

Fire Resistant Cables – FirePremium
B3 Cables Italy
Two core, Overall Screen, LSZH/HFFR Sheath
BS 6387 CWZ, EN 50200 PH120 + Annex E

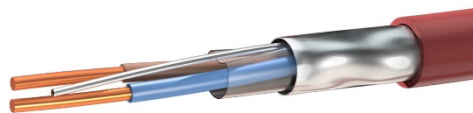
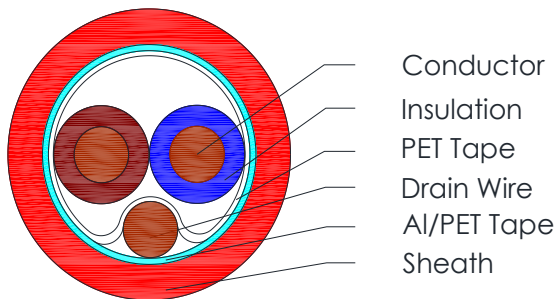


C1044, C1045, C1283, C1284, C1289, C5126

Applications

Screened two core Fire Resistant cable for Building and Industrial Management Systems

Cross Section Drawing



Appendix to Cert/LPCB ref. No. 1809a/01

Design

| Unit | Properties |
|------------------------|-----------------------------------------------------------------------------------|
| Conductor | Class1 or Class 2 Bare copper according to IEC 60228:2004 |
| Insulation | Silicone rubber EI2 Core 1: Blue Core 2: Brown |
| Wrapping tape | PET tape |
| Drain Wire | Solid Tinned Copper wire |
| Screen | Duplex Alu/Pet |
| Sheath Material | Thermoplastic LSZH compound Type M1, Standard Colour: Red (-02) or White (-09) |
| Standard Put Up Length | 305 and 500 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 | C1284 | C1283 | C1044* | C1045* | C1289 | C5126 |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|
| No of cores x cross section in sqmm (mm ²) | 2 x 0.75 | 2 x 1.0 | 2 x 1.5 | 2 x 2.5 | 2 x 4.0 | 2 x 6.0 |
| Nom. Diameter Conductor (mm) | 1 x 0.98 | 1 x 1.13 | 1 x 1.38 | 1 x 1.78 | 7 x 0.83 | 7 x 1.04 |
| Nom. Radial Thickness Insulation (mm) | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.0 |
| Twist per meter | 10 | | | | | |
| Nom. Cross Section Drain Wire (mm ²) | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Drain Wire Stranding | 1x0.8 | 1x0.8 | 1x0.8 | 1x0.8 | 1x0.8 | 1x0.8 |
| Screen Coverage (%) | 115 | | | | | |
| Nom. Overall Diameter (mm) | 7.5 | 8.0 | 8.0 | 9.40 | 12.5 | 14.3 |
| Cable weight (kg/km) | 67 | 75 | 90 | 125 | 201 | 254 |
| Operating Temperature (°C) | -40 to +90 (3hrs 950°C) | | | | | |
| Installation Temperature (°C) | -15 to +90 | | | | | |
| Minimum bending radius (mm) | 75 | 78 | 80 | 99 | 120 | 140 |
| Max. recommended pulling tension (N) | 205 | 265 | 405 | 670 | 1250 | 1875 |
| 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 950°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 | | | | | |
| Flame Retardancy | IEC 60332-3-24 | | | | | |

Electrical Characteristics at 20°C

| Part Number | C1284 | C1283 | C1044* | C1045* | C1289 | C5126 |
|------------------------------------------------|---------|-------|--------|--------|-------|-------|
| Max. DC Resistance Conductor (Ω/km) | 24.5 | 18.1 | 12.1 | 7.41 | 4.61 | 3.08 |
| Nom. Capacitance conductor to conductor (pF/m) | 87 | 95 | 105 | 125 | 125 | 147 |
| Nom. Capacitance conductor to rest (pF/m) | 160 | 170 | 185 | 200 | 195 | 220 |
| Min. Insulation Resistance (MΩ*km) | 200 | | | | | |
| Max. recommended current at 25°C (Amps) | 12 | 18 | 21 | 30 | 40 | 50 |
| Max. Operating Voltage (Vrms) | 300/500 | | | | | |

Reference Standards

| | |
|--------------------|------------------------------------|
| BS EN 50363-1 | *EN 50200 PH120, *EN 50200 Annex E |
| EN 50290-2-27 | *IEC 60754-1 |
| IEC 60228/BS6360 | IEC 60754-2 |
| IEC 60332-3-24 | *IEC 61034-2 |
| IEC 61034-1 | BS 7671 |
| IEC 60331-21 FE180 | BS 7655.6-1 |
| *BS 6387 CWZ | RoHS Directives |

*Standards and constructions under LPCB certification