



SPECIFICATION CONTROL DRAWING

44A0111

 TITLE WIRE, ELECTRIC, RADIATION-CROSSLINKED, TIN-COATED COPPER,
 LIGHTWEIGHT, GENERAL PURPOSE, 600 VOLT

Date 24MAR11

Revision P1

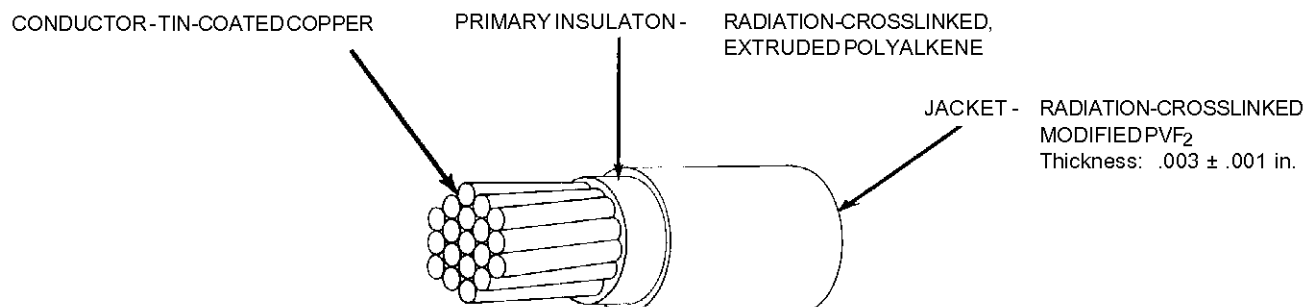


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
44A0111-26-*	26	19 x 38	.018	.021	41.3	.034 ± .002	1.4
44A0111-24-*	24	19 x 36	.023	.026	26.2	.040 ± .002	2.0
44A0111-22-*	22	19 x 34	.029	.033	16.2	.047 ± .002	3.0
44A0111-20-*	20	19 x 32	.037	.041	9.88	.055 ± .002	4.5
44A0111-18-*	18	19 x 30	.046	.051	6.23	.065 ± .002	6.8
44A0111-16-*	16	19 x 29	.052	.058	4.81	.072 ± .003	8.6
44A0111-14-*	14	19 x 27	.065	.073	3.06	.089 ± .004	13.2
44A0111-12-*	12	37 x 28	.084	.090	2.02	.108 ± .004	20.2
44A0111-10-*	10	37 x 26	.106	.114	1.26	.129 ± .004	31.1

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	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
44A0111-26-*	.500	.500	.250	.250	.500
44A0111-24-*	.500	.500	.250	.375	.500
44A0111-22-*	.750	.750	.250	.375	1.00
44A0111-20-*	.750	.750	.250	.375	1.00
44A0111-18-*	1.00	1.00	.375	.500	1.00
44A0111-16-*	1.00	1.00	.375	.500	1.00
44A0111-14-*	1.50	1.50	.500	1.00	3.00
44A0111-12-*	2.00	2.00	.500	1.00	3.00
44A0111-10-*	2.50	2.50	.500	1.00	3.00

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C,
Maximum continuous conductor temperature
VOLTAGE RATING: 600 volts (rms) at sea level
ACCELERATED AGING: 300 ± 2°C for 6 hours
Identification legibility, 225 ± 2°C for 6 hours
BLOCKING: 150 ± 2°C for 24 hours
COLOR: white preferred
FLAMMABILITY: 30 seconds (maximum); 3 in. (maximum);
no flaming of facial tissue
HUMIDITY RESISTANCE: Insulation Resistance,
5000 Megohms for 1000 ft. (minimum)
IDENTIFICATION, STRIPING, OR BAND DURABILITY:
125 cycles (250 strokes) (minimum), 500 g weight
IMMERSION: Diameter increase 5% (maximum);
no cracking, no dielectric breakdown
INSULATION ELONGATION AND TENSILE STRENGTH:
Primary Insulation,
Tensile Strength, 2500 lbf/in² (minimum)
Elongation, 150% (minimum)
INSULATION FLAWS:
Primary Insulation,
Spark test, 1.5 kV (rms), at 60 Hz
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 168 hours
LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours
SHRINKAGE: 300 ± 2°C, 0.125 in. (maximum) in 12 in.
SMOKE TEST: 200 ± 2°C. No visible smoke
SOLDERABILITY (95% minimum coverage): per MIL-STD-202,
Method 208, except without steam-aging, Type RMA Flux
SURFACE RESISTANCE: 500 Megohms-in. (minimum), both readings
THERMAL SHOCK RESISTANCE: 150 ± 2°C, 0.060 in. (maximum)
VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):
2500 volts (rms), 60 Hz, 5 minutes
WICKING: 2.25 in. (maximum)

PART NUMBER:

The "" in the part numbers on page 1 shall be replaced by a color code designator.

1/ Example: AWG 20, white: 44A0111-20-9

1/ See Footer section on page 1

Grupo



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