## **SPECIFICATION CONTROL DRAWING**

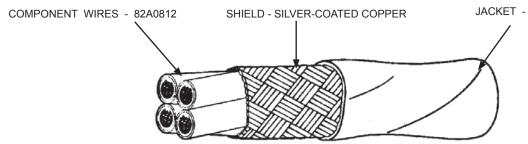
82A1842

FOUR CONDUCTOR CABLE, SHIELDED, JACKETED, GENERAL PURPOSE, FLEXIBLE, 600 VOLT

9-13-10

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



- RADIATION-CROSSLINKED, MODIFIED FLEXIBLE ETFE

| CABLE CONSTRUCTION DETAILS |                            |                         |                           |         |                           |         |                   |
|----------------------------|----------------------------|-------------------------|---------------------------|---------|---------------------------|---------|-------------------|
| PART NUMBER 1/             | CONDUCTOR<br>SIZE<br>(AWG) | SHIELD<br>SIZE<br>(AWG) | JACKET THICKNESS<br>(in.) |         | OUTSIDE DIAMETER<br>(in.) |         | MAXIMUM<br>WEIGHT |
|                            |                            |                         | MINIMUM                   | NOMINAL | NOMINAL                   | MAXIMUM | (lbs/1000 ft.)    |
| 82A1842-26-*               | 26                         | 38                      | .006                      | .009    | .127                      | .146    | 14.9              |
| 82A1842-24-*               | 24                         | 38                      | .007                      | .010    | .143                      | .166    | 19.7              |
| 82A1842-22-*               | 22                         | 38                      | .007                      | .011    | .170                      | .197    | 27.0              |
| 82A1842-20-*               | 20                         | 38                      | .008                      | .012    | .196                      | .228    | 35.7              |
| 82A1842-18-*               | 18                         | 38                      | .009                      | .013    | .227                      | .265    | 50.2              |
| 82A1842-16-*               | 16                         | 38                      | .010                      | .015    | .270                      | .315    | 71.1              |
| 82A1842-14-*               | 14                         | 36                      | .011                      | .017    | .336                      | .393    | 113.              |
| 82A1842-12-*               | 12                         | 36                      | .013                      | .019    | .391                      | .458    | 156.              |
| 82A1842-10-*               | 10                         | 34                      | .016                      | .024    | .527                      | .618    | 276.              |

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 1 hour DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 100% (minimum)

Elongation, 100% (Illinimum)

Tensile Strength, 3000 lbf/in<sup>2</sup> (minimum)

JACKET FLAWS:

TITLE

Spark Test, 1500 volts (rms)

Impulse Dielectric Test, 6.0 kV (peak)

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

SECANT MODULUS (Test per ASTM D 882):

4.0 x 104 lbf/in2 (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

## PART NUMBER:

The "\*" in the part numbers above shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color. Colors shown do not necessarily reflect the sequence of manufacturing.

1/ Example: AWG 22, black, brown, red and orange component wires; white jacket: 82A1842-22-0/1/2/3-9

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. 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

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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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