

# SPECIFICATION CONTROL DRAWING

SCD

**FLTW+0311**

Title GENERAL PURPOSE HOOKUP WIRE, MODIFIED POLYESTER-INSULATED, 600 VOLT

Date 12-4-14

Revision K

The complete requirements for procuring the wire described herein shall consist of this document and the issue in effect of Raychem Specification WCD 3106, UL Subject 758, Style 10208, File E303150, and carries UL labels to this effect.

CONDUCTOR - TIN-COATED COPPER

INSULATION - FLAME RETARDED,  
MODIFIED POLYESTER



### CONSTRUCTION DETAILS

PART NUMBER <u>1/</u>	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	NOMINAL CONDUCTOR DIAMETER (inch) (mm)	FINISHED WIRE				
				MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.) (ohms/km)	DIAMETER (inch) (mm)			NOMINAL WEIGHT (lbs/1000 ft.) (kg/km)
					MINIMUM	NOMINAL	MAXIMUM	
FLTWB0311-30-*	30	7 x 38	.012 (.305)	116. (381.)	.025 (.635)	.027 (.686)	.029 (.737)	.62 (.92)
FLTWB0311-28-*	28	7 x 36	.015 (.381)	72.8 (239.)	.028 (.711)	.030 (.762)	.032 (.813)	.86 (1.28)
FLTWC0311-28-*	28	19 x 40	.015 (.381)	72.8 (239.)	.029 (.737)	.031 (.787)	.033 (.838)	.91 (1.35)
FLTWC0311-26-*	26	19 x 38	.019 (.483)	45.8 (150.)	.032 (.813)	.034 (.864)	.036 (.914)	1.3 (1.93)
FLTWC0311-24-*	24	19 x 36	.024 (.610)	28.7 (94.2)	.038 (.965)	.040 (1.02)	.042 (1.07)	1.9 (2.83)
FLTWC0311-22-*	22	19 x 34	.030 (.762)	18.1 (59.4)	.045 (1.14)	.047 (1.19)	.049 (1.24)	2.8 (4.17)
FLTWC0311-20-*	20	19 x 32	.038 (.965)	11.4 (37.4)	.053 (1.35)	.055 (1.40)	.057 (1.45)	4.2 (6.25)
FLTWC0311-18-*	18	19 x 30	.047 (1.19)	7.15 (23.5)	.063 (1.60)	.065 (1.65)	.067 (1.70)	6.5 (9.67)
FLTWC0311-16-*	16	19 x 29	.053 (1.35)	4.82 (15.8)	.069 (1.75)	.072 (1.83)	.075 (1.91)	8.2 (12.2)
FLTWC0311-14-*	14	19 x 27	.066 (1.68)	3.05 (10.0)	.085 (2.16)	.089 (2.26)	.093 (2.36)	12.7 (18.9)
FLTWD0311-14-*	14	37 x 30	.068 (1.73)	3.22 (10.6)	.087 (2.21)	.091 (2.31)	.095 (2.41)	14.7 (21.9)
FLTWD0311-12-*	12	37 x 28	.085 (2.16)	2.01 (6.59)	.104 (2.64)	.108 (2.74)	.112 (2.84)	19.4 (28.9)
FLTWD0311-10-*	10	37 x 26	.107 (2.72)	1.26 (4.13)	.127 (3.23)	.131 (3.33)	.135 (3.43)	30.8 (45.8)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ 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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WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 135°C

VOLTAGE RATING: 600 volts (rms) at sea level

INSULATION ELONGATION AND TENSILE STRENGTH:

Elongation, 230% (minimum)

Tensile Strength, 5200 lbf/in<sup>2</sup> (minimum)

INSULATION FLAWS:

Spark Test, 6.0 kV (rms)

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION THICKNESS: .005 inch (minimum), .006 inch (minimum average)

SHRINKAGE: 125°C for 1 hour, 0.125 in. (maximum) per end

THERMAL STABILITY: 167°C for 168 hours

Elongation Retention, 75% (minimum)

Tensile Strength Retention, 55% (minimum)

VOLTAGE WITHSTAND (Post Environmental): 1500 volts (rms), 60 Hz

1/ PART NUMBER:

The "+" in the part number in the upper right hand corner of pages 1 and 2 shall be replaced with a letter designator to define conductor stranding (see part numbers in table).

B = 7 Strands    C = 19 Strands    D = 37 Strands

The "\*" in the part numbers on page 1 shall be replaced by a color code designator.

Example: AWG 26, 19 strands, white: FLTWC0311-26-9

AWG 26, 19 strands, white with a black stripe: FLTWC0311-26-90

1/ See footer section of page 1