

# SPECIFICATION CONTROL DRAWING

**10405**

TITLE

SPECIAL PURPOSE POWER CABLE,  
DOUBLE-INSULATED, 600 VOLT

Date

9-15-98

Revision

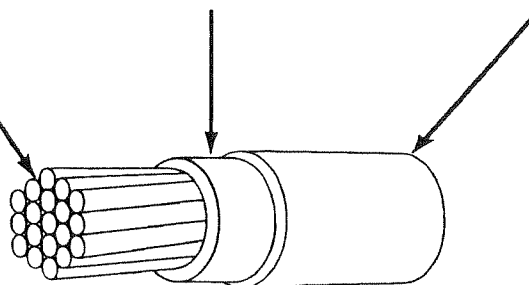
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This specification sheet forms a part of the latest issue of Raychem Specification WCD 3000.

CONDUCTOR - TIN-COATED COPPER

1ST INSULATION - THERMORAD® F

2ND INSULATION - THERMORAD® F



Thickness:

AWG 8-4

.0375 in. (nominal)

AWG 2-00

.0400 in. (nominal)

250 MCM

.0600 in. (nominal)

Color - Black Preferred

## CONSTRUCTION DETAILS

| PART NUMBER | WIRE SIZE (AWG) | CONDUCTOR STRANDING (number x AWG) | MAXIMUM DIAMETER OF STRANDED CONDUCTOR (in.) | FINISHED WIRE                             |                |                              |
|-------------|-----------------|------------------------------------|--|---|----------------|------------------------------|
|             |                 |                                    |  | MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft) | DIAMETER (in.) | NOMINAL WEIGHT (lbs/1000 ft) |
| 10405-8-*   | 8               | 133 x 29                           | .176   | .701                                      | .280 ± .008    | 71.3                         |
| 10405-6-*   | 6               | 133 x 27                           | .218   | .445                                      | .324 ± .010    | 106.                         |
| 10405-4-*   | 4               | 133 x 25                           | .272   | .280                                      | .380 ± .011    | 162.                         |
| 10405-2-*   | 2               | 665 x 30                           | .345   | .183                                      | .466 ± .014    | 254.                         |
| 10405-0-*   | 0               | 1045 x 30                          | .432   | .116                                      | .560 ± .017    | 397.                         |
| 10405-00-*  | 00              | 1330 x 30                          | .504   | .091                                      | .616 ± .018    | 513.                         |
| 10405-250-* | 250             | 2499 x 30                          | .716   | .043                                      | .932 ± .028    | 954.                         |

## ADDITIONAL REQUIREMENTS

ACCELERATED AGING: 225°C for 4 hours, outer insulation only, tensile strength and elongation retention 50% (minimum) of original values

CONCENTRICITY: 70% (each layer)

INSULATION (JACKET FLAWS): Spark Test, 3.0 kV (rms), 60 Hz

INSULATION ELONGATION AND TENSILE STRENGTH:

Tensile Strength, 2000 lbf/in<sup>2</sup> (minimum),

Elongation, 300% (minimum), Each insulation shall be tested individually for Tensile Strength and Elongation.

PART NUMBER: The "\*" in the part numbers above shall be replaced with a color code designator. Example: AWG 8, black insulation; 10405-8-0

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

DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL

**Raychem**Raychem Corporation  
300 Constitution Drive, Menlo Park, California 94025  
1-800-2 Raychem Fax: 1-650-361-6297