

Product: 74001E

DataTuff® 5E, 4PR #24 Sol BC, PO ins, SF/UTP, PVC jkt, AWM 2464

Product Description

DataTuff® 5E, 4 Pair AWG 24 Bare Copper - Solid, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PVC jacket , AWM 2464

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
24 AWG	Solid	BC - Bare Copper	4	8

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.1 mm (0.043 in)	White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown

Cable Core

Description
4 pairs twisted to cable core covered with a polyester foil

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	80%

Table Notes:	Aluminum outside

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	6.8 mm (0.27 in)

Overall Cable Diameter (Nominal):	6.8 mm (0.27 in)

Electrical Characteristics

Electricals

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

Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	60%

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	2.1	65.3	62.3	63.2	60.2	64	61	20

4	4.0	56.3	53.3	52.32	49.3	52	49	23
10	6.3	50.3	47.3	44	41	44	41	25
16	8.0	47.2	44.2	39.2	36.2	39.9	36.9	25
20	9.0	45.8	42.8	36.8	33.8	38	35	25
31.25	11.4	42.9	39.9	31.5	28.5	34.1	31.5	23.6
62.5	16.5	38.4	35.4	21.9	18.9	28.1	25.1	21.5
100	21.3	35.3	32.3	14	11	24	21	20.1

Voltage

Voltage Rating
450 V DC and 300 V AC

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.
27 mm (1.1 in)	54 mm

Max. Pull Tension:	80 N (18 lbf)

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca, Indoor, Sunlight Resistance - Black only, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
AWM Compliance:	AWM 2464
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.375 Revision Date: 03-04-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74001E.01B100	Black	Flat Box	100 m	8719605012968
74001E.01305	Black	Reel	305 m	8719605012944
74001E.01500	Black	Reel	500 m	8719605012951
74001E.012000	Black	Reel	2,000 m	8719605012937

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