Belden



Product: 2412

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

Product Description

Category 6+ Enhanced Premise Horizontal Cable (350MHz), 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	No. of Pairs
23 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

Separator	Material	Nom. Diameter	Ripcord
Dielectric Tape (Patented)	PVC - Polyvinyl Chloride	0.224 in (5.69 mm)	Yes

Overall Cable Diameter (Nominal):	0.224 in (5.69 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
78 Ohm/km (24 Ohm/1000ft)	330 pF/100m

Delay

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

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]	Max./Min. Fitted Impedance [Ohm]
1	2.0	79.3	77.3	77.3	75.3	70.8	67.8	20.0	100 ± 15	102 ± 15
4	3.7	70.3	68.3	66.5	64.5	58.8	55.8	23.6	100 ± 15	100 ± 15
8	5.3	65.8	63.8	60.5	58.5	52.7	49.7	25.3	100 ± 15	100 ± 15
10	5.9	64.3	62.3	58.4	56.4	50.8	47.8	26.0	100 ± 15	100 ± 15
16	7.4	61.2	59.2	53.8	51.8	46.7	43.7	26.0	100 ± 15	100 ± 15
20	8.3	59.8	57.8	51.4	49.4	44.8	41.8	26.0	100 ± 15	100 ± 15
25	9.4	58.3	56.3	49.0	47.0	42.8	39.8	25.5	100 ± 15	100 ± 15
31.25	10.5	56.9	54.9	46.4	44.4	40.9	37.9	25.0	100 ± 15	100 ± 15
62.5	15.1	52.4	50.4	37.3	35.3	34.9	31.9	23.5	100 ± 15	100 ± 15

100	19.3	49.3	47.3	30.0	28.0	30.8	27.8	22.5	100 ± 15	100 ± 15
155	24.5	46.4	44.4	21.9	19.9	27.0	24.0	21.6	100 ± 22	100 ± 15
200	28.3	44.8	42.8	16.6	14.6	24.8	21.8	21.0	100 ± 22	100 ± 15
250	31.8	43.3	41.3	11.5	9.5	22.8	19.8	20.5	100 ± 32	100 ± 15
300	35.2	42.1	40.1	6.9	4.9	21.3	18.3	20.1	100 ± 32	100 ± 15
350	38.4	41.1	39.1	2.7	0.7	19.9	16.9	19.8	100 ± 32	100 ± 15
400	41.5	40.3	38.3			18.8	15.8	19.5	100 ± 32	100 ± 15
450	44.3	39.5	37.5			17.7	14.7	19.2	100 ± 32	100 ± 15
500	47.1	38.8	36.8			16.8	13.8	19.0	100 ± 32	100 ± 15
550	49.7	38.2	36.2			16.0	13.0	18.8	100 ± 32	100 ± 15

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)	2.25 in (57.2 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	22 lbs/1000ft (33 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
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:	2413

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 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: 0.790 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
2412 0101000	Black	Reel	1,000 ft	612825061199	
2412 010A1000	Black	Reel-in-Box	1,000 ft	612825061205	

2412 010U1000	Black	UnReel	1,000 ft	612825062165	
2412 0061000	Blue	Reel	1,000 ft	612825061045	
2412 006A1000	Blue	Reel-in-Box	1,000 ft	612825061052	
2412 006U1000	Blue	UnReel	1,000 ft	612825061236	
2412 0062500	Blue	Reel	2,500 ft	612825061069	
2412 0065000	Blue	Reel	5,000 ft	612825062134	C
2412 0081000	Gray	Reel	1,000 ft	612825061168	
2412 008A1000	Gray	Reel-in-Box	1,000 ft	612825061175	
2412 008U1000	Gray	UnReel	1,000 ft	612825061243	
2412 0051000	Green	Reel	1,000 ft	612825061083	
2412 005A1000	Green	Reel-in-Box	1,000 ft	612825061090	
2412 005U1000	Green	UnReel	1,000 ft	612825062127	
2412 003A1000	Orange	Reel-in-Box	1,000 ft	612825061212	
2412 003U1000	Orange	UnReel	1,000 ft	612825062103	
2412 007A1000	Purple	Reel-in-Box	1,000 ft	612825061182	
2412 007U1000	Purple	UnReel	1,000 ft	612825062141	
2412 002A1000	Red	Reel-in-Box	1,000 ft	612825061229	C
2412 0091000	White	Reel	1,000 ft	612825061106	
2412 009A1000	White	Reel-in-Box	1,000 ft	612825061113	
2412 009U1000	White	UnReel	1,000 ft	612825061250	
2412 0092500	White	Reel	2,500 ft	612825061120	
2412 0041000	Yellow	Reel	1,000 ft	612825061137	
2412 004A1000	Yellow	Reel-in-Box	1,000 ft	612825061151	
2412 004U1000	Yellow	UnReel	1,000 ft	612825062110	

Footnote:	C - CRATE REEL PUT-UP.

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