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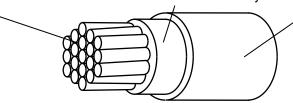
WIRE, ELECTRICAL, RADIATION-CROSSLINKED, TIN-COATED COPPER, LIGHTWEIGHT, GENERAL PURPOSE, 300 VOLT. (SUITABLE FOR 600 VOLT APPLICATIONS)

The complete requirements for procuring the wire herein shall consist of this document, UL subject 758, style 1385, File E 38136, CSA C22.2 No. 210-05. Class Number 5851-01, carrying UL and CSA labels to that effect and the issue in effect of Quality Plan QP-D-0004 as applicable.

Primary Insulation -

Radiation Crosslinked Extruded Polyalkene

Conductor -Tin Coated Copper



Jacket Radiation Crosslinked
Extruded Polyvinylidene Fluoride
Thickness: 0.07 mm Min.
0.077 mm Nom.

TABLE 1. CONSTRUCTIONAL DETAILS										
				FINISHED WIRE						
Part	Wire	Conductor	Conductor	Maximum						
Description	Size	Stranding	Diameter	Resistance	Diameter		Maximum			
	(AWG)		(mm)	@ 20°C	(mm)		Weight			
			Max.	(Ohms/km)	Min.	Max.	(kg/km)			
44/7031-28-*	28	7/0.13	0.41	222	0.71	0.81	2.09			
44/7031-26-*	26	19/0.10	0.53	133	0.81	0.91	2.83			
44/7031-24-*	24	19/0.12	0.66	83.3	0.97	1.07	4.02			
44/7031-22-*	22	19/0.15	0.84	50.9	1.14	1.24	5.51			
44/7031-20-*	20	19/0.20	1.04	31.8	1.35	1.45	7.75			
44/7031-18-*	18	19/0.25	1.32	20.0	1.60	1.70	11.5			
44/7031-16-*	16	19/0.30	1.48	13.7	1.80	1.95	15.6			

TABLE II. PERFORMANCE DETAILS									
Ma	Weight								
	(kg ± 3%)								
	Immersion								
Life cycle and	Cold	Wrap	Life cycle and	Cold					
Accelerated ageing	Bend		Accelerated ageing	Bend					
9.5	9.53	4.78	0.11	0.23					
12.7	12.7	6.35	0.11	0.23					
12.7	12.7	6.35	0.17	0.23					
19.1	19.1	9.53	0.17	0.45					
19.1	19.1	9.53	0.17	0.45					
25.4	25.4	12.7	0.23	0.45					
25.4	25.4	12.7	0.23	0.45					

COLOUR CODE: The '*' in the part number shall be replaced by a standard

colour code designator in accordance with Mil Std 681.

e.g. 44/7031-26-9 White insulation

PRODUCT 20 AWG and larger shall be marked in a contrasting colour

IDENTIFICATION: at 600 mm (maximum) intervals as follows:

"CSA LL41234 AWM I A 125°C 300V FT1"

APPROVAL: Electronic sign off - no signatures will appear.

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Specification Control Drawing

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WIRE RATING AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 125°C, Maximum continuous conductor temperature

ACCELERATED AGEING: 225 ±3°C for 6 hours

*BLOCKING: 150±2°C for 24 hours

IDENTIFICATION AND COLOUR STRIPING DURABILITY: 125 cycles (250 strokes) (minimum) FLAMMABILITY: 30 seconds (maximum); 76.2 mm (maximum); no flaming of facial tissue

*HUMIDITY RESISTANCE: Insulation resistance, 152 MW for km. (minimum)

INSULATION ELONGATION AND TENSILE STRENGTH:

Primary insulation:

Tensile strength: 13.8 MPa (minimum). To be tested in accordance with UL 758.

Elongation: 300% (minimum)

INSULATION FLAWS: Primary insulation:

Spark test, 1.5kV(rms) 100% test

Impulse dielectric test, 6.0 kV(peak), 100% test

Finished wire:

Spark Test, 3.0 kV (rms) 100% test

Impulse dielectric test, 8kV(peak), 100% tests

INSULATION RESISTANCE: 152 MW for km (minimum)

*LIFE CYCLE: 185 ±3°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65 ±2°C for 4 hours SHRINKAGE: 225 ±3°C, 3.2 mm. (maximum) in 300 mm.

*SMOKE TEST: 165 ±3°C. No visible smoke

*SURFACE RESISTANCE: 500 MW for 25.4 mm (minimum), both readings VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL): 2500volts (rms)

WICKING: 63.5 mm (maximum)

*Qualification test

APPROVAL:

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Tel: +44 (0)1793 528171 Fax: +44 (0)1793 572516 Electronic sign off - no signatures will appear.

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