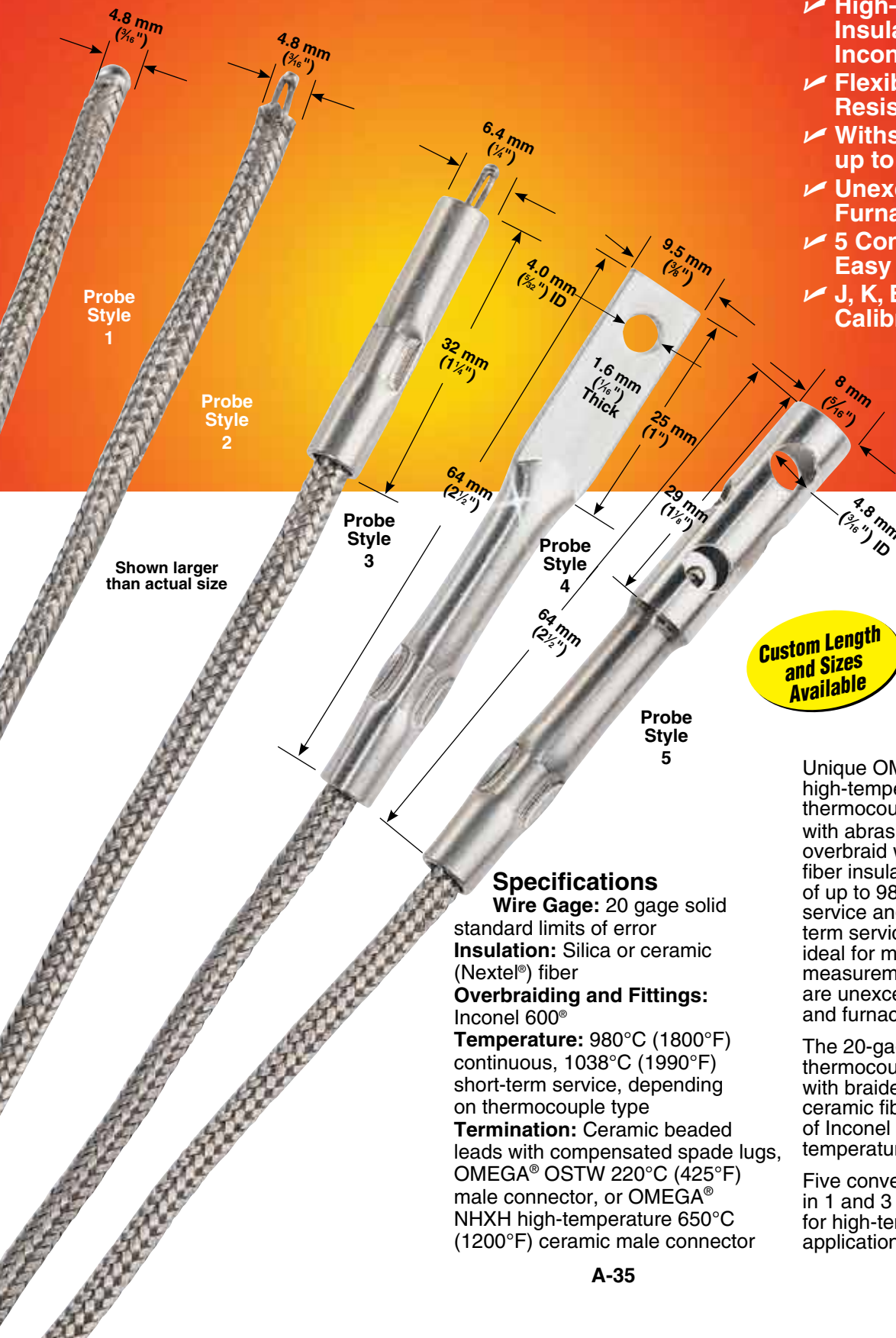


# High-Temperature Inconel® Overbraided Silica Fiber Insulated Thermocouples



- ✓ High-Temperature Insulation with Inconel Overbraid
- ✓ Flexible, Abrasion Resistant
- ✓ Withstand Temperatures up to 1038°C (1990°F)
- ✓ Unexcelled Oven and Furnace Profiling
- ✓ 5 Convenient Styles for Easy Application
- ✓ J, K, E, or N Thermocouple Calibrations

**Custom Length and Sizes Available**

**XCIB Series**



### Specifications

**Wire Gage:** 20 gage solid standard limits of error  
**Insulation:** Silica or ceramic (Nextel®) fiber  
**Overbraiding and Fittings:** Inconel 600®  
**Temperature:** 980°C (1800°F) continuous, 1038°C (1990°F) short-term service, depending on thermocouple type  
**Termination:** Ceramic beaded leads with compensated spade lugs, OMEGA® OSTW 220°C (425°F) male connector, or OMEGA® NHXH high-temperature 650°C (1200°F) ceramic male connector

Unique OMEGA family of high-temperature Types J, K, E, or N thermocouples are double-protected with abrasion-resistant Inconel® overbraid with high-temperature fiber insulation. A temperature rating of up to 980°C (1800°F) continuous service and 1038°C (1990°F) short-term service makes these products ideal for many high-temperature measurement applications. They are unexcelled for profiling ovens and furnaces.

The 20-gage solid conductor thermocouple wires are insulated with braided ceramic fiber. Over the ceramic fiber is a rugged overbraid of Inconel 600—a tough, high-temperature, high nickel-content alloy.

Five convenient styles are available in 1 and 3 m (3 and 10') lengths for high-temperature measurement applications.

**Style 1**

Style 1 is a grounded junction thermocouple with the Inconel overbraid welded to form a smooth rounded tip for all general purpose applications.

**Style 2**

Style 2 is a general purpose, bead welded, exposed junction thermocouple.

**Style 3**

Style 3 is an exposed, bead welded junction thermocouple with an Inconel collar to clamp the probe to a surface, or to secure it into a hole or any fabrication.

**Style 4**

Style 4 is grounded. It can be bolted to a surface, or the Inconel eye can hook the thermocouple to a conveyor flight. Ungrounded units and special hole sites are available. Contact Sales department for more information.

**Style 5**

Style 5 has an Inconel air hood to protect the exposed beaded wire junction. This design can be clamped to a surface, hooked to a conveyor flight, or bolted to a surface by using the through hole at the open end of the hood.



**XCIB-4, Shown, Attaches Easily for Accurate, High-Temperature Measurement**

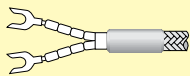
**To Order Visit [omega.com/xcib](http://omega.com/xcib) for Pricing and Details**

Model No.	Probe Style	Termination Type	Model No.	Probe Style	Termination Type
XCIB-(*)-1-1-(**)	1	1	XCIB-(*)-4-1-(**)	4	1
XCIB-(*)-1-2-(**)		2	XCIB-(*)-4-2-(**)		2
XCIB-(*)-1-3-(**)		3	XCIB-(*)-4-3-(**)		3
XCIB-(*)-1-4-(**)		4	XCIB-(*)-4-4-(**)		4
XCIB-(*)-1-5-(**)		5	XCIB--(*)-4-5-(**)		5
XCIB-(*)-1-6-(**)		6	XCIB--(*)-4-6-(**)		6
XCIB-(*)-1-7-(**)		7	XCIB--(*)-4-7-(**)		7
XCIB-(*)-2-1-(**)	2	1	XCIB-(*)-5-1-(**)	5	1
XCIB-(*)-2-2-(**)		2	XCIB-(*)-5-2-(**)		2
XCIB-(*)-2-3-(**)		3	XCIB-(*)-5-3-(**)		3
XCIB-(*)-2-4-(**)		4	XCIB-(*)-5-4-(**)		4
XCIB-(*)-2-5-(**)		5	XCIB-(*)-5-5-(**)		5
XCIB-(*)-2-6-(**)		6	XCIB-(*)-5-6-(**)		6
XCIB-(*)-2-7-(**)		7	XCIB-(*)-5-7-(**)		7
XCIB-(*)-3-1-(**)	3	1	* Specify thermocouple Type: J: Iron-Constantan, K: CHROMEGA®-ALOMEGA®, E: CHROMEGA®-Constantan, N: OMEGALLOY®-NICROSIL-NISIL Use prefix of "CAL-" for assemblies to be supplied with calibration data at specified temperatures. Check Sales department for pricing. ** Specify length in feet: 3' or 10' standard. Price per additional 1', up to over 50' is additional. Note: Available with Nextel insulation. Change "XCIB" in model number to "XSIB". No extra charge.		
XCIB-(*)-3-2-(**)		2			
XCIB-(*)-3-3-(**)		3			
XCIB-(*)-3-4-(**)		4			
XCIB-(*)-3-5-(**)		5			
XCIB-(*)-3-6-(**)		6			
XCIB-(*)-3-7-(**)		7			

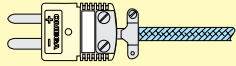
For a male straight M8 plug add "M8-S-M" to the model number and additional cost to the price, for a male straight M12 plug add "M12-S-M" to the model number and additional cost to the price. For a male right-angled M8 plug add "M8-R-M" to the model number and additional cost to the price, for a male right-angled M12 plug add "M12-S-M" to the model number and additional cost to the price.

**Ordering Example:** XCIB-K-1-3-10, XCIB Type K probe, probe style 1 with termination Type 3 m (10') length.

**Termination Types**

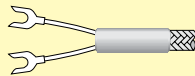


1. Ceramic beaded leads with compensated spade lugs.

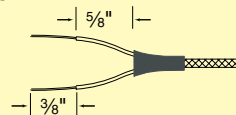


2. Type OSTW male standard thermocouple connector to 220°C (425°F).

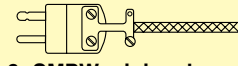
3. Type NHHX male ceramic connector to 650°C (1200°F).



4. Nextel® insulated leads with compensated spade lugs.



5. Stripped leads.



6. SMPW mini-male connector to 220°C (425°F) max.

7. SHX mini-male ceramic connector to 650°C (1200°F) max.