



Product: [74010NH](#)

DataTuff® 6A, 4PR #22 Sol BC, PO ins, S/FTP, LSNH Jkt, PROFINET Type A, AWM 20851

Product Description

DataTuff® 6A, 4 Pair AWG 22 Bare Copper - Solid, Polyethylene insulation, S/FTP - Overall Braid / Individual Foil shielding, LSZH / FRNC jacket , PROFINET Type A, AWM 20851

Technical Specifications

Product Overview

Suitable Applications:	PROFINET Cat6A, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
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Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Individual Shielded Pair	22 AWG	Solid	BC - Bare Copper	4	8

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.60 mm (0.0630 in)	White & Blue, White & Orange, White & Green, White & Brown

Cable Core

Description
4 pairs twisted to cable core

Inner Shield

Element	Shield Type	Material	Coverage
Individual Shielded Pair	Tape	Bi-Laminate (Alum+Poly)	100%

Table Notes:	Aluminum outside
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Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	80%

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	8.7 mm (0.34 in)

Overall Cable Diameter (Nominal):	8.7 mm (0.34 in)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
59.1 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
25 ns/100m	78%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. ELTCTL [dB]
1	2 dB/100m	78	76	73	78	20	35
4	3.7 dB/100m	78	74.3	71.3	78	23	23
10	5.9 dB/100m	78	72.1	69.1	75.3	25	15
16	7.4 dB/100m	78	70.6	67.6	71.2	25	10.9
31.2	10.4 dB/100m	78	67.6	64.6	65.4	23.6	5.1
62.5	14.9 dB/100m	75.5	60.6	57.6	59.4	21.5	
100	19 dB/100m	72.4	53.4	50.4	55.3	20.1	
125	21.4 dB/100m	70.9	49.6	46.6	53.4	19.4	
200	27.5 dB/100m	67.9	40.4	37.4	49.3	18	
250	31 dB/100m	66.4	35.5	32.5	47.3	17.3	
300	34.2 dB/100m	65.2	31.1	28.1	45.8	17.3	
500	50.1 dB/100m	60.7	10.6	7.6	39.7	17.3	

Table Notes:	Limits below 4MHz are for information only
Transfer Impedance Class:	Grade 1
Screening Class:	Type I
Table Notes:	Coupling Attenuation

Voltage

Voltage Rating
30 V AC

Mechanical Characteristics

Temperature

Operating	Storage
-40°C to +80°C	-40°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
45 mm (1.8 in)	90 mm

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
Data Category:	Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = d
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.147 Revision Date: 02-21-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74010NH.02305	Black	Reel	305 m	8719605203519
74010NH.01500	Gray, RAL 7032	Reel	500 m	8719605192400
74010NH.00100	Green	Reel	100 m	8719605129918
74010NH.00500	Green	Reel	500 m	8719605127594

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