

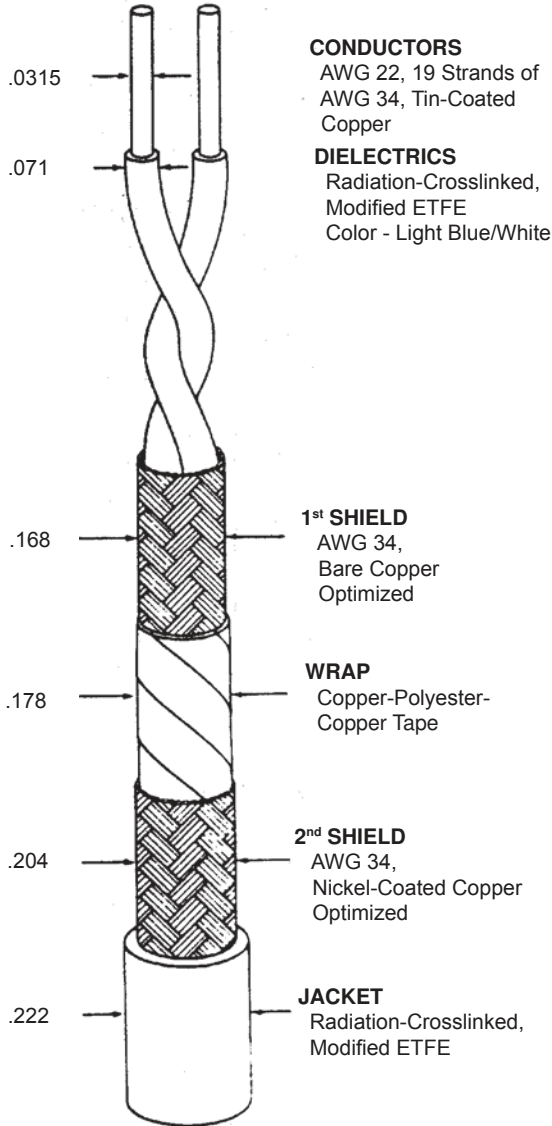
|                                      |  |                  |
|--------------------------------------|--|------------------|
| <b>SPECIFICATION CONTROL DRAWING</b> |  | <b>8522C8661</b> |
|--------------------------------------|--|------------------|

|                 |   |          |          |
|-----------------|---|----------|----------|
| <b>CHEMINAX</b> | 85 OHM, AWG 22, 19 STRANDS OF AWG 34,<br>EMP HARDENED, DATA BUS CABLE | Date     | 11-12-07 |
|                 |   | Revision | H        |

THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>CONSTRUCTION DETAILS</b> | <b>ELECTRICAL CHARACTERISTICS</b> |
|-----------------------------|-----------------------------------|

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE DESIGNATED.



**CONDUCTORS**  
AWG 22, 19 Strands of  
AWG 34, Tin-Coated  
Copper

**DIELECTRICS**  
Radiation-Crosslinked,  
Modified ETFE  
Color - Light Blue/White

|                            |   |
|----------------------------|---|
| CHARACTERISTIC IMPEDANCE   | 85 ± 5 ohms, Method C at 1 MHz                          |
| MUTUAL CAPACITANCE         | 20.0 pF/ft. (nominal)<br>22.5 pF/ft. (maximum)          |
| ATTENUATION                | 1.0 dB/100 ft. (maximum) at 1 MHz                       |
| SURFACE TRANSFER IMPEDANCE | 30 milliohms/meter (maximum)<br>from 0.1 MHz to 100 MHz |

**ADDITIONAL REQUIREMENTS**

**COMPONENT WIRE PRIOR TO CABLING (Test procedures per SAE AS22759)**

|                                       |   |
|---------------------------------------|---|
| CROSSLINK PROOF                       | 300 ± 3°C for 1 hour, .875 inch mandrel,<br>.625 lb., 2.5 kV dielectric test  |
| INSULATION (DIELECTRIC)<br>ELONGATION | 50% (minimum)   |
| TENSILE STRENGTH                      | 5000 lbf/in <sup>2</sup> (minimum)  |
| INSULATION FLAWS<br>SPARK TEST        | 3.0 kV (rms)  |
| IMPULSE TEST                          | 8.0 kV (peak)   |
| INSULATION RESISTANCE                 | 5000 megohms for 1000 ft. (minimum)   |
| LOW TEMPERATURE-COLD BEND             | -65 ± 3°C for 4 hours, .750 inch mandrel,<br>1.00 lb., 2.5 kV dielectric test |
| SHRINKAGE                             | 200 ± 3°C for 1 hour,<br>.125 inch (maximum) in 12 inches                     |

**FINISHED CABLE  
(Test procedures per NEMA WC 27500, unless otherwise specified)**

|   |   |
|---|---|
| BLOCKING                                | 200°C for 6 hours   |
| CABLE LAY LENGTH                        | .80 inch (minimum), 1.00 inch (maximum)   |
| CROSSLINKED VERIFICATION                | 300 ± 5°C for 6 hours, 6.00 inch mandrel  |
| FLAMMABILITY<br>(Method B of Spec 1200) | 3 seconds (maximum); 3 inch (maximum);<br>no flaming of facial tissue           |
| JACKET<br>ELONGATION                    | 50% (minimum)   |
| TENSILE STRENGTH                        | 5000 lbf/in <sup>2</sup> (minimum)  |
| JACKET FLAWS<br>SPARK TEST              | 1.0 kV (rms)  |
| IMPULSE TEST                            | 6.0 kV (peak)   |
| JACKET THICKNESS                        | .009 (nominal)  |
| LOW TEMPERATURE-COLD BEND               | -55 ± 5°C for 4 hours, 6.00 inch mandrel  |
| SHIELD COVERAGE (EACH)                  | 90% (minimum)   |
| VOLTAGE WITHSTAND<br>(DIELECTRIC)       | 1500 volts (rms)  |
| WRAP                                    | .0024 inch thick (nominal), .500 inch width<br>(nominal), 25% overlap (minimum) |
| WEIGHT                                  | 53.7 lbs/1000 ft. (nominal)   |

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 8522C8661-9) unless otherwise specified.

Designate outer jacket color with a dash number 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.

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.

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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.