



**Part Number:** 7702NH

LonWorks Cable Paired Cable 300 V, +80 °C

## Product Description

22 AWG, BC Conductors, Foamed Polyethylene Insulation, White LSZH Jacket, Unshielded, 2 Pairs

## 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	2

Conductor Count:	4
Total Number of Pairs:	2
Conductor Size:	22 AWG

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
Polyethylene	1.12 mm	0.05 mm	0.23 mm

#### Color Chart

Number	Color
Pair 1	White/Blue & Blue/White
Pair 2	Orange/White & White/Orange

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

#### Outer Shield Material

Material
Unshielded

#### Outer Jacket Material

Material	Color	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH / FRNC	White (like RAL 9003)	5.2 mm	0.4 mm	0.5 mm

### Construction and Dimensions

#### Cabling

Description
2 pairs twisted to cable core

### 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	Nom. NEXT [dB]
0.772 MHz	1.3 dB/100m	
1 MHz	1.5 dB/100m	59 dB
4 MHz	3.1 dB/100m	50 dB
10 MHz	4.9 dB/100m	44 dB
16 MHz	6.3 dB/100m	41 dB
20 MHz	6.9 dB/100m	40 dB

## 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:	31.2 kg/km
Max Recommended Pulling Tension:	50 N
Min Bend Radius During Installation:	80 mm

## Standards

CPR Euroclass:	Dca-s1,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):	1998-01-01
---------------------------------------	------------

## Flammability, LSOH, 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
7702NH.00305	White	305 m
7702NH.00U305	White	305 m

## History

Revision Number:	3
------------------	---

© 2019 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and

regulations based on their individual usage of the product.