



Product: [10GX24](#)

10GX Category 6A Enhanced Cable, 4 Pair, U/UTP, LSZH

**Product Description**  
10GX Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Haloarrest® LSZH 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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

**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	Material Trade Name	Nom. Diameter	Ripcord
Double H Cross-Web (Patented RoundFlex®)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	Haloarrest®	0.311 in (7.90 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)	90 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	64%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. PSACR [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	73.3	71.2	68.8	20.0	100 ± 15	100 ± 15	67.0	67.0	40.0	35.0
4	3.8 dB/100m	64.3	60.5	56.8	23.0	100 ± 15	100 ± 10	67.0	67.0	40.0	23.0
8	5.3 dB/100m	59.8	54.4	50.7	24.5	100 ± 15	100 ± 10	67.0	61.1	40.0	16.9
10	5.9 dB/100m	58.3	52.4	48.8	25.0	100 ± 15	100 ± 10	67.0	59.2	40.0	15.0
16	7.5 dB/100m	55.2	47.8	44.7	25.0	100 ± 15	100 ± 10	67.0	55.1	40.0	10.9
20	8.4 dB/100m	53.8	45.4	42.8	25.0	100 ± 15	100 ± 10	67.0	53.2	38.0	9.0
25	9.4 dB/100m	52.3	43.0	40.8	24.3	100 ± 15	100 ± 10	67.0	51.2	36.0	7.0
31.25	10.5 dB/100m	50.9	40.4	38.9	23.6	100 ± 15	100 ± 10	67.0	49.3	35.1	

62.5	15.0 dB/100m	46.4	31.4	32.9	21.5	100 ± 15	100 ± 10	66.6	43.3	32.0	
100	19.1 dB/100m	43.3	24.2	28.8	20.1	100 ± 15	100 ± 10	63.5	39.2	30.0	
200	27.6 dB/100m	38.8	11.2	22.8	18.0	100 ± 22	100 ± 10	59.0	33.2	27.0	
250	31.1 dB/100m	37.3	6.3	20.8	17.3	100 ± 32	100 ± 10	57.5	31.2	26.0	
300	34.3 dB/100m	36.1	1.9	19.3	16.8	100 ± 32	100 ± 10	56.3	29.7	25.2	
350	37.2 dB/100m	35.1		17.9	16.3	100 ± 32	100 ± 10	55.3	28.3	24.6	
400	40.1 dB/100m	34.3		16.8	15.9	100 ± 32	100 ± 10	54.5	27.2	24.0	
450	42.7 dB/100m	33.5		15.7	15.5	100 ± 32	100 ± 10	53.7	26.1	23.5	
500	45.3 dB/100m	32.8		14.8	15.2	100 ± 32	100 ± 10	53.0	25.2	23.0	
550	47.7 dB/100m	32.2		14.0	14.9	100 ± 32	100 ± 10	52.4	24.4		
600	50.1 dB/100m	31.6		13.2	14.7	100 ± 32	100 ± 10	51.8	23.6		
625	51.2 dB/100m	31.4		12.9	14.5	100 ± 32	100 ± 10	51.6	23.3		
750	56.7 dB/100m	30.2		11.3	14.0			50.4	21.7		
860	61.2 dB/100m	29.3		10.1	13.6			49.5	20.5		

Voltage

UL Voltage Rating	Voltage Rating
300 V RMS	300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-20°C To +75°C	0°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.25 in (31.8 mm)	3.0 in (76 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	34 lbs/1000ft

Standards and Compliance

Environmental Suitability:	LSZH, Indoor, Non-Halogenated
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
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 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:	10GX13
Non-Plenum Number:	10GX12

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.
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History

Update and Revision:	Revision Number: 0.609 Revision Date: 03-04-2023
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
10GX24.10305	Black	Reel	305 m	8719605000224
10GX24.06305	Blue	Reel	305 m	8719605000156
10GX24 0061000	Blue	Reel	1,000 ft	612825061854
10GX24.08305	Gray	Reel	305 m	8719605000194
10GX24.08500	Gray	Reel	500 m	8719605125149
10GX24.07305	Purple	Reel	305 m	8719605000170
10GX24.07500	Purple	Reel	500 m	8719605000187
10GX24 0071000	Purple	Reel	1,000 ft	612825061830
10GX24.071000	Purple	Reel	1,000 m	8719605000163
10GX24.09305	White	Reel	305 m	8719605000200
10GX24.09500	White	Reel	500 m	8719605000217
10GX24 0091000	White	Reel	1,000 ft	612825061847
10GX24.04305	Yellow	Reel	305 m	8719605000149
10GX24 0041000	Yellow	Reel	1,000 ft	612825061861
10GX24.041525	Yellow	Reel	1,525 m	8719605173232

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