Belden



Product: AdvanceNet Category 6e CMR

Category 6+ Premium Cable, 4 Pair, U/UTP, CMR

Product Description

Category 6+ Premium Premise Horizontal Cable (400MHz), 4 Pair, 23 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
23 AWG	Solid	BC - Bare Copper

Insulation

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

Outer Jacket

Separator	Material	Nom. Diameter	Ripcord
Center Member (Patented X-Spline®)	PVC - Polyvinyl Chloride	0.231 in (5.87 mm)	Yes

Overall Cable Diameter (Nominal):	0.231 in (5.87 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
77 Ohm/km (23 Ohm/1000ft)	330 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.	Typical Delay Skew
100 MHz	537.6 ns/100m	35 ns/100m	70%	35 ns/100m

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	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]
1	2.0	84.3	82.3	80.3	80.3	76.8	73.8	20.0	100 ± 15
4	3.7	75.3	73.3	69.5	69.5	64.8	61.8	23.6	100 ± 15
8	5.3	70.8	68.8	63.5	63.5	58.7	55.7	25.3	100 ± 15
10	5.9	69.3	67.3	61.4	61.4	56.8	53.8	26.0	100 ± 15
16	7.4	66.2	64.2	56.8	56.8	52.7	49.7	26.0	100 ± 15
20	8.3	64.8	62.8	54.4	54.4	50.8	47.8	26.0	100 ± 15
25	9.4	63.3	61.3	52.0	52.0	48.8	45.8	25.5	100 ± 15
31.25	10.5	61.9	59.9	49.4	49.4	46.9	43.9	25.0	100 ± 15
62.5	15.1	57.4	55.4	40.3	40.3	40.9	37.9	23.5	100 ± 15
100	19.3	54.3	52.3	33.0	33.0	36.8	33.8	22.5	100 ± 15

155	24.5	51.4	49.4	24.9	24.9	33.0	30.0	21.6	100 ± 22
200	28.2	49.8	47.8	19.6	19.6	30.8	27.8	21.0	100 ± 22
250	31.8	48.3	46.3	14.5	14.5	28.8	25.8	20.5	100 ± 32
300	35.2	47.1	45.1	9.9	9.9	27.3	24.3	20.1	100 ± 32
350	38.4	46.1	44.1	5.7	5.7	25.9	22.9	19.8	100 ± 32
400	41.5	45.3	43.3	1.8	1.8	24.8	21.8	19.5	100 ± 32
450	44.3	44.5	42.5			23.7	20.7	19.2	100 ± 32
500	47.1	43.8	41.8			22.8	19.8	19.0	100 ± 32
550	49.7	43.2	41.2			22.0	19.0	18.8	100 ± 32
600	52.3	42.6	40.6			21.2	18.2	18.7	100 ± 32
650	54.8	42.1	40.1			20.5	17.5	18.5	100 ± 32

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)	2.5 in (64 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	25 lbs/1000ft (37 kg/km)

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; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMR
CEC / C(UL) Compliance:	CMR.
ICEA Compliance:	S-116-732
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
Third Party Performance Verification:	Category 6
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
CENELEC Compliance:	Segregation class according EN50174-2 = a
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)

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 400 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.7 Revision Date: 07-28-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
M57209B	Black	Box	1,000 ft	

M57202B	Blue, Light	Box	1,000 ft	799936110319
M57205B	Gray	Box	1,000 ft	799936111477
M57206B	Green, Dark	Box	1,000 ft	
M57208B	Orange	Box	1,000 ft	
M57207B	Red	Box	1,000 ft	
M57210B	Violet	Box	1,000 ft	
M56889B	White	Box	1,000 ft	799936111453
M57204B	Yellow	Box	1,000 ft	799936110326

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