10GX12

Part Number: 10GX12

Enhanced Category 6A Nonbonded-Pair Cable

Product Description

CAT6A (625MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented Double-H spline, Ripcord, PVC Jacket

Product Specifications

Application

Suitable Applications:	Premise Horizontal Cable, 10 Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, PoE

Conductor

Total Number of Conductors:	8

Technical Specifications

APAC Standard

MII Order #39 (China RoHS):	Yes

Applicable Patents

Country:	US
Patent:	8030571

Bend Radius

Min Bend Radius/Minor Axis:	1.2 in
Min Bend Radius/Installation:	3 in

CCB-Part Number

Notes:	Jacket sequentially printed every 2 ft/1m. 0.295" cable dimension per TIA 6@1 equivalent diameter. Third party channel verified to TIA/EIA-568-C.2, Category 6a.

CCB-Sub-Part Number

Plenum (Y/N):	No
Plenum Number:	10GX13

Contact Information

PHONE_NUM:	1-800-Belden1

EMEA Standard

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

Environmental Characteristics

Operating Temp Range:	-20°C To +60°C
Storage Temp Range:	-20°C To +75 °C
Installation Temp Range:	+5°C To +50 °C

EU Directive

EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

Global Standard

Telecommunications Standards:	ANSI/TIA/EIA 568 C.2 Category 6A
ISO/IEC Compliance:	11801 ed 2.1 (2008) Class EA

North American Standard

CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMR
NEC/(UL) Specification:	CMR

Safety

IEEE Flammability:	1202 Vertical Tray Flame Test
UL Flammability:	UL1666 Riser
C(UL) Flammability:	FT4
CSA Flammability:	FT4

Use

Suitability - Outdoor:	No
Max Recommended Pulling Tension:	40 lbs

Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance
7.4 Ohm/100m	3 %

Color Chart 1:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Delay:

Max. Delay Description	Max. Delay Skew	Nominal Velocity of Propagation (VP)	Typical Delay Skew
537 @ 100MHz	45 ns/100m	64 ns/100m	35 ns/100m

Voltage:

UL Voltage Rating
300V RMS

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT	Min. PSACR	Min. PSACRF (PSELFEXT)	Min. RL (Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. PSANEXT	Min. PSAACRF	Min. TCL	Min. ELTCTL
1 MHz	2.1 db/100m	73.3 dB	71.2 dB	68.8 dB	20 dB	100 ± 15 Ohm	100 ± 15 Ohm	67 dB	67 dB	40 dB	35 dB

4 MHz	3.8 db/100m	64.3 dB	60.5 dB	56.8 dB	23 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	67 dB	40 dB	23 dB
8 MHz	5.3 db/100m	59.8 dB	54.4 dB	50.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	61.1 dB	40 dB	16.9 dB
10 MHz	5.9 db/100m	58.3 dB	52.4 dB	48.8 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	59.2 dB	40 dB	15 dB
16 MHz	7.5 db/100m	55.2 dB	47.8 dB	44.7 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	55.1 dB	40 dB	10.9 dB
20 MHz	8.4 db/100m	53.8 dB	45.4 dB	42.8 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	53.2 dB	38 dB	9 dB
25 MHz	9.4 db/100m	52.3 dB	43 dB	40.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	51.2 dB	36 dB	7 dB
31.25 MHz	10.5 db/100m	50.9 dB	40.4 dB	38.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	49.3 dB	35.1 dB	
62.5 MHz	15 db/100m	46.4 dB	31.4 dB	32.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	66.6 dB	43.3 dB	32 dB	
100 MHz	19.1 db/100m	43.3 dB	24.2 dB	28.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 10 Ohm	63.5 dB	39.2 dB	30 dB	
200 MHz	27.6 db/100m	38.8 dB	11.2 dB	22.8 dB	18 dB	100 ± 22 Ohm	100 ± 10 Ohm	59 dB	33.2 dB	27 dB	
250 MHz	31.1 db/100m	37.3 dB	6.3 dB	20.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	57.5 dB	31.2 dB	26 dB	
300 MHz	34.3 db/100m	36.1 dB	1.9 dB	19.3 dB	16.8 dB	100 ± 32 Ohm	100 ± 10 Ohm	56.3 dB	29.7 dB	25.2 dB	
350 MHz	37.2 db/100m	35.1 dB		17.9 dB	16.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	55.3 dB	28.3 dB	24.6 dB	
400 MHz	40.1 db/100m	34.3 dB		16.8 dB	15.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	54.5 dB	27.2 dB	24 dB	
450 MHz	42.7 db/100m	35.5 dB		15.7 dB	15.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	53.7 dB	26.1 dB	23.5 dB	
500 MHz	45.3 db/100m	32.8 dB		14.8 dB	15.2 dB	100 ± 32 Ohm	100 ± 10 Ohm	53 dB	25.2 dB	23 dB	
550 MHz	47.7 db/100m	32.2 dB		14 dB	14.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	52.4 dB	24.4 dB		
600 MHz	50.1 db/100m	31.6 dB		13.2 dB	14.7 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.8 dB	23.6 dB		
625 MHz	51.2 db/100m	31.4 dB		12.9 dB	14.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.6 dB	23.3 dB		

750 MHz	56.7 db/100m	30.2 dB		11.3 dB	14 dB			50.4 dB	21.7 dB		
860 MHz	61.2 db/100m	29.3 dB		10.1 dB	13.6 dB			49.5 dB	20.5 dB		

Capacitance:

Nominal Mutual Capacitance
17 pF/ft

Insulation:

Material
PO - Polyolefin

Outerjacket 1:

Material	Nominal Diameter	Ripcord	Separator Material
PVC - Polyvinyl Chloride	0.295 mm	Yes	Patented RoundFleX - Double H Cross-Web

Conductor:

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

Return Loss:

Return Loss								
Element	Frequency	Min. Return (RL)	Min. Structural Return Loss (SRL)	Min. Structural Return Loss Description	Nominal Return Loss	Nominal Return Loss Description	Nominal Structural Return Loss	Nominal Structural Return Loss Description

Product Variants

Part Number	Color	Put-Up Type	Length
10GX12 0021000	RED	Reel	1000 in
10GX12 0031000	ORANGE	Reel	1000 in
10GX12 0041000	YELLOW	Reel	1000 in
10GX12 0041500	YELLOW	Reel	1500 in
10GX12 0051000	GREEN, DARK	Reel	1000 in
10GX12 0061000	BLUE, LIGHT	Reel	1000 in
10GX12 0062500	BLUE, LIGHT	Reel	2500 in
10GX12 0071000	VIOLET	Reel	1000 in
10GX12 0081000	GRAY	Reel	1000 in
10GX12 0091000	WHITE	Reel	1000 in
10GX12 0091500	WHITE	Reel	1500 in
10GX12 0101000	BLACK	Reel	1000 in
10GX12 0101500	BLACK	Reel	1500 in

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor?s inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden?s knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.