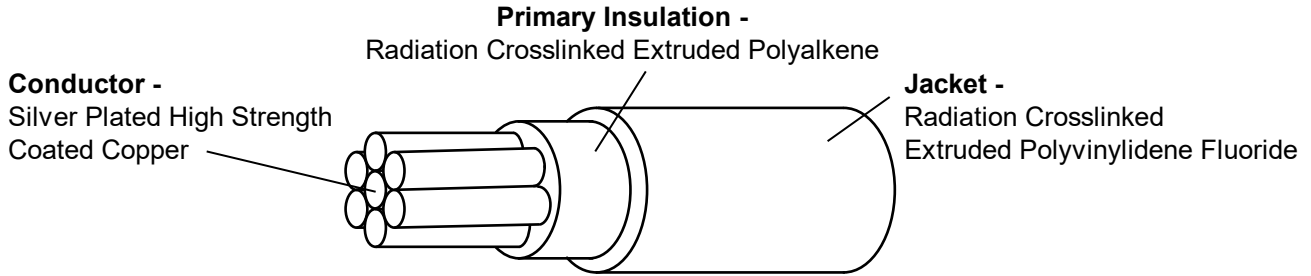


WIRE, ELECTRICAL, RADIATION-CROSSLINKED, MODIFIED FLUOROPOLYMER INSULATED, SILVER PLATED HIGH STRENGTH COPPER CONDUCTOR, 150°C, 600 VOLT, LIGHTWEIGHT.

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



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.	
44A0114-30-*	30	7/38	0.28	0.31	385	0.64	0.69	0.74	1.06
44A0114-28-*	28	7/36	0.36	0.38	244	0.71	0.76	0.81	1.43

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. 44A0114-30-9 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 ±2°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.