HIGH TEMPERATURE FIBERGLASS INSULATED TYPE W-Q/Q (THERMOCOUPLE GRADE)

HIGH TEMPERATURE FIBERGLASS INSULATION

Individual conductors are insulated with a high temperature fiberglass braid which is saturated with a resin to improve abrasion resistance and reduce fraying. Conductors are laid parallel and covered with an overall high temperature fiberglass jacket and a final impregnation of resin.

PERFORMANCE FEATURES

- Designed for continuous use to 1200° F (650° C), intermittent to 1500° F (815° C).
- High thermal endurance
- High tensile strength

APPLICATIONS

- Aluminum and Steel Industry
- Heat Treating
- Furnace Temperature Surveys

CALIBRATION: ANSI Type J

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-Q/Q-24F-J	W-Q/Q-24F-JJ	24 STRANDED	0.848
W-Q/Q-24-J	W-Q/Q-24-JJ	24 SOLID	0.928
W-Q/Q-20F-J	W-Q/Q-20F-JJ	20 STRANDED	0.335
W-Q/Q-20-J	W-Q/Q-20-JJ	20 SOLID	0.367
W-Q/Q-18-J	W-Q/Q-18-JJ	18 SOLID	0.234

CALIBRATION: ANSI Type K

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-Q/Q-24F-K	W-Q/Q-24F-KK	24 STRANDED	1.361
W-Q/Q-24-K	W-Q/Q-24-KK	24 SOLID	1.490
W-Q/Q-20F-K	W-Q/Q-20F-KK	20 STRANDED	0.538
W-Q/Q-20-K	W-Q/Q-20-KK	20 SOLID	0.589
W-Q/Q-18-K	W-Q/Q-18-KK	18 SOLID	0.376

CALIBRATION: ANSI Type E

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-Q/Q-24F-E	W-Q/Q-24F-EE	24 STRANDED	1.639
W-Q/Q-24-E	W-Q/Q-24-EE	24 SOLID	1.795
W-Q/Q-20F-E	W-Q/Q-20F-EE	20 STRANDED	0.648
W-Q/Q-20-E	W-Q/Q-20-EE	20 SOLID	0.709
W-Q/Q-18-E	W-Q/Q-18-EE	18 SOLID	0.453

CALIBRATION: ANSI Type N

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-Q/Q-24F-N	W-Q/Q-24F-NN	24 STRANDED	1.808
W-Q/Q-24-N	W-Q/Q-24-NN	24 SOLID	1.980
W-Q/Q-20F-N	W-Q/Q-20F-NN	20 STRANDED	0.715
W-Q/Q-20-N	W-Q/Q-20-NN	20 SOLID	0.783
W-Q/Q-18-N	W-Q/Q-18-NN	18 SOLID	0.500

CALIBRATION	COLOR CODE (ANSI)			COLOR CODE (IEC)*		
	POSITIVE	NEGATIVE	OVERALL	POSITIVE	NEGATIVE	OVERALL
TYPE J	WHITE	RED	BROWN	BLACK	WHITE	WHITE
TYPE K	YELLOW	RED	BROWN	GREEN	WHITE	WHITE
TYPE E	PURPLE	RED	BROWN	PURPLE	WHITE	WHITE
TYPE N	ORANGE	RED	BROWN	PINK	WHITE	PINK

* Add (-IEC) to the end of the ordering code for IEC color coded insulation and jacketed wire.
Example: W-Q/Q-20-J-IEC

INITIAL CALIBRATION TOLERANCES Per ANSI MC96.1 and ASTM E230 (°F)				
TEMPERATURE RANGE	STANDARD		SPECIAL	
	CALIBRATION	TOLERANCE	CALIBRATION	TOLERANCE
32 to 1400°F	TYPE J	±4.0°F or ±.75%*	TYPE JJ	±2.0°F or ±.4%*
32 to 2300°F	TYPE K	±4.0°F or ±.75%*	TYPE KK	±2.0°F or ±.4%*
32 to 1600°F	TYPE E	±3.0°F or ±.50%*	TYPE EE	±1.8°F or ±.5%*
32 to 2300°F	TYPE N	±4.0°F or ±.75%*	TYPE NN	±2.0°F or ±.4%*

*Whichever is greater.

CONDUCTOR SIZE (AWG)	INSULATION THICKNESS	JACKET THICKNESS	NOMINAL DIMENSIONS	APPROX. SHIPPING WT. lbs/1000 Ft. (Kg)
24 STRANDED	.013	.013	.076/.126	10 lbs (4.5 Kg)
24 SOLID	.013	.013	.072/.118	9 lbs (4.1 Kg)
20 STRANDED	.013	.013	.090/.154	13 lbs (5.9 Kg)
20 SOLID	.013	.013	.084/.142	12 lbs (5.4 Kg)
18 SOLID	.013	.013	.092/.158	21 lbs (9.5 Kg)

Notes:
(1) Meets or exceeds Special Initial Calibration Tolerances per ANSI MC96.1-1982 and ASTM E230-1993.
(2) Nominal resistance in OHMS per double feet at 68°F (20°C).