SPECIFICATION CONTROL DRAWING

FLDW+0311

TITLE: DUAL WALL HOOKUP WIRE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, 600 VOLT

Date: 25APR11 | Revision: P1

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 3584, File E303150 and carries UL labels to this effect.

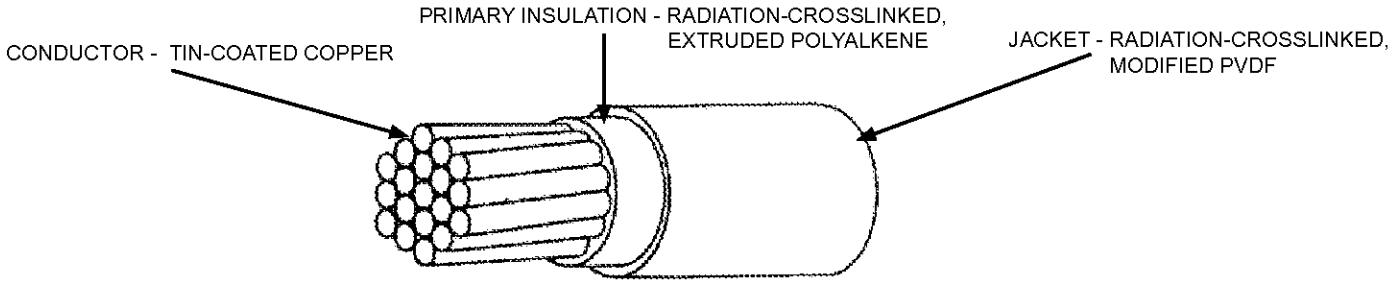


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	NOMINAL CONDUCTOR DIAMETER (in.) (*mm*)	FINISHED WIRE				
				MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.) (*ohms/km*)	DIAMETER (in.) (*mm*)			MAXIMUM WEIGHT (lbs/1000 ft.) (*kg/km*)
					MINIMUM	NOMINAL	MAXIMUM	
FLDWC0311-26-*	26	19 x 38	.019 *(.483)*	45.8 *(150.)*	.038 *(.965)*	.040 *(1.02)*	.042 *(1.07)*	1.6 *(2.38)*
FLDWC0311-24-*	24	19 x 36	.024 *(.610)*	28.7 *(94.2)*	.044 *(1.12)*	.046 *(1.17)*	.048 *(1.22)*	2.4 *(3.57)*
FLDWC0311-22-*	22	19 x 34	.030 *(.762)*	18.1 *(59.4)*	.052 *(1.32)*	.054 *(1.37)*	.056 *(1.42)*	3.5 *(5.21)*
FLDWC0311-20-*	20	19 x 32	.038 *(.965)*	11.4 *(37.4)*	.060 *(1.52)*	.062 *(1.57)*	.064 *(1.63)*	5.1 *(7.59)*
FLDWC0311-18-*	18	19 x 30	.047 *(1.19)*	7.15 *(23.5)*	.070 *(1.78)*	.073 *(1.85)*	.076 *(1.93)*	7.7 *(11.46)*
FLDWC0311-16-*	16	19 x 29	.053 *(1.35)*	4.82 *(15.8)*	.078 *(1.98)*	.081 *(2.06)*	.084 *(2.13)*	9.8 *(14.58)*
FLDWC0311-14-*	14	19 x 27	.066 *(1.68)*	3.05 *(10.0)*	.094 *(2.39)*	.098 *(2.49)*	.102 *(2.59)*	14.7 *(21.88)*
FLDWC0311-12-*	12	19 x 25	.090 *(2.29)*	1.92 *(6.30)*	.118 *(3.00)*	.122 *(3.10)*	.126 *(3.20)*	24.5 *(36.46)*
FLDWD0311-12-*	12	37 x 28	.085 *(2.16)*	2.01 *(6.59)*	.113 *(2.87)*	.117 *(2.97)*	.121 *(3.07)*	22.1 *(32.89)*
FLDWD0311-10-*	10	37 x 26	.107 *(2.72)*	1.26 *(4.13)*	.142 *(3.61)*	.146 *(3.71)*	.150 *(3.81)*	35.6 *(52.98)*
FLDWE0311-8-*	8	133 x 29	.160 *(4.06)*	.701 *(2.30)*	.198 *(5.03)*	.202 *(5.13)*	.206 *(5.23)*	59.9 *(89.14)*

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.

The TE (logo), TE Connectivity, TE connectivity (logo) and Raychem are trademarks.

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.

TE Connectivity

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TABLE II. PERFORMANCE DETAILS		
PART NUMBER 1/	BEND TESTING	
	MANDREL DIAMETER (inch) *(mm)* (± 3%)	WEIGHT (lb) *(kg)* (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
FLDWC0311-26-*	.500 *(12.7)*	.375 *(.170)*
FLDWC0311-24-*	.500 *(12.7)*	.375 *(.170)*
FLDWC0311-22-*	.750 *(19.1)*	.375 *(.558)*
FLDWC0311-20-*	.750 *(19.1)*	.500 *(.227)*
FLDWC0311-18-*	1.00 *(25.4)*	.500 *(.227)*
FLDWC0311-16-*	1.00 *(25.4)*	1.00 *(.454)*
FLDWC0311-14-*	1.50 *(38.1)*	1.00 *(.454)*
FLDWC0311-12-*	2.00 *(50.8)*	1.50 *(.680)*
FLDWD0311-12-*	2.00 *(50.8)*	1.50 *(.680)*
FLDWD0311-10-*	3.00 *(76.2)*	2.00 *(.907)*
FLDWE0311-8-*	3.00 *(76.2)*	3.00 *(1.36)*

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 125°C
VOLTAGE RATING: 600 volts (rms) at sea level
FLAME RATING: VW-1
CROSSLINK VERIFICATION: 300 ± 3°C for 1 hour
INSULATION FLAWS:
Finished Wire,
Spark Test, 6.0 kV (rms)
Impulse Dielectric Test, 8.0 kV (peak)
INSULATION ELONGATION AND TENSILE STRENGTH:
Primary Insulation,
Elongation, 150% (minimum)
Tensile Strength, 2500 lbf/in^2 (minimum)
INSULATION THICKNESS:
Primary Insulation, .004 inch (minimum), .005 inch (minimum average)
Primary Jacket, .002 inch (minimum) for AWGS 12 & smaller
Primary Jacket, .004 inch (minimum) for AWGS 10 & larger

SHRINKAGE: 0.125 in. (maximum) per end at 125°C for 1 hour
THERMAL STABILITY:
158°C for 168 hours, 70% (minimum) retention of Elongation and Tensile Strength
VOLTAGE WITHSTAND (Post Environmental): 2500 volts (rms), 60 Hz, 5 minutes

All Spool/Reel Labels shall include the following: " Reinforced Insulation "

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).
C = 19 Strands D = 37 Strands E = Rope Lay

The "*" in the part numbers in tables I and II shall be replaced by a color code designator.
1/ Example: AWG 18, 19 strands, white: FLDWC0311-18-9
AWG 18, 19 strands, white with black stripe: FLDWC0311-18-90

1/ See footer section on page 1

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