

# Category 6A Data Cables

23AWG, U/UTP, F/UTP or U/FTP,

PVC or HFFR/LSZH or PE Sheath



C1055, C1056, C1057, C1200, C1052, C1053, C1455, C1456, C1457,  
C1555, C1556, C1557, C1669, C6175, C6176

## Application

Twisted pair cable suitable for High Speed Local Area Networks and Analogue & Digital video applications

## Cross Section Drawing



## Design

Unit	Properties
Conductor	Solid Plain Copper Wire
Insulation	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
UTP	No screen
FTP	Overall screen of Aluminium/Polyester Foil with tinned copper drain wire
U-FTP	Each pair shielded with Aluminium / Polyester foil, with tinned copper drain wire, no overall screen
Rip Cord	Nylon Yarn
Sheath Material	Polyvinyl Chloride (PVC) Standard Color: Grey or Halogen Free, Flame Retardant (HFFR/LSZH) Standard Color: Purple or Oil Resistant Polyethylene (PE) 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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### Physical Characteristics

Part Number	C1055	C1455	C1555	C1200	C1669	C1056	C1456	C1556	C1052	C6176	C1057	C1457	C1557	C1053	C6175
Sheath Material	PVC	PVC CM	PVC CMR	HFFR/LSZH	PE	PVC	PVC CM	PVC CMR	HFFR/LSZH	PE	PVC	PVC CM	PVC CMR	HFFR/LSZH	PE
Screen type	UTP					FTP					U-FTP				
No. of Pairs	4														
Conductor Size (AMG)	23														
Drain Wire Size (AMG)	-					26					26				
Screen Coverage (%)	-					115					115				
Nom. Thickness Sheath (mm)	0.5														
Nom. Overall Diameter (mm)	7.0					7.2					7.8				
Operating Temperature (°C)	-20°C to +60°C														
Min. Bend Radius (install) (mm)	70					72					78				
Maximum Pulling Tension (Newton)	160					200					210				

### Electrical Characteristics at 20°C

Max. DC resistance conductor ( $\Omega/100m$ )		Input Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
UTP	FTP/U-FTP				
9.38	7.69	100	65	45	300

Freq. (MHz)	Min. Return Loss (dB)	Max. Attenuation (dB)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACRF (dB)	Min. PSACRF (dB)	Max. DELAY (ns)
1	20.0	2,1	74.3	72.3	67.8	64.8	570
4.0	23.0	3,8	65.3	63.3	55.8	52.8	552
8.0	24.5	5.3	60.8	58.8	49.7	46.7	547
10.0	25.0	5.9	59.3	57.3	47.8	44.8	545
16.0	25.0	7.5	56.2	54.2	43.7	40.7	543
20.0	25.0	8.4	54.8	52.8	41.8	38.8	542
25.0	24.3	9.4	53.3	51.3	39.8	36.8	541
31.25	23.6	10.5	51.9	49.9	37.9	34.9	540
62.5	21.5	15.0	47.4	45.4	31.9	28.9	539
100	20.1	19.1	44.3	42.3	27.8	24.8	538
200	18.0	27.6	39.8	37.8	21.8	18.8	537
250	17.3	31.1	38.3	36.3	19.8	16.8	536
300	16.8	34.3	37.1	35.1	18.3	15.3	536
400	15.9	40.1	35.3	33.3	15.8	12.8	536
500	15.2	45.3	33.8	31.8	13.8	10.8	536
550*	14,9	47,7	33,2	31,2	13,0	10,0	536

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\*C1055/C1200 only

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## Reference Standards

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