

# SPECIFICATION CONTROL DRAWING

**WXA-0213**

TITLE	WIRE, RADIATION-CROSSLINKED MODIFIED ETFE-INSULATED, LIGHTWEIGHT, 600 VOLT	Date	12-1-06	Revision	A
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This specification sheet forms a part of the latest issue of Raychem Specification 55.

CONDUCTOR - SILVER-COATED HIGH STRENGTH COPPER ALLOY

INSULATION - RADIATION-CROSSLINKED, MODIFIED ETFE

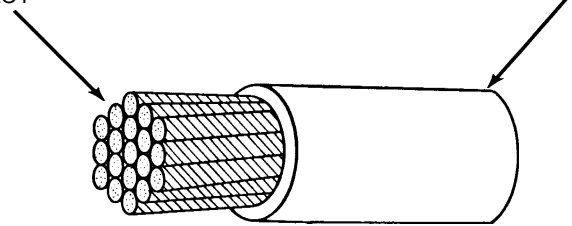


TABLE I. CONSTRUCTION DETAILS

PART NUMBER <u>1/</u>	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (inches)	MAXIMUM WEIGHT (lb/1000 ft)
WXA-0213-22-*	22	154 x 44	.029	.033	23.0	.043 ± .003	2.9

TABLE II. PERFORMANCE DETAILS

PART NUMBER <u>1/</u>	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-0213-22-*	.500	.750	.375	1.00

## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

### TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature  
 VOLTAGE RATING: 600 volts (rms) at sea level  
 ACCELERATED AGING (Crosslinking Proof Test):

300 ± 3°C for 7 hours  
 BLOCKING: 230 ± 3°C for 24 hours

COLOR: White preferred

CONCENTRICITY: 70% (minimum)

FLAMMABILITY: Procedure 1, 3 seconds (maximum); 3 in. (maximum)  
 no flaming of facial tissue

### HUMIDITY RESISTANCE:

Insulation Resistance, 5000 megohms for 1000 ft. (minimum)

### IDENTIFICATION AND COLOR STRIPING DURABILITY:

125 cycles (250 strokes) (minimum), 500 g weight

IMMERSION: Diameter increase 5% (maximum),

no cracking, no dielectric breakdown

### INSULATION ELONGATION AND TENSILE STRENGTH:

Elongation, 75% (minimum)

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

### INSULATION FLAWS:

Spark Test, 5.7 kv (rms) at 3.0 kHz

Impulse Dielectric Test, 8.0 kV (peak)

### INSULATION RESISTANCE:

5000 megohms for 1000 ft. (minimum)

INSULATION THICKNESS: 0.005 inch (minimum)

LIFE CYCLE: 230 ± 3°C for 500 hours

LOW TEMPERATURE COLD BEND: -65 ± 3°C for 4 hours

SHRINKAGE: 230 ± 3°C for 6 hours,

0.125 inch (maximum) in 12 inches

SMOKE TEST: 250 ± 5°C, no visible smoke

### SURFACE RESISTANCE:

500 megohms-in. (minimum), both readings

### THERMAL SHOCK RESISTANCE:

200 ± 3°C, .060 in. (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental):

2500 volts (rms), 60 Hz

### 1/ PART NUMBER:

The "\*" in the part numbers above shall be replaced by color code designators.

Example: AWG 22, white: WXA-0213-22-9

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.

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

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



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