

# SPECIFICATION CONTROL DRAWING

**55PC0112**

TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED ETFE-INSULATED, LIGHTWEIGHT, GENERAL PURPOSE, 600 VOLT

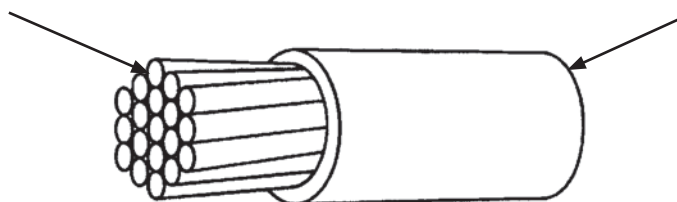
Date 7-30-08

Revision E

This specification sheet forms a part of the latest issue of Raychem Specification 55PC.

CONDUCTOR - SILVER-COATED COPPER

INSULATION - RADIATION - CROSSLINKED,  
MODIFIED ETFE



## CONSTRUCTION DETAILS

| PART NUMBER<br>1/ | WIRE SIZE<br>(AWG) | CONDUCTOR STRANDING<br>(number x AWG) | CONDUCTOR DIAMETER<br>(in.) |              |                  | MAXIMUM RESISTANCE<br>AT 20°C<br>(ohms/1000 ft.) | FINISHED WIRE<br>DIAMETER<br>(in.) |              |                  | WEIGHT<br>(lbs/1000 ft.) |                  |
|-------------------|--------------------|---------------------------------------|-----------------------------|--------------|------------------|--|------------------------------------|--------------|------------------|--------------------------|------------------|
|                   |                    |                                       | LOWER SPEC LIMIT            | TARGET VALUE | UPPER SPEC LIMIT |  | LOWER SPEC LIMIT                   | TARGET VALUE | UPPER SPEC LIMIT | TARGET VALUE             | UPPER SPEC LIMIT |
|                   |                    |                                       |                             |              |                  |  |                                    |              |                  |                          |                  |
| 55PC0112-26-*     | 26                 | 19 x 38                               | .0175                       | .0183        | .0191            | 38.4   | .0291                              | .0305        | .0319            | 1.23                     | 1.34             |
| 55PC0112-24-*     | 24                 | 19 x 36                               | .0225                       | .0233        | .0241            | 24.3   | .0341                              | .0355        | .0369            | 1.81                     | 1.93             |
| 55PC0112-22-*     | 22                 | 19 x 34                               | .0285                       | .0293        | .0301            | 15.1   | .0401                              | .0415        | .0429            | 2.69                     | 2.83             |
| 55PC0112-20-*     | 20                 | 19 x 32                               | .0365                       | .0375        | .0385            | 9.19   | .0481                              | .0495        | .0509            | 4.11                     | 4.27             |
| 55PC0112-18-*     | 18                 | 19 x 30                               | .0452                       | .0464        | .0476            | 5.79   | .0573                              | .0590        | .0607            | 6.27                     | 6.56             |
| 55PC0112-16-*     | 16                 | 19 x 29                               | .0514                       | .0527        | .0538            | 4.52   | .0646                              | .0665        | .0684            | 8.01                     | 8.33             |
| 55PC0112-14-*     | 14                 | 19 x 27                               | .0644                       | .0659        | .0674            | 2.88   | .0789                              | .0810        | .0831            | 12.39                    | 12.81            |
| 55PC0112-12-*     | 12                 | 37 x 28                               | .0825                       | .0845        | .0865            | 1.90   | .0974                              | .1000        | .1026            | 19.17                    | 19.71            |
| 55PC0112-10-*     | 10                 | 37 x 26                               | .1050                       | .1070        | .1090            | 1.19   | .1220                              | .1260        | .1300            | 30.68                    | 31.70            |
| 55PC0112-8-*      | 8                  | 133 x 29                              | .158                        | .163         | .169             | .658   | .183                               | .188         | .193             | 57.7                     | 59.9             |

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

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DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.



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## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

COLOR: White preferred

CROSSLINKING 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:

Elongation, 50% (minimum)

Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum)

INSULATION FLAWS:

Spark Test, 3.0 kV (rms)

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION THICKNESS: .006 in. (nominal)

SHRINKAGE: 230 ± 3°C for 1 hour, 0.125 inch (maximum) in 12 inches.

VOLTAGE WITHSTAND TEST (Post Environmental): 2500 volts (rms)

PART NUMBER:

The "\*" in the part numbers on page 1 shall be replaced by a color code designator,

1/ Example: AWG 22, white: 55PC0112-22-9

AWG 22, white with black stripe: 55PC0112-22-90

1/ See footer section on page 1