


**Detailed Specifications &  
Technical Data**



**1533P Paired - DataTwist® Category 5e**

	<p><b>For more information please call</b> <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:**

4 pair ScTP, 24 AWG solid bare copper conductors, FEP insulation, foil shield bonded to Flammarrest® jacket. 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, 100MHz Category 5e
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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	FEP - Fluorinated Ethylene Propylene
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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 Trade Name	Beldfoil®
Outer Shield Type	Tape
Outer Shield Material	Aluminum Foil-Polyester Tape
Outer Shield % Coverage	100 %

**OUTER SHIELD DRAIN WIRE :**

Outer Shield Drain Wire AWG	24
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Outer Shield Drain Wire Stranding	7x32
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

**OUTER JACKET:**

Outer Jacket Material Trade Name	Flamarrest®
Outer Jacket Material	LS PVC - Low Smoke Polyvinyl Chloride
Outer Jacket Ripcord	No

**OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter	.235 in.
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**MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	0°C To +75°C
Bulk Cable Weight	34 lbs/1000 ft.
Max. Recommended Pulling Tension	25 lbs.
Min. Bend Radius (Install)	1 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

NEC/(UL) Specification	CMP, UL444
CEC/C(UL) Specification	CMP
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	UL910 Plenum
CSA Flame Test	FT6

**PLENUM/NON-PLENUM:**

Plenum (Y/N)	Y
Non-Plenum Number	1533R

**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)	538 @ 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 %
Max. Operating Voltage - UL	300 V RMS

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**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	2.0	65.3	62.3	60.3	60.3	20.0	23.0
4	4.1	56.3	53.3	49.2	49.2	23.0	23.0
8	5.8	51.8	48.8	43.0	43.0	24.5	24.5
10	6.5	50.3	47.3	40.8	40.8	25.0	25.0
16	8.2	47.3	44.3	36.0	36.0	25.0	25.0
20	9.3	45.8	42.8	33.5	33.5	25.0	25.0
25	10.4	44.3	41.3	30.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	28.2	28.2	23.6	23.6
62.5	17.0	38.4	35.4	18.4	18.4	21.5	21.5
100	22.0	35.3	32.3	10.3	10.3	20.1	20.1

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

**NOTES:**

Notes

Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1533P 0021000	4 PR #24 FEP FS FLRST	1000	35	RED	C
1533P 002A1000	4 PR #24 FEP FS FLRST	A1000	38	RED	
1533P 0031000	4 PR #24 FEP FS FLRST	1000	35	ORANGE	C
1533P 003A1000	4 PR #24 FEP FS FLRST	A1000	38	ORANGE	
1533P 0041000	4 PR #24 FEP FS FLRST	1000	35	YELLOW	C

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1533P 004A1000	4 PR #24 FEP FS FLRST	A1000	38	YELLOW	
1533P 0051000	4 PR #24 FEP FS FLRST	1000	35	GREEN, DARK	C
1533P 005A1000	4 PR #24 FEP FS FLRST	A1000	38	GREEN, DARK	
1533P 0081000	4 PR #24 FEP FS FLRST	1000	35	GRAY	C
1533P 008A1000	4 PR #24 FEP FS FLRST	A1000	38	GRAY	
1533P 0101000	4 PR #24 FEP FS FLRST	1000	35	BLACK	C
1533P 010A1000	4 PR #24 FEP FS FLRST	A1000	38	BLACK	
1533P 8771000	4 PR #24 FEP FS FLRST	1000	35	NATURAL	C
1533P 877A1000	4 PR #24 FEP FS FLRST	A1000	38	NATURAL	
1533P D151000	4 PR #24 FEP FS FLRST	1000	35	BLUE	C
1533P D15A1000	4 PR #24 FEP FS FLRST	A1000	38	BLUE	

C = CRATE REEL PUT-UP.

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