

## Category 6A Data Cables

23AWG, U/UTP, F/UTP or U/FTP, SWA,  
HFFR/LSZH Sheath

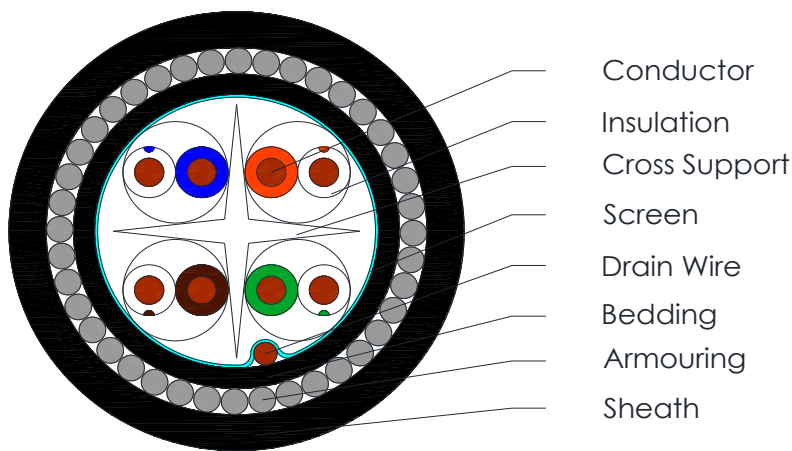


C5971, C5972, C5973

### Application

Armoured 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
Bedding	Halogen Free, Flame Retardant (HFFR/LSZH) Standard Color: Black
Armouring	Galvanized Steel Wire
Sheath Material	Halogen Free, Flame Retardant (HFFR/LSZH) 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	C5971	C5972	C5973
Screen type	U/UTP	F/UTP	U/FTP
No. of Pairs	4		
Conductor Size (AMG)	23		
Drain Wire Size (AMG)	-	26	26
Screen Coverage (%)	-	115	115
Nom. Radial Thickness Sheath (mm)	0.8		
Nom. Bedding Diameter (mm)	7.6	7.8	7.8
Nom. Diameter of SWA Wire (mm)	0.9		
Nom. Radial Thickness Bedding (mm)	0.8		
Nom. Overall Diameter (mm)	11.0	11.2	11.2
Operating Temperature (°C)	-30°C to +90°C		
Min. Bend Radius (install) (mm)	165	168	177
Maximum Pulling Tension (Newton)	350	450	550

### Electrical Characteristics at 20°C

Max. DC resistance conductor (Ω/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

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### Reference Standards

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