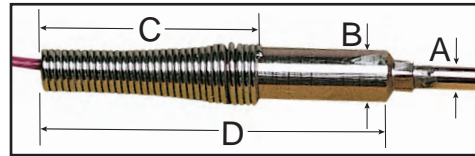


# Rugged Transition Joint Probes

## 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: 24 AWG
- ✓ Cal-5 Available

**Dual Element TJ Probes**  
To Order, add suffix "-DUAL" to model no.  
Ordering Example: TJ36-CASS-14G-12-DUAL.

**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.

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.

Omega heavy-duty transition joint probes offer convenient termination to PFA coated lead wire. Refer chart to get Probe Diameter (A), Transition junction diameter (B) & Spring length (C) & Length of Junction and Strain relief (D)

To Order				
Alloy/ANSI Color Code	Sheath Dia. (")	Model No. 12" Length	Model No. 18" Length	Model No. 24" Length
IRON-CONSTANTAN Inconel Sheath	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	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	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	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	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	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	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	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	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.

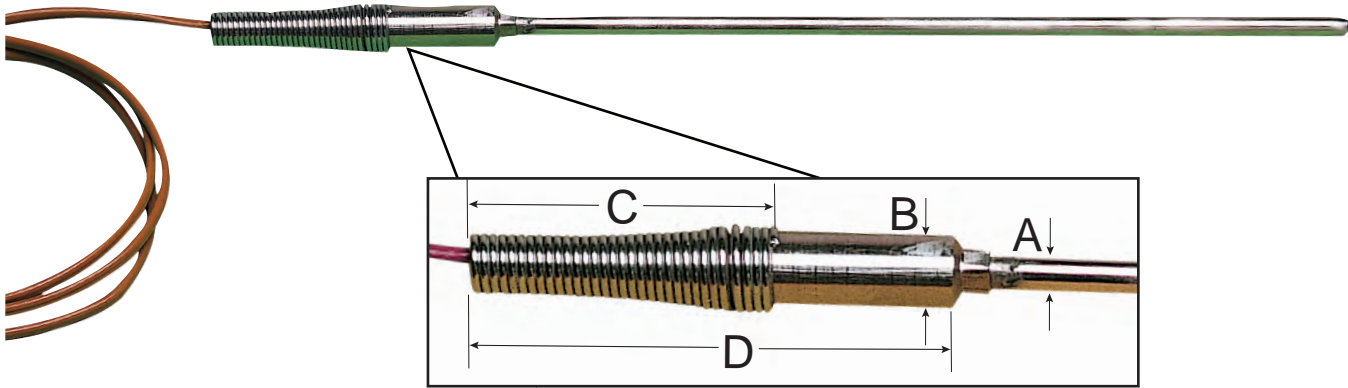
\* Specify junction type: E (Exposed), G (Grounded) or U (Ungrounded). For lengths from 2 to 12", please consult Sales.

\*\* 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 Standard Dimensions

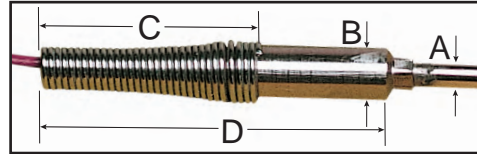


A Sheath Diameter (in)	Lead Wire Type	B Transition Junction Diameter (in)	C Spring Length in (mm)	D Length of Transition Junction & Strain Relief in (mm)
0.010	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
0.020	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
1/32	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
.040	-- SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)

A Sheath Diameter (in)	Lead Wire Type	B Transition Junction Diameter (in)	C Spring Length in (mm)	D Length of Transition Junction & Strain Relief in (mm)
1/16	-- -SB -CC-SB -CC	1/4	1 (25mm)	2.06 (52.3mm)
	-BX -CC-BX -CC-XCIB -CC-XSIB -Dual	3/8	1.5 (38mm)	2.56 (66mm)
1/8	-- -SB -CC-SB -CC	1/4	1 (25mm)	2.06 (52.3mm)
	-BX -CC-BX -CC-XCIB -CC-XSIB -Dual	3/8	1.5 (38mm)	2.56 (66mm)
3/16	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB -Dual	3/8	1.5 (38mm)	2.56 (66mm)
1/4	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB -Dual	3/8	1.5 (38mm)	2.56 (66mm)

# Rugged Transition Joint Probes

## With Metric 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 1.5 to 6 mm
- ✓ 1 m PFA Coated Stranded Lead Wire: 24 AWG
- ✓ Cal-5 Available

**Dual Element TJ Probes**  
To Order, add suffix “-DUAL” to model no.  
**Ordering Example:**  
TJ1-CASS-M600G-300-DUAL.

**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.

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..

Omega heavy-duty transition joint probes offer convenient termination to PFA coated lead wire. Refer chart to get Probe Diameter (A), Transition junction diameter (B) & Spring length (C) & Length of Transition junction and Strain relief (D)

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	1.5	TJ1-ICIN-M15(*)-300	TJ1-ICIN-M15(*)-450	TJ1-ICIN-M15(*)-600
		3.0	TJ1-ICIN-M30(*)-300	TJ1-ICIN-M30(*)-450	TJ1-ICIN-M30(*)-600
		4.5	TJ1-ICIN-M45(*)-300	TJ1-ICIN-M45(*)-450	TJ1-ICIN-M45(*)-600
		6.0	TJ1-ICIN-M60(*)-300	TJ1-ICIN-M60(*)-450	TJ1-ICIN-M60(*)-600
IRON-CONSTANTAN 304 SS Sheath	J	1.5	TJ1-ICSS-M15(*)-300	TJ1-ICSS-M15(*)-450	TJ1-ICSS-M15(*)-600
		3.0	TJ1-ICSS-M30(*)-300	TJ1-ICSS-M30(*)-450	TJ1-ICSS-M30(*)-600
		4.5	TJ1-ICSS-M45(*)-300	TJ1-ICSS-M45(*)-450	TJ1-ICSS-M45(*)-600
		6.0	TJ1-ICSS-M60(*)-300	TJ1-ICSS-M60(*)-450	TJ1-ICSS-M60(*)-600
CHROMEGLA™-ALOMEGA™ ** Inconel Sheath	K	1.5	TJ1-CAIN-M15(*)-300	TJ1-CAIN-M15(*)-450	TJ1-CAIN-M15(*)-600
		3.0	TJ1-CAIN-M30(*)-300	TJ1-CAIN-M30(*)-450	TJ1-CAIN-M30(*)-600
		4.5	TJ1-CAIN-M45(*)-300	TJ1-CAIN-M45(*)-450	TJ1-CAIN-M45(*)-600
		6.0	TJ1-CAIN-M60(*)-300	TJ1-CAIN-M60(*)-450	TJ1-CAIN-M60(*)-600
CHROMEGLA™-ALOMEGA™ 304 SS Sheath	K	1.5	TJ1-CASS-M15(*)-300	TJ1-CASS-M15(*)-450	TJ1-CASS-M15(*)-600
		3.0	TJ1-CASS-M30(*)-300	TJ1-CASS-M30(*)-450	TJ1-CASS-M30(*)-600
		4.5	TJ1-CASS-M45(*)-300	TJ1-CASS-M45(*)-450	TJ1-CASS-M45(*)-600
		6.0	TJ1-CASS-M60(*)-300	TJ1-CASS-M60(*)-450	TJ1-CASS-M60(*)-600
CHROMEGLA™-CONSTANTAN Inconel Sheath	E	1.5	TJ1-CXIN-M15(*)-300	TJ1-CXIN-M15(*)-450	TJ1-CXIN-M15(*)-600
		3.0	TJ1-CXIN-M30(*)-300	TJ1-CXIN-M30(*)-450	TJ1-CXIN-M30(*)-600
		4.5	TJ1-CXIN-M45(*)-300	TJ1-CXIN-M45(*)-450	TJ1-CXIN-M45(*)-600
		6.0	TJ1-CXIN-M60(*)-300	TJ1-CXIN-M60(*)-600	TJ1-CXIN-M60(*)-600
CHROMEGLA™-CONSTANTAN 304 SS Sheath	E	1.5	TJ1-CXSS-M15(*)-300	TJ1-CXSS-M15(*)-450	TJ1-CXSS-M15(*)-600
		3.0	TJ1-CXSS-M30(*)-300	TJ1-CXSS-M30(*)-450	TJ1-CXSS-M30(*)-600
		4.5	TJ1-CXSS-M45(*)-300	TJ1-CXSS-M45(*)-450	TJ1-CXSS-M45(*)-600
		6.0	TJ1-CXSS-M60(*)-300	TJ1-CXSS-M60(*)-450	TJ1-CXSS-M60(*)-600
COPPER-CONSTANTAN Inconel Sheath	T	1.5	TJ1-CPIN-M15(*)-300	TJ1-CPIN-M15(*)-450	TJ1-CPIN-M15(*)-600
		3.0	TJ1-CPIN-M30(*)-300	TJ1-CPIN-M30(*)-450	TJ1-CPIN-M30(*)-600
		4.5	TJ1-CPIN-M45(*)-300	TJ1-CPIN-M45(*)-450	TJ1-CPIN-M45(*)-600
		6.0	TJ1-CPIN-M60(*)-300	TJ1-CPIN-M60(*)-450	TJ1-CPIN-M60(*)-600
COPPER-CONSTANTAN 304 SS Sheath	T	1.5	TJ1-CPSS-M15(*)-300	TJ1-CPSS-M15(*)-450	TJ1-CPSS-M15(*)-600
		3.0	TJ1-CPSS-M30(*)-300	TJ1-CPSS-M30(*)-450	TJ1-CPSS-M30(*)-600
		4.5	TJ1-CPSS-M45(*)-300	TJ1-CPSS-M45(*)-450	TJ1-CPSS-M45(*)-600
		6.0	TJ1-CPSS-M60(*)-300	TJ1-CPSS-M60(*)-450	TJ1-CPSS-M60(*)-600
OMEGALLOY™-NICROSIL-NISIL ** Inconel Sheath	N	1.5	TJ1-NNIN-M15(*)-300	TJ1-NNIN-M15(*)-450	TJ1-NNIN-M15(*)-600
		3.0	TJ1-NNIN-M30(*)-300	TJ1-NNIN-M30(*)-450	TJ1-NNIN-M30(*)-600
		4.5	TJ1-NNIN-M45(*)-300	TJ1-NNIN-M45(*)-450	TJ1-NNIN-M45(*)-600
		6.0	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.

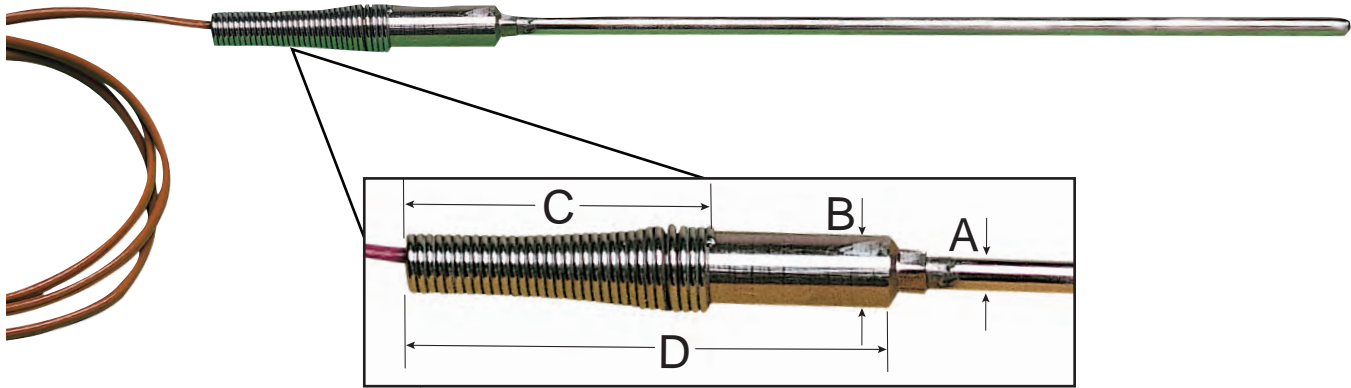
\* Specify junction type: E (Exposed), G (Grounded) or U (Ungrounded). For lengths from 50 to 300 mm, please consult Sales Department.

\*\* For Super OMEGACLAD™ XL, change “IN” to “XL” and add additional cost.

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

# Rugged Transition Joint Probes

## With Metric Dimensions



A Sheath Diameter (in)	Lead Wire Type	B Transition Junction Diameter (in)	C Spring Length in (mm)	D Length of Transition Junction & Strain Relief in (mm)
0.5	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
1	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
1.5	-- -SB -CC-SB -CC -BX -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	3/8	1.5 (38mm)	2.56 (66mm)

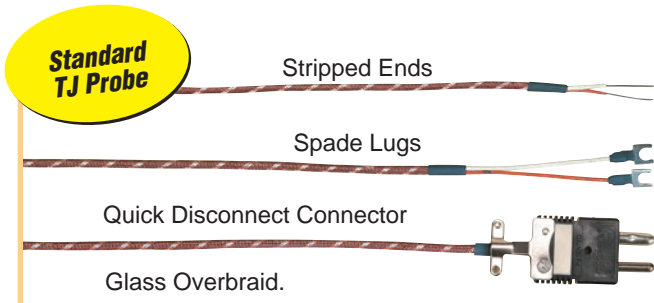
continued...

2	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
3	-- -SB -CC-SB -CC -BX -CC-BX -CC-XCIB -CC-XSIB	1/4	1 (25mm)	2.06 (52.3mm)
	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	3/8	1.5 (38mm)	2.56 (66mm)
4.5	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	3/8	1.5 (38mm)	2.56 (66mm)
6	-- -SB -BX -CC -CC-SB -CC-BX -CC-XCIB -CC-XSIB	3/8	1.5 (38mm)	2.56 (66mm)

# Transition Joint Probe Lead Configurations

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

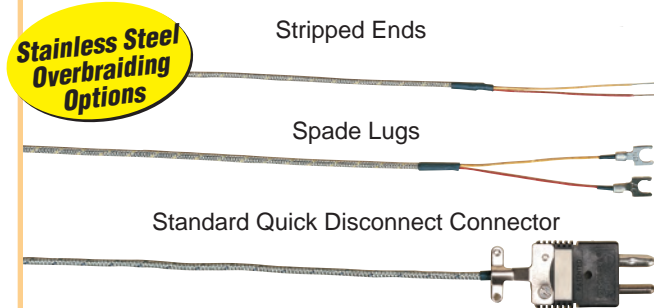
All products shown  
smaller than actual size.



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.

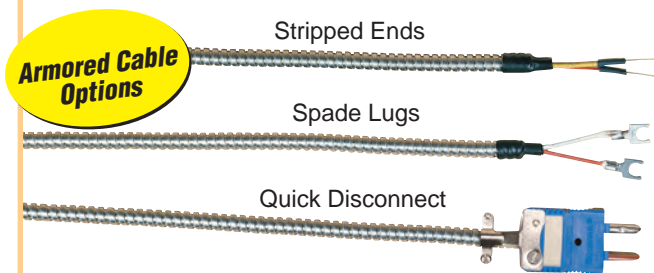


## Stainless Steel Overbraiding

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.

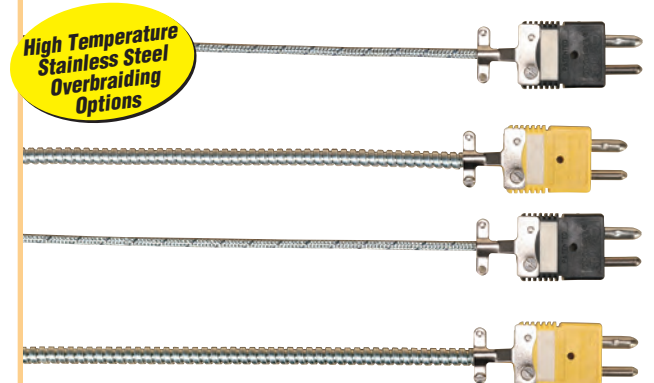


## Armored Cable TJ Probes

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® ceramic fiber insulation and Inconel® 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