



Product: [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

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.
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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
PE - 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	Alum / Poly	Beldfoil®	100 %	9 / 23 µm	TC - Tinned Copper	AWG24/7	7x32
Braid	2	TC - Tinned Copper		90 %				

Outer Jacket Material

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen flame retardant	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

UL AWM Style:	UL AWM 21088
CPR Euroclass:	Dca-s2,d1,a1
CENELEC Compliance:	EN 50290-2-27

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Dca
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
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-3-24 and IEC 60332-3-22
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

Plenum/Non-Plenum

Plenum (Y/N): No

Part Number

Variants

Item #	Color	Putup Type	Length	UPC/EAN
9841NH.00152	Chrome	Reel	152 m	8719605022929
9841NH.00305	Chrome	Reel	305 m	8719605022936
9841NH.00500	Chrome	Reel	500 m	8719605022943
9841NH 0601000	Chrome	Reel	1,000 ft	612825259497
9841NH 0601000	Chrome	Reel	1,000 ft	612825259497
9841NH.001000	Chrome	Reel	1,000 m	8719605022912

Footnote: C - CRATE REEL PUT-UP.

History

Update and Revision: Revision Number: 0.405 Revision Date: 04-28-2020

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