

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

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 Cabling

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

Mechanical Characteristics (Overall)

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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 (Install)/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

Nominal Velocity of Propagation:

VP (%)
70

Maximum Capacitance Unbalance (pF/100 m):	49.2
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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 (%)
3

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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	1.9	74.3	72.3	70	70	20.0
4	3.7	65.3	63.3	59	59	23.0
8	5.3	60.3	58.8	53	53	24.5
10	5.9	59.3	57.3	51	51	25.0
16	7.5	56.3	54.3	46	46	25.0
20	8.4	54.8	52.8	44	44	25.0
25	9.5	53.4	51.4	42	42	24.3
31.25	10.6	51.9	49.9	39	39	23.6
62.5	15.4	47.4	45.4	30	30	21.5
100	19.8	44.3	42.3	25	25	21.0
155	25.1	41.5	39.5	14	14	21.0
200	29.0	39.9	37.9	10	10	21.0
250	32.8	38.3	36.3	3	3	18.0
300	35.2	37.2	34.2	0	0	18.0
310	37.1	36.9	34.9			18.0
350	39.8	36.2	34.2			17.0
400	43.0	35.3	33.3			14.0
500	49.0	33.8	31.8			14.0

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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