

SPECIFICATION CONTROL DRAWING

44A9710

TITLE	TWO CONDUCTOR THERMOCOUPLE EXTENSION CABLE, DOUBLE SHIELDED, JACKETED	Date	10-9-04	Revision	A
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This specification sheet forms a part of the latest issue of Raychem Specification 44.

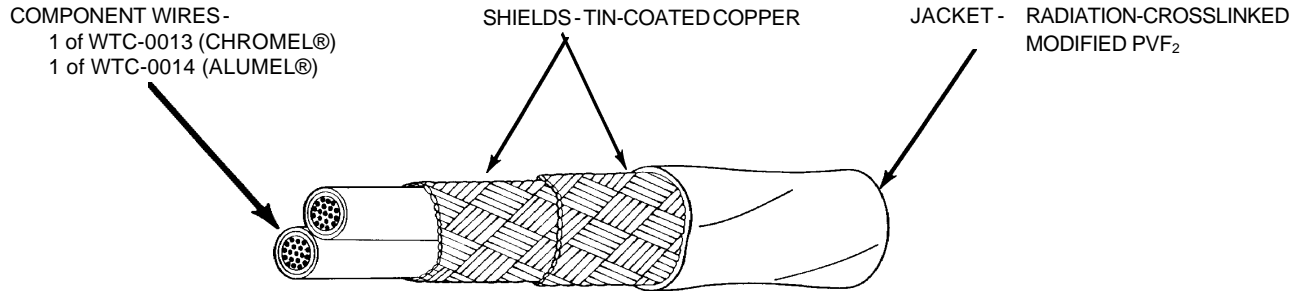


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER 1/	CONDUCTOR SIZE (AWG)	INNER SHIELD SIZE (AWG)	OUTER SHIELD SIZE (AWG)	JACKET THICKNESS (inch)		OUTSIDE DIAMETER (inch)		MAXIMUM WEIGHT (lbs/1000 ft.)
				MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44A9710-22-*	22	38	36	.010	.012	.180	.189	28.2
44A9710-20-*	20	36	36	.010	.012	.200	.210	36.0
44A9710-16-*	16	36	36	.012	.014	.254	.267	59.9

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING			
	MANDREL DIAMETER (inch) (±3%)		WEIGHT (lb) (±3%)	
	ACCELERATED AGING, AND LOW TEMPERATURE COLD-BEND	COLD BEND	ACCELERATED AGING, AND LOW TEMPERATURE COLD-BEND	COLD BEND
44A9710-22-*	3.75	3.75	.375	3.00
44A9710-20-*	4.00	4.00	.375	3.00
44A9710-16-*	5.00	5.00	.500	3.00

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C
 Maximum continuous conductor temperature
 ACCELERATED AGING: 300 ± 3°C for 6 hours
 DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz, 1 minute
 FLAMMABILITY: 30 seconds (maximum); 3 in. (maximum)
 no flaming of facial tissue
 JACKET CONCENTRICITY: 70% (minimum)
 JACKET ELONGATION AND TENSILE STRENGTH:
 Elongation, 200% (minimum)
 Tensile Strength, 4000 lbf/in² (minimum)
 JACKET FLAWS:
 Spark Test, 1.5 volts (rms)
 Impulse Dielectric Test, 6.0 kV (peak)
 LOW TEMPERATURE- COLD BEND: -65°C ± 2°C for 4 hours
 SHIELD COVERAGE: 85% (minimum) each
 VOLTAGE WITHSTAND TEST (Post Environmental):
 1000 volts (rms), 60 Hz, 1 minute

PRODUCT IDENTIFICATION: The cable jacket shall be marked in black ink at 6 in. (nominal) intervals between marks as follows: " 44A9710 - AWG - 06090 "

PART NUMBER: The "*" in the part numbers 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 20,
 Per MIL-STD-687: white and green; white jacket: 44A9710-20-9/5-9.
 Per ANSI MC96.1: yellow and red; yellow jacket: 44A9710-20-4/2-4
 Per British Standard Code BS: brown and blue; red jacket: 44A9710-20-1/6-2.

The combination of the above thermoelements is referred to as type KX per ANSI MC96.1.

EMF shall be 4.00 mV (minimum), 4.19 mV (maximum), at 100°C with reference junction corrected to 0°C per ANSI MC96.1, and shall be performed on every length of finished cable.

CHROMEL® and ALUMEL® are federally registered trademarks of Hoskins Manufacturing Company. Alternative conductors, exhibiting the same performance characteristics, may be substituted for one or both of the CHROMEL® and ALUMEL® conductors.

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.



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