

**Detailed Specifications & Technical Data**



**1702A Paired - DataTwist® Enhanced Category 5e**

<p><b>Picture Not Available</b></p>	<p>For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p> <p><b>Color Code Chart : No. 8 for DataTwist Cables (Modified Western Electric).pdf</b></p>
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**Description:**

Siamese 2X4 Pair UTP, 350MHz Enhanced Category 5e, Vertical Tray Rated, 24 AWG Solid Bare Copper, Polyolefin Insulation, Bonded Pairs, PVC Jacket, Rip Cord in each leg, Sequential Marking at Two Foot Intervals

**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, Noisy Environments   US Patent #'s 5, 606, 151; 5, 734, 126
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**PHYSICAL CHARACTERISTICS:**

**CONDUCTOR:**

Number of Pairs	8
Total Number of Conductors	16
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	0.200 x 0.415 in.
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**MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-20°C To +80°C
Bulk Cable Weight	45 lbs/1000 ft.
Max. Recommended Pulling Tension	50 lbs.
Min. Bend Radius (Install)	0.8 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

NEC/(UL) Specification	CM, UL444
CEC/C(UL) Specification	CM
IEC Specification	11801 Category 5
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	UL1581 Vertical Tray
CSA Flame Test	FT1

**PLENUM/NON-PLENUM:**

Plenum (Y/N)	N
Plenum Number	1703A

**ELECTRICAL CHARACTERISTICS:**

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	66 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	510 ns/100 m
Maximum Delay Skew (ns/100m)	25 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %
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	65.3	65.3	63.3	63.3	20.0	
4	4.0	56.3	56.3	52.3	52.3	23.0	
8	5.7	51.8	51.8	46.1	46.1	24.5	
10	6.4	50.3	50.3	43.9	43.9	25.0	
16	8.1	47.3	47.3	39.1	39.1	25.0	
20	9.2	45.8	45.8	35.2	35.2	25.0	
25	10.3	44.3	44.3	34.1	34.1	24.3	
31.25	11.6	42.9	42.9	31.3	31.3	23.6	
62.5	16.8	38.4	38.4	21.6	21.6	21.5	
100	21.7	35.3	35.3	17.1	17.1	20.1	
155	27.7	32.5	32.5	4.7	4.7	19.0	
200	32.0	30.8	30.8	3.0	3.0	19.0	
250	36.4	29.3	29.3	>0	>0	18.0	
300	40.5	28.2	28.2			18.0	
310	41.3	27.9	27.9			18.0	
350	44.3	27.2	27.2			17.0	

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.8
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 18	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

**NOTES:**

Notes

US Patent #'s 5, 606, 151; 5, 734, 126

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
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1702A 0061000	2 X 4 PR #24 DUAL DATATWIST	1000	45	BLUE, LIGHT	C
1702A 0061640	2 X 4 PR #24 DUAL DATATWIST	1640	73.8	BLUE, LIGHT	C
1702A F2V1000	2 X 4 PR #24 DUAL DATATWIST	1000	45	GRAY, DEC	C
1702A F2V1640	2 X 4 PR #24 DUAL DATATWIST	1640	73.8	GRAY, DEC	C

C = CRATE REEL PUT-UP.

Revision Number: 1      Revision Date: 06-02-2004

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