

SPECIFICATION CONTROL DRAWING

WXA-0072

TITLE WIRE, ELECTRIC, RADIATION-CROSSLINKED, POLYALKENE-INSULATED
TIN-COATED COPPER, LIGHTWEIGHT, GENERAL PURPOSE, 600 VOLT

Date 3-12-96

Revision D

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

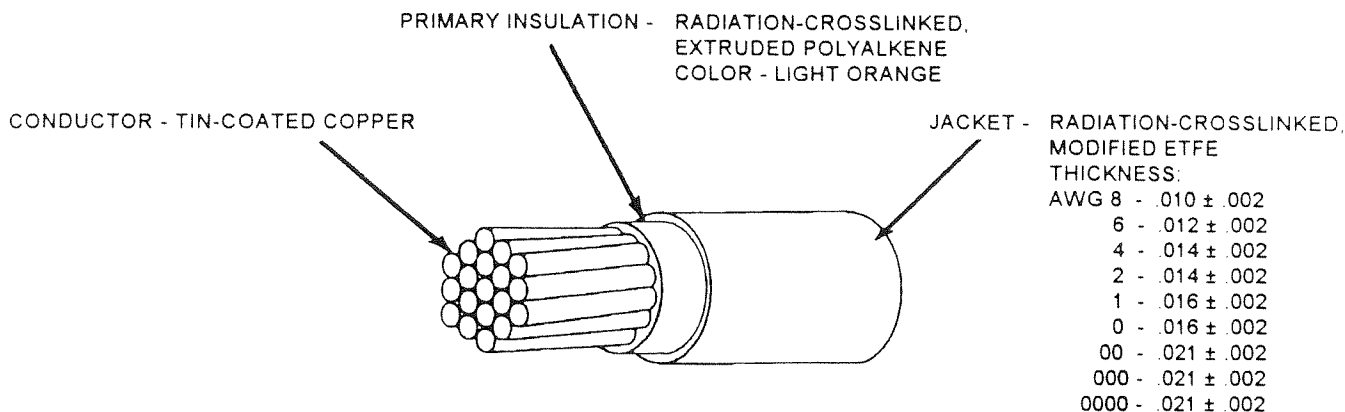


TABLE I. CONSTRUCTION DETAILS

| PART NUMBER | WIRE SIZE (AWG) | CONDUCTOR STRANDING (number x AWG) | DIAMETER OF STRANDED CONDUCTOR (in.) | | FINISHED WIRE | | |
|-----------------|-----------------|------------------------------------|--------------------------------------|---------|--|----------------|-----------------------------|
| | | | MINIMUM | MAXIMUM | MAXIMUM RESISTANCE AT 20°C (ohms/1000ft) | DIAMETER (in.) | MAXIMUM WEIGHT (lb/1000 ft) |
| | | | | | | | |
| WXA-0072- 8-* | 8 | 133 x 29 | .158 | .173 | .701 | .199 ± .003 | 60.9 |
| WXA-0072- 6-* | 6 | 133 x 27 | .198 | .217 | .445 | .250 ± .003 | 97.9 |
| WXA-0072- 4-* | 4 | 133 x 25 | .250 | .274 | .280 | .312 ± .004 | 153. |
| WXA-0072- 2-* | 2 | 665 x 30 | .320 | .340 | .183 | .388 ± .004 | 241. |
| WXA-0072- 1-* | 1 | 817 x 30 | .360 | .380 | .149 | .431 ± .005 | 290. |
| WXA-0072- 0-* | 0 | 1045 x 30 | .405 | .425 | .116 | .479 ± .006 | 385. |
| WXA-0072-00-* | 00 | 1330 x 30 | .450 | .475 | .091 | .546 ± .007 | 497. |
| WXA-0072-000-* | 000 | 1665 x 30 | .500 | .540 | .071 | .604 ± .008 | 581. |
| WXA-0072-0000-* | 0000 | 2109 x 30 | .565 | .605 | .056 | .669 ± .008 | 724. |

TABLE II. PERFORMANCE DETAILS

| PART NUMBER | BEND TESTING | | | |
|-----------------|---|-----------|---|-----------|
| | MANDREL DIAMETER (inch) (± 3%) | | WEIGHT (lb) (± 3%) | |
| | IMMERSION, LIFE CYCLE AND ACCELERATED AGING | COLD BEND | IMMERSION, LIFE CYCLE AND ACCELERATED AGING | COLD BEND |
| WXA-0072- 8-* | 3.00 | 4.00 | 3.00 | 6.00 |
| WXA-0072- 6-* | 4.00 | 5.00 | 3.00 | 10.0 |
| WXA-0072- 4-* | 5.00 | 6.00 | 3.00 | 10.0 |
| WXA-0072- 2-* | 6.00 | 8.00 | 4.00 | 15.0 |
| WXA-0072- 1-* | 8.00 | 10.0 | 4.00 | 15.0 |
| WXA-0072- 0-* | 8.00 | 10.0 | 4.00 | 15.0 |
| WXA-0072-00-* | 10.0 | 14.0 | 6.00 | 20.0 |
| WXA-0072-000-* | 12.0 | 14.0 | 8.00 | 20.0 |
| WXA-0072-0000-* | 12.0 | 14.0 | 8.00 | 20.0 |

COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-881.

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.

Raychem

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WIRE RATING AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

ACCELERATED AGING: 300 ± 3°C for 7 hours

BLOCKING: 200 ± 3°C for 24 hours per Raychem 55A spec

COLOR: White preferred

FLAMMABILITY: 30 seconds (maximum); 3 inch (maximum);

no flaming of facial tissue

HUMIDITY RESISTANCE: After humidity exposure, wire shall

meet the requirements for initial Insulation Resistance

IDENTIFICATION AND COLOR STRIPING DURABILITY: 125 cycles

(250 strokes) (minimum), 500 g weight

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

no dielectric breakdown

INSULATION RESISTANCE:

For AWG 8 - 6, 3000 megohms for 1000 ft. (minimum),

for AWG 4 - 0000, 2000 megohms for 1000 ft. (minimum)

INSULATION ELONGATION AND TENSILE STRENGTH:

(Primary insulation and jacket pulled together at 2 inches/minute)

Tensile Strength, 3000 lbf/in² (minimum)

Elongation, 75% (minimum)

INSULATION FLAWS:

Primary Insulation,

Spark Test, 1.5 kV (rms), 60 Hz, 100% test

Impulse Dielectric Test, 6.0 kV (peak), 100% test

Finished Wire,

Impulse Dielectric Test, 8.0 kV (peak), 100% test

LIFE CYCLE: 200 ± 2°C for 168 hours

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

SHRINKAGE: 230 ± 2°C, 0.125 inch (maximum) in 12 inches

SMOKE TEST: 200 ± 5°C

SURFACE RESISTANCE: 500 megohms-inch (minimum), both readings

THERMAL SHOCK RESISTANCE: 150 ± 2°C; AWG 8, 0.100 inch (maximum)

AWG 6-0000, 0.125 inch (maximum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

2500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "" in the part numbers on page 1 shall be replaced by color code designators.

Example: AWG 8, white: WXA-0072-8-9