

1533P Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1



General Description:

CAT5e (100MHz), 4-Pair, F/UTP-Foil shielded, Plenum-CMP, Premise Horizontal Cable, 24 AWG solid bare copper conductors, FEP insulation, overall Beldfoil® shield, Flamarrest® jacket, RJ-45 compatible

Usage (Overall)

Suitable Applications:

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments, 100MHz Category 5e

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors:

8

Insulation

Insulation Material:

Insulation Material
FEP - Fluorinated Ethylene Propylene

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
24	7x32	TC - Tinned Copper	

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.235

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)

Operating Temperature Range: 0°C To +75°C

Bulk Cable Weight: 34 lbs/1000 ft.

Max. Recommended Pulling Tension: 25 lbs.

Min. Bend Radius/Minor Axis: 1 in.

Min. Bend/Installation: 2.350 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP, UL444

CEC/(UL) Specification: CMP

1533P Multi-Conductor - Category 5e Nonbonded-Pair Cable

EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005
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 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e

Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	1533R

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

Delay (ns/100 m)
538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)
45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.38

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)	Min. SRL (dB)
1	2.0	65.3	62.3	60.3	60.3	20.0	23.0
4	4.1	56.3	53.3	49.2	49.2	23.0	23.0
8	5.8	51.8	48.8	43.0	43.0	24.5	24.5
10	6.5	50.3	47.3	40.8	40.8	25.0	25.0
16	8.2	47.3	44.3	36.0	36.0	25.0	25.0
20	9.3	45.8	42.8	33.5	33.5	25.0	25.0
25	10.4	44.3	41.3	30.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	28.2	28.2	23.6	23.6
62.5	17.0	38.4	35.4	18.4	18.4	21.5	21.5
100	22.0	35.3	32.3	10.3	10.3	20.1	20.1

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8

1533P Multi-Conductor - Category 5e Nonbonded-Pair Cable

4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8

Notes (Overall)

Notes: Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-C.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1533P D15A1000	1,000 FT	37.000 LB	BLUE		CAT5E 4PR F/UTP CMP RIB
1533P D15I1000	1,000 FT	35.000 LB	BLUE	C	CAT5E 4PR F/UTP CMP REEL
1533P 002A1000	1,000 FT	37.000 LB	RED		CAT5E 4PR F/UTP CMP RIB
1533P 002I1000	1,000 FT	35.000 LB	RED	C	CAT5E 4PR F/UTP CMP REEL
1533P 003A1000	1,000 FT	37.000 LB	ORANGE		CAT5E 4PR F/UTP CMP RIB
1533P 003I1000	1,000 FT	35.000 LB	ORANGE	C	CAT5E 4PR F/UTP CMP REEL
1533P 004A1000	1,000 FT	37.000 LB	YELLOW		CAT5E 4PR F/UTP CMP RIB
1533P 004I1000	1,000 FT	35.000 LB	YELLOW	C	CAT5E 4PR F/UTP CMP REEL
1533P 005A1000	1,000 FT	37.000 LB	GREEN, DARK		CAT5E 4PR F/UTP CMP RIB
1533P 005I1000	1,000 FT	35.000 LB	GREEN, DARK	C	CAT5E 4PR F/UTP CMP REEL
1533P 008A1000	1,000 FT	37.000 LB	GRAY		CAT5E 4PR F/UTP CMP RIB
1533P 008I1000	1,000 FT	35.000 LB	GRAY	C	CAT5E 4PR F/UTP CMP REEL
1533P 010A1000	1,000 FT	37.000 LB	BLACK		CAT5E 4PR F/UTP CMP RIB
1533P 010I1000	1,000 FT	35.000 LB	BLACK	C	CAT5E 4PR F/UTP CMP REEL
1533P 877A1000	1,000 FT	37.000 LB	NATURAL		CAT5E 4PR F/UTP CMP RIB
1533P 877I1000	1,000 FT	35.000 LB	NATURAL	C	CAT5E 4PR F/UTP CMP REEL

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 08-14-2013

© 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.

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