



**Product:** [7703NH](#)

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

## Product Description

LonWorks, 1 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Foil(s) or Copper Tape(s) shielding, LSZH / FRNC jacket , 300V, CPR Dca

## Technical Specifications

### Product Overview

Suitable Applications:	LonWorks, instrumentation, Low capacitance
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### 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
PE - Polyethylene (Foam)	1.55 mm	0.05 mm	0.4 mm

#### Color Chart

Number	Color
Pair 1	White/Blue & Blue/White

Table Notes:	Ring marking applied
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#### Outer Shield Material

Type	Material	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	100%	TC - Tinned Copper	0.51 mm	24

Table Notes:	Aluminum inside
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#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	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
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1 - 20	100 Ohm
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#### 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 Amps per Conductor

#### 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. Pull Tension:	50 N
Min Bend Radius During Installation:	80 mm

#### Standards

CPR Euroclass:	Dca-s1,d1,a1
Other Compliance:	BS 7655 section 6.1 table 1, LTS 3

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Dca
EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

#### Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and IEC 60332-3-24
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero

#### Part Number

#### Variants

Item #	Color	Putup Type	Length	EAN
7703NH.00C100	White	Coil	100 m	8719605013477
7703NH.00305	White	Reel	305 m	8719605013453
7703NH.00500	White	Reel	500 m	8719605013460

#### History

Update and Revision:	Revision Number: 0.233 Revision Date: 12-18-2020
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