

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.

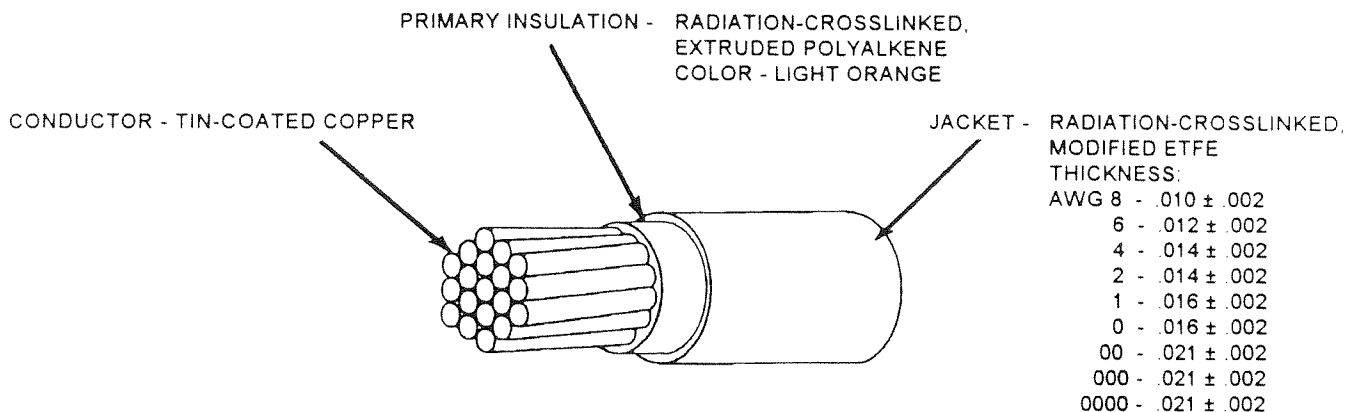


TABLE I. CONSTRUCTION DETAILS

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.

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