

**Product: [70006E](#)**

DataTuff® 5E, 1Q #22 Sol BC, PO ins, F/B, PVC jkt, PROFINET type A, AWG 2464


[Request Sample](#)
**Product Description**

DataTuff® 5E, 1 Quad AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, SF/UTP - Overall Braid + Foil shielding, PVC jacket , PROFINET type A, AWG 2464

**Technical Specifications**
**Physical Characteristics (Overall)**
**Conductor**

AWG	Stranding	Material	Nominal Diameter	No. of Quads
22	Solid	BC - Bare Copper	0.65 mm	1

Conductor Count:	4
Total Number of Pairs:	2

**Insulation**

Material	Nominal Diameter	Diameter +/- Tolerance
Polyolefin	1.5 mm	0.05 mm

Bonded-Pair:	No
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**Color Chart**

Number	Color
Quad 1	White & Blue & Yellow & Orange

**Inner Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	3.9 mm

InnerJacket, Table Note:	Bedding
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**Outer Shield Material**

Type	Material	Min. Coverage [%]
Tape	Alum / Poly	
Braid	TC - Tinned Copper	85 %

**Outer Jacket Material**

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	6.5 mm	0.2 mm

**Electrical Characteristics**
**Conductor DCR**

Max. Conductor DCR
57.1 Ohm/km

**Impedance**

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
1 - 100	100 Ohm	15 Ohm

## Delay

Max. Delay	Nominal Velocity of Propagation (VP) [%]
530 ns/100m	68 %

## High Freq

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

High Freq Table Note: Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e

General Electrical Parameters Notes: Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e

## Transfer Impedance

Frequency [MHz]	Transfer Impedance
10 MHz	Max. 10 mOhm/m

## Voltage

Voltage Rating [V]
300 V

## Temperature Range

Installation Temp Range:	-5°C To +60°C
Storage Temp Range:	-40°C To +80°C
Operating Temp Range:	-40°C To +80°C

## Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
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## Standards

ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011
CPR Euroclass:	Eca
Data Category:	Category 5e

## Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	2014-10-21

## Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes - Black only

## Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
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## Part Number

### Variants

Item #	Color	Putup Type	Length	EAN
70006E.01500	Green	Reel	500 m	8719605009210
70006E.011000	Green	Reel	1,000 m	8719605009197
70006E.01305	Green	Reel	305 m	8719605009203
70006E.01B100	Green	Flat Box	100 m	8719605009227
70006E.013000	Green	Reel	3,000 m	8719605167026

Patent: <https://www.belden.com/resources/patents>

## History

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