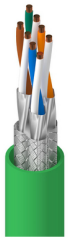
Belden



Product: 74010NH

DataTuff® 6A, 4PR #22 Sol BC, PO ins, S/FTP, LSZH 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.

Construction Details

Conductor

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

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%

Inner Shield Table Notes:	Aluminum outside

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)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
59.1 Ohm/km (18.0 Ohm/1000ft)	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) [dB/100m]	Min. NEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. ELTCTL [dB]
1	2	78	76	73	78	20	35
4	3.7	78	74.3	71.3	78	23	23
10	5.9	78	72.1	69.1	75.3	25	15
16	7.4	78	70.6	67.6	71.2	25	10.9
31.2	10.4	78	67.6	64.6	65.4	23.6	5.1
62.5	14.9	75.5	60.6	57.6	59.4	21.5	
100	19	72.4	53.4	50.4	55.3	20.1	
125	21.4	70.9	49.6	46.6	53.4	19.4	
200	27.5	67.9	40.4	37.4	49.3	18	
250	31	66.4	35.5	32.5	47.3	17.3	
300	34.2	65.2	31.1	28.1	45.8	17.3	
500	50.1	60.7	10.6	7.6	39.7	17.3	

High Frequency Table Notes:	Limits below 4MHz are for information only
Transfer Impedance Class:	Grade 1
Screening Class:	Type I
Screening 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 (3.5 in)

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor - Euroclass Eca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance - UL 1581 sec 1200, Oil Resistance - IRM 902 70°Cx4h, Oil Resistance - IEC 60811-404
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
Data Category:	Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1
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, IEC 61034-2 - Smoke Density Min. Transmittance = 60%
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.169 Revision Date: 07-23-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74010NH.02305	Black	Reel	305 m	8719605203519
74010NH 010305M	Black	Reel	305 m	6938935091296
74010NH.01500	Gray, RAL 7032	Reel	500 m	8719605192400
74010NH 008500M	Gray, RAL 7032	Reel	500 m	6938935091289
74010NH.00100	Green	Reel	100 m	8719605129918
74010NH 005100M	Green	Reel	100 m	6938935091265
74010NH.00500	Green	Reel	500 m	8719605127594

74010NH 005500M	Green	Reel	500 m	6938935091272

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