



# Part Number: 7703NH

LonWorks Cable Paired Cable 300 V, +80 °C

# **Product Description**

22 AWG, BC Conductors, Foamed Polyethylene Insulation, White LSZH Jacket, Overall Beldfoil Shield, 1 Pair

# **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 Diamet	ter	No. of Pairs
22	Solid	BC - Bare Copper	0.64 mm		1
Conductor Count:			2		
Total Number of Pairs:			1		
Conductor Size:			22 A	AWG	

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
FPE - Foamed Polyethylene	1.55 mm	0.05 mm	0.4 mm

# Color Chart

# Outer Shield Material

Type	Material	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Aluminum/Polyester	100 %	TC - Tinned Copper	0.51 mm	24
Outer Shield Table Note: Aluminum inside					

### 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

# **Electrical Characteristics**

# Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
55 Ohm/km	34 Ohm/km

# Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
40 pF/m	80 pF/m

# Impedance

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

### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.772 MHz	1.8 dB/100m
1 MHz	2 dB/100m
4 MHz	3.6 dB/100m
10 MHz	5.5 dB/100m
16 MHz	7 dB/100m
20 MHz	7.8 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
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#### **Mechanical Characteristics**

Bulk Cable Weight:	26.6 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
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# 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
7703NH.00305	White	305 m
7703NH.00500	White	500 m
7703NH.00C100	White	100 m
7703NH.K0305	White	305 m

### **History**

Update and Revision:	Revision Number: 0.168 Revision Date: 05-07-2019

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