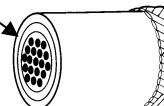
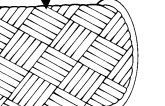


| <b>SPECIFICATION CONTROL DRAWING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                         |                            | SCD            |                            | <b>82A1811</b> |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|----------------------------|----------------|----------------------------|----------------|-------------------------------------|
| Title<br>ONE CONDUCTOR CABLE, SHIELDED, JACKETED,<br>GENERAL PURPOSE, FLEXIBLE, 600 VOLT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |                         |                            | Date<br>2-3-16 |                            | Revision<br>A  |                                     |
| This specification sheet forms a part of the latest issue of Raychem Specification 80.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                         |                            |                |                            |                |                                     |
| <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>COMPONENT WIRE - 82A0811</p>  </div> <div style="text-align: center;"> <p>SHIELD - TIN-COATED COPPER</p>  </div> <div style="text-align: center;"> <p>JACKET - RADIATION-CROSSLINKED,<br/>MODIFIED FLEXIBLE ETFE</p>  </div> </div> |                            |                         |                            |                |                            |                |                                     |
| <b>CABLE CONSTRUCTION DETAILS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                         |                            |                |                            |                |                                     |
| PART NUMBER<br><u>1/</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CONDUCTOR<br>SIZE<br>(AWG) | SHIELD<br>SIZE<br>(AWG) | JACKET THICKNESS<br>(inch) |                | OUTSIDE DIAMETER<br>(inch) |                | MAXIMUM<br>WEIGHT<br>(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)

**JACKT 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.

|             |                                                                                                                                                                    |                                                                                                                                                                                                                                       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Page 1 of 1 | Raychem, TE Connectivity, TE connectivity (logo), and TE (logo) are trademarks.                                                                                    |  <p><b>Raychem Wire &amp; Cable</b><br/>501 Oakside Avenue<br/>Redwood City, CA 94063-3800<br/>Phone: 1-800-227-8816<br/>Fax: 1-650-361-6297</p> |
|             | DIMENSIONS ARE IN INCHES AND, UNLESS OTHERWISE DESIGNATED, ARE NOMINAL                                                                                             |                                                                                                                                                                                                                                       |
|             | THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.<br>REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID. |                                                                                                                                                                                                                                       |