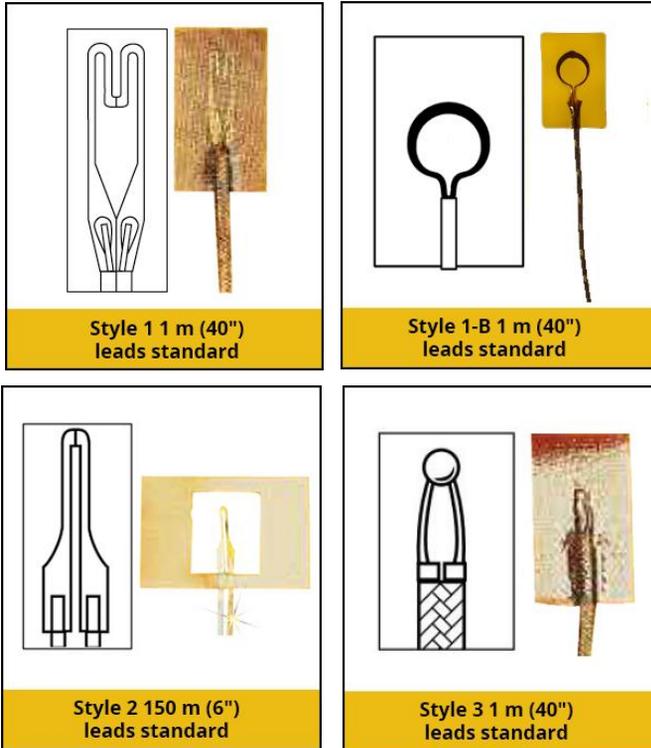


“Cement-On” Thermocouples

- ✓ Response Time in Milliseconds
- ✓ Made from thin Profile Thermocouple Wire
- ✓ Very Low Thermal Inertia
- ✓ Four Calibrations J, K, E, and T
- ✓ Four Styles Ideal for Surface Measurement

OMEGA introduces its CO Series Cement-On, fast response thermocouples for fast surface temperature measurement applications in four convenient styles. Styles 1, 2 are made from 0.13 mm (0.005") thermocouple alloy & Style 1-B is made from 0.18 mm (0.008") thick thermocouple alloy by a special process where the butt welded thermocouple junction are very thin and flat. Styles 1, 1-B and 2 are flat, extremely low inertia construction and are an ideal means of measuring the temperature of both flat and curved metals, plastic and ceramic surfaces where very fast response is desired.

OMEGA's Cement-On Style 1, 1-B and 2 thermocouples are fabricated from ANSI "Special Limits of Error" grade thermocouple materials in K, E and T calibrations and yield accurate temperature indication when used with standard thermocouple instrumentation. Styles 1, 1-B 2 have the fastest response. Style 3 is an economy version constructed from 0.25 mm (0.010") diameter bead welded standard limit of error thermocouple wire. It should be used where extremely fast response is not essential.



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

Model No.	Style	Thermocouple Type	Length mm (inches)	Maximum Temperature °C* (°F)		
				Continuous	600 hr.	10 hr.
CO1-K	1	K CHROMEGA-ALOMEGA [®]	1 m (40")	260 (500)	315 (600)	370 (700)
CO1-E		E CHROMEGA [®] -Constantan	1 m (40")	260 (500)	315 (600)	370 (700)
CO1-T		T Copper - Constantan	1 m (40")	150 (300)	205 (400)	260(500)
CO1-K-B	1-B	K CHROMEGA-ALOMEGA [®]	1 m (40")	260 (500)	315 (600)	370 (700)
CO2-K	2	K CHROMEGA-ALOMEGA [®]	150 mm (6")	540(1000)	540(1000)	650 (120)
CO2-E		E CHROMEGA [®] -Constantan	150 mm (6")	425(800)	425(800)	540(1000)
CO2-T		T Copper - Constantan	150 mm (6")	150 (300)	150 (300)	260(500)
CO3-J	3	J Iron - Constantan	1 m (40")	260 (500)	370 (700)	370 (700)
CO3-K		K CHROMEGA-ALOMEGA [®]	1 m (40")	260 (500)	370 (700)	370 (700)
CO3-E		E CHROMEGA [®] -Constantan	1 m (40")	260 (500)	370 (700)	370 (700)
CO3-T		T Copper - Constantan	1 m (40")	205 (400)	260 (500)	370 (700)

* The temperature range high limits given are greatly influenced by environmental conditions, installation method, accuracy and lifetime requirements and may vary from the general guidelines listed in the table.

Style 1 & 1-B and 3 cannot be used with CC High Temperature Cement; CC Cement will break down insulation. Response time when "grounded" or "cemented" to surface: **Style 1 & Style 1-B** (150 to 200 milliseconds), **Style 2** (2 to 5 milliseconds), **Style 3** (300 milliseconds).

The response time or "time constant" is the time required to reach 63.2% of an instantaneous temperature change. Additional length wire can be ordered for Styles 1 and 3, or CO1-K-B-60 style 1-b, Type K thermocouple, 60 **Ordering Example: CO1-K** is a style 1, Type K thermocouple, 1 m (40") long.