

Product: 1583E

Category 5e Cable, 4 Pair, U/UTP, PVC Indoor CPR Eca

Product Description

Category 5e Premise Horizontal Cable (100MHz), 4-Pair, 24 AWG solid bare copper conductors, U/UTP, Polyethylene insulation, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 5e applications, such as: 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs
Individual Pair	24	Solid	BC - Bare Copper	4

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Pair	PE - Polyethylene	0.9 mm (0.035 in)	White/Blue & Blue, White/Green & Green, White/Orange & Orange, White/Brown & Brown

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	4.5 mm (0.18 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km (29 Ohm/1000ft)	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	65.3	62.3	63.2	60.2	64	61	20	40	35
4	4 dB/100m	56.3	53.3	52.32	49.3	52	49	23	34	23
10	6.3 dB/100m	50.3	47.3	44	41	44	41	25	30	15
16	8 dB/100m	47.2	44.2	39.2	36.2	39.9	36.9	25	28	10.9
20	9 dB/100m	45.8	42.8	36.8	33.8	38	35	25	27	9
31.25	11.4 dB/100m	42.9	39.9	31.5	28.5	34.1	31.5	23.6	25.1	5.5
62.5	16.5 dB/100m	38.4	35.4	21.9	18.9	28.1	25.1	21.5	22	
100	21.3 dB/100m	35.3	32.3	14	11	24	21	20.1	20	

Table Notes:	Limits below 4 MHz are for information only. Reference standard: IEC 61156-5

Voltage

Voltage Rating

72 V DC

Mechanical Characteristics

Temperature

Operating	Installation
-30°C To +60°C	0°C To +50°C

Bend Radius

Installation Min.
40 mm (1.6 in)

Max. Pull Tension:	65 N (15 lbf)
Bulk Cable Weight:	28 kg/km (19 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = a
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

History

Update and Revision:	Revision Number: 0.291 Revision Date: 12-12-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
1583E.03305	Black	Reel	305 m	8719605002143
1583E.03U305	Black	UnReel	305 m	8719605002150
1583E.01B100	Blue	Flat Box	100 m	8719605002129
1583E.01305	Blue	Reel	305 m	8719605002105
1583E.01U305	Blue	UnReel	305 m	8719605002136
1583E.01500	Blue	Reel	500 m	8719605002112
1583E.011000	Blue	Reel	1,000 m	8719605002099
1583E.00B100	Gray, RAL 7032	Flat Box	100 m	8719605002075
1583E.00305	Gray, RAL 7032	Reel	305 m	8719605002044
1583E.00U305	Gray, RAL 7032	UnReel	305 m	8719605002082
1583E.00500	Gray, RAL 7032	Reel	500 m	8719605002068
1583E.001000	Gray, RAL 7032	Reel	1,000 m	8719605002037
1583E.003500	Gray, RAL 7032	Reel	3,500 m	8719605176783
1583E.003570	Gray, RAL 7032	Reel	3,570 m	8719605002051
1583E.09305	Green	Reel	305 m	8719605002204
1583E.09U305	Green	UnReel	305 m	8719605002228
1583E.09500	Green	Reel	500 m	8719605002211
1583E.11305	Red	Reel	305 m	8719605002259
1583E.11U305	Red	UnReel	305 m	8719605002266
1583E.12B100	White	Flat Box	100 m	8719605002273
1583E.04U305	White	UnReel	305 m	8719605002174
1583E.12U305	White	UnReel	305 m	8719605002280
1583E.04500	White	Reel	500 m	8719605002167
1583E.10305	Yellow	Reel	305 m	8719605002235
1583E.10U305	Yellow	UnReel	305 m	8719605002242

© 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.