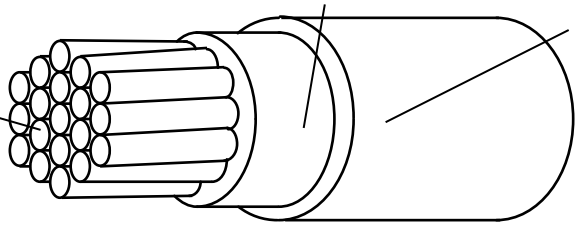
WIRE, ELECTRICAL, RADIATION-CROSSLINKED, MODIFIED FLUOROPOLYMER INSULATED, TIN COPPER CONDUCTOR, 150°C, 600 VOLT, LIGHTWEIGHT.

The complete requirements for procuring the wire described herein shall consist of this document.

Primary Insulation -
Radiation Crosslinked Extruded Polyalkene

Conductor -
Tin Coated Copper



Jacket -
Radiation Crosslinked
Extruded Polyvinylidene Fluoride

TABLE I. CONSTRUCTIONAL DETAILS

Part Description	Wire Size (AWG)	Conductor			FINISHED WIRE				
		Stranding No./AWG	Diameter (mm)		Maximum Resistance @20°C (Ω/km)	Outside Diameter (mm)			Maximum Weight (kg/km)
			Min.	Max.		Min.	Nom.	Max.	
44A0111-30-*	30	7/38	0.29	0.31	356	0.64	0.69	0.74	1.06
44A0111-28-*	28	7/36	0.36	0.38	225	0.71	0.76	0.81	1.43

TABLE II. PERFORMANCE DETAILS

Mandrel Diameter (mm ± 3%) Immersion			Weight (kg ± 3%) Immersion	
Life cycle and Accelerated ageing	Cold Bend	Wrap	Life cycle and Accelerated ageing	Cold Bend
9.5	9.5	4.8	0.11	0.23
9.5	9.5	4.8	0.11	0.23

COLOUR CODE: The '*' in the part number shall be replaced by a standard colour code designator in accordance with Mil Std 681. White preferred.
e.g. 44A0111-30-9 White insulation

PERFORMANCE REQUIREMENTS: To be tested in accordance with the issue in effect of QP-D-0004 and meet the requirements of below:

Accelerated Ageing: 300 ±2°C for 6 hours
Shrinkage: 300 ±2°C 3.17 mm Max. in 300 mm
Blocking: 150 ±2°C for 24 hours
Thermal Shock: 150 ±2°C, 1.52 mm Max.
Flammability: 30 seconds Max.
76 mm Max. no flaming tissue.
Immersion: Diameter increase 5% Max.
no cracking, no dielectric breakdown
Elongation and Tensile Strength:
Primary Insulation
Elongation: 150% Min.
Tensile Strength: 17.2 MPa Min.
Insulation Resistance: 1500 MΩ/ km Min.
Surface Resistance: 1.27 MΩ/ km Min.
Both Readings

Insulation Flaws:
Primary Insulation Spark Test: 1.5 kV (rms)
Impulse Dielectric Test: 6.0 kV (peak) 100% test
Finished Wire
Impulse Dielectric Test: 8.0 kV (peak) 100% test
Life Cycle: 200 ±3°C for 168 hours
Low Temperature - Cold Bend:
-65 ±2°C for 4 hours
Voltage Withstand Test (Post Environmental):
(After Accelerated Ageing, Immersion,
Life Cycle and Low Temperature-Cold Bend)
1 kV (rms) for 1 minute
Smoke Test: 200±2°C, No visible smoke
Solderability (95% Min. coverage): per MIL-STD-202, Method 208, except without steam-ageing, type RMA flux
Wicking: 57.2 mm Max.
Humidity Resistance: Insulation Resistance
1500 MΩ/ km Min.

APPROVAL: Electronic sign off - no signatures will appear.

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