

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



Description:

24 AWG solid bare copper conductors, plenum, FEP Teflon® insulation, twisted pairs, overall Beldfoil® shield, drain wire, RJ-45 compatible, see color code chart (below), Flamarrest® jacket (red, orange, yellow, green, blue, gray or natural).

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

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

Overall Cabling

Overall Nominal Diameter: 0.235 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)

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

Bulk Cable Weight: 34 lbs/1000 ft.

Max. Recommended Pulling Tension: 25 lbs.

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Min. Bend Radius (Install)/Minor Axis:	1 in.
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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP, UL444
CEC/C(UL) Specification:	CMP
Other Standards:	11801 Category 5
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:	568-B.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to 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

Nominal Velocity of Propagation:

VP (%)
70

Maximum Capacitance Unbalance (pF/100 m):	330
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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

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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)	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: Third party verified to TIA/EIA-568-B.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1533P D15A1000	1,000 FT	37.000 LB	BLUE		4 PR #24 FEP FS FLRST
1533P D15I1000	1,000 FT	35.000 LB	BLUE	C	4 PR #24 FEP FS FLRST
1533P 002A1000	1,000 FT	37.000 LB	RED		4 PR #24 FEP FS FLRST
1533P 002I1000	1,000 FT	35.000 LB	RED	C	4 PR #24 FEP FS FLRST
1533P 003A1000	1,000 FT	37.000 LB	ORANGE		4 PR #24 FEP FS FLRST
1533P 003I1000	1,000 FT	35.000 LB	ORANGE	C	4 PR #24 FEP FS FLRST
1533P 004A1000	1,000 FT	37.000 LB	YELLOW		4 PR #24 FEP FS FLRST
1533P 004I1000	1,000 FT	35.000 LB	YELLOW	C	4 PR #24 FEP FS FLRST
1533P 005A1000	1,000 FT	37.000 LB	GREEN, DARK		4 PR #24 FEP FS FLRST
1533P 005I1000	1,000 FT	35.000 LB	GREEN, DARK	C	4 PR #24 FEP FS FLRST
1533P 008A1000	1,000 FT	37.000 LB	GRAY		4 PR #24 FEP FS FLRST
1533P 008I1000	1,000 FT	35.000 LB	GRAY	C	4 PR #24 FEP FS FLRST
1533P 010A1000	1,000 FT	37.000 LB	BLACK		4 PR #24 FEP FS FLRST
1533P 010I1000	1,000 FT	35.000 LB	BLACK	C	4 PR #24 FEP FS FLRST
1533P 877A1000	1,000 FT	37.000 LB	NATURAL		4 PR #24 FEP FS FLRST
1533P 877I1000	1,000 FT	35.000 LB	NATURAL	C	4 PR #24 FEP FS FLRST

Notes:
C = CRATE REEL PUT-UP.

DataTwist® 5e ScTP Cable

TIA/EIA-568-B.2, Category 5e Nonbonded-Pair Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nominal OD		Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm										

24 AWG Solid Bare Copper Conductors • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • RJ-45 Compatible • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray or Black)

1533R		NEC:	4	1000	304.8	34.0	15.5	.260	6.60	9.38	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		CMR		A-1000	A-304.8	37.0	16.8						4	4.1	53.3	49	48.7	100±15	23.0
		CEC:		1640†	500.0	57.4	26.1						8	5.8	48.8	43	42.7	100±15	24.5
		CMR											10	6.5	47.3	41	40.8	100±15	25.0
													16	8.2	44.3	36	36.7	100±15	25.0
													20	9.3	42.8	34	34.7	100±15	25.0
													25	10.4	41.3	31	32.8	100±15	24.3
													31.25	11.7	39.9	28	30.9	100±15	23.6
												62.5	17.0	35.4	18	24.8	100±15	21.5	
												100	22.0	32.3	10	20.8	100±15	20.1	

†1640 ft. put-up available in Gray only.

Shield is bonded to jacket inner wall for electrical stability.

Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Non-Plenum • Polypropylene Insulation (Color Code: See Chart Below) • Black Low-Smoke, Zero-Halogen Jacket

300V RMS		1300SB	NEC:	4	1000	304.8	35.0	15.9	.260	6.60	9.3	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		new	CMG-LS										4	4.1	53.3	49	48.7	100±15	23.0	
			CEC:										8	5.8	48.8	43	42.7	100±15	24.5	
			CMG-LS FT4										10	6.5	47.3	41	40.8	100±15	25.0	
			Limited Smoke										16	8.2	44.3	36	36.7	100±15	25.0	
													20	9.3	42.8	34	34.7	100±15	25.0	
													25	10.4	41.3	31	32.8	100±15	24.3	
													31.25	11.7	39.9	28	30.9	100±15	23.6	
												62.5	17.0	35.4	18	24.8	100±15	21.5		
												100	22.0	32.3	10	20.8	100±15	20.1		

LSZH and ABS Type Approved

Jacket sequentially marked at 2 ft. intervals.

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, Black or Natural)

1533P		NEC:	4	1000	304.8	35.0	15.9	.235	6.00	9.38	3.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		CMP		A-1000	A-304.8	38.0	17.2						4	4.1	53.3	49	48.7	100±15	23.0
		CEC:											8	5.8	48.8	43	42.7	100±15	24.5
		CMP											10	6.5	47.3	41	40.8	100±15	25.0
													16	8.2	44.3	36	36.7	100±15	25.0
													20	9.3	42.8	34	34.7	100±15	25.0
													25	10.4	41.3	31	32.8	100±15	24.3
													31.25	11.7	39.9	28	30.9	100±15	23.6
												62.5	17.0	35.4	18	24.8	100±15	21.5	
												100	22.0	32.3	10	20.8	100±15	20.1	

Shield is bonded to jacket inner wall for electrical stability.

Jacket sequentially marked at 2 ft. intervals.

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ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss
ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5e ScTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Teflon is a DuPont trademark.

