



**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
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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 Skew	Nom. Velocity of Prop.
100 MHz	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, Burial - Engineered burial only
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. Cable not guaranteed to meet TIA 568.2 specification for delay above lengths of 90m. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Fully Water Blocked. Suitable for burial or use in outdoor wet locations. Not recommended for Direct Burial applications without additional crush and impact protection. Additional crush and impact protection would include cable armoring, installation in conduit or installation with over top barriers per Belden Technical Bulletin T/8-6. 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 REVConnect core coupler, part number RVACPKUBK-S1.
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History

Update and Revision:	Revision Number: 0.680 Revision Date: 03-31-2025
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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

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