

# 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.

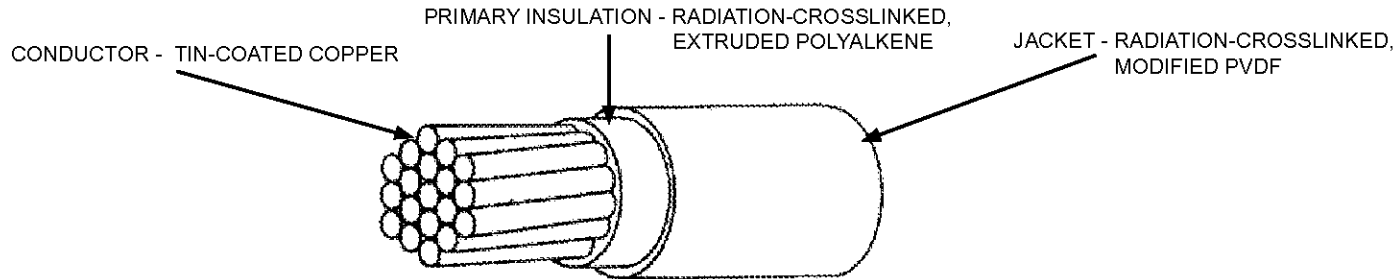


TABLE I. CONSTRUCTION DETAILS

PART NUMBER ↓/	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.

↓/ 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

Tyco Electronics Corporation  
Raychem Wire and Cable  
501 Oaks Avenue  
Redwood City, CA 94063-3800  
1-800-227-8816

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<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

1/ See footer section on page 1



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.