

Product: 70007E

DataTuff® 5E, 1Q #22 Str TC, PO ins, F/B, PVC jkt, PROFINET Type B

Product Description

DataTuff® 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PVC jacket , PROFINET Type B

Technical Specifications

Product Overview

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

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
22 AWG	7x0.25 mm	TC - Tinned Copper	2	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.55 mm (0.0610 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)	4.1 mm (0.16 in)

Table Notes:	Bedding

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	6.5 mm (0.26 in)

Overall Cable Diameter (Nominal):	6.5 mm (0.26 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
57.1 Ohm/km	100 Ohm

Delay

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

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. SRL (Structural Return Loss) [dB]
1	2.1 dB/100m	65.3	64	
4	4.1 dB/100m	56.3	52	23
10	6.5 dB/100m	50.3	44	25
16	8.3 dB/100m	47.2	40	25
31.25	11.7 dB/100m	42.9	34	23.6
62.5	17 dB/100m	38.4	28	21.5
100	22 dB/100m	35.3	24	20.1

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

Transfer Impedance

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

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

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

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca, 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
Data Category:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.266 Revision Date: 04-29-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
70007E.01B100	Green	Flat Box	100 m	8719605009333
70007E.01305	Green	Reel	305 m	8719605009319
70007E.01500	Green	Reel	500 m	8719605009326
70007E.011000	Green	Reel	1,000 m	8719605009296
70007E.011525	Green	Reel	1,525 m	8719605009302

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