



Product: [1533R](#)

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

Product Description

Category 5e Premise Horizontal Cable (100MHz), 4 Pair, 24 AWG Solid Bare Copper Conductors, F/UTP - Foil Shielded, 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, Noisy Environments
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents .

Construction Details

Conductor

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

Insulation

Material	Color Code
PO - Polyolefin	White/Blue Stripe & Blue, White/Green Stripe & Green, White/Orange Stripe & Orange, White/Brown Stripe & Brown

Bonded-Pair: No

Outer Shield Material

Type	Material	Coverage	Drainwire Type
Tape	Polyester + Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC

Outer Jacket Material

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.260 in	No

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance	Nom. Velocity of Prop.
93.8 Ohm/km	5.0%	330 pF/100m	15 pF/ft	70%

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	70%

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	51.8 dB	48.8 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	47.2 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	37.8 dB	34.8 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	27.9 dB	24.9 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	32.4 dB	29.4 dB	4.4 dB	1.4 dB	20.0 dB	17.0 dB	18.8 dB		
200 MHz	32.4 dB/100m	30.8 dB	27.8 dB			17.8 dB	14.8 dB	18.0 dB		

Voltage

UL Voltage Rating
300 V (CMR)

Mechanical Characteristics

Temperature

UL Rating	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	2.25 in

Max. Pull Tension:	25 lbs
Bulk Cable Weight:	30 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Riser, Indoor
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
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-90-661-2012
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:	1533P
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Variants

Item #	Color	Putup Type	Length	UPC
1533R 0101000	Black	Reel	1,000 ft	612825117582
1533R 010A1000	Black	Reel-in-Box	1,000 ft	612825117575
1533R 0061000	Blue	Reel	1,000 ft	612825117568
1533R 006A1000	Blue	Reel-in-Box	1,000 ft	612825117551
1533R F2V1000	Gray	Reel	1,000 ft	612825117452
1533R F2VA1000	Gray	Reel-in-Box	1,000 ft	612825117445
1533R F2V1640	Gray	Reel	1,640 ft	612825117469
1533R 0051000	Green	Reel	1,000 ft	612825117544
1533R 005A1000	Green	Reel-in-Box	1,000 ft	612825117537
1533R 0031000	Orange	Reel	1,000 ft	612825117506
1533R 003A1000	Orange	Reel-in-Box	1,000 ft	612825117490
1533R 0021000	Red	Reel	1,000 ft	612825117483
1533R 002A1000	Red	Reel-in-Box	1,000 ft	612825117476
1533R 0041000	Yellow	Reel	1,000 ft	612825117520
1533R 004A1000	Yellow	Reel-in-Box	1,000 ft	612825117513

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. Shield is Bonded to Jacket Inner Wall for Electrical Stability. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision: Revision Number: 0.404 Revision Date: 09-30-2020

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