

Product: 70006E

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

Request Sample

Product Description

DataTuff® 5E, 1 Quad AWG 22 Bare Copper - Solid, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PVC jacket , PROFINET type A, AWM 2464

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	Solid	BC - Bare Copper	2	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.5 mm (0.059 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)	3.9 mm (0.15 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, Indoor, Outdoor - Black only, 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: 0.310 Revision Date: 07-23-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
70006E.01B100	Green	Flat Box	100 m	8719605009227
70006E.01305	Green	Reel	305 m	8719605009203
70006E.01500	Green	Reel	500 m	8719605009210
70006E 005500M	Green	Reel	500 m	6938935090152
70006E.011000	Green	Reel	1,000 m	8719605009197
70006E.013000	Green	Reel	3,000 m	8719605167026

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.