BELDEN

Product: 3613 ⧉

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

Product Description

Category 6+ Premium Premise Horizontal Cable (400MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, Flamarrest® PVC-LS 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	Number of Pairs
23 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO+FEP - Polyolefin + Fluorinated Ethylene Propylene	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown

Outer Jacket

Separator	Material	Material Trade Name	Nom. Diameter	Ripcord
Center Member (Patented X-Spline®)	PVC - Polyvinyl Chloride	Flamarrest®	0.238 in (6.05 mm)	Yes

Overall Cable Diameter (Nominal):	0.238 in (6.05 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 (CMP), 300 V (CL3P)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
90°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:	28 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800
CEC / C(UL) Compliance:	CMP
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)
Non-Plenum Number:	3612

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: 0.552 Revision Date: 01-20-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
3613 0101000	Black	Reel	1,000 ft	612825145967
3613 010A1000	Black	Reel-in-Box	1,000 ft	612825145943
3613 010U1000	Black	UnReel	1,000 ft	612825145950
3613 0102500	Black	Reel	2,500 ft	612825145974
3613 D151000	Blue	Reel	1,000 ft	612825145714
3613 D15A1000	Blue	Reel-in-Box	1,000 ft	612825335078
3613 D15U1000	Blue	UnReel	1,000 ft	612825335085
3613 D152500	Blue	Reel	2,500 ft	612825145721
3613 0081000	Gray	Reel	1,000 ft	612825145899
3613 008A1000	Gray	Reel-in-Box	1,000 ft	612825145875
3613 008U1000	Gray	UnReel	1,000 ft	612825145882
3613 0051000	Green	Reel	1,000 ft	612825145837
3613 005A1000	Green	Reel-in-Box	1,000 ft	612825145813
3613 005U1000	Green	UnReel	1,000 ft	612825145820
3613 0052500	Green	Reel	2,500 ft	612825145844
3613 0031000	Orange	Reel	1,000 ft	612825145769
3613 003A1000	Orange	Reel-in-Box	1,000 ft	612825145745
3613 003U1000	Orange	UnReel	1,000 ft	612825145752
3613 012A1000	Pink	Reel-in-Box	1,000 ft	612825145981
3613 007A1000	Purple	Reel-in-Box	1,000 ft	612825145851
3613 007U1000	Purple	UnReel	1,000 ft	612825145868
3613 002A1000	Red	Reel-in-Box	1,000 ft	612825145738
3613 0091000	White	Reel	1,000 ft	612825145929
3613 009A1000	White	Reel-in-Box	1,000 ft	612825145905
3613 009U1000	White	UnReel	1,000 ft	612825145912
3613 0092500	White	Reel	2,500 ft	612825145936
3613 0041000	Yellow	Reel	1,000 ft	612825145790
3613 004A1000	Yellow	Reel-in-Box	1,000 ft	612825145776
3613 004U1000	Yellow	UnReel	1,000 ft	612825145783
3613 0042500	Yellow	Reel	2,500 ft	612825145806