



Product: [7997A](#)

Category 5e OSP Cable, 4 Pair, U/UTP, Burial, Gel Filled

Product Description

Category 5e Premise Horizontal Cable (200MHz), OSP Rated, 4 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Gel-Filled, Polyethylene Jacket

Technical Specifications

Product Overview

Suitable Applications:	OSP-Outdoor, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE
------------------------	----------------------------------------------------------------------------------------------------------------------

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
24 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown

Waterblocking:	Gel Filled
----------------	------------

Outer Jacket

Material	Nom. Diameter	Ripcord
PE - Polyethylene	0.226 in (5.74 mm)	Yes

Overall Cable Diameter (Nominal):	0.226 in (5.74 mm)
-----------------------------------	--------------------

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	160 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	65%

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]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]
1	2.0 dB/100m	65.3	62.3	63.3	60.3	63.8	60.8	20.0	100 ± 15	100 ± 15
4	4.1 dB/100m	56.3	53.3	52.2	49.2	51.8	48.8	23.0	100 ± 15	100 ± 15
8	5.8 dB/100m	51.8	48.8	46.0	43.0	45.7	42.7	24.5	100 ± 15	100 ± 15
10	6.5 dB/100m	50.3	47.3	43.8	40.8	43.8	40.8	25.0	100 ± 15	100 ± 15
16	8.2 dB/100m	47.2	44.2	39.0	36.0	39.7	36.7	25.0	100 ± 15	100 ± 15
20	9.3 dB/100m	45.8	42.8	36.5	33.5	37.8	34.8	25.0	100 ± 15	100 ± 15
25	10.4 dB/100m	44.3	41.3	33.9	30.9	35.8	32.8	24.3	100 ± 15	100 ± 15

31.25	11.7 dB/100m	42.9	39.9	31.2	28.2	33.9	30.9	23.6	100 ± 15	100 ± 15
62.5	17.0 dB/100m	38.4	35.4	21.4	18.4	27.9	24.9	21.5	100 ± 15	100 ± 15
100	22.0 dB/100m	35.3	32.3	13.3	10.3	23.8	20.8	20.1	100 ± 15	100 ± 15
155	28.1 dB/100m	32.4	29.4	4.4	1.4	20.0	17.0	18.8		
200	32.4 dB/100m	30.8	27.8	-1.6	-4.6	17.8	14.8	18.0		

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-40°C To +75°C	-40°C To +60°C	-40°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.0 in (25 mm)	2.25 in (57.2 mm)

Max. Pull Tension: 25 lbs (11 kg)

Bulk Cable Weight: 23 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
CPR Compliance:	CPR Euroclass: Fca
ICEA Compliance:	S-116-732, S-56-434, S-99-689, S-100-685
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 100 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Not Suitable for Direct Burial. Belden recommends using an entrance demarcation point when transitioning inside buildings with gel-filled OSP cables due to the cable design containing gel specific for wet outdoor environments. The suggested transition point is the REV/Connect core coupler, part number RVACPKUBK-S1.
--------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

History

Update and Revision:	Revision Number: 0.554 Revision Date: 11-27-2023
----------------------	--------------------------------------------------

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7997A 0101000	Black	Reel	1,000 ft	612825192596	C
7997A 0101000	Black	Reel	1,000 ft	612825192596	C

© 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.