



Product: [70008PU](#)

DataTuff® 5E, 1Q #22 Str TC, PO ins, F/B, PUR HF jkt, PROFINET type C, 5M Trailing

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Product Description

DataTuff® 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, PUR Halogen Free jacket , PROFINET type C, 5M trailing

Technical Specifications

Product Overview

Suitable Applications:	PROFINET Cat5e, Flex trailing, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
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Construction Details

Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
22 AWG	19x34	TC - Tinned Copper	2	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.63 mm (0.0642 in)	White & Blue & Yellow & Orange
		1 Quad

Cable Core

Description
1 quad with center filler

Inner Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	4.2 mm (0.17 in)

Table Notes:	Bedding
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Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	85%

Outer Jacket

Separator	Material	Nom. Diameter
non-Woven Tape	PUR - Polyurethane (Halogen Free)	6.5 mm

Table Notes:	Jacket color green (RAL 6018)
Overall Cable Diameter (Nominal):	6.5 mm (0.26 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
57.1 Ohm/km (17.4 Ohm/1000ft)	100 Ohm

Delay

Max. Delay	Nom. Velocity of Prop.
530 ns/100m	68%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. SRL (Structural Return Loss) [dB]
1	2.1	65	64	
4	4	56	52	23
10	6.3	50	44	25
16	8	47	40	25
31.25	11.4	43	34	23.6
62.5	16.5	38	28	21.5
100	21.3	35	24	20.1

Table Notes:	Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e
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Transfer Impedance

Frequency	Max. Transfer Impedance
10 Mhz	Max. 10 mOhm/m

Voltage

UL Voltage Rating	Voltage Rating
300 V	300 V

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
80°C	-40°C to +80°C	-5°C To +60°C	-40°C To +80°C

Trailing/Flexing Properties

Motion	Number of Cycles	Radius	Speed	Acceleration	Traverse Length	Torsion Angle
Trailing/Bending	5,000,000	60 mm	3 m/s	3		
Torsion/Twisting	1,000,000	60 mm	12		1 m	180 °

Table Notes:	Drag chain
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Bend Radius

Stationary Min.	Installation Min.	Flexing Min.
30 mm (1.2 in)	65 mm (2.6 in)	65 mm (2.6 in)

Max. Pull Tension:	160 N (36 lbf)
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Standards and Compliance

Environmental Suitability:	Indoor, Indoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	Horizontal flametest
AWM Compliance:	AWM 20549
Data Category:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = Pass
European Directive Compliance:	EU CE Mark

History

Update and Revision:	Revision Number: 0.309 Revision Date: 08-13-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
70008PU.01B100	Green	Flat Box	100 m	8719605009463
70008PU.01305	Green	Reel	305 m	8719605009449
70008PU.01500	Green	Reel	500 m	8719605009456
70008PU.011000	Green	Reel	1,000 m	8719605009432

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