



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

This specification sheet forms a part of the latest issue of Raychem Specification 44

Primary Insulation -

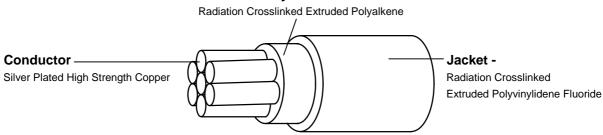


TABLE I. CONSTRUCTIONAL DETAILS												
Part	Wire	Conductor			FINISHED WIRE							
Description	Size	Stranding	Diameter		Maximum	Diameter		Maximum				
	(AWG)	No./AWG	(mm)		Resistance	(mm.)		Weight				
					@20°C			(kg/km)				
			Min.	Max.	(Ω/km)	Min.	Nom.	Max				
44A0114-30-*	30	7/38	0.28	0.31	385	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			

TABLE II. PERFORMANCE DETAILS									
I	Weight								
	(kg ± 3%)								
	Immersion								
Life cycle and	Cold	Wrap	Life cycle and	Cold					
Accelerated ageing	Bend		Accelerated ageing	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

APPROVAL:

Electronic sign off - no signatures will appear.

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Specification Control Drawing

44A0114-28.30 Issue 3 27th September 2010 Page 2 of 3

Page 3 for internal use only

PERFORMANCE REQUIREMENTS:

To be tested in accordance with QP-D-004 and meet the requirements of below:

ACCELERATED AGEING: 300±2°C for 6 hours; Identification legibility, 225±2°C for 6 hours.

BLOCKING: 150±2°C for 24 hours

FLAMMABILITY: 30 seconds (maximum); 76.2 mm (maximum); no flaming of facial tissue

HUMIDITY RESISTANCE: Insulation resistance, 1500 M Ω / km. (minimum)

IMMERSION: Diameter increase 5% (maximum); no cracking, no dielectric breakdown

INSULATION ELONGATION AND TENSILE STRENGTH: Primary insulation, tensile strength, 17.2 MPa (minimum). Elongation, 150% (minimum)

INSULATION FLAWS: Primary insulation, spark test, 1.5 kV (rms), Impulse dielectric test, 6 kV (peak), 100% tests. Finished wire, Impulse dielectric test, 8 kV (peak), 100% tests

INSULATION RESISTANCE: 1500 MΩ/ km. (minimum)

LIFE CYCLE: 200±2°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65±2°C for 4 hours

SHRINKAGE: 300±2°C, 3.17 mm. (maximum) in 300 mm.

SMOKE TEST: 200±2°C. No visible smoke

SOLDERABILITY (95% minimum coverage): per MIL-STD-202, Method 208, except without steam-ageing, type RMA flux.

SURFACE RESISTANCE: 1.27 MΩ-m. (minimum), both readings

THERMAL SHOCK RESISTANCE: 150±2°C, 1.52 mm. (maximum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL): 2500 volts (rms), 60 Hz, 5 minutes

WICKING: 57.2 mm. (maximum)

APPROVAL:

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