Product: 3612

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/resources/patents.

Construction Details

Conductor

AWG	Stranding	Material	Number of Pairs
23	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

Bonded-Pair:	No

Outer Jacket Material

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

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance
77 Ohm/km	3%	330 pF/100m	15.5 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]	Typical Delay Skew
100 MHz	537.6 ns/100m	35 ns/100m	70%	35 ns/100m

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

100 MHz	19.3 dB/100m	54.3 dB	52.3 dB	33.0 dB	33.0 dB	36.8 dB	33.8 dB	22.5 dB	100 ± 15
155 MHz	24.5 dB/100m	51.4 dB	49.4 dB	24.9 dB	24.9 dB	33.0 dB	30.0 dB	21.6 dB	100 ± 22
200 MHz	28.2 dB/100m	49.8 dB	47.8 dB	19.6 dB	19.6 dB	30.8 dB	27.8 dB	21.0 dB	100 ± 22
250 MHz	31.8 dB/100m	48.3 dB	46.3 dB	14.5 dB	14.5 dB	28.8 dB	25.8 dB	20.5 dB	100 ± 32
300 MHz	35.2 dB/100m	47.1 dB	45.1 dB	9.9 dB	9.9 dB	27.3 dB	24.3 dB	20.1 dB	100 ± 32
350 MHz	38.4 dB/100m	46.1 dB	44.1 dB	5.7 dB	5.7 dB	25.9 dB	22.9 dB	19.8 dB	100 ± 32
400 MHz	41.5 dB/100m	45.3 dB	43.3 dB	1.8 dB	1.8 dB	24.8 dB	21.8 dB	19.5 dB	100 ± 32
450 MHz	44.3 dB/100m	44.5 dB	42.5 dB			23.7 dB	20.7 dB	19.2 dB	100 ± 32
500 MHz	47.1 dB/100m	43.8 dB	41.8 dB			22.8 dB	19.8 dB	19.0 dB	100 ± 32
550 MHz	49.7 dB/100m	43.2 dB	41.2 dB			22.0 dB	19.0 dB	18.8 dB	100 ± 32
600 MHz	52.3 dB/100m	42.6 dB	40.6 dB			21.2 dB	18.2 dB	18.7 dB	100 ± 32
650 MHz	54.8 dB/100m	42.1 dB	40.1 dB			20.5 dB	17.5 dB	18.5 dB	100 ± 32

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	2.5 in

Max. Pull Tension:	25 lbs
Bulk Cable Weight:	25 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:	Article 800, CMR
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-116-732-2013
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
Cenelec Compliance:	Segregation class according EN50174-2=a
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:	3613

Variants

Item #	Color	Putup Type	Length	UPC
3612 0101000	Black	Reel	1,000 ft	612825145707
3612 010A1000	Black	Reel-in-Box	1,000 ft	612825145684
3612 010U1000	Black	UnReel	1,000 ft	612825145691
3612 0061000	Blue	Reel	1,000 ft	612825145585
3612 006A1000	Blue	Reel-in-Box	1,000 ft	612825145561
3612 006U1000	Blue	UnReel	1,000 ft	612825145578
3612 0062500	Blue	Reel	2,500 ft	612825145592
3612 0081000	Gray	Reel	1,000 ft	612825145639
3612 008A1000	Gray	Reel-in-Box	1,000 ft	612825335061

3612 008U1000	Gray	UnReel	1,000 ft	612825145622
3612 0051000	Green	Reel	1,000 ft	612825145554
3612 005A1000	Green	Reel-in-Box	1,000 ft	612825145530
3612 005U1000	Green	UnReel	1,000 ft	612825145547
3612 003A1000	Orange	Reel-in-Box	1,000 ft	612825145479
3612 003U1000	Orange	UnReel	1,000 ft	612825145486
3612 007A1000	Purple	Reel-in-Box	1,000 ft	612825145608
3612 007U1000	Purple	UnReel	1,000 ft	612825145615
3612 0091000	White	Reel	1,000 ft	612825145660
3612 009A1000	White	Reel-in-Box	1,000 ft	612825145646
3612 009U1000	White	UnReel	1,000 ft	612825145653
3612 0092500	White	Reel	2,500 ft	612825145677
3612 0041000	Yellow	Reel	1,000 ft	612825145516
3612 004A1000	Yellow	Reel-in-Box	1,000 ft	612825145493
3612 004U1000	Yellow	UnReel	1,000 ft	612825145509
3612 0042500	Yellow	Reel	2,500 ft	612825145523

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: 0.433 Revision Date: 02-16-2021