

Category 5 Data Cable

25Pairs 24AWG, UTP with HFFR/LSZH Sheath



C5196

Applications

Twisted pair cable suitable for Local Area Networks, Data Centre and Video Applications delivering 1000base-t Gigabit Ethernet, 100BASE-TX Fast Ethernet, 622 Mbps ATM, 155 Mbps ATM and Composite Video.

Design

Unit	Properties
Conductor	Solid Plain Copper Wire
Insulation	Solid Polyethylene
Pair	Two wires twisted together
Unite	5pairs cabled together as a Unit
Binder Tape (optional)	Blue, Orange, Green, Brown, Grey
Wrapping Tape	PET Tape
Rip Cord	Nylon Yarn
Sheath Material	Halogen Free, Flame Retardant (HFFR/LSZH) Standard Color: Purple
Standard Put Up Length	305 metres

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

Physical Characteristics

Part Number	C5196
Screen type	UTP
No. of Pairs	25
Conductor Size (AWG)	24
Nom. Radial Thickness Sheath (mm)	0.85
Nom. Overall Diameter (mm)	13.2
Operating Temperature (°C)	-20°C to +60°C
Min. Bend Radius (install) (mm)	132
Maximum Pulling Tension (Newton)	1000

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C5I96

Electrical Characteristics at 20°C

Input Impedance (Ohm)	Max. Conductor Resistance (Ohm/km)	Mutual Capacitance (pF/m)	Velocity of Propagation (%)	Max. Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
100 ± 15	100	56	65	45	300

Frequency (MHz)	Return Loss (dB/100m)	Maximum Attenuation (dB/100m)	Minimum NEXT (dB)	Maximum Time Delay (ns/100m)	Minimum PSNEXT (dB)	Minimum ELFEXT (dB)	Minimum PSELFEXT (dB)
1	17.0	2.0	62.3	570.00	62.3	61.0	61.0
4	18.8	4.1	53.3	552.00	53.3	49.0	49.0
8	19.7	5.8	48.8	546.73	48.8	42.9	42.9
10	20.0	6.5	47.3	545.38	47.3	41.0	41.0
16	20.0	8.2	44.2	543.00	44.4	36.9	36.9
20	20.0	9.3	42.8	542.05	42.8	35.0	35.0
25	19.3	10.4	41.3	541.20	41.3	33.8	33.8
31.25	18.6	11.7	39.9	540.44	39.9	31.1	31.1
62.5	16.5	17.0	35.4	538.55	35.4	25.1	25.1
100	15.1	22.0	32.3	537.60	32.3	21.0	21.0

Color Scheme

Pair No	Color	Pair No	Color
1	BLUE + WHITE/Blue	14	BROWN + BLACK/Brown
2	ORANGE + WHITE/Orange	15	GREY + BLACK/Grey
3	GREEN + WHITE/Green	16	BLUE + YELLOW/Blue
4	BROWN + WHITE/Brown	17	ORANGE + YELLOW/Orange
5	GREY + WHITE/Grey	18	GREEN + YELLOW/Green
6	BLUE + RED/Blue	19	BROWN + YELLOW/Brown
7	ORANGE + RED/Orange	20	GREY + YELLOW/Grey
8	GREEN + RED/Green	21	BLUE + VIOLET/Blue
9	BROWN + RED/Brown	22	ORANGE + VIOLET/Orange
10	GREY + RED/Grey	23	GREEN + VIOLET/Green
11	BLUE + BLACK/Blue	24	BROWN + VIOLET/Brown
12	ORANGE + BLACK/Orange	25	GREY + VIOLET/Grey
13	GREEN + BLACK/Green		

Reference Standards

EN 50290-2	IEC 61034
ISO 11801	IEC 60754-1 & 2
ANSI/TIA/EIA-568-C2	IEC 60332-1
RoHS directives	