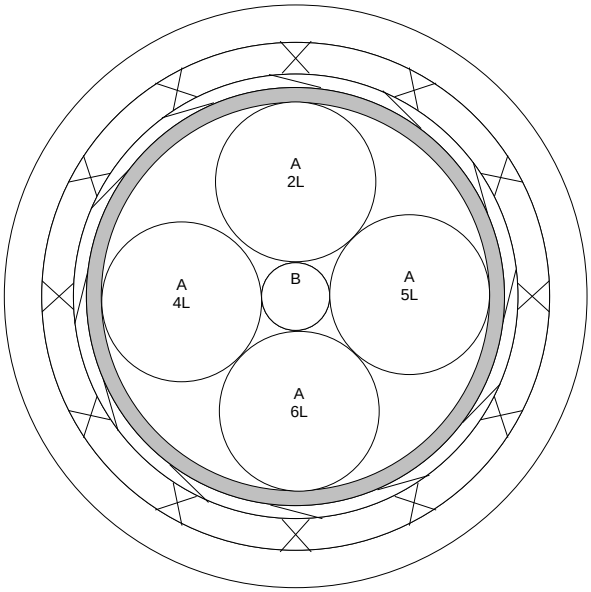
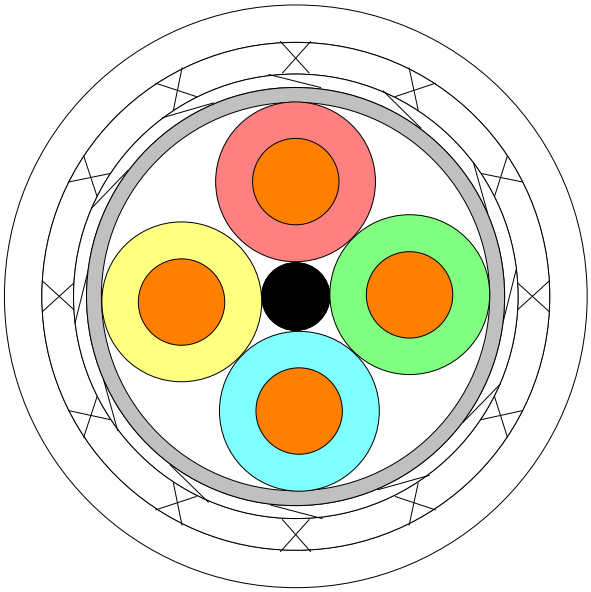
## Identification, colors & marks




## Cross section



## Components

| ID | Quantity | Part number | Description |
|---|---|---|---|
| A | 4 | RAYFOAM-H2444C4 | Dielectric |
| B | 1 | FIL-70-0.018 | Solid FEP Filler 0.018 OD |

## Cable

| Outer | | Description | Thickness | | OD | |
|---|---|---|---|---|---|---|
| | | | Inches | *mm* | Inches | *mm* |
| Layer 1 | | | | | 0.104 | *2.63* |
| | Wrap | Fluoropolymer Wrap .002" | 0.004 | *0.10* | 0.112 | *2.84* |
| | Shield | Flat silver copper 36 awg regular | 0.004 | *0.09* | 0.119 | *3.01* |
| | Shield | Round silver copper 38 awg regular | 0.009 | *0.22* | 0.136 | *3.45* |
| | Jacket | FEP white | 0.010 | *0.25* | 0.156 | *3.95* |
| Cable OD tolerance | | | | | + 0.008 | *+ 0.20* |

| **Weight** | 23.77 lb/kft | *35.45 Kg/Km* |
|---|---|---|





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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 to bid.
Proposed specification control drawings may be altered prior to final issue.

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*Continued*

## Physical properties

| | |
|---|---|
| **Jacket tensile strength** | 2000 psi minimum |
| **Jacket elongation** | 200% minimum |
| **Wrap** | 25% (minimum) overlap |
| **Flat Braid** | Braid AWG under the Cable description is for calculation purposes only. Actual AWG is optional to allow manufacturing to choose an AWG that best fits the design.<br>The shield thickness shall have a thickness of .0015 ± .0004. |
| **Marker Tape** | There shall be a marker tape under the jacket: "RAYCHEM CEC-RWC-18687 06090 A - B"<br>The orientation of the tape shall be as follows: The "A" end components shall be Red, Green, Blue and Yellow in a clockwise direction. The "B" end components shall be Red, Yellow, Blue, and Green in a clockwise direction. |
| **Shield Coverage** | 92% minimum for flat shield. 85% minimum for round shield |
| **Testing** | This cable is to be tested in accordance with SPEC 1200 as applicable |
| **Jacket Color** | Color white for this cable is 9X, translucent white. |

## Environmental properties

| | |
|---|---|
| **Flammability** | Shall meet the requirements of FAR Part 25, Appendix F, Part I when tested in accordance with the 60 degree test specified therein. |

## Electrical properties

| | |
|---|---|
| **Voltage withstand (dielectric)** | 1500 volts (rms) conductor to conductor and shield<br>500 volts (rms) shield to shield when applicable per NEMA WC 27500.<br>Coax components to their own SCD. |
| **Additional Electricals** | See Page 3 |
| **Jacket Flaws** | Spark Test: 2.5 kV (rms). Impulse Dielectric Test: 6.0 kV (peak) |

## Notes

| | |
|---|---|
| **Colors** | Color code designators shall be in accordance with MIL-STD-681. |
| **Dimensions** | Dimensions are in inches, and unless otherwise designated, are nominal. |
| **Identification, Colors & Marks** | The following is the key to the descriptions in the left hand view of the cable on Page 1.<br>Line 1: Identifies the component per the components' ID list.<br>Line 2: Color codes.<br>Line 3: Mark on component "-" mark on component jacket. |
| **Minimum length** | Cable will be supplied in 50 ft. minimum lengths unless otherwise specified |
| **Specification Information** | This drawing is the property of Tyco Electronics Corporation and may not be used for any purpose other than for that which it is supplied without the express written authority of Tyco Electronics Corporation. |
| **Part Number Note** | Other codes and suffixes may be added to the Part Number as necessary, to capture any additional requirements imposed by the purchase order |
| **Nesting** | Some components are nested. Their size on the drawing may be altered to reflect the effect of nesting. |
| **Export License Note** | These commodities, technology, or software, when exported from the United States, are required to be exported in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited. |
| **Trademarks** | Raychem, Rayfoam, TE Connectivity, TE connectivity (logo), and TE (logo) are trademarks. |



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## TABLE I (Electrical Parameters)

| Frequency | Insertion Loss dB/100m (typical/maximum) | RL dB/100m (min) | NEXT dB/100m (min) | Propagation Delay ns/100m (max) |
|---|---|---|---|---|
| 1 MHz | 2.2/2.8 | 20.0 | 65.3 | 570 |
| 4 MHz | 4.5/5.5 | 23.0 | 56.3 | - |
| 8 MHz | 6.2/7.8 | 24.5 | 51.8 | - |
| 10 MHz | 6.8/8.7 | 25.0 | 50.3 | - |
| 16 MHz | 8.5/11.1 | 25.0 | 47.3 | - |
| 20 MHz | 9.8/12.5 | 25.0 | 45.8 | - |
| 25 MHz | 11 /14.1 | 24.2 | 44.3 | - |
| 31.25 MHz | 12.3/15.8 | 23.3 | 42.9 | - |
| 62.5 MHz | 18.6/22.9 | 20.7 | 38.4 | - |
| 100 MHz | 24.8/29.7 | 19.0 | 35.3 | 538 |

Note: Values in Table I for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568-C.2.

| | |
|---|---|
| Capacitance: | 13.0 pF/ft. (nominal) at 1 kHz. |
| Impedance: | 100 ± 10 ohms at 1 to 100 MHz. |
| Electrical Testing: | In accordance with ANSI/TIA-568-C.2. |



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