

### 7814A - Belden Category 6 UTP Cable

 	<p>For more information please call                  1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Related Documents: No.8 for Data Twist Cables (Modified Western Electric).pdf</p>
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**Description:**

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, rip cord, see color code chart (below), PVC jacket (blue or grey).

**Special Printing Information**

BELDEN DATATWIST6 7814A-4PR24 E108998JH VERIFIED(UL)CAT6 C(UL)US CM- ISO/IEC 11801 CAT6-<DDDY> <jjnn> HUANG GANG SHI ZHONG XIN YI YUAN ROHS xxxx FEET

Where: <DDDY>: is manufacture date

**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, 250MHz Category 6
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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
Pair Color Code Chart:	

Pair Number	Insulation Color	
	Wire 1	Wire 2
1	Blue	White with Blue Stripe
2	Orange	White with Orange Stripe
3	Green	White with Green Stripe
4	Brown	White with Brown Stripe

**OVERALL CABLING:**

Overall Cabling Fillers	Central Spline
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**OUTER SHIELD:**

Outer Shield Material	Unshielded
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# Detailed Specifications & Technical Data *(Project Only-Special Printing)*



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### OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Ripcord	Yes

### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	5.8 ± 0.3 mm
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### MECHANICAL CHARACTERISTICS:

Operating Temperature Range	- 20°C To + 75°C
Bulk Cable Weight	36.0 kg/km
Max. Recommended Pulling Tension	110 N
Min. Bend Radius (Install)	23.2 mm

### APPLICABLE SPECIFICATION AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

NEC/(UL) Specification	CM
NEC Articles	800
CEC/C(UL) Specification	CM
IEC Specification	11801 Category 6
EU RoHS Compliant (Y/N)	Y
EU RoHS Compliance Date	Sept 2007
TIA Specification	568-C.2 Category 6
Other Specification	NEMA WC-63.1 Category 6, UL verified to Category 6

### FLAME TEST:

UL Flame Test	UL1685 UL Loading
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### SUITABILITY:

Suitability – Indoor (Y/N)	Y
Suitability - Outdoor (Y/N)	N
Sunlight Resistance (Y/N)	N
Oil Resistance	N
Non-halogenated	N

### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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### ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	5.6 nF/100m
Maximum Capacitance Unbalance	330 pF/100m
Nominal Velocity of Propagation	70 %
Maximum Delay @ 100 MHz	538 ns/100m
Maximum Delay Skew	45 ns/100m

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Maximum Conductor DC Resistance @ 20 Deg.C	9.38 Ohms/100m
Nominal Conductor DC Resistance @ 20 Deg.C	7.5 Ohms/100m
Maximum DCR Unbalance @ 20 Deg.C	5 %
Characteristic Impedance	100 ± 15 Ohms
Maximum Intended Operating Voltage	80 V RMS

### ELECTRICAL CHARACTERISTICS - PREMISES:

Premise Cable Electricals Table 1:

Frequency (MHz)	Max. Attenuation (dB/100m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. Return Loss (dB)	TCL	ELTCTL	Min. ACRF (dB)	Min. PSACRF (dB)
4	3.8	66.3	63.3	23.0	40	23	56.0	53.0
10	6.0	60.3	57.3	25.0	40	15	48.0	45.0
16	7.6	57.2	54.2	25.0	38	10.9	43.9	40.9
20	8.5	55.8	52.8	25.0	37	9	42.0	39.0
31.25	10.7	52.9	49.9	23.6	35.1	5.1	38.1	35.1
62.5	15.5	48.4	45.4	21.5	32	/	32.1	29.1
100	19.9	45.3	42.3	20.1	30	/	28.0	25.0
150	24.8	42.7	39.7	18.9	/	/	24.5	21.5
200	29.1	40.8	37.8	18.0	27	/	22.0	19.0
250	33	39.3	36.3	17.3	26	/	20.0	17.0

### NOTES:

Notes	Jacket sequentially marked. Third party verified to TIA -568-C.2, Category 6. Typical Values are for reference only.
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### PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (kg.)	Jacket Color	Package type
7814A 006A1000-1	4 PR #24 PO PVC	1000	14.2	BLU	Reel in box
7814A 008A1000-1	4 PR #24 PO PVC	1000	14.2	GRY	Reel in box

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