

## 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

##### 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	1

Conductor Count:	2
Total Number of Pairs:	1
AWG Size:	24

###### 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
LSZH / FRNC (UV stabilised)	Chrome (RAL 7037)	6.10 mm	0.9 mm

##### Construction and Dimensions

###### Stranding

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

###### Cabling

Filler
Polypropylene (2x) (White, 1.90 mm)

##### Electrical Characteristics

###### 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

#### 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	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

### Temperature Range

Installation Temp Range:	-15°C To +80°C
UL Temp Rating:	75°C
Storage Temp Range:	-45°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

### Mechanical Characteristics

Oil Resistance:	IEC 60811-404
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

### Standards

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Dca-s2,d1,a1
CENELEC Compliance:	EN 50290-2-27

### Applicable Environmental and Other Programs

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2012-04-09
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

### Suitability

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

### Flammability, LSOH, Toxicity Testing

C(UL) Flammability:	FT4
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UL Flammability:	UL1685 FT4 Loading
ISO/IEC Flammability:	IEC 60332-3-24 and IEC 60332-3-22
Other Flammability:	UL AWM 21088
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

**Part Number**

Plenum (Y/N):	No
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**Variants**

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

Footnote:	C - CRATE REEL PUT-UP.
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