

7997A Multi-Conductor - Category 5e Outside Plant Cable

For more Information
please call

1-800-Belden1



General Description:

CAT5e (100 MHz), 4 Pair, U/UTP-Unshielded, Outdoor OSP, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Gel-Filled, UV-Resistant LLDPE Jacket

Usage (Overall)

Suitable Applications:

OSP, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 200MHz Category 5e, Outside Plant, Duct

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors:

8

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Outer Jacket Diameter:

Nom. Dia. (mm)
5.740

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Storage Temperature Range: -40°C To +60°C

Installation Temperature Range: -20°C To +60°C

Operating Temperature Range: -40°C To +60°C

Bulk Cable Weight: 38.693 Kg/Km

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Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	58.420 mm
Min. Bend/Installation:	58.420 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	POE per IEEE 802.3af
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	07/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 5e - TIA 568.C.2, ISO/IEC 11801:2011 Amendment 2.2 Class D
ANSI Specification:	ANSI/ICEA S-56-434 Outdoor Use, ANSI/ICEA S-99-689 Broadband Outdoor Use
Other Specification:	REA-200 Approved Jacket Material

Suitability

Suitability - Indoor:	No
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Sunlight Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)	45.934
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Maximum Capacitance Unbalance (pF/100 m):	66
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Nominal Velocity of Propagation:

VP (%)	65
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Max. Delay Skew:

Delay Skew (ns/100 m)	25
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Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)	8.9
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Max. Operating Voltage - UL:

Voltage	300 V RMS
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Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)	3
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Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	65.3	62.3	63.3	60.3	20.000
4	4.100	56.3	53.3	52.3	49.2	23.000
8	5.800	51.8	48.8	46.0	43.0	24.500
10	6.500	50.3	47.3	43.8	40.8	25.000
16	8.200	47.2	44.2	39.0	36.0	25.000
20	9.300	45.8	42.8	36.5	33.5	25.000
25	10.400	44.3	41.3	33.9	30.9	24.300
31.25	11.700	42.9	39.9	31.2	28.2	23.600
62.5	17.000	38.4	35.4	21.4	18.4	21.500
100	22.000	35.3	32.3	13.3	10.3	20.100
155	28.100	32.4	29.4	4.4	1.4	18.800
200	32.400	30.8	27.8			18.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.8	48.8
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.8	34.8
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.9	24.9
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 22	100 ± 15	20.0	17.0
200	100 ± 22	100 ± 15	17.8	14.8

Notes (Overall)

Notes: Verified to ANSI/TIA-568-C.2, Category 5e, -40C Cold bend per UL 1581, Print Includes Descending Footage / Meter Markings, Water Penetration per GR 421-CORE para. 4.3.5.1, and ANSI/ICEA S-107-704 Para. 8.2.1 Data Above 100 MHz For Engineering Information Only.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7997A 0101000	1,000 FT	27.000 LB	BLACK	C	CAT5E 4PR U/UTP OSP REEL

Notes:

C = CRATE REEL PUT-UP.

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