Product: 1594A

Category 5e Indoor/Outdoor Cable, 4 Pair, U/UTP, CMR/CMX

Product Description

Category 5e Premise Horizontal Cable (200MHz), Indoor/Outdoor, 4 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR/CMX Outdoor, UV Resistant PVC Jacket

Technical Specifications

Product Overview

Suitable Applications:	Indoor/Outdoor, Premise Horizontal Cable, Ethernet 1000BASE-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

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.220 in (5.59 mm)	Yes

Overall Cable Diameter (Nominal):	0.220 in (5.59 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	330 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	68%

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	51.7	48.7	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	47.3	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	37.7	34.7	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	27.8	24.8	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	32.5	29.4	4.4	1.4	19.9	16.9	15.8	100 ± 25	100 ± 15
200	32.4 dB/100m	30.8	27.8			17.7	14.7	15.0	100 ± 25	100 ± 15

Voltage

UL Voltage Rating
300 V (CMR), 300 V (CMX-Outdoor)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
90°C	-40°C To +75°C	-25°C To +75°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:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMR, CMX-Outdoor
CEC / C(UL) Compliance:	CMX-Outdoor
ICEA Compliance:	S-90-661, 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
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU CE Mark, 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
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	1585A
Non-Plenum Number:	1583A

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.553 Revision Date: 02-03-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
1594A 008U1000	Gray	UnReel	1,000 ft	612825118756
1594A 1GFU1000	Ivory	UnReel	1,000 ft	612825118770
1594A 009U1000	White	UnReel	1,000 ft	612825118763

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