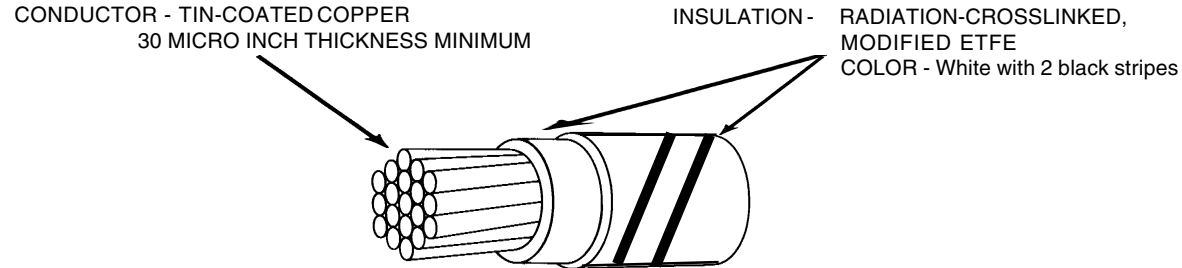


# SPECIFICATION CONTROL DRAWING

**55PC6121**

TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED, ETFE-INSULATED, TIN-COATED COPPER, GENERAL PURPOSE, LIGHT AIRFRAME, 600 VOLT	Date 03-16-00	Revision C
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This specification sheet forms a part of the latest issue of Raychem Specification 55PC.



### CONSTRUCTION DETAILS

PART NUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	CONDUCTOR DIAMETER (in.)			FINISHED WIRE						
			LOWER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)			WEIGHT (lbs/1000 ft.)		
							LOWER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT	LOWER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT
55PC6121-22-900	22	19 x 34	.0285	.0293	.0301	16.2	.0438	.0455	.0472	2.74	2.90	3.06
55PC6121-20-900	20	19 x 32	.0365	.0375	.0385	9.88	.0523	.0540	.0557	4.19	4.38	4.57
55PC6121-18-900	18	19 x 30	.0452	.0464	.0476	6.23	.0616	.0635	.0654	6.28	6.59	6.90

### WIRE RATINGS AND ADDITIONAL REQUIREMENTS

**TEMPERATURE RATING:** 150°C  
 Maximum continuous conductor temperature  
**VOLTAGE RATING:** 600 volts (rms)  
**CROSSLINK VERIFICATION:** 300 ± 3°C for 1 hour  
**IDENTIFICATION AND COLOR STRIPING DURABILITY:**  
 125 cycles (250 strokes) (minimum), 500 g weight  
**INSULATION ELONGATION AND TENSILE STRENGTH:**  
 Total Insulation,  
 Elongation, 50% (minimum)  
 Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum)  
**INSULATION FLAWS:**  
 Impulse Dielectric Test, 8.0 kV (peak)  
**INSULATION THICKNESS:** .008 in. (nominal) total insulation

**SHRINKAGE:** 230 ± 3°C for 1 hour, 0.125 in. (maximum) in 12 in.  
**SPOOLING:**  
 Minimum lengths, 500 ft.  
 Place orange flag on each splice  
**STRIPE WIDTH:** .022 in. (maximum)  
**STRIPE INTERVALS:** Per MIL-STD-681 (2 inch maximum)  
**VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):**  
 2500 volts (rms)  
**MARKING:** Mark wire in green ink at 1.5 inch (nominal) distance between marks. Example: " 18 AWG "  
 Mark shall be read horizontally for AWG size 20 and 18  
 Mark shall be read vertically for AWG size 22

NOTES: - THIS WIRE MEETS ALL REQUIREMENTS OF BMS13-48T10C1, EXCEPT IDENTIFICATION AS MODIFIED HEREIN.  
 - STRIPING INK MEETS RAYCHEM SPECIFICATION RT1404 WHICH INCLUDES IMMERSSED I.R. AND DWV TESTING.

COLORS, STRIPES AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681.

## Raychem

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