

7813LC Paired - Enhanced Category 6 Bonded-Pair Cable

 	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Related Documents : No. 8 for DataTwist Cables (Modified Western Electric).pdf</p>
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Description:

23 AWG bonded-pairs, solid bare copper conductors, plenum, FEP insulation, twisted pairs, central rod filler, ripcord, see color code chart (below), FEP jacket (light blue or white).

SUITABLE APPLICATIONS:

Suitable Applications Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz Category 6, Enviroments benefitting from Limited Combustible Cable

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	23
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material FEP - Fluorinated Ethylene Propylene

Pair Color Code Chart :

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

OVERALL CABLING:

Overall Cabling Fillers Rod Center Member

OUTER SHIELD:

Outer Shield Material Unshielded

OUTER JACKET:

Outer Jacket Material FEP - Fluorinated Ethylene Propylene

OVERALL NOMINAL DIAMETER:

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Overall Nominal Diameter	.214 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +150°C
Bulk Cable Weight	28 lbs/1000 ft.
Max. Recommended Pulling Tension	40 lbs.
Min. Bend Radius (Install)	0.5 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMP, Limited Combustible FHC 25/50, UL444
NEC Articles	NFPA 259
CEC/C(UL) Specification	CMP
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
TIA/EIA Specification	568-B.2-1 Category 6
Other Specification	UL verified to Category 6

FLAME TEST:

UL Flame Test	UL723 (NFPA 255), NFPA 262
CSA Flame Test	FT6

PLENUM/NON-PLENUM:

Plenum (Y/N)	Y
Non-Plenum Number	7881A

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	72 %
Maximum Delay (ns/100 m)	537 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	8.2 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	5 %
Max. Operating Voltage - UL	300 V RMS

ELECTRICAL CHARACTERISTICS - PREMISE:

Premise Cable Electricals Table 1 :	
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Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2.0	74.3	72.3	72.3	70.3	20.0	na
4	3.8	65.3	63.3	61.5	59.5	23.0	na
8	5.3	60.8	58.8	55.4	53.4	24.5	na
10	6.0	59.3	57.3	53.3	51.3	25.0	na
16	7.6	56.2	54.3	48.7	46.7	25.0	na
20	8.5	54.8	52.8	46.3	44.3	25.0	na
25	9.5	53.3	51.3	43.8	41.8	24.3	na
31.25	10.7	51.9	49.9	41.2	39.2	23.6	na
62.5	15.4	47.4	45.4	32.0	30.0	21.5	na
100	19.8	44.3	42.3	24.5	22.5	20.1	na
155	25.2	41.5	39.5	16.3	14.3	18.8	na
200	29.0	39.8	37.8	10.8	8.8	18.0	na
250	32.8	38.3	36.3	5.5	3.5	17.3	na

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.8
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 22	100 ± 15	23.9	20.9
200	100 ± 22	100 ± 15	21.8	18.8
250	100 ± 32	100 ± 15	19.8	16.8

NOTES:

Notes

Jacket sequentially marked at 2 ft. intervals. US Patents 5, 606, 151 & 5, 734, 126. Third party verified to TIA/EIA 568-B.2-1, Category 6.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7813LC 0061000	4 PR #23 FEP FEP	1000	35	BLUE, LIGHT	C
7813LC 006U1000	4 PR #23 FEP FEP	U1000	33	BLUE, LIGHT	
7813LC 0091000	4 PR #23 FEP FEP	1000	35	WHITE	C
7813LC 009U1000	4 PR #23 FEP FEP	U1000	33	WHITE	

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C = CRATE REEL PUT-UP.

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