

Product: 74004NH

DataTuff® 7, 4PR #23 Sol BC, PO ins, S/FTP, LSZH Jkt, AWM 20851, Dca

Product Description

DataTuff® 7, 4 Pair AWG 23 Bare Copper - foamskin, Polyethylene insulation, S/FTP - Overall Braid / Individual Foil shielding, LSZH / FRNC jacket , AWM 20851

Technical Specifications

Product Overview

Suitable Applications:	Cat7, harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
23 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	1.45 mm (0.0571 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)	65%

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	8 mm (0.31 in)

Overall Cable Diameter (Nominal):	8 mm (0.31 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
75 Ohm/km (23 Ohm/1000ft)	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

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

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
1	2	78	75	73	70	78	75	20
4	3.7	78	75	74.3	71.3	78	75	23
10	5.9	78	75	72.1	69.1	75.3	72.3	25
16	7.4	78	75	70.6	67.6	71.2	68.2	25
31.2	10.4	78	75	67.6	64.6	65.4	62.4	23.6
62.5	14.9	75.5	72.5	60.6	57.6	59.4	56.4	21.5
100	19	72.4	69.4	53.4	50.4	55.3	52.3	20.1
125	21.4	70.9	67.9	49.6	46.6	53.4	50.4	19.4
200	27.5	67.9	64.9	40.4	37.4	49.3	46.3	15
250	31	66.4	63.4	35.5	32.5	47.3	44.3	17.3
300	34.2	65.2	62.2	31.1	28.1	45.8	42.8	17.3
600	50.1	60.7	57.7	10.6	7.6	39.7	36.7	17.3
1000	66.9	57.4	54.4			35.3	32.3	15.1

High Frequency Table Notes:	Limits below 4 MHz are for information only.; Values at 1000 MHz are for information only. Reference standard: IEC 61156-5

Transfer Impedance

Frequency	Max. Transfer Impedance
1 MHz	Max. 15 mOhm/m
10 MHz	Max. 10 mOhm/m
30 MHz	Max. 30 mOhm/m
100 MHz	100 mOhm/m

Transfer Impedance Class:	Grade 1
Screening Class:	Type I
Screening Table Notes:	Coupling Attenuation

Voltage

UL Voltage Rating	Voltage Rating
30 V RMS	125 V (non UL)

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-40°C to +80°C	-15°C To +60°C	-40°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
40 mm (1.6 in)	80 mm (3.1 in)

Max. Pull Tension:	80 N (18 lbf)

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor - Euroclass Dca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance - UL 1581 sec 1200, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-3-24, EN 50266-2-4
CPR Compliance:	CPR Euroclass: Dca-s1,d1,a1; CPR UKCA Class: Dca-s1,d1,a1
AWM Compliance:	AWM 20851
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 7
TIA/EIA Compliance:	ANSI/TIA 568.2-D
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: 0.340 Revision Date: 03-09-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74004NH.01B100	Black	Flat Box	100 m	8719605013217
74004NH.01305	Black	Reel	305 m	8719605013194
74004NH.01500	Black	Reel	500 m	8719605013200
74004NH.011000	Black	Reel	1,000 m	8719605013187
74004NH.03500	Blue	Reel	500 m	8719605236906
74004NH.031000	Blue	Reel	1,000 m	8719605160478
74004NH.02500	Gray, RAL 7032	Reel	500 m	8719605130006
74004NH.041000	Green	Reel	1,000 m	8719605196767
74004NH.051000	Orange	Reel	1,000 m	8719605196774

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