

# Thermocouple Extension Wire

## G9 Series

When selecting: insulation, moisture, abrasion, flexing, chemical attack, temperature extremes, and other adverse environments must be evaluated. Insulations are rated for a maximum continuous use temperature. This maximum use temperature is for the insulation material, not the temperature at which the thermocouple is operating. That temperature limit is based on the thermocouple design and calibration.



Thermocouple EXTENSION grade wire (denoted by an "X") has approximately the same thermoelectric properties as thermocouple wire, but is only guaranteed accurate within a limited temperature range. Typically, under 400 degrees Fahrenheit. All thermocouple wire is supplied to your specified length.

$$\text{Part Number} = \frac{\text{###}}{\text{Insulation}} / \frac{\text{X}}{\text{Material}} / \frac{\text{##}}{\text{Wire Size}}$$

Extension Wire for Types CX, E, J, K, N, RX, SX & T								
Insulation Material	CX	E	J	K	N	RX	SX	T
PVC over each/overall (801) rated to 175°F	-	-	-	-	-	-	-	801T24
	-	801EX20	801JX20	801KX20	-	801RX20	801SX20	-
PVC, shielded w/drain wire (805) rated to 175°F	805CX20	-	-	-	805NX20	805RX20	805SX20	805TX20
	-	-	805JX20	805KX20	-	-	-	805TX20
Teflon FEP wrapped (809) rated to 500°F	-	809E30	809J30	-	-	-	-	809T30
	-	809E24	809J24	809K24	-	809RX24	809SX24	809T24
	-	-	809J20	809K20	-	809RX20	809SX20	809T20
Teflon TFE extruded (810) rated to 400°F	-	-	810J30	810K30	-	-	-	810T30
	810CX24	810E24	810J24	810K24	810N24	810RX24	810SX24	810T24
	-	810E20	810J20	810K20	-	810RX20	810SX20	810T20
Nextel braided (820) rated to 2,600°F	-	-	-	812K20	812N20	-	-	-
	-	-	-	-	-	-	-	-
Fiberglass braided (828) rated to 900°F	-	-	828J30	828K30	-	-	-	-
	-	-	-	828K28	-	-	-	828T28
	-	828E24	828J24	828K24	828N24	828RX24	828SX24	-
	828CX20	828E20	828J20	828K20	-	828RX20	828SX20	828T20

Temperature Ranges and Accuracy of Thermocouples & RTDs											
Temperature Ranges by Sensor Type											
Useful Range	B	C	B	E	J	K	N	R	S	T	Pt100
°C	0 / 1,700	0 / 2,320	0 / 2,320	-200 / 900	0 / 750	-200 / 1,250	-270 / 1,300	0 / 1,450	0 / 1,450	-200 / 350	-200 / 850
°F	32 / 3,092	0 / 4,230	0 / 4,230	-328 / 1,652	32 / 1,382	-328 / 2,282	-454 / 2,372	32 / 2,642	32 / 2,642	-328 / 662	-328 / 1,562
°C / °F											
-200 / -328	-	-	-	1.0	-	2.0	2.0	-	-	1.5	0.65
-100 / -148	-	-	-	1.0	-	2.0	2.0	-	-	1.5	0.8
0 / 32	-	-	-	1.0	0.75	0.75	0.75	0.25	0.25	1.5	0.3
200 / 392	-	-	-	0.5	0.75	0.75	0.75	0.25	0.25	1.0	0.8
400 / 752	-	4.5°C	4.5°C	0.5	0.75	0.75	0.75	0.25	0.25	1.0	0.55
600 / 1,112	-	1.0	1.0	0.5	0.75	0.75	0.75	0.25	0.25	-	0.55
800 / 1,472	0.5	1.0	1.0	0.5	-	0.75	0.75	0.25	0.25	-	0.55
1,000 / 1,832	0.5	1.0	1.0	-	-	0.75	0.75	0.25	0.25	-	-
1,200 / 2,192	0.5	1.0	1.0	-	-	0.75	0.75	0.25	0.25	-	-
1,400 / 2,552	0.5	1.0	1.0	-	-	-	-	0.25	0.25	-	-
1,600 / 2,912	0.5	1.0	1.0	-	-	-	-	-	-	-	-
1,800 / 3,272	-	1.0	1.0	-	-	-	-	-	-	-	-
2,000 / 3,632	-	1.0	1.0	-	-	-	-	-	-	-	-
2,300 / 4,172	-	1.0	1.0	-	-	-	-	-	-	-	-

