

Part Number: 9841NH

Audio, Control and Instrumentation Cable Individually Shielded Pairs, RS-485



Product Description

24 AWG stranded (7x32) tinned copper conductors, polyethylene insulation, twisted pair, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, LSZH jacket.

Technical Specifications

Use

Suitable Applications:	Instrumentation and computer cable; For EIA RS-485 data transmission applications
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7xAWG32	Tinned copper	1

Total Number of Conductors:	2
Total Number of Pairs:	1

Insulation

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

Color Chart

Number	Color
Pair 1	White/Blue & Blue/White

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Thickness of Foil	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum / Polyester	Beldfoil®	100 %	9 / 23 µm	Tinned copper	AWG24/7	7x32 mm
Braid	2	Tinned copper		90 %				

Outer Jacket Material

Material	Color	Nominal Diameter	Nominal Wall Thickness
FRNC / LSZH (UV stabilised)	Chrome (RAL 7037)	6.10 mm	0.9 mm

Electrical Characteristics

Capacitance

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

Construction and Dimensions

Stranding

Lay Length	Lay Direction	Twists
2.25 in	Left Hand	5.333 twist/ft

Conductor DCR

Nominal Conductor DCR	Nominal Inner Shield DCR	Nominal Outer Shield DCR
78.7 Ohm/km	11.0 Ohm/km	3.4 Ohm/1000ft

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1	120 Ohm

High Frequency (Nominal/Typical)

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

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
66 ns/100m	1.6 ns/ft ns/ft	66 %

Current

Element	Max. Recommended Current [A]
Conductor	2.1 A

Voltage

UL Voltage Rating	Voltage Rating [V]
300V RMS	300 V

Oil Resistance: IEC 60811-404

Applicable Standards & Environmental Programs

CEC/C(UL) Specification:	CMG
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2012-04-09
CPR Euroclass:	Dca-s2,d1,a1
CENELEC Compliance:	EN 50290-2-27
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Standards

NEC/(UL) Specification:	CMG
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Flame Test

C(UL) Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-3-24 and IEC 60332-3-22
UL Flammability:	UL1685 FT4 Loading
Other Flammability:	UL AWM 21088

Safety

Amt of Halogen IEC 60754-1 /EN50267-1:	Zero
UL Voltage Rating:	300 V RMS

Suitability

Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes

Mechanical Characteristics

Storage Temp Range:	-45°C To +80°C
Installation Temp Range:	-15°C To +80°C

Operating Temp Range:	-20°C To +75°C
Operating Temp Range (Flexible Install):	-15°C To +80°C
Operating Temp Range (Fixed Install):	-45°C To +80°C
Bulk Cable Weight:	33(lbs/1000ft)
Max Recommended Pulling Tension:	328(N)
Min Bend Radius During Installation:	61 mm
Min Bend Radius/Minor Axis:	2.5(in)

Temperature Range

UL Temp Rating:	75°C
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Plenum/Non-Plenum

Plenum (Y/N):	No
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History

Revision Number:	10
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Variants

Item #	Color
9841NH.001000	CHROME
9841NH.00152	CHROME
9841NH.00305	CHROME
9841NH.00500	CHROME
9841NH 0601000	CHROME
9841NH 0601000	CHROME

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