

Part Number: NN00097

Category 3 cable



Product Description

CAT3 (16MHz), 25-pair U/UTP, Premise Horizontal Cable, 24 AWG, HDPE insulation, LSZH jacket

Technical Specifications

Product Overview

Environmental Space:	Outdoor
Suitable Applications:	Backbone cable; Support current and future Category 3 applications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
24	Solid	BC - Bare Copper	0.51 mm	25

Conductor Count:	50
Total Number of Pairs:	25
Conductor Size:	24 AWG

Insulation

Type	Material	Nominal Diameter
Dielectric	Polyethylene	0.88 mm

Color Chart

Number	Color
Pair 1	White & Blue
Pair 2	White & Orange
Pair 3	White & Green
Pair 4	White & Brown
Pair 5	White & Grey
Pair 6	Red & Blue
Pair 7	Red & Orange
Pair 8	Red & Green
Pair 9	Red & Brown
Pair 10	Red & Grey
Pair 11	Black & Blue
Pair 12	Black & Orange
Pair 13	Black & Green
Pair 14	Black & Brown
Pair 15	Black & Grey
Pair 16	Yellow & Blue
Pair 17	Yellow & Orange
Pair 18	Yellow & Green
Pair 19	Yellow & Brown
Pair 20	Yellow & Grey
Pair 21	Violet & Blue
Pair 22	Violet & Orange
Pair 23	Violet & Green
Pair 24	Violet & Brown

Pair 25 Violet & Grey

Outer Jacket Material

Material	Color	Max. Diameter	Min. Wall Thickness	Ripcord
LSZH / FRNC	Gray	12.2 mm	0.8 mm	Yes

Construction and Dimensions

Cabling

Description
2+8+15 pairs twisted in concentric layers and covered with a polyester foil

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]	Max. DCR Unbalanced Within Pair [%]
93.8 Ohm/km	5 %	5 Ohm

Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
330 pF/m	66 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
100 Ohm	15 Ohm

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. SRL (Structural Return Loss)
0.772 MHz	2.2 dB/100m	45 dB	43 dB	12 dB
1 MHz	2.6 dB/100m	44 dB	41 dB	12 dB
4 MHz	5.6 dB/100m	34 dB	32 dB	12 dB
8 MHz	8.5 dB/100m	29 dB	27 dB	12 dB
10 MHz	9.7 dB/100m	28 dB	26 dB	12 dB
16 MHz	13.1 dB/100m	25 dB	23 dB	10 dB

Current

Max. Recommended Current [A]
1.5 A

Voltage

Voltage Rating [V]
72 V

Temperature Range

Installation Temp Range:	0°C To +50°C
Operating Temp Range:	-30°C To +60°C

Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	61 mm
Min Bend Radius During Installation:	183 mm
Min Bend Radius During Operation:	183 mm

Standards

ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011
Data Category:	Category 3

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	2015-12-16
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Part Number

Variants

Item #	Color
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NN00097.001000	Gray
NN00097.009999	Gray
NN00097.00305	Gray

Patent:	https://www.belden.com/resources/patents
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History

Revision Number:	2
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