



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>
---	--

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).

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
-----------------------	---

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
-------------------------	----------------

OUTER SHIELD:

Outer Shield Material	Unshielded
-----------------------	------------

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
-----------------------	--------------------------

7814A - Belden Category 6 UTP Cable

Outer Jacket Ripcord	Yes
OVERALL NOMINAL DIAMETER:	
Overall Nominal Diameter	5.8 ± 0.3 mm
MECHANICAL CHARACTERISTICS:	
Operating Temperature Range	- 20°C To + 75°C
Bulk Cable Weight	45 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
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
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
Maximum Conductor DC Resistance @ 20 Deg.C	9.38 Ohms/100m

7814A - Belden Category 6 UTP Cable

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)	Attenuation (dB/100m)		NEXT (dB)		PSNEXT (dB)		Return Loss (dB)		ELFEXT (dB)		PSELFEXT (dB)	
	Max.	Typical	Min.	Typical	Min.	Typical	Min.	Typical	Min.	Typical	Min.	Typical
1	2.0	1.8	74.3	95	72.3	93	20.0	35	67.8	87	64.8	82
4	3.8	3.5	65.3	92	63.3	90	23.0	36	55.8	82	52.8	75
8	5.3	5.0	60.8	90	58.8	88	24.5	36	49.7	77	46.7	69
10	6.0	5.6	59.3	90	57.3	88	25.0	33	47.8	74	44.8	67
16	7.6	7.2	56.2	83	54.2	81	25.0	34	43.7	68	40.7	63
20	8.5	8.0	54.8	80	52.8	78	25.0	33	41.8	67	38.8	61
25	9.5	9.0	53.3	76	51.3	74	24.3	33	39.8	73	36.8	61
31.25	10.7	10.0	51.9	70	49.9	68	23.6	32	37.9	64	34.9	57
62.5	15.4	14.5	47.4	68	45.4	66	21.5	31	31.9	57	28.9	49
100	19.8	18.5	44.3	65	42.3	63	20.1	30	27.8	53	24.8	47
155	25.2	24.0	41.4	68	39.4	66	18.8	31	24.0	48	21.0	41
200	29.0	26.8	39.8	65	37.8	63	18.0	22	21.8	43	18.8	38
250	32.8	30.2	38.3	60	36.3	59	17.3	23	19.8	43	16.8	36

Frequency (MHz)	ACR (dB)		PSACR (dB)	
	Min.	Typical	Min.	Typical
1	72.3	93.3	70.3	91.3
4	61.5	88.8	59.5	86.8
8	55.4	85.2	53.4	83.2
10	53.3	84.4	51.3	82.4
16	48.7	75.8	46.7	73.8
20	46.3	72.0	44.3	70.0
25	43.8	67.0	41.8	65.0
31.25	41.2	59.8	39.2	57.8
62.5	32.0	53.4	30.0	51.4
100	24.5	46.2	22.5	44.2
155	16.3	44.0	14.3	42.0
200	10.8	37.6	8.8	35.6
250	5.5	29.0	3.5	28.0

7814A - Belden Category 6 UTP Cable

NOTES:

Notes	Jacket sequentially marked. Third party verified to TIA -568-C.2, Category 6. Typical Values are for reference only.
-------	--

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color
7814A 006A1000	4 PR #24 PO PVC	A1000	30	BLU
7814A 008A1000	4 PR #24 PO PVC	A1000	30	GRY

Revision Number: 8

Revision Date: 02-05-2017

©Copyright 2017 Belden, Inc
All Rights Reserved.

Although Belden ("Belden") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with the following environmental regulations: California Proposition 65 Consent Judgment For Wire & amp; Cable Mfgs.(San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory. EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); And EU BFR (Directive 2003/11/EC, 6-Feb2003). The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information and belief at the date of its publication. The information provided in the Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.