

# SPECIFICATION CONTROL DRAWING

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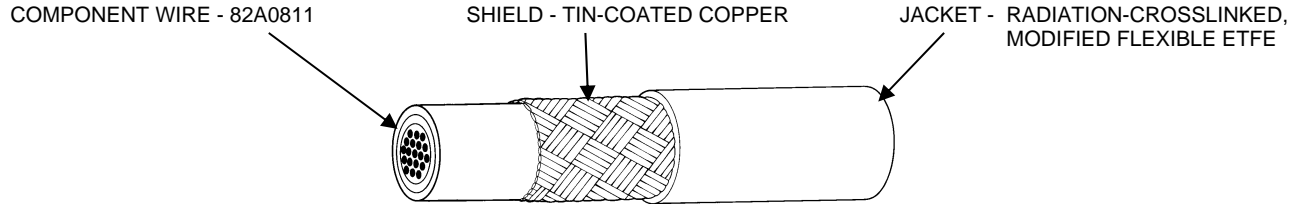
**82A1811**

Title ONE CONDUCTOR CABLE, SHIELDED, JACKETED,  
GENERAL PURPOSE, FLEXIBLE, 600 VOLT

Date 2-3-16

Revision A

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



CABLE CONSTRUCTION DETAILS							
PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (inch)		OUTSIDE DIAMETER (inch)		MAXIMUM WEIGHT (lbs/1000 ft.)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
82A1811-24-*	24	38	.005	.007	.075	.080	6.6
82A1811-22-*	22	38	.005	.007	.085	.090	8.5
82A1811-20-*	20	38	.006	.008	.097	.102	11.0
82A1811-18-*	18	38	.006	.008	.109	.114	14.7
82A1811-16-*	16	38	.007	.009	.127	.133	20.2
82A1811-14-*	14	38	.008	.010	.153	.161	29.9
82A1811-12-*	12	38	.008	.010	.174	.183	40.2
82A1811-10-*	10	38	.009	.012	.228	.239	67.7
82A1811-8-*	8	38	.011	.014	.275	.289	100.
82A1811-6-*	6	36	.011	.015	.328	.344	151.
82A1811-4-*	4	36	.014	.018	.416	.437	234.
82A1811-2-*	2	34	.016	.021	.501	.526	349.
82A1811-1-*	1	34	.017	.023	.560	.588	426.
82A1811-0-*	0	34	.019	.025	.634	.666	534.

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C  
 Maximum continuous conductor temperature  
 VOLTAGE RATING: 600 volts (rms) at sea level  
 CROSSLINKING PROOF TEST: 300 ± 3°C for 7 hours  
 DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz  
 JACKET COLOR: White preferred  
 JACKET ELONGATION AND TENSILE STRENGTH:  
 Elongation, 100% (minimum)  
 Tensile Strength, 3000 lbf/in<sup>2</sup> (minimum)  
 JACKET FLAWS:  
 Spark Test, 1500 volts (rms)  
 Impulse Dielectric Test, 6.0 kV (peak)

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  
 SHIELD COVERAGE: 85% (minimum)  
 VOLTAGE WITHSTAND (Post Environmental):  
 1000 volts (rms), 60 Hz, 1 minute

1/ PART NUMBER:  
 The "\*" in the part numbers above shall be replaced by color code designators with a dash separating the component wire color from the jacket color.  
 Example: AWG 22, white component wire; white jacket:  
 82A1811-22-9-9

NOTE: Nominal values are for information only. Nominal values are not requirements.

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/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902..." MAY BE REPLACED BY "Axxx".) 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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