IRON-CONSTANTAN 304 SS Sheath <b>J</b>	1/16"	TJ36-ICSS-116(*)-12	TJ36-ICSS-116(*)-18	TJ36-ICSS-116(*)-24
	1/8"	TJ36-ICSS-18(*)-12	TJ36-ICSS-18(*)-18	TJ36-ICSS-18(*)-24
	3/16"	TJ36-ICSS-316(*)-12	TJ36-ICSS-316(*)-18	TJ36-ICSS-316(*)-24
	1/4"	TJ36-ICSS-14(*)-12	TJ36-ICSS-14(*)-18	TJ36-ICSS-14(*)-24
CHROMEGLA™-ALOMEGA™ ** Inconel Sheath <b>K</b>	1/16"	TJ36-CAIN-116(*)-12	TJ36-CAIN-116(*)-18	TJ36-CAIN-116(*)-24
	1/8"	TJ36-CAIN-18(*)-12	TJ36-CAIN-18(*)-18	TJ36-CAIN-18(*)-24
	3/16"	TJ36-CAIN-316(*)-12	TJ36-CAIN-316(*)-18	TJ36-CAIN-316(*)-24
	1/4"	TJ36-CAIN-14(*)-12	TJ36-CAIN-14(*)-18	TJ36-CAIN-14(*)-24
CHROMEGLA™-ALOMEGA™ ** 304 SS Sheath <b>K</b>	1/16"	TJ36-CASS-116(*)-12	TJ36-CASS-116(*)-18	TJ36-CASS-116(*)-24
	1/8"	TJ36-CASS-18(*)-12	TJ36-CASS-18(*)-18	TJ36-CASS-18(*)-24
	3/16"	TJ36-CASS-316(*)-12	TJ36-CASS-316(*)-18	TJ36-CASS-316(*)-24
	1/4"	TJ36-CASS-14(*)-12	TJ36-CASS-14(*)-18	TJ36-CASS-14(*)-24
CHROMEGLA™-CONSTANTAN Inconel Sheath <b>E</b>	1/16"	TJ36-CXIN-116(*)-12	TJ36-CXIN-116(*)-18	TJ36-CXIN-116(*)-24
	1/8"	TJ36-CXIN-18(*)-12	TJ36-CXIN-18(*)-18	TJ36-CXIN-18(*)-24
	3/16"	TJ36-CXIN-316(*)-12	TJ36-CXIN-316(*)-18	TJ36-CXIN-316(*)-24
	1/4"	TJ36-CXIN-14(*)-12	TJ36-CXIN-14(*)-18	TJ36-CXIN-14(*)-24
CHROMEGLA™-CONSTANTAN 304 SS Sheath <b>E</b>	1/16"	TJ36-CXSS-116(*)-12	TJ36-CXSS-116(*)-18	TJ36-CXSS-116(*)-24
	1/8"	TJ36-CXSS-18(*)-12	TJ36-CXSS-18(*)-18	TJ36-CXSS-18(*)-24
	3/16"	TJ36-CXSS-316(*)-12	TJ36-CXSS-316(*)-18	TJ36-CXSS-316(*)-24
	1/4"	TJ36-CXSS-14(*)-12	TJ36-CXSS-14(*)-18	TJ36-CXSS-14(*)-24
COPPER-CONSTANTAN Inconel Sheath <b>T</b>	1/16"	TJ36-CPIN-116(*)-12	TJ36-CPIN-116(*)-18	TJ36-CPIN-116(*)-24
	1/8"	TJ36-CPIN-18(*)-12	TJ36-CPIN-18(*)-18	TJ36-CPIN-18(*)-24
	3/16"	TJ36-CPIN-316(*)-12	TJ36-CPIN-316(*)-18	TJ36-CPIN-316(*)-24
	1/4"	TJ36-CPIN-14(*)-12	TJ36-CPIN-14(*)-18	TJ36-CPIN-14(*)-24
COPPER-CONSTANTAN 304 SS Sheath <b>T</b>	1/16"	TJ36-CPSS-116(*)-12	TJ36-CPSS-116(*)-18	TJ36-CPSS-116(*)-24
	1/8"	TJ36-CPSS-18(*)-12	TJ36-CPSS-18(*)-18	TJ36-CPSS-18(*)-24
	3/16"	TJ36-CPSS-316(*)-12	TJ36-CPSS-316(*)-18	TJ36-CPSS-316(*)-24
	1/4"	TJ36-CPSS-14(*)-12	TJ36-CPSS-14(*)-18	TJ36-CPSS-14(*)-24
OMEGALLOY™-NICROSIL-NISIL ** Inconel Sheath <b>N</b>	1/16"	TJ36-NNIN-116(*)-12	TJ36-NNIN-116(*)-18	TJ36-NNIN-116(*)-24
	1/8"	TJ36-NNIN-18(*)-12	TJ36-NNIN-18(*)-18	TJ36-NNIN-18(*)-24
	3/16"	TJ36-NNIN-316(*)-12	TJ36-NNIN-316(*)-18	TJ36-NNIN-316(*)-24
	1/4"	TJ36-NNIN-14(*)-12	TJ36-NNIN-14(*)-18	TJ36-NNIN-14(*)-24

Note: Other lengths are available, consult Sales. 6" probes also available, change "-12" to "-6" to order. No additional charge. To order optional sheaths, change "SS" in Model no. to "IN" for Inconel, "304SS" for 304 SS, "310SS" for 310 SS, "316SS" for 316 SS or "321SS" for 321 SS. No additional charge.

\* Specify junction type: **E** (Exposed), **G** (Grounded) or **U** (Ungrounded). For lengths from 2 to 12", please consult Sales.

\*\* For Super OMEGACLAD™ XL, change "IN" to "XL" there is an additional price.

**Ordering Examples:** TJ36-CASS-18U-12, heavy duty transition joint probe, Type K (CHROMEGLA™-ALOMEGA™), 304 SS sheath, 1/8" OD, ungrounded junction, 12" length. TJ36-NNXL-14G-12, Type N transition joint probe with Super OMEGACLAD™ XL, 1/4" OD stainless steel sheath, 12" length.

# Rugged Transition Joint Probes

With **Metric** Dimensions

Shown smaller than actual size.

Note: Visit Omega for probe terminations and compression fittings.

- ✓ 304 SS, 310 SS, 316 SS, 321 SS, Inconel® or Super OMEGA CLAD™ XL Sheath
- ✓ Diameters from 1.5 to 6 mm
- ✓ 1 m PFA Coated Stranded Lead Wire: 20 AWG for 4.5 and 6 mm OD, 24 AWG for 1.5 and 3 mm OD Probes
- ✓ Cal-5 Available

Omega heavy-duty transition joint probes offer convenient termination to PFA coated lead wire. The transition joint and spring for strain relief are 66 mm (2.6") long. The joint diameter is 6.4 mm for 1.5 and 3 mm Dia. probes, 9.7 mm for 4.5 and 6 mm Dia. probes.

### Dual Element TJ Probes

To Order, add suffix "-DUAL" to model no. Add to base probe price plus any options (extra probe length, overbraiding, armored cable), then multiply this price x 1.75.  
**Ordering Example:**  
 TJ1-CASS-M600G-300-DUAL.

For additional PFA lead wire length, add an **additional cost** per meter over 1 m and change "1" in part no. to desired total length in meters.

**Ordering Example:** TJ3-ICSS-M600G-300, type J transition joint probe with 3 m of PFA lead wire, 6mm OD stainless steel sheath, 300mm probe length..



### 310 Stainless Steel Sheath

To Order, replace "SS" in Model no. with 310SS, no add'l charge. **Ordering Example:** TJ1-CA310SS-M600G-300, type K transition joint probe with 310 stainless steel sheath.

### Discount Schedule

1-10 units	..... Net
11-24 units	..... 10%
25-49 units	..... 20%
50 and up	..... Consult Sales

## To Order

Alloy/ANSI Color Code	Sheath Dia. mm	Model No. 300 mm Length	Model No. 450 mm Length	Model No. 600 mm Length
IRON-CONSTANTAN Inconel Sheath	J	TJ1-ICIN-M15(*)-300	TJ1-ICIN-M15(*)-450	TJ1-ICIN-M15(*)-600
		TJ1-ICIN-M30(*)-300	TJ1-ICIN-M30(*)-450	TJ1-ICIN-M30(*)-600
		TJ1-ICIN-M45(*)-300	TJ1-ICIN-M45(*)-450	TJ1-ICIN-M45(*)-600
		TJ1-ICIN-M60(*)-300	TJ1-ICIN-M60(*)-450	TJ1-ICIN-M60(*)-600
IRON-CONSTANTAN 304 SS Sheath	J	TJ1-ICSS-M15(*)-300	TJ1-ICSS-M15(*)-450	TJ1-ICSS-M15(*)-600
		TJ1-ICSS-M30(*)-300	TJ1-ICSS-M30(*)-450	TJ1-ICSS-M30(*)-600
		TJ1-ICSS-M45(*)-300	TJ1-ICSS-M45(*)-450	TJ1-ICSS-M45(*)-600
		TJ1-ICSS-M60(*)-300	TJ1-ICSS-M60(*)-450	TJ1-ICSS-M60(*)-600
CHROMEGA™-ALOMEGA™** Inconel Sheath	K	TJ1-CAIN-M15(*)-300	TJ1-CAIN-M15(*)-450	TJ1-CAIN-M15(*)-600
		TJ1-CAIN-M30(*)-300	TJ1-CAIN-M30(*)-450	TJ1-CAIN-M30(*)-600
		TJ1-CAIN-M45(*)-300	TJ1-CAIN-M45(*)-450	TJ1-CAIN-M45(*)-600
		TJ1-CAIN-M60(*)-300	TJ1-CAIN-M60(*)-450	TJ1-CAIN-M60(*)-600
CHROMEGA™-ALOMEGA™ 304 SS Sheath	K	TJ1-CASS-M15(*)-300	TJ1-CASS-M15(*)-450	TJ1-CASS-M15(*)-600
		TJ1-CASS-M30(*)-300	TJ1-CASS-M30(*)-450	TJ1-CASS-M30(*)-600
		TJ1-CASS-M45(*)-300	TJ1-CASS-M45(*)-450	TJ1-CASS-M45(*)-600
		TJ1-CASS-M60(*)-300	TJ1-CASS-M60(*)-450	TJ1-CASS-M60(*)-600
CHROMEGA™-CONSTANTAN Inconel Sheath	E	TJ1-CXIN-M15(*)-300	TJ1-CXIN-M15(*)-450	TJ1-CXIN-M15(*)-600
		TJ1-CXIN-M30(*)-300	TJ1-CXIN-M30(*)-450	TJ1-CXIN-M30(*)-600
		TJ1-CXIN-M45(*)-300	TJ1-CXIN-M45(*)-450	TJ1-CXIN-M45(*)-600
		TJ1-CXIN-M60(*)-300	TJ1-CXIN-M60(*)-600	TJ1-CXIN-M60(*)-600
CHROMEGA™-CONSTANTAN 304 SS Sheath	E	TJ1-CXSS-M15(*)-300	TJ1-CXSS-M15(*)-450	TJ1-CXSS-M15(*)-600
		TJ1-CXSS-M30(*)-300	TJ1-CXSS-M30(*)-450	TJ1-CXSS-M30(*)-600
		TJ1-CXSS-M45(*)-300	TJ1-CXSS-M45(*)-450	TJ1-CXSS-M45(*)-600
		TJ1-CXSS-M60(*)-300	TJ1-CXSS-M60(*)-450	TJ1-CXSS-M60(*)-600
COPPER-CONSTANTAN Inconel Sheath	T	TJ1-CPIN-M15(*)-300	TJ1-CPIN-M15(*)-450	TJ1-CPIN-M15(*)-600
		TJ1-CPIN-M30(*)-300	TJ1-CPIN-M30(*)-450	TJ1-CPIN-M30(*)-600
		TJ1-CPIN-M45(*)-300	TJ1-CPIN-M45(*)-450	TJ1-CPIN-M45(*)-600
		TJ1-CPIN-M60(*)-300	TJ1-CPIN-M60(*)-450	TJ1-CPIN-M60(*)-600
COPPER-CONSTANTAN 304 SS Sheath	T	TJ1-CPSS-M15(*)-300	TJ1-CPSS-M15(*)-450	TJ1-CPSS-M15(*)-600
		TJ1-CPSS-M30(*)-300	TJ1-CPSS-M30(*)-450	TJ1-CPSS-M30(*)-600
		TJ1-CPSS-M45(*)-300	TJ1-CPSS-M45(*)-450	TJ1-CPSS-M45(*)-600
		TJ1-CPSS-M60(*)-300	TJ1-CPSS-M60(*)-450	TJ1-CPSS-M60(*)-600
OMEGALLOY™-NICROSIL-NISIL** Inconel Sheath	N	TJ1-NNIN-M15(*)-300	TJ1-NNIN-M15(*)-450	TJ1-NNIN-M15(*)-600
		TJ1-NNIN-M30(*)-300	TJ1-NNIN-M30(*)-450	TJ1-NNIN-M30(*)-600
		TJ1-NNIN-M45(*)-300	TJ1-NNIN-M45(*)-450	TJ1-NNIN-M45(*)-600
		TJ1-NNIN-M60(*)-300	TJ1-NNIN-M60(*)-450	TJ1-NNIN-M60(*)-600

Note: Other lengths are available, consult Sales. Shorter probes are also available, change "-300" at the end of the model number to the required length in millimeters, no additional charge. To order optional sheaths, change "SS" in model number to "IN" for Inconel, "304SS" for 304 SS, "310SS" for 310 SS, "316SS" for 316 SS or "321SS" for 321 SS, no additional charge.

\* Specify junction type: E (Exposed), G (Grounded) or U (Ungrounded). For lengths from 50 to 300 mm, please consult Sales Department.

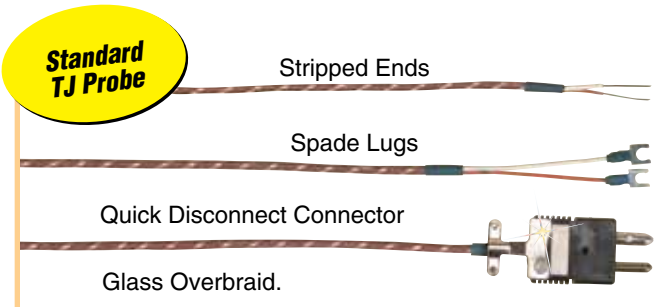
\*\* For Super OMEGA CLAD™ XL, change "IN" to "XL" and add additional cost.

Ordering Example: TJ1-CAIN-M15G-300, heavy duty transition joint probe, Type K (CHROMEGA™-ALOMEGA™), Inconel sheath, 1.5 mm OD, grounded junction, 300 mm length.

# Transition Joint Probe Lead Configurations



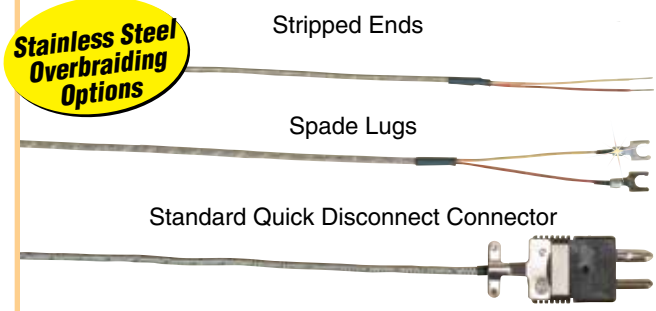
All products shown smaller than actual size.



Standard TJ probe construction is PFA insulation. Consult Sales for glass braid insulation.

Standard TJ probe construction with thermocouple alloy compensated spade lugs attached. Add suffix **"-LUG"**, for additional cost.

Standard TJ probe construction with OST standard or SMP miniature male thermocouple connector attached. Add suffix **"-OSTW-M"** or **"-SMPW-M"** for additional cost.

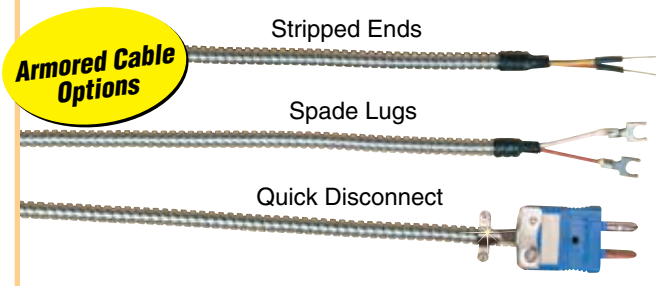


## Stainless Steel Overbraiding

Standard TJ probe construction with stainless steel overbraided lead wire. Add suffix **"-SB"**, for additional cost. For lead wire lengths over 900 mm (36"), consult sales.

Standard TJ probe construction with stainless steel overbraided lead wire thermocouple alloy compensated spade lugs. Add suffix **"-SB-LUG"** for additional cost.

Standard TJ probe with stainless steel overbraided lead wire and OST or SMP male connector. Add suffix **"-SB-OSTW-M"** or **"-SB-SMPW-M"**, for additional cost.

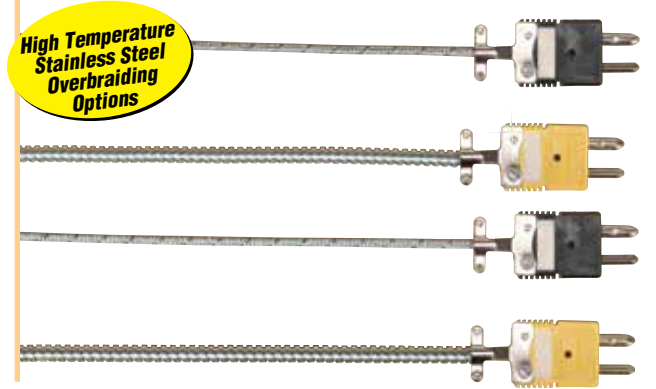


## Armored Cable TJ Probes

Standard TJ probe construction with spiral armor cable. Add suffix **"-BX"**, for additional cost. For lead wire lengths over 900 mm (36") consult sales.

Standard TJ probe construction with spiral armor cable and thermocouple alloy compensated spade lugs. Add suffix **"-BX-LUG"**, for additional cost.

Standard TJ probe with spiral armor cable and OST male connector. Add suffix **"-BX-OSTW-WM"**, for additional cost.



## High Temperature TJ Probes 480°C (900°F)

Available in the same terminations shown above but with high temperature construction. Entire probe will withstand 480°C (900°F). Add suffix **"-CC"** to suffixes used above, for additional cost.

## Ultra-High Temperature TJ Probes 815°C (1500°F) (Type K and N Only)

Available in the same terminations shown above but with special high temperature construction with Nextel<sup>®</sup> ceramic fiber insulation and Inconel<sup>®</sup> overbraiding or SS armor for a temperature rating of 815°C (1500°F). Add suffix **"-CC-XCIB"** or **"-CC-XCBX"** to above numbers, for additional cost to price of probe. For lead wire lengths over 900 mm (36"), consult sales.

### To Order

Model Number-ANSI Color Code	Description
TJ36-ICSS-316G-24-LUG	600 mm (24") Type J probe with 900 mm (36") lead wire, spade lug termination
TJ48-CASS-14G-12-SB-OSTW-M	300 mm (12") Type K probe with 1.2 m (48") stainless steel overbraid and OSTW standard size connector termination
TJ36-CASS-14G-12-CC-BX-OSTW-M	300 mm (12") High temperature type K probe with 900 mm (36") armor cable and OSTW standard size connector termination
TJ60-CXSS-116G-12-CC-XCIB-LUG	300 mm (12") Type E probe with 1.5 m (5') of ultra-high temperature lead wire and Inconel overbraid, spade lug termination