



Product: <u>1594A</u> ☑

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

AWG	Stranding	Material	Number of Pairs
24	Solid	BC - Bare Copper	4

Insulation

	Material		Color Code			
PC	O - Polyolefin	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown				
Во	onded-Pair:		No			

Outer Jacket Material

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.220 in	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance
93.8 Ohm/km	3%	330 pF/100m	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	68%

High Freq

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)	Max./Min. Fitted Impedance
1 MHz	2.0 dB/100m	65.3 dB	62.3 dB	63.3 dB	60.3 dB	63.8 dB	60.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	52.2 dB	49.2 dB	51.7 dB	48.7 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	46.0 dB	43.0 dB	45.7 dB	42.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43.8 dB	40.8 dB	43.8 dB	40.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
16 MHz	8.2 dB/100m	47.3 dB	44.2 dB	39.0 dB	36.0 dB	39.7 dB	36.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.7 dB	34.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	31.2 dB	28.2 dB	33.9 dB	30.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm
62.5 MHz	17.0 dB/100m	38.4 dB	35.4 dB	21.4 dB	18.4 dB	27.8 dB	24.8 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
100 MHz	22.0 dB/100m	35.3 dB	32.3 dB	13.3 dB	10.3 dB	23.8 dB	20.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm

155 MHz	28.1 dB/100m	32.5 dB	29.4 dB	4.4 dB	1.4 dB	19.9 dB	16.9 dB	15.8 dB	100 ± 25 Ohm	100 ± 15 Ohm
200 MHz	32.4 dB/100m	30.8 dB	27.8 dB			17.7 dB	14.7 dB	15.0 dB	100 ± 25 Ohm	100 ± 15 Ohm

Voltage

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

Mechanical Characteristics

Temperature

UL Rating.	Operating	Installation	Storage	
90°C	-40°C To +75°C	-25°C To +75°C	-40°C To +75°C	

Bend Radius

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Fire Resistance:	UL 1666 Riser, FT4, FT4, IEC 60332-1-2
NEC / UL Compliance:	800, CMR;CMX-Outdoor
CEC / C(UL) Compliance:	CMX-Outdoor
ICEA Compliance:	S-90-661-2012
ICEA Compliance:	S-56-434
ICEA Compliance:	S-99-689
ICEA Compliance:	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
CPR Euroclass:	Eca
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Part Number

Plenum Number:	1585A
Non-Plenum Number:	1583A

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

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: 0.396 Revision Date: 09-30-2020

© 2020 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.