SPECIFICATION CONTROL DRAWING			FLDW+0311	
TITLE	DUAL WALL HOOKUP WIRE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, 600 VOLT	Date <b>25APR11</b>	Revision P1	
	The complete requirements for procuring the wire described herein shall consist of this document and the issue in eff			

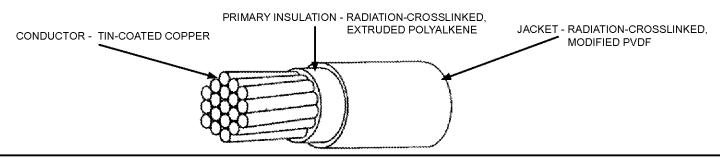


TABLE I. CONSTRUCTION DETAILS								
	WIRE SIZE	CONDUCTOR STRANDING	NOMINAL CONDUCTOR	FINISHED WIRE				
PART NUMBER 1/				MAXIMUM RESISTANCE	DIAMETER (in.) ( <i>mm</i> )			MAXIMUM WEIGHT
	(AWG)	(number x AWG)	DIAMETER (in.) ( <i>mm</i> )	AT 20°C (ohms/1000 ft.) ( <i>ohms/km</i> )	MINIMUM	NOMINAL	MAXIMUM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

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.				
Page 1 of 2	The TE (logo), TE Connectivity, TE connectivity (logo) and Raychem are trademarks.		Tyco Electronics Corporation		
	DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL	Raychem Wire and Cab 501 Oakside Avenue	501 Oakside Avenue		
	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	Redwood City, CA 94063-3800 1-800-227-8816		



## **SPECIFICATION CONTROL DRAWING**

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FLDW+0311

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

## 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<sup>2</sup> (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

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity: FLDWC0311-20-0