

SPECIFICATION CONTROL DRAWING

CTC-0046TITLE TWO CONDUCTOR THERMOCOUPLE EXTENSION CABLE
SHIELDED, JACKETED

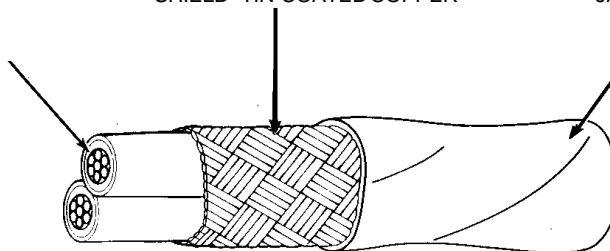
Date 10-11-04

Revision C

This specification sheet forms a part of the latest issue of Raychem Specification 55A.

COMPONENT WIRES-
1 of WTC-0013 (CHROMEL®)
1 of WTC-0045 (Constantan)

SHIELD - TIN-COATED COPPER

JACKET - RADIATION-CROSSLINKED
MODIFIED ETFE

CONSTRUCTION DETAILS

PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (inch)		OUTSIDE DIAMETER (inch)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
CTC-0046-22-*	22	38	.010	.012	.159	.167	16.1

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

ACCELERATED AGING: 300 ± 3°C for 7 hours

DIELECTRIC WITHSTAND: 1500 volts, 60 Hz (rms)

FLAMMABILITY: Procedure 1, 3 seconds (maximum);

3 in. (maximum); no flaming of facial

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 50% (minimum)

Tensile Strength, 5000 lbf/in² (minimum)

JACKET FLAWS:

Spark Test, 1000 volts (rms)

Impulse Dielectric Test, 6.0 kV (peak)

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND TEST (Post Environmental):

1000 volts, 60 Hz, (rms) 1 minute

PART NUMBER

The "*" in the part number above shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color. The color of CHROMEL® shall be shown first.

1/ Example: AWG 22,

Per MIL-STD-687: white and yellow; white jacket:
CTC-0046-22-9/4-9Per ANSI MC 96.1: purple and red; purple jacket:
CTC-0046-22-7/2-7Per British Standard Code BS: brown and blue; brown jacket:
CTC-0046-22-1/6-1

The combination of the above thermoelements is referred to as type EX per ANSI MC 96.1.

EMF shall be 6.21 mV (minimum), 6.43 mV (maximum) at 100°C with reference junction at 0°C per ANSI MC 96.1, and shall be performed on every length of finished cable.

CHROMEL® is a federally registered trademark of Hoskins Manufacturing Company. Alternative conductors, exhibiting the same performance characteristics, may be substituted for the CHROMEL® conductor.

*Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.**Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.*

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902..." MAY BE REPLACED BY "Axxx".) OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.**tyco**
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