



Product: [9843NH](#)

Low Capacitance Computer Cable for EIA RS-485 Applications

Product Description

3-Pair, 24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, LSZH jacket, Flame resistance IEC 60332-3C

Technical Specifications

Product Overview

Environmental Space:	Indoor - Euroclass Dca
Suitable Applications:	Instrumentation and computer cable; For EIA RS-485 data transmission applications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	3

Conductor Count:	6
Total Number of Pairs:	3

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
Polyethylene	1.73 mm	0.05 mm

Color Chart

Number	Color
Pair 1	White/Blue & Blue/White
Pair 2	White/Orange & Orange/White
Pair 3	White/Green & Green/White

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	Aluminum/Polyester	Z-fold®		9 / 23 µm	TC - Tinned Copper	AWG24/7
Braid	TC - Tinned Copper		90 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH / FRNC	9.1 mm	0.9 mm

Construction and Dimensions

Cabling

Description	Filler
3 pairs and a filler twisted to cable core	Polypropylene

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR

78.7 Ohm/km	7.7 Ohm/km
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Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
42 pF/m	75.5 pF/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1 MHz	120 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.97 dB/100m

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
520 ns/ft	66 %

Current

Element	Max. Recommended Current [A]
Conductor	1.54 A

Voltage

Voltage Rating [V]
300 V

Temperature Range

Installation Temp Range:	-15°C To +80°C
Storage Temp Range:	-45°C To +80°C
Operating Temp Range (Flexible Install):	-15°C To +80°C
Operating Temp Range (Fixed Install):	-45°C To +80°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Max Recommended Pulling Tension:	470 N
Min Bend Radius During Installation:	91 mm

Standards

CPR Euroclass:	Dca-s2,d2,a1
CENELEC Compliance:	EN 50290-2-27

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
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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
9843NH.001000	Chrome	1,000 m
9843NH.00305	Chrome	305 m
9843NH.00500	Chrome	500 m

History

Update and Revision:	Revision Number: 0.159 Revision Date: 09-02-2019
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