

Product: 7704NH

LonWorks, 2PR #22 Sol BC, PO ins, OS, LSNH Jkt, 300V, Dca

Product Description

LonWorks, 2 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Overall Beldfoil® shielding, LSZH / FRNC jacket , 300V

Technical Specifications

Product Overview

Suitable Applications:	LonWorks, instrumentation, Low capacitance

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

Insulation

Material	Nominal Diameter	Min. Wall Thickness
PE - Polyethylene (Foam)	1.35 mm	0.3 mm

Color Chart

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

Table Notes:	Ring marking applied

Outer Shield

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

Outer Jacket

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.5 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	Nominal Outer Shield DCR
55 Ohm/km	17 Ohm/km

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
40 pF/m	65 pF/m

Inductance

Nominal Pair Inductance
0.65 µH/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	1.8 dB/100m	
1 MHz	2 dB/100m	59 dB
4 MHz	3.6 dB/100m	50 dB
10 MHz	5.5 dB/100m	44 dB
16 MHz	7 dB/100m	41 dB
20 MHz	7.8 dB/100m	40 dB

Current

Element	Max. Recommended Current [A]
Conductor(s)	2.5 Amps per Conductor

Voltage

Voltage Rating [V]
300 V

Temperature Range

Installation Temp Rating:	-5°C To +80°C
Storage Temp Range:	-15°C To +80°C
Operating Temp Range:	-15°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	40.2 kg/km
Max. Pull 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

Environmental Space:	Indoor - Euroclass Dca
EU CE Mark:	Yes

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and IEC 60332-3-24
IEC 60754-1 - Halogen Amount:	Zero
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	EAN
7704NH.00305	White	Reel	305 m	8719605013507
7704NH.00500	White	Reel	500 m	8719605013514
7704NH.001020	White	Reel	1,020 m	8719605013491

History

Update and Revision:	Revision Number: 0.244 Revision Date: 02-04-2022

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