

Belden 1583A PVC Cat5e Cable



General Description:

CAT5e (100MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, PVC Jacket.

Usage (Overall)

Suitable Applications:	Horizontal, 1000BaseT, Gigabit Ethernet, POE, POE+,100BaseTX, Fast Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422
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Physical Characteristics (Overall)

Conductor	
AWG:	
# Pairs	AWG
4	24
Stranding	Conductor Material
Solid	BC - Bare Copper
Total Number of Conductors:	
8	

Insulation	
Insulation Material:	
Insulation Material	
PO - Polyolefin	

Outer Shield	
Outer Shield Material:	
Outer Shield Material	
Unshielded	

Outer Jacket	
Outer Jacket Material:	
Outer Jacket Material	
PVC - Polyvinyl Chloride	
Outer Jacket Diameter:	
Nom. Dia. (in.)	
0.190	
Outer Jacket Ripcord:	
Yes	

Pair	
Pair Color Code Chart:	
Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Storage Temperature Range:	-20°C To +75°C
Installation Temperature Range:	0°C To +60°C
Operating Temperature Range:	-20°C To +60°C
Bulk Cable Weight:	18 lbs/1000 ft.
Max. Recommended Pulling Tension:	35 lbs.
Min. Bend Radius/Minor Axis:	0.800 in.
Min. Bend/Installation:	1.900 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMR
NEC Articles:	800

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CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class D
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e
Applicable Patents:	

Flame Test

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

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Mutual Capacitance:	
Capacitance (pF/ft)	15
Maximum Capacitance Unbalance (pF/100 m):	330
Nominal Velocity of Propagation:	
VP (%)	70
Maximum Delay:	
Delay (ns/100 m)	538 @ 100MHz
Max. Delay Skew:	
Delay Skew (ns/100 m)	45
Maximum Conductor DC Resistance:	
DCR @ 20°C (Ohm/100 m)	9.38
Max. Operating Voltage - UL:	
Voltage	300 V RMS
Maximum DCR Unbalanced:	
DCR Unbalance @ 20°C (%)	

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Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	65.3	62.3	63.0	60.3	20.000
4	4.100	56.3	53.3	51.0	49.2	23.000
8	5.800	51.8	48.8	46.0	43.0	24.500
10	6.500	50.3	47.3	43.0	40.8	25.000
16	8.200	47.3	44.3	39.0	36.0	25.000
20	9.300	45.8	42.8	36.5	33.5	25.000
25	10.400	44.3	41.3	33.9	30.9	24.300
31.25	11.700	42.9	39.9	31.0	28.2	23.600
62.5	17.000	38.4	35.4	22.0	19.0	21.500
100	22.000	35.3	32.3	14.0	10.3	20.100
155	28.100	32.5	29.5	4.4	1.4	15.800
200	32.400	30.8	27.8	4.0	1.0	15.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	63.8	60.8
4	100 ± 15	51.7	48.7
8	100 ± 15	45.7	42.7
10	100 ± 15	43.8	40.8
16	100 ± 15	39.7	36.7
20	100 ± 15	37.7	34.7
25	100 ± 15	35.8	32.8
31.25	100 ± 15	33.9	30.9
62.5	100 ± 15	27.8	24.9
100	100 ± 15	23.8	20.8
155	100 ± 25	19.9	16.9
200	100 ± 25	17.7	14.7

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e. Values above 100 MHz are for engineering purposes only.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1583A 002U1000	1,000 FT	24.000 LB	RED		CAT5E 4PR U/UTP CMR BOX
1583A 0021000	1,000 FT	5.000 LB	RED	C	CAT5E 4PR U/UTP CMR REEL
1583A 003U1000	1,000 FT	24.000 LB	ORANGE		CAT5E 4PR U/UTP CMR BOX
1583A 0031000	1,000 FT	20.000 LB	ORANGE	C	CAT5E 4PR U/UTP CMR REEL
1583A 004U1000	1,000 FT	24.000 LB	YELLOW		CAT5E 4PR U/UTP CMR BOX
1583A 0041000	1,000 FT	20.000 LB	YELLOW	C	CAT5E 4PR U/UTP CMR REEL
1583A 005U1000	1,000 FT	24.000 LB	GREEN, DARK		CAT5E 4PR U/UTP CMR BOX
1583A 0051000	1,000 FT	20.000 LB	GREEN, DARK	C	CAT5E 4PR U/UTP CMR REEL
1583A 006U1000	1,000 FT	20.000 LB	BLUE, LIGHT		CAT5E 4PR U/UTP CMR BOX
1583A 0061000	1,000 FT	20.000 LB	BLUE, LIGHT	C	CAT5E 4PR U/UTP CMR REEL
1583A 0061640	1,640 FT	34.440 LB	BLUE, LIGHT		CAT5E 4PR U/UTP CMR REEL
1583A 0063000	3,000 FT	60.000 LB	BLUE, LIGHT		CAT5E 4PR U/UTP CMR REEL
1583A 008U1000	1,000 FT	20.000 LB	GRAY	C	CAT5E 4PR U/UTP CMR BOX
1583A 0081000	1,000 FT	20.000 LB	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 0081640	1,640 FT	34.440 LB	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 0083000	3,000 FT	60.000 LB	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 009U1000	1,000 FT	24.000 LB	WHITE		CAT5E 4PR U/UTP CMR BOX
1583A 0091000	1,000 FT	20.000 LB	WHITE	C	CAT5E 4PR U/UTP CMR REEL
1583A 0093000	3,000 FT	60.000 LB	WHITE	C	CAT5E 4PR U/UTP CMR REEL
1583A 010U1000	1,000 FT	24.000 LB	BLACK		CAT5E 4PR U/UTP CMR BOX
1583A 0101000	1,000 FT	20.000 LB	BLACK	C	CAT5E 4PR U/UTP CMR REEL
1583A 012U1000	1,000 FT	24.000 LB	PINK		CAT5E 4PR U/UTP CMR BOX
1583A 0121000	1,000 FT	20.000 LB	PINK	C	CAT5E 4PR U/UTP CMR REEL

Notes:
C = CRATE REEL PUT-UP.