



**Part Number:** 9841NH

RS485, 1 Pr #24 Str TC, PO Ins, OS+TC Brd, LSZH Jkt, CMG AWM 21088

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## Product Description

RS-485, 1 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, LSZH Outer Jacket, CMG AWM 21088

## 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

#### 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	TC - Tinned Copper	AWG24/7	7x32 mm
Braid	2	TC - 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 Direction	Twists
Left Hand	5.333 twist/ft

#### Cabling

Description	Filler
1 pair and 2 fillers twisted to cable core	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	66 %

#### Current

Element	Max. Recommended Current [A]
Conductor	2.1 A

#### Voltage

Voltage Rating [V]
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

CPR Euroclass:	Dca-s2,d1,a1
GENELEC 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):	2005-01-01

### Suitability

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

### Flammability, LSOH, Toxicity Testing

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

### Plenum/Non-Plenum

Plenum (Y/N): No

**Part Number**

**Variants**

Item #	Color	UPC	Length	Footnote
9841NH.001000	Chrome		1,000 m	
9841NH.00152	Chrome		152 m	
9841NH.00305	Chrome		305 m	
9841NH.00500	Chrome		500 m	
9841NH 0601000	Chrome	612825259497	1,000 ft	C
9841NH 0601000	Chrome	612825259497	1,000 ft	C
9841NH.K01000	Chrome		1,000 m	
9841NH.K0152	Chrome		152 m	
9841NH.K0305	Chrome		305 m	

Footnote: C - CRATE REEL PUT-UP.

**History**

Update and Revision: Revision Number: 0.388 Revision Date: 08-28-2019

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