# Product: 7701NH

LonWorks, 1PR #22 Sol BC, PO ins, Unsh, LSNH Jkt, 300V

## Product Description

LonWorks, 1 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Unshielded shielding, LSZH / FRNC jacket , 300V

## Technical Specifications

### Product Overview

| | |
|---|---|
| Environmental Space: | Indoor - Euroclass Dca |
| Suitable Applications: | Instrumentation and computer cable; For data transmission applications |

### Physical Characteristics (Overall)

**Conductor**

| AWG | Stranding | Material | Nominal Diameter | No. of Pairs |
|---|---|---|---|---|
| 22 | Solid | BC - Bare Copper | 0.64 mm | 1 |

| | |
|---|---|
| Conductor Count: | 2 |
| Total Number of Pairs: | 1 |

**Insulation**

| Material | Nominal Diameter | Diameter +/- Tolerance | Min. Wall Thickness |
|---|---|---|---|
| Polyethylene | 1.17 mm | 0.05 mm | 0.23 mm |

**Color Chart**

| Number | Color |
|---|---|
| Pair 1 | White/Blue & Blue/White |

| | |
|---|---|
| Color Chart1, Table Note: | Ring marking applied |

**Outer Shield Material**

| Material |
|---|
| Unshielded |

**Outer Jacket Material**

| Material | Nominal Diameter | Diameter +/- Tolerance | Min. Wall Thickness |
|---|---|---|---|
| LSZH / FRNC | 3.5 mm | 0.4 mm | 0.45 mm |

### Electrical Characteristics

**Conductor DCR**

| Nominal Conductor DCR |
|---|
| 55 Ohm/km |

**Capacitance**

| Nom. Capacitance Conductor to Conductor |
|---|
| 46 pF/m |

**Impedance**

| Frequency [MHz] | Nominal Characteristic Impedance |
|---|---|
| 1 - 20 | 100 Ohm |

**High Frequency (Nominal/Typical)**

| Frequency [MHz] | Nom. Insertion Loss |
|---|---|
| 0.772 MHz | 1.3 dB/100m |
| 1 MHz | 1.5 dB/100m |
| 4 MHz | 3.1 dB/100m |
| 10 MHz | 4.9 dB/100m |
| 16 MHz | 6.3 dB/100m |
| 20 MHz | 6.9 dB/100m |

**Current**

| Element | Max. Recommended Current [A] |
|---|---|
| Conductor | 2.5 A |

**Voltage**

| Voltage Rating [V] |
|---|
| 300 V |

## Temperature Range

| | |
|---|---|
| Operating Temp Range: | -15°C To +80°C |

## Mechanical Characteristics

| | |
|---|---|
| Bulk Cable Weight: | 15.9 kg/km |
| Max Recommended Pulling Tension: | 50 N |
| Min Bend Radius During Installation: | 80 mm |

## Standards

| | |
|---|---|
| CPR Euroclass: | Dca-s2,d1,a1 |
| Other Specification: | BS 7655 section 6.1 table 1, LTS 3 |

## Applicable Environmental and Other Programs

| | |
|---|---|
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |

## Flammability, LS0H, Toxicity Testing

| | |
|---|---|
| ISO/IEC Flammability: | IEC 60332-1-2 and IEC 60332-3-24 |
| Amount of Halogen acc. to IEC 60754-1 & EN50267-1: | Zero |

## Part Number

**Variants**

| Item # | Color | Length |
|---|---|---|
| 7701NH.00500 | White | 500 m |
| 7701NH.01305 | White | 305 m |
| 7701NH.K1305 | White | 305 m |
| 7701NH.K0500 | White | 500 m |

## History

| | |
|---|---|
| Update and Revision: | Revision Number: 0.172 Revision Date: 01-31-2020 |