

SPECIFICATION CONTROL DRAWING

44/7004

TITLE WIRE, SOLID, TIN-COATED COPPER AND ELECTROLYTIC
TIN-COATED OXYGEN-FREE COPPER, GENERAL PURPOSE, 600 VOLT

Date 08-09-03

Revision M

This specification sheet forms a part of the latest issue of Raychem Specification 44.

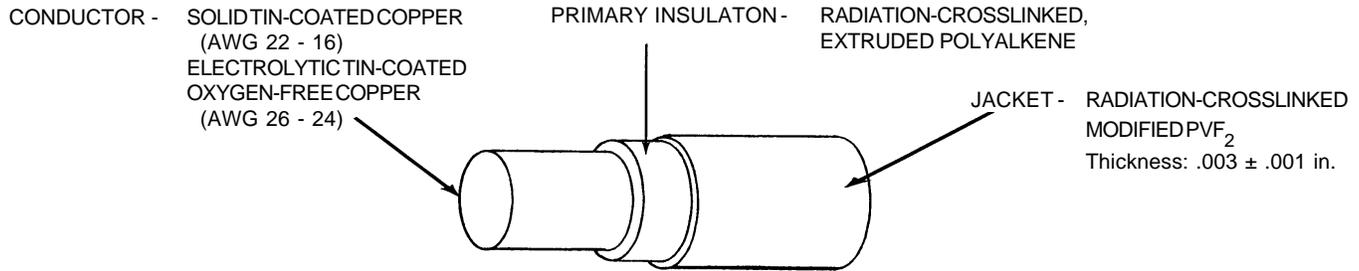


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	MAXIMUM DIAMETER CONDUCTOR (in.)	FINISHED WIRE		
			MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)	MAXIMUM WEIGHT (lb/1000 ft.)
44/7004-26-*	26	.017	46.2	.030 ± .002	1.2
44/7004-24-*	24	.021	28.3	.035 ± .002	1.7
44/7004-22-*	22	.026	17.9	.040 ± .002	2.6
44/7004-20-*	20	.033	11.2	.047 ± .002	3.9
44/7004-18-*	18	.042	7.0	.055 ± .002	5.9
44/7004-16-*	16	.052	4.4	.066 ± .002	9.2

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING				
	MANDREL DIAMETER (in.) (± 3%)			WEIGHT (lb) (± 3%)	
	LIFE CYCLE AND ACCELERATED AGING	COLD BEND	WRAP	LIFE CYCLE AND ACCELERATED AGING	COLD BEND
44/7004-26-*	.500	.500	.250	.125	.500
44/7004-24-*	.500	.500	.250	.190	.500
44/7004-22-*	.750	.750	.375	.190	1.00
44/7004-20-*	.750	.750	.375	.190	1.00
44/7004-18-*	1.00	1.00	.500	.250	1.00
44/7004-16-*	1.00	1.00	.500	.250	1.00

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 in. (maximum); no flaming of facial tissue
HUMIDITY RESISTANCE: Insulation Resistance, 5000 megohms for 1000 ft. (minimum)
INSULATION ELONGATION AND TENSILE STRENGTH:
Primary Insulation,
Elongation, 150% (minimum)
Tensile Strength, 3000 lbf/in² (minimum)
INSULATION RESISTANCE: 5000 megohms for 1000 ft. (minimum)

INSULATION FLAWS:
Primary Insulation,
Spark Test, 4.2 kV (rms) at 3.0 kHz
Impulse Dielectric Test, 6.0 kV (peak)
Finished Wire,
Spark Test, 5.7 kV (rms) at 3.0 kHz
Impulse Dielectric Test, 8.0 kV (peak)
LIFE CYCLE: 185 ± 3°C for 120 hours
LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours
SMOKE: 165 ± 2°C. No visible smoke
SURFACE RESISTANCE: 500 megohms-in. (minimum), both readings
VOLTAGE WITHSTAND TEST (Post Environmental): 2500 volts (rms), 60 Hz, 5 minutes
WICKING: 2.25 in. (maximum)

PART NUMBER:
The "*" in the part numbers above shall be replaced with a color code designator.
1/ Example: AWG 26, white; 44/7004-26-9
AWG 26, white with black stripe; 44/7004-26-90

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.



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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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