



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

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

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)
Plenum Number:	3613

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: 0.548 Revision Date: 04-29-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
3612 0101000	Black	Reel	1,000 ft	612825145707	C
3612 010A1000	Black	Reel-in-Box	1,000 ft	612825145684	C
3612 010U1000	Black	UnReel	1,000 ft	612825145691	
3612 0061000	Blue	Reel	1,000 ft	612825145585	C
3612 006A1000	Blue	Reel-in-Box	1,000 ft	612825145561	C
3612 006U1000	Blue	UnReel	1,000 ft	612825145578	
3612 0062500	Blue	Reel	2,500 ft	612825145592	
3612 0081000	Gray	Reel	1,000 ft	612825145639	C
3612 008A1000	Gray	Reel-in-Box	1,000 ft	612825335061	C
3612 008U1000	Gray	UnReel	1,000 ft	612825145622	
3612 0051000	Green	Reel	1,000 ft	612825145554	C
3612 005A1000	Green	Reel-in-Box	1,000 ft	612825145530	C
3612 005U1000	Green	UnReel	1,000 ft	612825145547	
3612 003A1000	Orange	Reel-in-Box	1,000 ft	612825145479	C
3612 003U1000	Orange	UnReel	1,000 ft	612825145486	
3612 007A1000	Purple	Reel-in-Box	1,000 ft	612825145608	C
3612 007U1000	Purple	UnReel	1,000 ft	612825145615	
3612 0091000	White	Reel	1,000 ft	612825145660	C
3612 009A1000	White	Reel-in-Box	1,000 ft	612825145646	C
3612 009U1000	White	UnReel	1,000 ft	612825145653	
3612 0092500	White	Reel	2,500 ft	612825145677	
3612 0041000	Yellow	Reel	1,000 ft	612825145516	C
3612 004A1000	Yellow	Reel-in-Box	1,000 ft	612825145493	C
3612 004U1000	Yellow	UnReel	1,000 ft	612825145509	
3612 0042500	Yellow	Reel	2,500 ft	612825145523	

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.