



Product Description

CAT6 (250 MHz), 4 Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented Film Separator, Ripcord, PVC Jacket

Technical Specifications

Product Overview

Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents.

Physical Characteristics (Overall)

Conductor			
AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4
Condu	Conductor Count:		
Total I	Total Number of Pairs:		

Insulation

Material PO - Polyolefin	
Bonded-Pair: N/A	
Color Chart	

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

Outer Jacket Material

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.224 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
78 Ohm/km	3.0 %

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/100m	17 pF/ft

Delay

Max. Delay	Max. Delay Skew
537.6 ns/100m	35 ns/100m

High Freq

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)	Max./Min. Fitted Impedance
1 MHz	2.0 dB/100m	74.3 dB	72.3 dB	72.3 dB	70.3 dB	67.8 dB	64.8 dB	20.0 dB	100 ± 15	102 ± 15
4 MHz	3.8 dB/100m	65.3 dB	63.3 dB	61.5 dB	59.5 dB	55.8 dB	52.8 dB	23.0 dB	100 ± 15	100 ± 15
8 MHz	5.3 dB/100m	60.8 dB	58.8 dB	55.4 dB	53.4 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 15	100 ± 15
10 MHz	6.0 dB/100m	59.3 dB	57.3 dB	53.4 dB	51.4 dB	47.8 dB	44.8 dB	25.0 dB	100 ± 15	100 ± 15
16 MHz	7.6 dB/100m	56.3 dB	54.3 dB	48.7 dB	46.7 dB	43.7 dB	40.7 dB	25.0 dB	100 ± 15	100 ± 15
20 MHz	8.5 dB/100m	54.8 dB	52.8 dB	46.3 dB	44.3 dB	41.8 dB	38.8 dB	25.0 dB	100 ± 15	100 ± 15
25 MHz	9.5 dB/100m	53.3 dB	51.3 dB	43.8 dB	41.8 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15	100 ± 15
31.25 MHz	10.7 dB/100m	51.9 dB	49.9 dB	41.2 dB	39.2 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15	100 ± 15
62.5 MHz	15.4 dB/100m	47.4 dB	45.4 dB	32.0 dB	30.0 dB	31.9 dB	28.9 dB	21.5 dB	100 ± 15	100 ± 15
100 MHz	19.8 dB/100m	44.3 dB	42.3 dB	24.5 dB	22.5 dB	27.8 dB	24.8 dB	20.1 dB	100 ± 15	100 ± 15
155 MHz	25.2 dB/100m	41.5 dB	39.5 dB	16.3 dB	14.3 dB	24.0 dB	21.0 dB	18.8 dB	100 ± 15	100 ± 15
200 MHz	29.0 dB/100m	39.8 dB	37.8 dB	10.8 dB	8.8 dB	21.8 dB	18.8 dB	18.0 dB	100 ± 15	100 ± 15
250 MHz	32.8 dB/100m	38.3 dB	36.3 dB	5.5 dB	3.5 dB	19.8 dB	16.8 dB	17.3 dB	100 ± 15	100 ± 15

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	22 lbs/1000ft
Max. Pull Tension:	25 lbs
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMR
IEC Compliance:	11801 ed 2.2 (2011) Class E
CPR Euroclass:	Eca
ANSI Compliance:	S-116-732-2013 Category 6, ANSI/NEMA WC-66 Category 6
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 6
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Third Party Performance Verification:	Category 6

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

Suitability

Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL 1666 Riser
CSA Flammability:	CMR FT 4
Plenum/Non-Plenum	

Plenum (Y/N):	No
Plenum Number:	D6UP

Part Number

Variants

ltem #	Color	Putup Type	Length	UPC
D6UR 0101000	Black	Reel	1,000 ft	612825444411
D6UR 010U1000	Black	UnReel	1,000 ft	
D6UR 0061000	Blue, Light	Reel	1,000 ft	612825444336
D6UR 006U1000	Blue, Light	UnReel	1,000 ft	
D6UR 0081000	Gray	Reel	1,000 ft	612825444374
D6UR 008U1000	Gray	UnReel	1,000 ft	
D6UR 0051000	Green, Dark	Reel	1,000 ft	612825444381
D6UR 005U1000	Green, Dark	UnReel	1,000 ft	
D6UR 0031000	Orange	Reel	1,000 ft	612825444404
D6UR 003U1000	Orange	UnReel	1,000 ft	
D6UR 0021000	Red	Reel	1,000 ft	612825444398
D6UR 002U1000	Red	UnReel	1,000 ft	
D6UR 007U1000	Violet	UnReel	1,000 ft	
D6UR 0091000	White	Reel	1,000 ft	612825444312
D6UR 009U1000	White	UnReel	1,000 ft	
D6UR 0041000	Yellow	Reel	1,000 ft	612825444343
D6UR 004U1000	Yellow	UnReel	1,000 ft	

Product Notes

Notes:

Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

History

Update and Revision:

Revision Number: 0.33 Revision Date: 06-18-2020

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