

Fire Resistant Cables

Three Core, Un-Screened, PVC Sheath

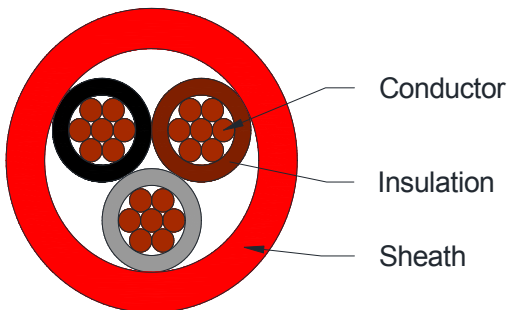


CI 152, CI 153, CI 154, CI 155, CI 156

Applications

Three core Fire Resistant cable for Building and Industrial Management Systems

Cross Section Drawing



Design

| Unit | Properties |
|------------------------|---|
| Conductor | 3 x Bare Copper wire |
| Insulation | Ceramifiable Silicon Rubber Core 1: Brown Core 2: Black Core 3: Grey |
| Sheath Material | Halogen Free Flame-Retardant (HFFR) Colour: red |
| Standard Put Up Length | 305 and 500 meters |

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

Fire Resistant Cables

Three Core, Un-Screened, PVC Sheath



C1152, C1153, C1154, C1155, C1156

Physical Characteristics

| Part Number | C1152 | C1153 | C1154 | C1155 | C1156 |
|--|---|----------|---------|---------|----------|
| No of cores x cross section in sqmm (mm ²) | 3 x 0.75 | 3 x 1.0 | 3 x 1.5 | 3 x 2.5 | 3 x 4.0 |
| Nom. Diameter Conductor (mm) | 1 x 1.0 | 1 x 1.13 | 1 x 1.4 | 1 x 1.8 | 7 x 0.85 |
| Nom. Radial Thickness Insulation (mm) | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 |
| Nom. Diameter Insulation (mm) | 2.4 | 2.5 | 2.8 | 3.4 | 4.35 |
| Nom. Overall Diameter (mm) | 7.6 | 7.9 | 8.8 | 10.1 | 12.4 |
| Cable Weight (Kg/km) | 78 | 83 | 112 | 156 | 230 |
| Operating Temperature (°C) | -20 to +90 | | | | |
| Installation Temperature (°C) | -15 to +90 | | | | |
| Minimum bending radius (mm) | 80 | 80 | 90 | 100 | 120 |
| Max. recommended pulling tension (N) | 160 | 210 | 310 | 520 | 700 |
| Fire Resistance to BS6387, Cat. C | Exposed to fire at 950°C for 3 hours | | | | |
| Fire Resistance to BS6387, Cat. W | Exposed to fire at 650°C for 15 minutes, then exposed to fire at 650°C with water for 15 minutes | | | | |
| Fire Resistance to BS6387, Cat. Z | Exposed to fire at 650°C for 15 minutes, then exposed to fire at 650°C with mechanical shock for 15 minutes | | | | |
| Fire Resistance to IEC 60331-21 | Exposed to fire at 750°C for 90 minutes | | | | |
| Fire Retardancy | IEC 60332-3C | | | | |

Electrical Characteristics (at 20°C)

| Part Number | C1152 | C1153 | C1154 | C1155 | C1156 |
|--|---------|-------|-------|-------|-------|
| Max. DC Resistance Conductor (Ω /km) | 24.5 | 18.1 | 12.1 | 7.41 | 4.61 |
| Mutual Capacitance (pF/m) | <100 | | | | |
| Min. Insulation Resistance ($M\Omega \cdot k m$) | 200 | | | | |
| Max. recommended current at 25°C (Amps) | 12 | 18 | 21 | 30 | 40 |
| Max. Operating Voltage (Vrms) | 300/500 | | | | |

Reference Standards

| | |
|--------------------------|-----------------|
| EN 50267-2-1, | BS EN 50363-1 |
| BS 7655.1.1, BS 7655.6.1 | EN 50200 PH120 |
| EN 50290-2-27 | VDE 472-814 |
| IEC 60228 | IEC 60754-1&-2 |
| IEC 60332-3-24 | IEC 61034-1&-2 |
| IEC 60331-21 FE180 | BS 6360 |
| BS 6387 CWZ | RoHS Directives |