



**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, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc
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### Construction Details

#### Conductor

Size	Stranding	Material	Number of Pairs	Number of Element
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

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, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
AWM Compliance:	AWM 2464
Data Category:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1
European Directive Compliance:	EU CE Mark

## History

Update and Revision: Revision Number: 0.252 Revision Date: 12-15-2021

## 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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