

Product: 10GX63F

10GX Category 6A Enhanced Cable, 4 Bonded-Pairs, F/UTP, CMP

Product Description

10GX Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, F/UTP - Foil Shielded, Plenum-CMP, Flamarrest® PVC-LS Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet up to 10GBASE-T, Wi-Fi 6, Wi-Fi 5, Surveillance, HDBaseT, PoE++, PoE+, PoE, Noisy Environments
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
FEP - Fluorinated Ethylene Propylene	White & Blue, White & Orange, White & Green, White & Brown

Bonded-Pair:	Yes

Inner Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.26 in (6.6 mm)	Yes

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	26 AWG (7x34) TC

Outer Jacket

Separator	Material	Material Trade Name	Nom. Diameter	Ripcord
Center Member (Patented X-Spline®)	PVC - Polyvinyl Chloride	Flamarrest®	0.310 in (7.87 mm)	Yes

Overall Cable Diameter (Nominal):	0.310 in (7.87 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
82 Ohm/km (25 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. 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	73.3	71.2	70.8	68.8	20.0	100 ± 15	105 ± 10	77.0	77.0	40.0	35.0
4	3.8 dB/100m	64.3	60.5	58.8	56.8	23.0	100 ± 15	100 ± 15	77.0	76.2	40.0	23.0
8	5.3 dB/100m	59.8	54.4	52.7	50.7	24.5	100 ± 15	100 ± 15	77.0	70.1	40.0	16.9
10	5.9 dB/100m	58.3	52.4	50.8	48.8	25.0	100 ± 15	100 ± 15	77.0	68.2	40.0	15.0
16	7.5 dB/100m	55.2	47.8	46.7	44.7	25.0	100 ± 15	100 ± 15	77.0	64.1	38.0	10.9
20	8.4 dB/100m	53.8	45.4	44.8	42.8	25.0	100 ± 15	100 ± 15	77.0	62.2	37.0	9.0
25	9.4 dB/100m	52.3	43.0	42.8	40.8	25.0	100 ± 15	100 ± 15	77.0	60.2	36.0	7.0
31.25	10.5 dB/100m	50.9	40.4	40.9	38.9	25.0	100 ± 15	100 ± 10	77.0	58.3	35.1	
62.5	15.0 dB/100m	46.4	31.4	34.9	32.9	25.0	100 ± 15	100 ± 10	77.0	52.3	32.0	
100	19.1 dB/100m	43.3	24.2	30.8	28.8	25.0	100 ± 15	100 ± 10	72.5	48.2	30.0	
200	27.6 dB/100m	38.8	11.2	24.8	22.8	18.0	100 ± 22	100 ± 10	68.5	42.2	27.0	
250	31.1 dB/100m	37.3	6.3	22.8	20.8	17.3	100 ± 32	100 ± 10	66.5	40.2	26.0	
300	34.3 dB/100m	36.1	1.9	21.3	19.3	16.8	100 ± 32	100 ± 10	65.3	38.7	25.2	
350	37.2 dB/100m	35.1	-2.1	19.9	17.9	16.3	100 ± 32	100 ± 10	64.3	37.3	24.6	
400	40.1 dB/100m	34.3		18.8	16.8	15.9	100 ± 32	100 ± 10	63.5	36.2	24.0	
450	42.7 dB/100m	33.5		17.7	15.7	15.5	100 ± 32	100 ± 10	62.7	35.1	23.5	
500	45.3 dB/100m	32.8		16.8	14.8	15.2	100 ± 32	100 ± 10	62.0	34.2	23.0	
550	47.7 dB/100m	32.2		14.9	14.0	14.9	100 ± 32	100 ± 10	62.4	34.4		
600	50.1 dB/100m	31.6			13.2	14.7	100 ± 32	100 ± 10	61.8	33.6		
625	51.2 dB/100m	31.4			12.9	14.5	100 ± 32	100 ± 10	61.6	33.3		
750	56.7 dB/100m	30.2			11.3	14.0	100 ± 32	100 ± 10	60.4	31.7		
860	61.2 dB/100m	29.3			10.1	13.6	100 ± 32	100 ± 10	59.5	30.5		

Voltage

UL Voltage Rating
300 V (CMP)

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.
1.2 in (30 mm)	3.0 in (76 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	48 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, CMP
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 6A
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
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:	10GX62F

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. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.553 Revision Date: 04-29-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
10GX63F 0101000	Black	Reel	1,000 ft	612825102526	
10GX63F D151000	Blue	Reel	1,000 ft	612825102472	
10GX63F 0081000	Gray	Reel	1,000 ft	612825102502	C
10GX63F 0021000	Red	Reel	1,000 ft	612825102489	
10GX63F 0091000	White	Reel	1,000 ft	612825102519	
10GX63F 0041000	Yellow	Reel	1,000 ft	612825102496	

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