

# High Performance Category 6 Data Cables

## 23AWG, S/FTP

### PVC or HFFR/LSZH Sheath

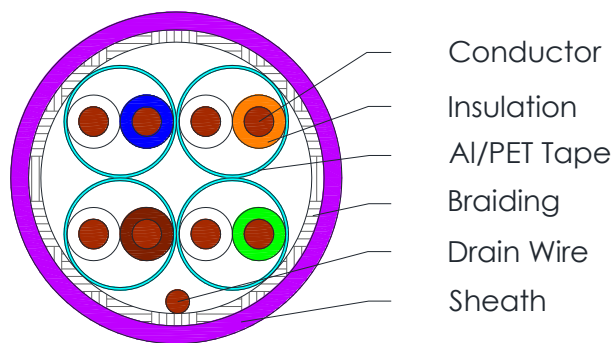


C4162, C5123

### 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	Foamed Polyethylene Pair 1: WHITE-Blue Pair 2: WHITE-Orange Pair 3: WHITE-Green Pair 4: WHITE-Brown
Pair	Two wires twisted together
Screen	Each pair shielded with Aluminium / Polyester foil, with tinned copper drain wire, no overall screen
Braiding	Tinned copper wire
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.

# High Performance Category 6 Data Cables

## 23AWG, S/FTP

### PVC or HFFR/LSZH Sheath



**C4162, C5123**

#### Physical Characteristics

Part Number	C4162	C5123
Sheath Material	PVC	HFFR/LSZH
Screen type	S/FTP	
No. of Pairs	4	
Conductor Size (mm)	0.56	
Drain Wire Size (AMG)	26	
Braiding Coverage (%)	30	
Nom. Radial Thickness Sheath (mm)	0.5	
Nom. Overall Diameter (mm)	7.3	
Operating Temperature (°C)	-20°C to +60°C	
Min. Bend Radius (install) (mm)	70	
Maximum Pulling Tension (Newton)	160	

#### Electrical Characteristics at 20°C

Max. Loop resistance (Ω/100m)	Max. Resistance unbalance (%)	Nom. Mutual Capacitance at 800Hz (nF/km)	Max. Capacitance Unbalance (pair/ground) (pF/km)	Velocity of Propagation (%)
165	2	43	1500	79

Transfer Impedance (m Ω/m) Grade 2			Coupling attenuation (dB) Type 2	Maximum Delay Skew (ns/100m)	Min. Insulation Resistance (500V) (M.Ω *km)
At 1MHz	At 10MHz	At 30MHz			
12	10	30	80	12	2000

Frequency (MHz)	Impedance (Ohm)	Min. Return Loss (dB/100m)	Max. Attenuation (dB/100m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	20.0	2.0	80	75	78	75
4	100 ± 15	23.0	3.7	80	75	78	75
10	100 ± 15	25.0	5.9	80	75	74	71
16	100 ± 15	25.0	7.4	80	75	70	67
20	100 ± 15	25.0	8.3	80	75	68	65
31.25	100 ± 15	23.6	10.4	80	75	64	61
62.5	100 ± 15	21.5	14.9	75.5	72.5	58	55
100	100 ± 15	20.1	19.0	72.4	69.4	54	51
200	100 ± 25	17.3	27.5	67.9	64.9	48	45
250	100 ± 25	17.3	31.0	66.5	63.5	46	43
300	100 ± 25	17.3	34.2	61.9	62.2	40	37
600	100 ± 25	17.3	50.1	60.8	57.7	38	35

# High Performance Category 6 Data Cables

23AWG, S/FTP

PVC or HFFR/LSZH Sheath



---

C4162, C5123

## Reference Standards

EN 50290-2	IEC 60332-1
IEC 61034 (HFFR/LSZH only)	RoHS directives
IEC 60754-1 & 2 (HFFR/LSZH only)	