



1594A Paired - Category 5e Unbonded-Pair Cable

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

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, rip cord, see color code chart (below), UV resistant PVC Jacket (gray, white or ivory).

SUITABLE APPLICATIONS:

Suitable Applications	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422
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PHYSICAL CHARACTERISTICS:

CONDUCTOR:

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

INSULATION:

Insulation Material	PO - Polyolefin
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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

OUTER SHIELD:

Outer Shield Material	Unshielded
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OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Ripcord	Yes

OVERALL NOMINAL DIAMETER:



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Overall Nominal Diameter	5.588 mm
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +60°C
Installation Temperature Range	-10°C To +60°C
Bulk Cable Weight	31.252 Kg/Km
Max. Recommended Pulling Tension	155.687 N
Min. Bend Radius (Install)	12.7 mm

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR, CMX, UL444
CEC/C(UL) Specification	CMR
IEC Specification	11801 Category 5
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 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL verified to Category 5e

FLAME TEST:

UL Flame Test	UL1666 Riser, CMX Outdoor
CSA Flame Test	FT4

SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes
Sunlight Resistance	Yes

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	1585A
Non-Plenum Number	1583A

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	49.215 pF/m
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	68 %
Maximum Delay (ns/100 m)	510 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9.38 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %



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Max. Operating Voltage - UL 300 V RMS

ELECTRICAL CHARACTERISTICS - PREMISE:

Premise Cable Electricals Table 1 :

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	65.3	62.3	63.0	60.0	20	23
4	4.1	56.3	53.3	51.0	49.0	23	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	41.0	25	25.0
16	8.2	47.3	44.3	39.0	36.0	25	25.0
20	9.3	45.8	42.8	36.5	33.5	25	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.0	23.6	23.6
62.5	17	38.4	35.4	22.0	19.0	21.5	21.5
100	22	35.3	32.3	14.0	11.0	20.1	20.1
155	28.1	32.5	29.5	4.4	1.4	15.8	
200	32	30.8	27.8	4.0	1.0	15	

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	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

PUT-UPS AND COLORS:

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
1594A 008U1000	4 PR #24 PP PVC	U304.8	11.804	GRAY	
1594A 009U1000	4 PR #24 PP PVC	U304.8	11.804	WHITE	
1594A 1GFU1000	4 PR #24 PP PVC	U304.8	11.804	IVORY 1GF	

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