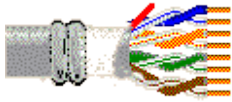


121872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable



For more Information
please call

1-800-Belden1



General Description:

23 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, PVC inner jacket, aluminum interlocked armor, industrial grade PVC jacket. Sequential marking at one meter intervals.

Usage (Overall)

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 Audio, AES51, RS-422, RJ-45 Compatible, Armored

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4	23	Solid	BC - Bare Copper	.022

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PO - Polyolefin	.009	.038

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.365 x .165

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
Industrial Grade PVC - Polyvinyl Chloride	0.050

Outer Jacket over Armor (y/n): Yes

Armor

Armor Type: Interlocked

Armor Material: Aluminum

Diameter over Armor: .625

Overall Cable

Overall Nominal Diameter: 0.725 in.

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue

121872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Storage Temperature Range:	-40°C To +85°C
Installation Temperature Range:	-25°C To +75°C
Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	154 lbs/1000 ft.
Max. Recommended Pulling Tension:	200 lbs.
Min. Bend Radius/Minor Axis:	8.250 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CMG, HL
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class E
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2006
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 6 - TIA 568.C.2

Applicable Patents:

Country
www.belden.com/p

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT4

Suitability

Sunlight Resistance:	Yes
Oil Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
----------------------	----

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15.0

Maximum Capacitance Unbalance (pF/100 m):	49.2
--	------

Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

121872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

Delay (ns/100 m)

510 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

3

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	1.900	74.3	72.3	72.4	70.4	20.000
4	3.700	65.3	63.3	61.6	59.6	23.000
8	5.300	60.3	58.8	55.5	53.5	24.500
10	5.900	59.3	57.3	53.4	51.4	25.000
16	7.500	56.3	54.3	48.7	46.7	25.000
20	8.400	54.8	52.8	46.4	44.4	25.000
25	9.500	53.4	51.4	43.9	41.9	24.300
31.25	10.600	51.9	49.9	41.2	39.2	23.600
62.5	15.400	47.4	45.4	32.0	30	21.500
100	19.800	44.3	42.3	24.5	22.5	21.000
155	25.100	41.5	39.5	16.3	14.3	21.000
200	29.000	39.9	37.9	10.8	10	21.000
250	32.800	38.3	36.3	5.5	3.5	18.000
300	35.200	37.2	34.2	0.7	0	18.000
310	37.100	36.9	34.9	0		18.000
350	39.800	36.2	34.2			17.000
400	43.000	35.3	33.3			14.000
500	49.000	33.8	31.8			14.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	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

121872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

Notes (Overall)

Notes: **Values above 350 MHz are information only. Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
121872A J221000	1,000 FT	234.000 LB	BLUE, STRONG		1872A ALUM ARMOR PVC
121872A 0081000	1,000 FT	234.000 LB	GRAY	C Z	4 PR 24 ARM PVC CABLE
121872A 0101000	1,000 FT	234.000 LB	BLACK	C Z	4 PR 24 ARM PVC CABLE

Notes:

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.

Revision Number: 12 Revision Date: 02-28-2014

© 2014 Belden, Inc
All Rights Reserved.

Although 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. 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 this 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.