

Plenum Grade Category 7 Data Cable

23AWG, S/FTP, PVC sheath



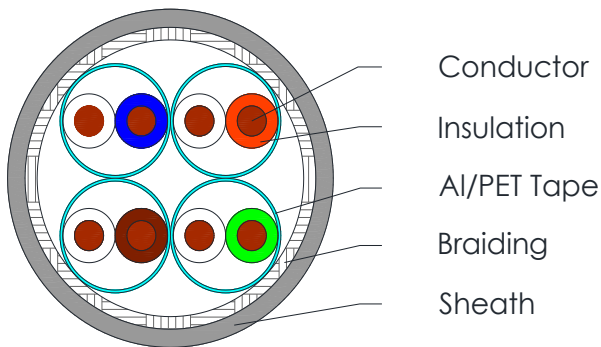
C8039

Applications

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 | FPE+FEP Pair 1: WHITE + BLUE Pair 2: WHITE + ORANGE Pair 3: WHITE + GREEN Pair 4: WHITE + BROWN |
| Pair | Two wires twisted together |
| Individually Screened pairs | Aluminium/Polyester foil tape |
| Collective Braiding | Tinned Copper wire |
| Sheath Material | Plenum Grade Flame-Retardant Polyvinyl Chloride (CMP PVC) Standard colour: Grey |
| Standard Put Up Length | 305 or 500 or 1000 Metres |

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

Plenum Grade Category 7 Data Cable

23AWG, S/FTP, PVC sheath



C8039

Physical Characteristics

| | |
|-----------------------------------|--------------|
| Part Number | C8039 |
| Screen type | SFTP |
| No. of Pairs | 4 |
| Conductor Size (AMG) | 23 |
| Screen Coverage (%) | 115 |
| Drain Wire Size (AMG) | 26 |
| Braiding Coverage (%) | 30 |
| Nom. Radial Thickness Sheath (mm) | 0.50 |
| Nom. Overall Diameter (mm) | 8.4 |
| Operating Temperature (°C) | 0°C to +60°C |
| Min. Bend Radius (install) (mm) | 84 |
| Nominal Cable Weight (kg/km) | 74 |
| Maximum Pulling Tension (Newton) | 160 |

Electrical Characteristics at 20°C

| Max. Conductor Resistance (Ohm/100m) | Max. DCR Conductor unbalance (%) | Mutual Capacitance (pF/km) | Velocity of Propagation (%) | Maximum Delay Skew (ns/100m) | Max. Operating Voltage |
|--------------------------------------|----------------------------------|----------------------------|-----------------------------|------------------------------|------------------------|
| 7.7 | 2 | 48 | 72 | 45 | 300 |

| 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 |

Reference Standards

| | |
|---------------------|-------------------------------|
| ISO 11801, | EN 50290-2 |
| ANSI/TIA/EIA-568-C2 | NFC 725.154(A), ANSI/NFPA 262 |
| IEC 61156 | RoHS directives |