

# Fire Resistant Cables

## Two core, Overall Screen & Steel Wire Armour

### PVC Sheath, BS6387 CWZ

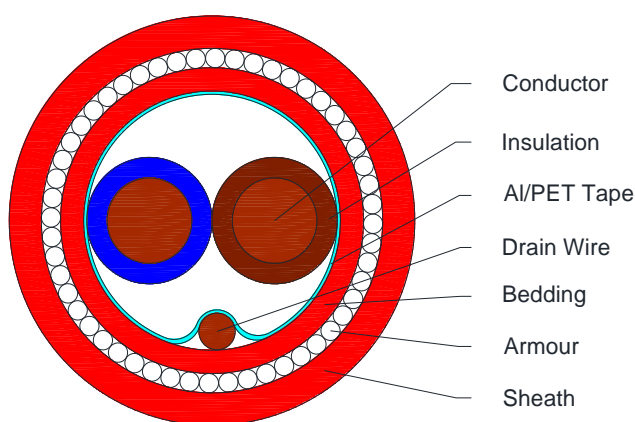


C1204, C1205

#### Applications

Two core armoured Fire Resistant cable for Building and Industrial Management Systems.

#### Cross Section Drawing



#### Design

| Unit                   | Properties  |
|------------------------|---|
| Conductor              | Solid Bare Copper wires                                     |
| Insulation             | Silicon Rubber blend<br>Core 1: Blue<br>Core 2: Brown       |
| Cable Core lay-up      | Two wires twisted together                                  |
| Drain Wire             | Bare Copper wire  |
| Screen                 | Aluminium/Polyester tape                                    |
| Bedding Material       | Halogen Free Flame-Retardant (HFFR)                         |
| Armour                 | Galvanized steel wire                                       |
| Sheath Material        | Halogen Free Flame-Retardant (HFFR)<br>Standard Colour: Red |
| 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.

# Fire Resistant Cables

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C1204, C1205

#### Physical Characteristics

| Part Number  | C1204   | C1205   |
|--|---|---------|
| No of cores x cross section in sqmm (mm <sup>2</sup> ) | 2 x 1.5   | 2 x 2.5 |
| Nom. Diameter Conductor (mm)                           | 1.4   | 1.8     |
| Nom. Radial Thickness Insulation (mm)                  | 0.7   | 0.8     |
| Diameter over insulation (mm)                          | 2.8   | 3.4     |
| Screen Coverage (%)                                    | 115   |         |
| Nom. Cross Section Drain Wire (mm <sup>2</sup> )       | 1.5   | 2.5     |
| Nom. Diameter Bedding (mm)                             | 8.3   | 9.5     |
| Nom. Diameter Steel Wire Armouring (mm)                | 10.1  | 11.3    |
| Nom. Overall Diameter (mm)                             | 13.1  | 14.3    |
| Operating Temperature (°C)                             | -20 to +90  |         |
| Installation Temperature (°C)                          | -15 to +90  |         |
| Minimum bending radius (mm)                            | 180   | 258     |
| Max. recommended pulling tension (N)                   | 1040  | 1170    |
| 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                             | C1204   | C1205 |
|---|---------|-------|
| Max. DC Resistance Conductor (Ω/km)     | 12.1    | 7.41  |
| Min. Insulation Resistance (MΩ*k m)     | 200     |       |
| Test Voltage (Vrms)                     | 3000    |       |
| Max. recommended current at 25°C (Amps) | 21      | 30    |
| Max. Operating Voltage (Vrms)           | 300/500 |       |

#### Reference Standards

|  |                |
|--|----------------|
| EN 50267-2-1,                              | BS 6387 CWZ    |
| BS 7655-Type EI2, BS 7655.1.1, BS 7655.6.1 | BS 6234        |
| EN 50290-2                                 | BS 6360        |
| IEC 60332-3-24                             | IEC 60754-1&-2 |
| IEC 60331-21                               | IEC 61034      |