




11872A Paired - DataTuff® Enhanced 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 bonded-pairs UTP, 23 AWG solid bare copper conductors, riser rated, polyolefin insulation, PVC inner jacket, rip cord, .035" industrial grade PVC outer jacket. Sequential marking at two foot intervals.

SUITABLE APPLICATIONS:

Suitable Applications	Industrial Ethernet Cable, Harsh Environments, 350 MHz Enhanced Category 6, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422, RJ-45 Compatible
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PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	23
Stranding	Solid
Conductor Diameter	.022 in.
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	PO - Polyolefin
Nom. Insulation Wall Thickness	.009 in.
Insulation Diameter	.038 in.

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

INNER JACKET:

Inner Jacket Material	PVC - Polyvinyl Chloride
Inner Jacket Diameter	.365 x .165 in.
Inner Jacket Ripcord	Yes



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OUTER SHIELD:

Outer Shield Material	Unshielded
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OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Nominal Wall Thickness	.035 in.
Outer Jacket Ripcord	Yes

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.475 x .265 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +75°C
Installation Temperature Range	-25°C To +75°C
Bulk Cable Weight	59 lbs/1000 ft.
Max. Recommended Pulling Tension	45 lbs.
Min. Bend Radius (Install)	0.1 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CM, UL444
CEC/C(UL) Specification	CM
TIA/EIA Specification	568-B.2-1 Category 6

FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT1

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15.0 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	49.2 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	510 @ 100MHz 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:

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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	1.9	74.3	72.3	70	70	20.0	
4	3.7	65.3	63.3	59	59	23.0	
8	5.3	60.3	58.8	53	53	24.5	
10	5.9	59.3	57.3	51	51	25.0	
16	7.5	56.3	54.3	46	46	25.0	
20	8.4	54.8	52.8	44	44	25.0	
25	9.5	53.4	51.4	42	42	24.3	
31.25	10.6	51.9	49.9	39	39	23.6	
62.5	15.4	47.4	45.4	30	30	21.5	
100	19.8	44.3	42.3	25	25	21.0	
155	25.1	41.5	39.5	14	14	21.0	
200	29.0	39.9	37.9	10	10	21.0	
250	32.8	38.3	36.3	3	3	18.0	
300	35.2	37.2	34.2	0	0	18.0	
310	37.1	36.9	34.9			18.0	
350	39.8	36.2	34.2			17.0	
400	43.0	35.3	33.3			14.0	
500	49.0	33.8	31.8			14.0	

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	100 ± 15	67.8	64.8
4	100 ± 12	100 ± 15	55.7	52.7
8	100 ± 12	100 ± 15	49.7	46.7
10	100 ± 12	100 ± 15	47.8	44.8
16	100 ± 12	100 ± 8	43.7	40.7
20	100 ± 12	100 ± 8	41.7	38.7
25	100 ± 15	100 ± 8	39.8	36.8
31.25	100 ± 15	100 ± 8	37.9	34.9
62.5	100 ± 15	100 ± 8	31.8	28.8
100	100 ± 15	100 ± 8	27.8	24.8
155	100 ± 15	100 ± 8	23.9	20.9
200	100 ± 15	100 ± 8	21.7	18.7
250	100 ± 20	100 ± 8	19.8	16.8
300	100 ± 20	100 ± 8	18.2	15.2
310	100 ± 20	100 ± 8	17.9	14.9
350	100 ± 22	100 ± 8	16.9	13.9
400	100 ± 32	100 ± 8	15.7	12.7
500	100 ± 32	100 ± 8	13.8	10.8

NOTES:



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Notes	US Patent #'s 5, 606, 151; 5, 734, 126; 5, 821, 467 **Values above 350 MHz are information only
Notes (Cont'd.)	Operating temperatures are subject to length de-rating. Cable passes -25C Cold Bend per UL 1581.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
11872A 0081000	4 PR #23 PP PVC PVC	1000	66	GRAY	C Z
11872A 0101000	4 PR #23 PP PVC PVC	1000	66	BLACK	C Z

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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