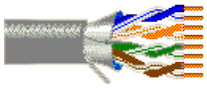
Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

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. (mm)
5.969

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:	50.599 Kg/Km
Max. Recommended Pulling Tension:	111.205 N
Min. Bend Radius/Minor Axis:	25.400 mm
Min. Bend/Installation:	59.690 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP, UL444
CEC/C(UL) Specification:	CMP

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/m)
49.215

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

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 verfied 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 D151000	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 0021000	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 0031000	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 0041000	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 0051000	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 0081000	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 0101000	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 8771000	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