

# SPECIFICATION CONTROL DRAWING

**82A6064**

TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED FLEXIBLE ETFE-INSULATED, NORMAL WEIGHT, GENERAL PURPOSE, 600 VOLT

Date  
5-29-07

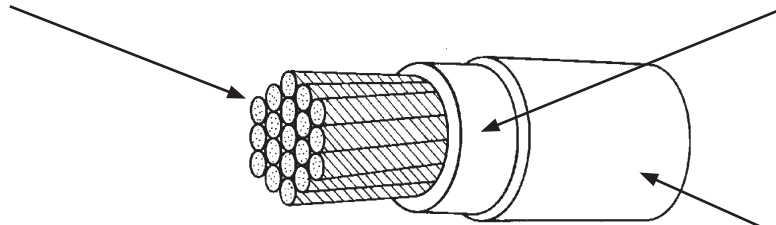
Revision  
A

This specification sheet forms a part of the latest issue of Raychem Specification 80.

CONDUCTOR - SILVER-COATED COPPER

PRIMARY INSULATION -

RADIATION - CROSSLINKED,  
MODIFIED FLEXIBLE ETFE  
COLOR - LIGHT GREEN



JACKET -

RADIATION-CROSSLINKED,  
MODIFIED FLEXIBLE ETFE

TABLE I. CONSTRUCTION DETAILS

PART NUMBER <u>1/</u>	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	CONDUCTOR DIAMETER (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)	MAXIMUM WEIGHT (lb/1000 ft.)
82A6064- 0-*	0	2660 x 34	.435	.465	.130	.520 ± .020	409.
82A6064-0000-*	0000	5320 x 34	.615	.655	.056	.705 ± .020	789.

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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TABLE II. PERFORMANCE DETAILS		
PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (in.) (±3%)	WEIGHT (lb) (±3%)
	CROSSLINKING PROOF TEST	CROSSLINKING PROOF TEST
82A6064- 0-*	8.00	6.00
82A6064-0000-*	10.0	8.00

### WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 175°C

Maximum continuous conductor temperature

VOLTAGE RATING:

600 volts (rms), 15 kft, 175°C

Corona Onset, 1240 volts (rms), 15 kft, 175°C

Corona Extinction, 620 volts (rms), 15 kft, 175°C

CONCENTRICITY: 70% (minimum)

CROSSLINKING PROOF: 300 ± 3°C for 1 hour

IDENTIFICATION COLOR AND STRIPING DURABILITY:

125 cycles (250 strokes) (minimum). 250 g weight.

INSULATION ELONGATION AND TENSILE STRENGTH:

Elongation, 125% (minimum)

Tensile Strength, 3000 lbf/in<sup>2</sup> (minimum)

INSULATION FLAWS:

Primary Insulation

Spark Test 1.5 kV (rms) at 3.0 kHz

Impulse Dielectric Test, 6.0 kV (peak)

Finished Wire

Spark Test 3.0 kV (rms) at 3 kHz

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION RESISTANCE: 100 megohms for 1000 ft (minimum)

INSULATION THICKNESS: .012 inch (minimum) for primary insulation

.017 inch (minimum) for outer jacket

JACKET COLOR: White preferred.

SECANT MODULUS: (Test per ASTM D 882)

4.0 x 10<sup>4</sup> lbf/in<sup>2</sup> (maximum), 2% strain, 2 inch jaw separation, 0.2 inch/minute

SHRINKAGE: 200 ± 3°C for 6 hours, .250 inch (maximum) in 12 inches.

VOLTAGE WITHSTAND TEST (Post Environmental): 2500 volts (rms), 60 Hz

PART NUMBER:

The “\*” in the part numbers above and on page 1 shall be replaced by

a color code designator,

1/ Example: AWG 0, white: 82A6064-0-9

1/ See footer section on page 1

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SCD:	82A6064	Revision:	A	Date:	5-22-07
		Replaces Revision:		Date:	

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## REASON FOR UPDATE

	1. CUSTOMER REQUESTED DESIGN CHANGE
	2. GUIDELINE CHANGES
	3. COMMENT SHEET/SCD CORRECTION
X	4. PRODUCT MANAGEMENT REQUEST
	5. ADDED CSR REQUIREMENTS
	6. OTHER (See Comment)

\* SPECIALTY CONSTRUCTIONS DO NOT MEET ALL THE GENERAL DESIGN GUIDELINES