Belden



Product: 7965E

Category 6 Cable, 4 Pair, U/UTP, PVC Indoor CPR Eca

Product Description

Category 6 Premise Horizontal Cable (250MHz), 4-Pair, 23 AWG solid bare copper conductors, U/UTP, Polyethylene insulation, PVC jacket, CPR Eca

Technical Specifications

Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 6 and 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	23 AWG	Solid	BC - Bare Copper	4

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Pair	PE - Polyethylene	0.96 mm (0.038 in)	White/Blue & Blue, White/Green & Green, White/Orange & Orange, White/Brown & Brown

Cable Core

Description	Separator
4 pairs twisted together	Center Member (Patented X-Spline®)

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	5.4 mm (0.21 in)

Overall Cable Diameter (Nominal):	5.4 mm (0.21 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	75.3	72.3	73.2	70.2	70	67	20	40	35
4	3.8 dB/100m	66.3	63.3	62.4	59.4	58	55	23	34	23
10	6 dB/100m	60.3	57.3	54.3	51.3	50	47	25	30	15
16	7.6 dB/100m	57.2	54.2	49.6	46.6	45.9	42.9	25	28	10.9
20	8.5 dB/100m	55.8	52.8	47.3	44.3	44	41	25	27	9
31.2	10.7 dB/100m	52.9	49.9	42.1	39.1	40.1	37.1	23.6	25.1	5.1
62.5	15.5 dB/100m	48.4	45.4	32.9	29.9	34.1	31.1	21.5	22	

100	19.9 dB/100m	45.3	42.3	25.4	22.4	30	27	20.1	20	
155	25.3 dB/100m	42.4	39.4	17.1	14.1	26.2	23.2	18.8	18.1	
200	29.1 dB/100m	40.8	37.8	11.6	8.6	24	21	18	17	
250	33 dB/100m	39.3	36.3	6.3	3.3	22	19	17.3	16	

High Frequency Table Notes:	Limits below 4 MHz are for information only. Reference standard: IEC 61156-5
Screening Class:	Type III
Screening Table Notes:	Coupling Attenuation

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
23 mm (0.91 in)	46 mm

Max. Pull Tension:	80 N (18 lbf)
Bulk Cable Weight:	37 kg/km

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, Type 4
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = a
European Directive Compliance:	EU CE Mark
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: 0.396 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
7965E.05A305	Black	Reel-in-Box	305 m	8719605016997
7965E.K5A305	Black	Reel-in-Box	305 m	8719605144928
7965E.05500	Black	Reel	500 m	8719605160706
7965E.01B100	Blue	Flat Box	100 m	8719605016942
7965E.01200	Blue	Reel	200 m	8719605016904
7965E.01305	Blue	Reel	305 m	8719605016911
7965E.01A305	Blue	Reel-in-Box	305 m	8719605016935
7965E.K1305	Blue	Reel	305 m	8719605017055
7965E.K1A305	Blue	Reel-in-Box	305 m	8719605017079
7965E.B1305	Blue	Reel	305 m	8719605229533
7965E.B1A305	Blue	Reel-in-Box	305 m	8719605229540
7965E.S1305	Blue	Reel	305 m	8719605229571
7965E.01500	Blue	Reel	500 m	8719605016928
7965E.K1500	Blue	Reel	500 m	8719605017062
7965E.011000	Blue	Reel	1,000 m	8719605016898

7965E.K11000	Blue	Reel	1,000 m	8719605017048
7965E.00B100	Gray, RAL 7032	Flat Box	100 m	8719605016881
7965E.00305	Gray, RAL 7032	Reel	305 m	8719605016850
7965E.00A305	Gray, RAL 7032	Reel-in-Box	305 m	8719605016874
7965E.K0305	Gray, RAL 7032	Reel	305 m	8719605017017
7965E.K0A305	Gray, RAL 7032	Reel-in-Box	305 m	8719605017031
7965E.B0305	Gray, RAL 7032	Reel	305 m	8719605229557
7965E.B0A305	Gray, RAL 7032	Reel-in-Box	305 m	8719605229564
7965E.S0305	Gray, RAL 7032	Reel	305 m	8719605229588
7965E.00500	Gray, RAL 7032	Reel	500 m	8719605016867
7965E.K0500	Gray, RAL 7032	Reel	500 m	8719605017024
7965E.001000	Gray, RAL 7032	Reel	1,000 m	8719605016836
7965E.K01000	Gray, RAL 7032	Reel	1,000 m	8719605017000
7965E.03305	Green	Reel	305 m	8719605016966
7965E.K3305	Green	Reel	305 m	8719605017086
7965E.03500	Green	Reel	500 m	8719605016973
7965E.K8A305	Orange	Reel-in-Box	305 m	8719605145215
7965E.K8305	Orange	Reel	305 m	8719605239129
7965E.K7A305	Red	Reel-in-Box	305 m	8719605144980
7965E.06305	White	Reel	305 m	8719605221612
7965E.K4305	Yellow	Reel	305 m	8719605017093

© 2026 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.