

Specification Control Drawing

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.

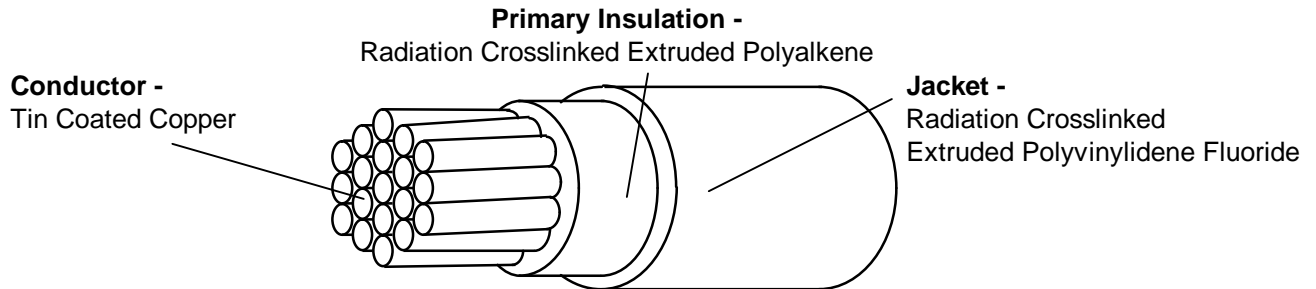


TABLE I. CONSTRUCTIONAL DETAILS

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

Life cycle and Accelerated ageing	Mandrel Diameter (mm ± 3%) Immersion		Wrap	Weight (kg ± 3%) Immersion	
	Cold Bend			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-004 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.
Voltage Withstand Test (Post Environmental): 2.5 kV (rms) for 5 minutes
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.