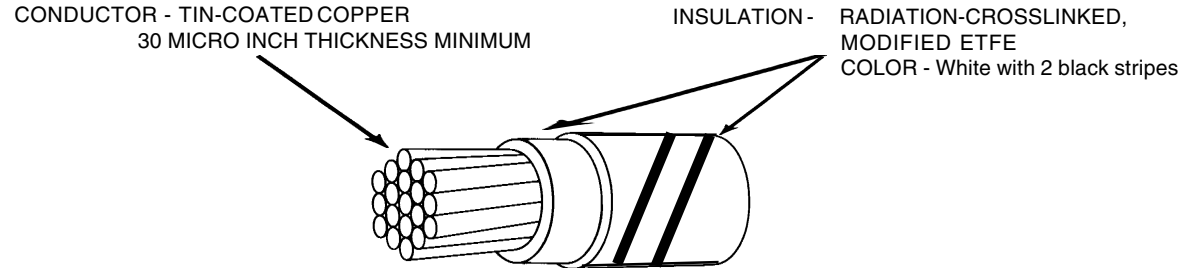


# SPECIFICATION CONTROL DRAWING

**55PC6121**

|   |                  |               |
|---|------------------|---------------|
| TITLE<br>WIRE, RADIATION-CROSSLINKED, MODIFIED, ETFE-INSULATED,<br>TIN-COATED COPPER, GENERAL PURPOSE, LIGHT AIRFRAME, 600 VOLT | Date<br>03-16-00 | Revision<br>C |
|---|------------------|---------------|

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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