



Product: [1583EPE](#)

Category 5e Cable, 4 Pair, U/UTP, PE Outdoor

Product Description

Category 5e Premise Horizontal Cable (100MHz), 4-Pair, 24 AWG solid bare copper conductors, U/UTP, Polyethylene insulation, PE 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, suitable for outdoor use
------------------------	---

Construction Details

Conductor

Element	Size	Stranding	Material	Number 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
PE - Polyethylene	4.7 mm (0.19 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:	27 kg/km (18 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Outdoor
CPR Compliance:	CPR Euroclass: Fca
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

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: 0.258 Revision Date: 03-08-2023
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
1583EPE.00100	Black	Reel	100 m	8719605002600
1583EPE.00250	Black	Reel	250 m	8719605002624
1583EPE.00305	Black	Reel	305 m	8719605002631
1583EPE.00U305	Black	UnReel	305 m	8719605002655
1583EPE.00500	Black	Reel	500 m	8719605002648
1583EPE.001000	Black	Reel	1,000 m	8719605002617

© 2023 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.