Belden

Product: 10GX32

10GX Category 6A Enhanced Cable, 4 Bonded-Pairs, U/UTP, CMR

Product Description

10GX Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet up to 10GBASE-T, HDBaseT, 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

Bonded-Pair:	Yes

Outer Jacket

Separator	Material	Nom. Diameter	Ripcord
Double H Cross-Web (Patented RoundFlex®)	PVC - Polyvinyl Chloride	0.295 in (7.49 mm)	Yes

Overall Cable Diameter (Nominal):	0.295 in (7.49 mm)

Electrical Characteristics

Electricals

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

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	30 ns/100m	64%

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]	Max./Min. Fitted Impedance [Ohm]	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	75.3	73.3	73.2	71.2	70.8	68.8	20.0	100 ± 15	100 ± 15	67.0	67.0	48.0	43.0
4	3.8 dB/100m	66.3	64.3	62.5	60.5	58.8	56.8	23.0	100 ± 15	100 ± 10.4	67.0	67.0	48.0	41.0
8	5.3 dB/100m	61.8	59.8	56.4	54.4	52.7	50.7	24.5	100 ± 15	100 ± 8	67.0	61.1	48.0	24.9
10	5.9 dB/100m	60.3	58.3	54.4	52.4	50.8	48.8	25.0	100 ± 15	100 ± 7.3	67.0	59.2	48.0	23.0
16	7.5 dB/100m	57.2	55.2	49.8	47.8	46.7	44.7	25.0	100 ± 15	100 ± 5	67.0	55.1	46.0	18.9
20	8.4 dB/100m	55.8	53.8	47.4	45.4	44.8	42.8	25.0	100 ± 15	100 ± 5	67.0	53.2	45.0	17.0
25	9.4 dB/100m	54.3	52.3	45.0	43.0	42.8	40.8	25.0	100 ± 15	100 ± 5	67.0	51.2	44.0	15.0

31.25	10.5 dB/100m	52.9	50.9	42.4	40.4	40.9	38.9	25.0	100 ± 15	100 ± 5	67.0	49.3	43.1	
62.5	15.0 dB/100m	48.4	46.4	33.4	31.4	34.9	32.9	25.0	100 ± 15	100 ± 5	66.6	43.3	40.0	
100	19.1 dB/100m	45.3	43.3	26.2	24.2	30.8	28.8	25.0	100 ± 15	100 ± 5	63.5	39.2	38.0	
200	27.6 dB/100m	40.8	38.8	13.2	11.2	24.8	22.8	21.0	100 ± 22	100 ± 5	59.0	33.2	35.0	
250	31.1 dB/100m	39.3	37.3	8.3	6.3	22.8	20.8	20.5	100 ± 32	100 ± 5	57.5	31.2	34.0	
300	34.3 dB/100m	38.1	36.1	3.9	1.9	21.3	19.3	20.1	100 ± 32	100 ± 5	56.3	29.7	33.2	
350	37.2 dB/100m	37.1	35.1			19.9	17.9	19.8	100 ± 32	100 ± 5	55.3	28.3	32.6	
400	40.1 dB/100m	36.3	34.3			18.8	16.8	19.5	100 ± 32	100 ± 5	54.5	27.2	32.0	
450	42.7 dB/100m	35.5	33.5			17.7	15.7	18.9	100 ± 32	100 ± 5	53.7	26.1	31.5	
500	45.3 dB/100m	34.8	32.8			16.8	14.8	18.4	100 ± 32	100 ± 5	53.0	25.2	31.0	
550	47.7 dB/100m	34.2	32.2			16.0	14.0	18.0	100 ± 32	100 ± 5	52.4	24.4		
600	50.1 dB/100m	33.6	31.6			15.2	13.2	17.6	100 ± 32	100 ± 5	51.8	23.6		
625	51.2 dB/100m	33.4	31.4			14.9	12.9	17.4	100 ± 32	100 ± 5	51.6	23.3		
750	56.7 dB/100m	32.2	30.2			13.3	11.3	16.5			50.4	21.7		
860	61.2 dB/100m	31.3	29.3			12.1	10.1	15.8			49.5	20.5		

Voltage

UL Voltage Rating
300 V (CMR), 300 V (CL3R)

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.
0.6 in (15 mm)	3.0 in (76 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	40 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
NEC / UL Compliance:	Article 800, CMR, CMR-LP (0.5A), CL3R-LP (0.5A)
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 6A
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6A
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:	10GX33

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 625 MHz are for Engineering Information Only. 0.295" Cable Dimension per TIA 6@1 Equivalent Diameter. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.530 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
10GX32 0061000	Blue	Reel	1,000 ft	612825102304	
10GX32 0081000	Gray	Reel	1,000 ft	612825102311	C
10GX32 0091000	White	Reel	1,000 ft	612825102328	C
10GX32 0041000	Yellow	Reel	1,000 ft	612825102298	C

Footnote:	C - CRATE REEL PUT-UP.