

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. (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

Inner Jacket Ripcord: Yes

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.035

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.475 x 0.265 in.

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

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Mechanical Characteristics (Overall)

Installation Temperature Range:	-10°C To +75°C
Operating Temperature Range:	-25°C To +75°C
Bulk Cable Weight:	59 lbs/1000 ft.
Max. Recommended Pulling Tension:	45 lbs.
Min. Bend Radius/Minor Axis:	0.100 in.

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
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Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)

15.0

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

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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	1,000 FT	66.000 LB	GRAY	C	4 PR #23 PP PVC PVC
11872A 0101000	1,000 FT	66.000 LB	BLACK	C	4 PR #23 PP PVC PVC

Notes:

C = CRATE REEL PUT-UP.

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