

11872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable



For more Information
please call

1-800-Belden1



Description:

23 AWG Bonded-Pair solid bare copper conductors, polyolefin insulation, PVC inner jacket, rip cord, industrial grade PVC outer jacket. Sequential marking at two foot 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

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
4	23	Solid	BC - Bare Copper	0.5588

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)	Dia. (mm)
PO - Polyolefin	0.2286	0.9652

Inner Jacket

Inner Jacket Material:

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

Inner Jacket Ripcord: Yes

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.889

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 12.065 x 6.731 mm

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

11872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

Mechanical Characteristics (Overall)

Installation Temperature Range:	-10°C To +75°C
Operating Temperature Range:	-25°C To +75°C
Bulk Cable Weight:	87.804 Kg/Km
Max. Recommended Pulling Tension:	200.169 N
Min. Bend Radius/Minor Axis:	2.540 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, UL444
CEC/C(UL) Specification:	CM
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
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:	568-B.2-1 Category 6

Flame Test

UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT1

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)	49.215
--------------------	--------

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

Nominal Velocity of Propagation:

VP (%)	70
--------	----

Maximum Delay:

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 (%)	
--------------------------	--

11872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

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	10.0	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

Notes (Overall)

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 #	Putup	Ship Weight	Color	Notes	Item Desc
11872A 0081000	305 MT	29.937 KG	GRAY	C	4 PR #23 PP PVC PVC
11872A 0101000	305 MT	29.937 KG	BLACK	C	4 PR #23 PP PVC PVC

Notes:

C = CRATE REEL PUT-UP.

11872A Multi-Conductor - Category 6 DataTuff® Twisted Pair Cable

Revision Number: 7 Revision Date: 03-22-2012

© 2012 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.