| PECIFICATION CONTROL DRAWING  |                            |  |                              |                              |                              | SCD 82A1                     |                                     |
|---|----------------------------|--|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------------|
| TWO CONDUCTOR CABLE, SHIELDED, JACKETED,<br>GENERAL PURPOSE, FLEXIBLE, 600 VOLT |                            |  |                              |                              | Date                         | ,<br>6-1-16                  | Revision<br>F                       |
|   |                            | E, 600 VOLT<br>a part of the latest issue of Raychem S |                              |                              |                              | Г                            |                                     |
|   | This specification         | sneet forms a  | part of the late             | st issue of Ray              | ycnem Specific               | cation 80.                   |                                     |
| COMPONENT WIRE  | S - 82A0111                |  |                              | COPPER                       | JACKE                        |                              | N-CROSSLINKED,<br>FLEXIBLE ETFE     |
|   |                            | CABLE  | CONSTRUCTI                   | ON DETAILS                   | 1                            |                              |                                     |
| 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                      | ( ,                                 |
| 82A1121-28-*  | 28                         | 38   | .005                         | .008                         | .091                         | .097                         | 6.9                                 |
| 82A1121-26-*  | 26                         | 38   | .006                         | .009                         | .101                         | .106                         | 8.5                                 |
| 82A1121-24-*  | 24                         | 38   | .006                         | .009                         | .109                         | .114                         | 10.5                                |
| 82A1121-22-*  | 22                         | 38   | .007                         | .010                         | .123                         | .129                         | 13.3                                |
|   | 20                         | 38   | .007                         | .011                         | .145                         | .152                         | 17.8                                |
| 82A1121-20-*  |                            |  |                              |                              | 400                          | 477                          | 05.4                                |
| 82A1121-20-*<br>82A1121-18-*  | 18                         | 38   | .008                         | .012                         | .169                         | .177                         | 25.1                                |
|   | 18<br>16                   | 38<br>38   | .008<br>.009                 | .012<br>.013                 | .169<br>.201                 | .177                         | 35.2                                |
| 82A1121-18-*  | -                          |  |                              | -                            |                              |                              | -                                   |
| 82A1121-18-*<br>82A1121-16-*  | 16                         | 38   | .009                         | .013                         | .201                         | .211                         | 35.2                                |
| 82A1121-18-*<br>82A1121-16-*<br>82A1121-14-*                                    | 16<br>14                   | 38<br>38   | .009                         | .013<br>.015                 | .201<br>.245                 | .211<br>.257                 | 35.2<br>52.8                        |
| 82A1121-18-*<br>82A1121-16-*<br>82A1121-14-*<br>82A1121-14-*                    | 16<br>14<br>12             | 38<br>38<br>38   | .009<br>.010<br>.011         | .013<br>.015<br>.017         | .201<br>.245<br>.293         | .211<br>.257<br>.308         | 35.2<br>52.8<br>75.3                |
| 82A1121-18-*<br>82A1121-16-*<br>82A1121-14-*<br>82A1121-12-*<br>82A1121-12-*    | 16<br>14<br>12<br>10       | 38<br>38<br>38<br>38<br>36                             | .009<br>.010<br>.011<br>.013 | .013<br>.015<br>.017<br>.020 | .201<br>.245<br>.293<br>.375 | .211<br>.257<br>.308<br>.394 | 35.2<br>52.8<br>75.3<br>125.        |

## 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 slash separating the component wire colors and a dash separating the component wire colors from the jacket color.

Example: AWG 20, blue and white component wires; white jacket: 82A1121-20-6/9-9

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.<br>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,<br>AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902" MAY BE REPLACED BY "Axxx".) OTHER CODES AND<br>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   | - TE         |  |  |  |  |  |
|  | 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. | connectivity |  |  |  |  |  |
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TE Connectivity: 82A1121-22-2/6-9