

Category 5e Data Cable

UTP or FTP with PVC or HFFR/LSZH Sheath

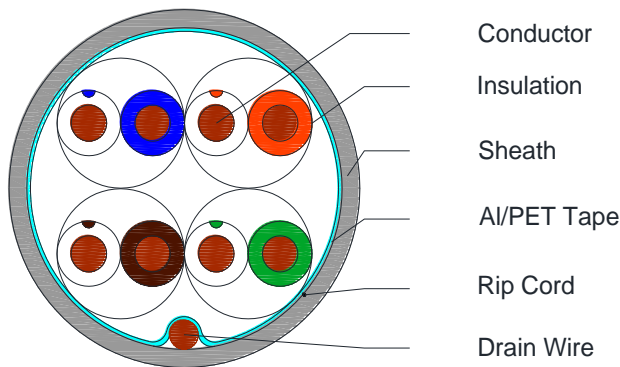


C4576, C4577, C5515, C5516

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
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/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.

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Physical Characteristics

Part Number	C4576	C5515	C4577	C5516
Sheath Material	PVC	HFFR	PVC	HFFR
Screen type	UTP		FTP	
No. of Pairs	4			
Conductor Size (AWG)	24			
Drain Wire Size (AWG)	-		26	
Screen Coverage (%)	-		115	
Nom. Radial Thickness Sheath (mm)	0.5			
Nom. Overall Diameter (mm)	4.9		6.1	
Operating Temperature (°C)	-20°C to +60°C			
Min. Bend Radius (install) (mm)	55		65	
Nominal Cable Weight (kg/km)	28		40	
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				
10	48	50	100 ± 15	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	20.0	2.0	65.3	570.00	62.3	63.8	60.8
4	23.0	4.1	56.3	552.00	53.3	51.7	48.7
8	24.5	5.8	51.8	546.73	48.8	45.7	42.7
10	25.0	6.5	50.3	545.38	47.3	43.8	40.8
16	25.0	8.2	47.2	543.00	44.4	39.7	36.7
20	25.0	9.3	45.8	542.05	42.8	37.7	34.7
25	24.3	10.4	44.3	541.20	41.3	35.8	32.8
31.25	23.6	11.7	42.9	540.44	39.9	33.9	30.9
62.5	21.5	17.0	38.4	538.55	35.4	27.8	24.8
100	20.1	22.0	35.3	537.60	32.3	23.8	20.8

Reference Standards

ISO 11801, ANSI/TIA/EIA-568-C2	IEC 61034, IEC 60754-1 & 2 (HFFR/LSZH only)
EN 50290-2	RoHS directives
IEC 60332-1	