



Thermo-Couple Products Co.

www.tcproducts.com

a division of Marsh Bellofram
www.marshbellofram.com
1-800-727-5646

TYPE 30

Single Conductor Insulation

- Ceramic Fiber Braid
- No Impregnation

Duplex Conductor Insulation

- Ceramic Fiber Braid
- No Impregnation

ANSI Color-Coded

- No

Temperature Rating

- Continuous: 2200°F (1204°C)
- Single Reading: 2600°F (1427°C)

Physical Properties

- Abrasion Resistance - Good
- Moisture Resistance - Fair
- Chemical Resistance - Good

Note

- Because this insulation has no binders or impregnation, it may "fray" when stripped.

Thermocouple Grade Wire							
Type	Catalog Number	Wire Gauge	Conductor size (in/mm)	Ohms /Dbl. Ft.	Nominal Overall size (in/mm)	Approx. Shipping Weight	
						(lb. /1000 ft)	(Kg/Km)
30	20K30	20	.0320/.813	.590	.110 x .150/2.79 x 3.81	16	23.8

TYPE 31

Single Conductor Insulation

- Fused Polyimide Tape - Colored Polyimide Enamel

Duplex Conductor Insulation

- Fused Polyimide Tape

Temperature Rating

- Continuous: 600°F (316°C)
- Single Reading: 800°F (427°C)

ANSI Color-Coded

- Yes (Singles)

Physical Properties

- Abrasion Resistance - Excellent
- Moisture Resistance - Excellent
- Chemical Resistance - Excellent

Note

- FEP Teflon laminate melts at approximately 500°F (260°C)

Characteristics

- See page 129

Thermocouple Grade Wire							
Type	Catalog Number	Wire Gauge	Conductor size (in/mm)	Ohms /Dbl. Ft.	Nominal Overall size (in/mm)	Approx. Shipping Weight	
						(lb. /1000 ft)	(Kg/Km)
31	20J31P	20	.0320/.813	.357	.065 x .100/1.65 x 2.54	11	16.4
31	24J31P	24	.0201/.508	.877	.060 x .085/1.52 x 2.16	6	8.9
31	30J31P	30	.0100/.254	3.520	.048 x .058/1.22 x 1.47	4	6.0
31	20K31P	20	.0320/.813	.590	.065 x .100/1.65 x 2.54	11	16.4
31	24K31P	24	.0201/.508	1.490	.060 x .085/1.52 x 2.16	6	8.9
31	30K31P	30	.0100/.254	5.980	.048 x .058/1.22 x 1.47	4	6.0
31	20T31P	20	.0320/.813	.298	.065 x .100/1.65 x 2.54	11	16.4

TYPE 36

Single Conductor Insulation

- High Temperature Fiver Glass Braid; No impregnation

Duplex Conductor Insulation

- High Temperature Fiber Glass Braid with Silicone Modified Resin Impregnation

Temperature Rating

- Continuous: 1300°F (704°C)
- Single Reading: 1600°F (871°C)

ANSI Color-Coded

- Both Legs Have Tracers
- No Overall Color-Code

Physical Properties

- Abrasion Resistance - Good
- Moisture Resistance - Fair
- Chemical Resistance - Good

Note

- Impregnation retained to 400°F (204°C)

Characteristics

- See page 129

Thermocouple Grade Wire							
Type	Catalog Number	Wire Gauge	Conductor size (in/mm)	Ohms /Dbl. Ft.	Nominal Overall size (in/mm)	Approx. Shipping Weight	
						(lb. /1000 ft)	(Kg/Km)
36	14J36	14	.0641/.628	.086	.125 x .195/3.18x 4.95	36	53.6
36	14K36	14	.0641/.628	.147	.125 x .195/3.18x 4.95	39	58.0

TYPE 42

Single Conductor Insulation

- Extruded FEP Teflon

Duplex Conductor Insulation

- Extruded FEP Teflon

Temperature Rating

- Continuous: 400°F (204°C)
- Single Reading: 500°F (260°C)

ANSI Color-Coded

- Yes

Physical Properties

- Abrasion Resistance - Excellent
- Moisture Resistance - Excellent
- Chemical Resistance - Excellent

Characteristics

- See page 129

Thermocouple Grade Wire							
Type	Catalog Number	Wire Gauge	Conductor size (in/mm)	Ohms /Dbl. Ft.	Nominal Overall size (in/mm)	Approx. Shipping Weight	
						(lb. /1000 ft)	(Kg/Km)
42	30J42	30	.0100/.254	3.520	.030 x .050/.76 x 1.27	4	6.0
42	30K42	30	.0100/.254	5.980	.030 x .050/.76 x 1.27	4	6.0
42	30T42	30	.0100/.254	3.025	.030 x .050/.76 x 1.27	4	6.0