

Category 6 Data Cables

23AWG. UTP or FTP with PVC or HFFR Sheath

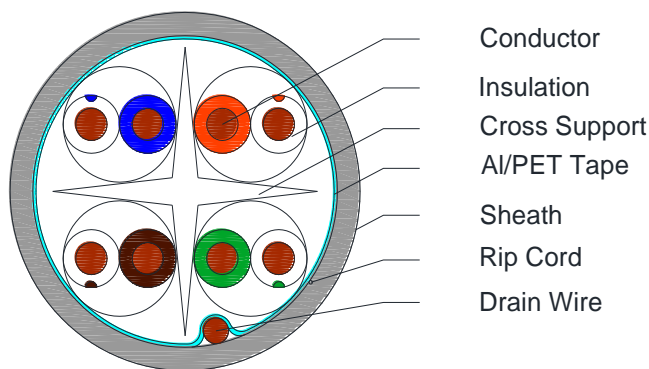


CI037, CI038, CI237, CI238, CI437, CI438, CI537, CI538, CI483, CI484

Applications

Twisted pair cable suitable for Local Area Networks and Video Applications

Cross Section Drawing



Design

Unit	Properties
Conductor	Solid Plain Copper Wire
Insulation	Solid Polyethylene Pair 1: WHITE/Blue + BLUE Pair 2: WHITE/Orange + ORANGE Pair 3: WHITE/Green + GREEN Pair 4: WHITE/Brown + BROWN
Pair	Two wires twisted together
Filler	Cross support
Drain Wire (FTP only)	Tinned Copper wire
Screen(FTP only)	Aluminium/Polyester tape
Rip Cord	Nylon Yarn
Sheath Material	Polyvinyl Chloride (PVC) Standard Color: Grey or Halogen Free, Flame Retardant (HFFR) Standard Color: Purple or Low Density Polyethylene (LDPE) Standard Color: Black
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.

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C1037, C1038, C1237, C1238, C1437, C1438, C1537, C1538, C1483, C1484

Physical Characteristics

Part Number	C1037	C1437	C1537	C1237	C1483	C1038	C1438	C1538	C1238	C1484
Sheath Material	PVC	PVC CM	PVC CMR	HFFR	PE	PVC	PVC CM	PVC CMR	HFFR	PE
Screen type	UTP					FTP				
No. of Pairs	4									
Conductor Size (AMG)	23									
Drain Wire Size (AMG)	-					26				
Screen Coverage (%)	-					115				
Nom. Radial Thickness Sheath (mm)	0.5									
Nom. Overall Diameter (mm)	6.1					7.2				
Operating Temperature (°C)	-20°C to +60°C									
Min. Bend Radius (install) (mm)	61					72				
Nominal Cable Weight (kg/km)	40.5					56				
Maximum Pulling Tension (Newton)	160					200				

Electrical Characteristics at 20°C

Conductor Resistance (Ohm/100m)	Mutual Capacitance (pF/m)		Input Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
	UTP	FTP				
9.38	47	48	100 ± 15	67	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	20.0	2.0	74.3	570.00	72.3	67.8	64.8
4	23.0	3.8	65.3	552.00	63.3	55.8	52.8
8	24.5	5.3	60.8	546.73	58.8	49.7	46.7
10	25.0	6.0	59.3	545.38	57.3	47.8	44.8
16	25.0	7.6	56.2	543.00	54.2	43.7	40.7
20	25.0	8.5	54.8	542.05	52.8	41.8	38.8
25	24.3	9.5	53.3	541.20	51.3	39.8	36.8
31.25	23.6	10.7	51.9	540.44	49.9	37.9	34.9
62.5	21.5	15.4	47.4	538.55	45.4	31.9	28.9
100	20.1	19.8	44.3	537.80	42.3	27.8	24.8
200	18.0	29.0	39.8	536.54	37.8	21.8	18.8
250	17.3	32.8	38.3	536.27	36.3	19.8	16.8

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Reference Standards

EN 50290-2	UL 1685 for CM
ISO 11801	UL1666 for CMR
ANSI/TIA/EIA-568-C2	IEC 60332-1
IEC 61034 (HFFR only)	RoHS directives
IEC 60754-1 & 2 (HFFR only)	