

Product: 1583A

Category 5e Cable, 4 Pair, U/UTP, CMR

Product Description

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

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

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	0.190 in (4.83 mm)	Yes

Overall Cable Diameter (Nominal):	0.190 in (4.83 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	70%

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			17.8	14.8	18.0		

Table Notes:	Third party verified to TIA/EIA-568-B.2, Category 5E

Voltage

UL Voltage Rating
300 V (CMR)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
75°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.0 in (25 mm)	2.0 in (51 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	18 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Riser, Indoor
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
NEC / UL Compliance:	Article 800, CMR
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-90-661
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

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 Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.632 Revision Date: 12-12-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
1583A 006Z1000				612825432197	
1583A 006Z1000				612825432197	
1583A 010Z1000				612825432272	
1583A 010Z1000				612825432272	
1583A 0061100					
1583A 0081003				612825118039	
ND0481 0041000					

1583A 0101000	Black	Reel	1,000 ft	612825317661	C
1583A 0101000	Black	Reel	1,000 ft	612825317661	C
1583A 010U1000	Black	UnReel	1,000 ft	612825118145	
1583A 010U1000	Black	UnReel	1,000 ft	612825118145	
1583A 0061000	Blue	Reel	1,000 ft	612825117940	C
1583A 0061000	Blue	Reel	1,000 ft	612825117940	C
1583A 006U1000	Blue	UnReel	1,000 ft	612825117926	
1583A 006U1000	Blue	UnReel	1,000 ft	612825117926	
1583A 006U1000	Blue	Unreel	1,000 ft		
1583A 0061640	Blue	Reel	1,640 ft	612825117964	
1583A 0061640	Blue	Reel	1,640 ft	612825117964	
1583A 0063000	Blue	Reel	3,000 ft	612825117988	
1583A 0063000	Blue	Reel	3,000 ft	612825117988	
1583A 0081000	Gray	Reel	1,000 ft	612825118022	C
1583A 0081000	Gray	Reel	1,000 ft	612825118022	C
1583A 008U1000	Gray	UnReel	1,000 ft	612825118008	C
1583A 008U1000	Gray	UnReel	1,000 ft	612825118008	C
1583A 0081640	Gray	Reel	1,640 ft	612825118046	C
1583A 0081640	Gray	Reel	1,640 ft	612825118046	C
1583A 0083000	Gray	Reel	3,000 ft	612825118060	C
1583A 0083000	Gray	Reel	3,000 ft	612825118060	C
1583A.00305	Gray, Dark Pearl	Reel	305 m	8719605001900	
1583A.00U305	Gray, Dark Pearl	UnReel	305 m	8719605001917	
1583A 0051000	Green	Reel	1,000 ft	612825117902	C
1583A 0051000	Green	Reel	1,000 ft	612825117902	C
1583A 005U1000	Green	UnReel	1,000 ft	612825317654	
1583A 005U1000	Green	UnReel	1,000 ft	612825317654	
1583A 005U1000	Green	Unreel	1,000 ft		
1583A 008U1000	Grey	Unreel	1,000 ft		
1583A 0031000	Orange	Reel	1,000 ft	612825117834	C
1583A 0031000	Orange	Reel	1,000 ft	612825117834	C
1583A 003U1000	Orange	UnReel	1,000 ft	612825117810	
1583A 003U1000	Orange	UnReel	1,000 ft	612825117810	
1583A 0121000	Pink	Reel	1,000 ft	612825118176	C
1583A 0121000	Pink	Reel	1,000 ft	612825118176	C
1583A 012U1000	Pink	UnReel	1,000 ft	612825118152	
1583A 012U1000	Pink	UnReel	1,000 ft	612825118152	
1583A 0021000	Red	Reel	1,000 ft	612825317647	C
1583A 002U1000	Red	UnReel	1,000 ft	612825117780	
1583A 002U1000	Red	UnReel	1,000 ft	612825117780	
1583A 0021000	Red	Reel	1,000 ft	612825317647	C
1583A 002U1000	Red	Unreel	1,000 ft		
1583A 0091000	White	Reel	1,000 ft	612825118107	C
1583A 0091000	White	Reel	1,000 ft	612825118107	C
1583A 009U1000	White	UnReel	1,000 ft	612825118084	
1583A 009U1000	White	UnReel	1,000 ft	612825118084	
1583A 0093000	White	Reel	3,000 ft	612825118121	C
1583A 0093000	White	Reel	3,000 ft	612825118121	C
1583A 0041000	Yellow	Reel	1,000 ft	612825117872	C
1583A 0041000	Yellow	Reel	1,000 ft	612825117872	C
1583A 004U1000	Yellow	UnReel	1,000 ft	612825117858	
1583A 004U1000	Yellow	UnReel	1,000 ft	612825117858	

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