



B. J. WOLFE ENTERPRISES, INC.

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Insulation Types, Construction and Characteristics

Insulation Type	Overall Jack I = Insulation P = Impregnation	Each Conductor I = Insulation P = Impregnation	Temperature Rating of Insulation Continuous Single RDG		Notes and Comments
CF	I = Ceramic Fiber P = None	I = Ceramic Fiber P = None	1204°C (2000°F)	1427°C (2600°F)	No ANSI color coding, fiber does tend to unravel over time.
CFIN	I = Ceramic Fiber w/Inconel 600 overbraiding P = None	I = Ceramic Fiber P = None	704°C (1300°F)	1148°C (2100°F)	Inconel 600 over-braiding, increases the abrasion resistance and unraveling of fiber insulation.
HTGB	I = High Temp Glass Braid P = High Temp Varnish	I = High Temp Glass Braid P = High Temp Varnish	537°C (1000°F)	871°C (1600°F)	Impregnation retained to 204°C (400°F), insulation holds up well at upper temperature.
GG	I = Glass Braid P = Silicon Modified Resin	I = Glass Braid P = Silicon Modified Resin	482°C (900°F)	538°C (1000°F)	Impregnation retains to 204°C (400°F).
GW	I = Double Glass Wrap P = High Temp Varnish	I = Glass Braid P = High Temp Varnish	482°C (900°F)	538°C (1000°F)	Impregnation retained to 204°C (400°F). Insulation holds up better than GG at higher temperatures.
KT	I = Fused Kapton Tape Colored Polyimide Enamel	I = Fused Kapton Tape	316°C (600°F)	427°C (800°F)	Excellent moisture and abrasion resistance, FEP binder melts at 260°C/500°F.
TFE	I = Fused TFE Tape	I = Fused TFE Tape	260°C (500°F)	316°C (600°F)	Because of the fusing process this wire is not recommended for applications where the outer jacket only is to be removed.
TP	I = Extruded PFA Teflon	I = Extruded PFA Teflon	260°C (500°F)	316°C (600°F)	Slightly less rugged than the TFE series. TP offers a nice smooth extruded finish.
TF	I = Extruded FEP Teflon	I = Extruded FEP Teflon	204°C (400°F)	260°C (400°F)	Slightly less expensive than TP wire. Excellent moisture and abrasion like most teflon wires.
PVC	Ripcord construction-No outer jacket, insulation on conductors are fused	I = Extruded PVC Polyvinyl	105°C (221°F)		Good down to -29°C (-20°F), most economical wire produced easy to strip. For lower or higher temperature use Teflon.
PP Extension Wire Only	I = Extruded PVC Polyvinyl	I = Extruded PVC Polyvinyl	105°C (221°F)		Good down to -29°C (-20°F). This wire is designed as an economical thermocouple extension wire.

ANSI Color Coding

Type	Positive Wire		Negative Wire		Overall Jacket Color Code			
	Alloy	Color Code	Alloy	Color	GG, GW	Teflon 20-24	Teflon 26-36	Extension PP
J	Iron "Magnetic"	White	Constantan	Red	Brown with Black Tracer	Brown	Clear PFA Jacket	Black
K	CHROMEL®	Yellow	ALUMEL® "Magnetic"	Red	Brown with Yellow Tracer	Brown	Clear PFA Jacket	Yellow
T	Copper	Blue	Constantan	Red	Brown with Blue Tracer	Brown	Clear PFA Jacket	Blue
E	CHROMEL®	Purple	Constantan	Red	Brown with Purple Tracer	Brown	Clear PFA Jacket	Purple
R	Plat 13% Rhodium	Black	Pure Platinum	Red				Green
S	Plat 10% Rhodium	Black	Pure Platinum	Red				Green

CF/CFIN Insulation do not contain ANSI color coding. Ceramic Fiber material is sold white. The Alumel leg of the CF/FCIN wire is magnetic for easy identification.

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