

SPECIFICATION CONTROL DRAWING

44/7011

TITLE WIRE, SOLID, TIN-COATED COPPER AND ELECTROLYTIC TIN-COATED OXYGEN-FREE COPPER, OUTER SPACE, 600 VOLT	Date 08-21-03	Revision J
This specification sheet forms a part of the latest issue of Raychem Specification 44 and MIL-W-81044 as applicable.		

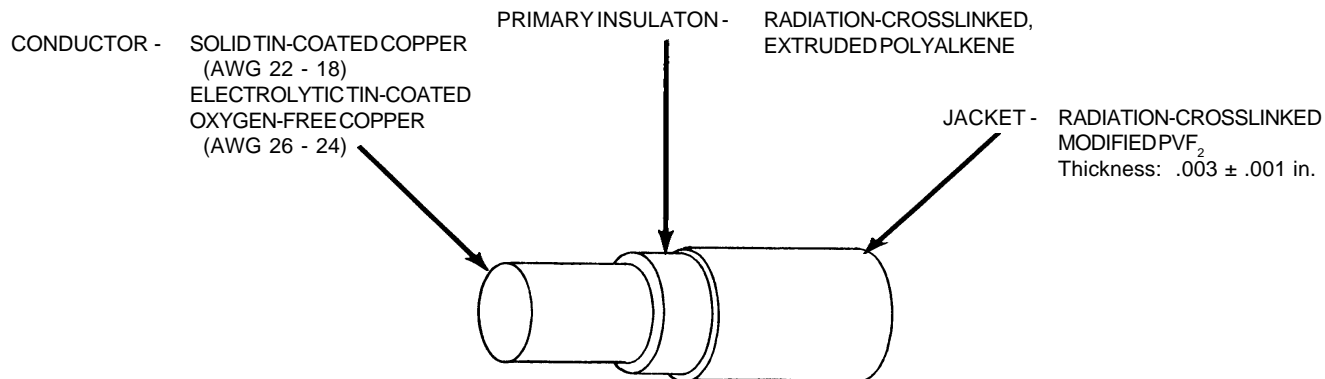


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	MAXIMUM CONDUCTOR DIAMETER (in.)	FINISHED WIRE		
			MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
44/7011-26-*	26	.017	46.2	.030 ± .002	1.1
44/7011-24-*	24	.021	28.3	.035 ± .002	1.7
44/7011-22-*	22	.026	17.9	.040 ± .002	2.5
44/7011-20-*	20	.033	11.2	.047 ± .002	3.8
44/7011-18-*	18	.042	7.0	.055 ± .002	5.9

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING					
	MANDREL DIAMETER (inch) (± 3%)				WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	WRAP	RADIATION RESISTANCE	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
44/7011-26-*	.500	.500	.250	.750	.063	.500
44/7011-24-*	.500	.500	.250	1.00	.125	.500
44/7011-22-*	.750	.750	.375	1.00	.125	1.00
44/7011-20-*	.750	.750	.375	1.25	.125	1.00
44/7011-18-*	1.00	1.00	.500	1.50	.125	1.00

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. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.



Raychem Wire & Cable
501 Oakside Avenue
Redwood City, CA 94063-3800
Phone: 1-800-227-8816
Fax: 1-650-361-6297

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.

WIRE RATINGS AND ADDITIONAL REQUIREMENTS**TEMPERATURE RATING: 135°C**

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level**ACCELERATED AGING:** 225 ± 2°C for 6 hours**BLOCKING:** 150 ± 2°C for 24 hours**COLOR:** White preferred**CONCENTRICITY:** (Entire insulation only) 70% (minimum)**FLAMMABILITY:** 30 seconds (maximum); 3 inch (maximum);
no flaming of facial tissue**HUMIDITY RESISTANCE:** Insulation Resistance,
5000 megohms for 1000 ft. (minimum)**IMMERSION:** Diameter increase 5% (maximum); no cracking,
no dielectric breakdown**INSULATION ELONGATION AND TENSILE STRENGTH:**

Primary Insulation,

Elongation, 150% (minimum)

Tensile Strength, 2500 lbf/in² (minimum)**INSULATION FLAWS:**

Primary Insulation,

High Frequency Spark Test, 4.2 kV (rms) at 3.0 kHz

Impulse Dielectric Test, 6.0 kV (peak)

Finished Wire,

High Frequency Spark Test, 5.7 kV (rms) at 3.0 kHz

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION RESISTANCE: 5000 megohms for 1000 ft. (minimum)**LIFE CYCLE:** 200 ± 2°C for 120 hours**LOW TEMPERATURE-COLD BEND:** -65 ± 2°C for 4 hours**RADIATION RESISTANCE:** 500 megarads**SHRINKAGE:** 225 ± 2°C, 0.125 inch (maximum) in 12 inches**SMOKE TEST:** 165 ± 2°C, no visible smoke**SURFACE RESISTANCE:** 500 megohms-in. (minimum), both readings**THERMAL SHOCK RESISTANCE:** 135 ± 2°C, 0.060 inch (maximum)**VACUUM STABILITY:**

Total Mass Loss (TML), 1.0% (maximum)

Volatile Condensable Material (VCM), 0.1% (maximum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

2500 volts (rms), 60 Hz, 5 minutes

WICKING: 2.25 inches (maximum)**PART NUMBER:**

The "*" in the part numbers above shall be replaced with a color code designator.

1/ Example: AWG 26, white; 44/7011-26-9