# Product Specification
## (L-2.5CHD FRNC)

Canare Electric Co., Ltd

**1. Scope** This product specification covers the performance of the 75Ω Coaxial cable.

**2. General Specifications**

**(1) Product Name** 75Ω Coaxial Cable

**(2) Model Name** L-2.5CHD FRNC

**(3) Construction and Appearance** As shown in Fig.1 and Table 1

Fig. 1

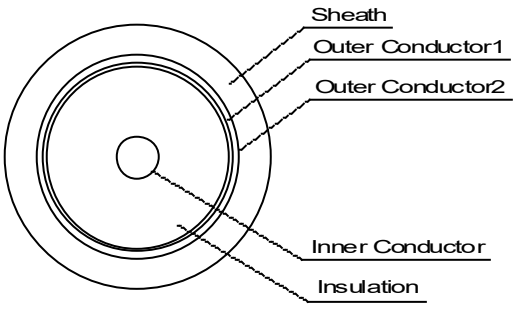


Table 1

| Item | | Standard Value | Note |
|---|---|---|---|
| No. of Conductor | | 1 | |
| Inner Conductor | Construction (qty/mm) | 1/0.59A | Annealed Copper 23AWG |
| | Nom. Cross Section Area ($mm^2$) | 0.27 | |
| | Outer Diameter (mm) | 0.59 | |
| Insulation | Thickness (mm) | 1.00 | Foamed Polyethylene |
| | Outer Diameter (mm) | 2.59 | |
| Outer Conductor 1 | Thickness (mm) | 0.07 | Aluminum Laminated Tape |
| | Outer Diameter (mm) | 2.7 | |
| Outer Conductor 2 | Construction (carr/end/mm) | 16/ 7/0.12TA | Tinned Annealed Copper Coverage >=95% |
| | Pitch (mm) | <= 23 | |
| | Outer Diameter (mm) | 3.2 | |
| Sheath | Thickness (mm) | 0.5 | LSZH-FR (FRNC) |
| | Color | BLK. RED. YEL. GRN. BLU. GRY. WHT. PPL. Custom colors available | |
| | Marking | 12G-SDI<br>75 Ohm Coaxial Cable<br>L-2.5CHD-FRNC<br>Euroclass B2ca s1a,d1,a1<br>LSZH-FR<br>CANARE (XXXXX)<br>MADE IN ITALY<br>“Meter marking” | (xxxxx = batch of production) |
| Outer Diameter (mm) | | 4.2 | |

**(4) Weight** Approx. 2.8kg／100m

## 3. Rating, Standard

**(1) Rated Voltage** AC 60Vrms

**(2) Temperature Range** -20°C to +75°C

**(3) Applicable Specifications** Euroclass B2ca s1a, d1, a1 (EN 13501-6:2018)

## 4. Electrical Characteristics

| Item | | Standard Value | Test Method |
|---|---|---|---|
| D.C. Resistance | Inner Conductor | <= 65.6Ω/km (20°C) | JIS C 3005 |
| | Outer Conductor | <= 16.6Ω/km (20°C) | JIS C 3005 |
| Insulation Resistance | | >= 1000MΩ x km | JIS C 3005 |
| Voltage Proof | | AC1000V 1minute Not Breakdown | JIS C 3005 |
| Characteristic Impedance | | 75±3Ω | ANSI/SCTE 68 2008 |
| Nominal Capacitance | | 52nF/km (1kHz) | JIS C 3502 |
| Nominal Attenuation | | 10MHz: 4.1dB/100m<br>30MHz: 6.5dB/100m<br>72MHz: 9.5dB/100m<br>88MHz: 10.4dB/100m<br>135MHz: 12.6dB/100m<br>180MHz: 14.5dB/100m<br>270MHz: 17.8dB/100m<br>750MHz: 30.2dB/100m<br>1.3GHz: 40.0dB/100m<br>1.5GHz: 43.1dB/100m<br>2.0GHz: 50.1dB/100m<br>2.5GHz: 56.3dB/100m<br>3.0GHz: 62.0dB/100m<br>6.0GHz: 91.7dB/100m | JIS C 3502 |

## 5. Mechanical Characteristics

| Item | | Standard Value | Test Method |
|---|---|---|---|
| Tensile properties of Sheath | Tensile strength | >= 13.8 MPa | JIS C 3005 |
| | Elongation | >= 100 % | JIS C 3005 |
| Maximum pulling force | | <= 18N | - |
| Permission bend radius | | On / after installation finished:<br>More than 6 times of the cable O.D.<br>Process of wiring:<br>More than 15 times of the cable O.D. | - |

## 6. Environmental Characteristics

| Item | Performance | Technical specification |
|---|---|---|
| Flame Retardance | Reaction to fire:<br>Class B2ca s1a, d1, a1 | Test done in accordance with<br>EN 13501-6:2018<br>(EN 60332-1-2, EN 50399, EN 61034-2, EN 60754-2) |
| Dangerous substances | None | EU Directive 2011/65 (RoHS 2) |

**Note:** Testing must be performed under standard conditions set down in “JIS C 60068-1 General Environmental Testing Rules (Electric/Electronics).”

**Standard Conditions:** Unless otherwise specified, all tests and measurements should be performed within a normal temperature range of 15-35°C, a relative humidity of 25-75%, and an atmospheric pressure of 86-106kPa.