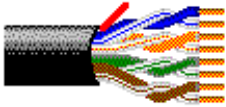


**Detailed Specifications &
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7881A Paired - DataTwist® Category 6

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

4 Pair UTP, 250MHz Category 6, Riser Rated, 23 AWG Solid Bare Copper, Polyolefin Insulation, Rod Filler, PVC Jacket, Rip Cord, Sequential Marking at Two Foot Intervals

SUITABLE APPLICATIONS:

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

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

INSULATION:

Insulation Material: PO - Polyolefin

Pair Color Code Chart :

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

OVERALL CABLING:

Overall Cabling Fillers: Rod Center Member

OUTER SHIELD:

Outer Shield Material: Unshielded

OUTER JACKET:

Outer Jacket Material: PVC - Polyvinyl Chloride
Outer Jacket Ripcord: Yes

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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.235 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +75°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	CMR, UL444
CEC/C(UL) Specification	CMR
TIA/EIA Specification	568-B.2-1 Category 6
Other Specification	UL verified to Category 6

FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT4

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	7882A

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	70 %
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	52.7
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	38.7
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	28.8
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	18.7
250	100 ± 32	100 ± 15	19.8	16.8

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7881A 0021000	4 PR #23 PP FRPVC	1000	30	RED	
7881A 002A1000	4 PR #23 PP FRPVC	A1000	33	RED	
7881A 0031000	4 PR #23 PP FRPVC	1000	30	ORANGE	
7881A 003A1000	4 PR #23 PP FRPVC	A1000	33	ORANGE	
7881A 0041000	4 PR #23 PP FRPVC	1000	30	YELLOW	C

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7881A 004A1000	4 PR #23 PP FRPVC	A1000	33	YELLOW	
7881A 0051000	4 PR #23 PP FRPVC	1000	30	GREEN, DARK	C
7881A 005A1000	4 PR #23 PP FRPVC	A1000	33	GREEN, DARK	
7881A 0061000	4 PR #23 PP FRPVC	1000	30	BLUE, LIGHT	C
7881A 006A1000	4 PR #23 PP FRPVC	A1000	33	BLUE, LIGHT	
7881A 0071000	4 PR #23 PP FRPVC	1000	30	VIOLET	C
7881A 007A1000	4 PR #23 PP FRPVC	A1000	33	VIOLET	
7881A 0081000	4 PR #23 PP FRPVC	1000	30	GRAY	C
7881A 008A1000	4 PR #23 PP FRPVC	A1000	33	GRAY	
7881A 0091000	4 PR #23 PP FRPVC	1000	30	WHITE	C
7881A 009A1000	4 PR #23 PP FRPVC	A1000	33	WHITE	
7881A 0101000	4 PR #23 PP FRPVC	1000	30	BLACK	C
7881A 010A1000	4 PR #23 PP FRPVC	A1000	33	BLACK	

C = CRATE REEL PUT-UP.

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