

# Fire Detection and Alarm System Cables

## Three Core, Overall Screen, Fire Rated

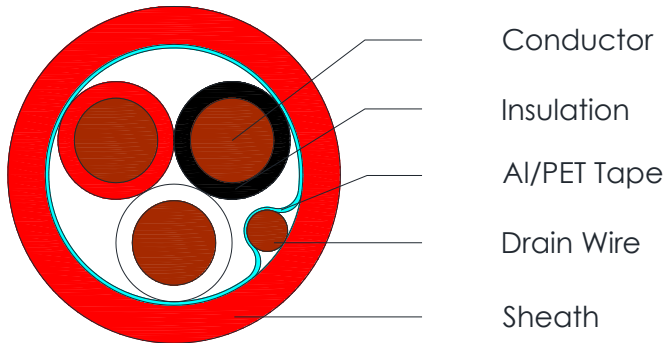


CI477, CI478, CI505, CI506

### Applications

Screened two core cable suitable for Fire Detection and Alarm Systems.

### Cross Section Drawing



### Design

| Unit                   | Properties   |
|------------------------|--|
| Conductor              | 3 x Bare Copper wire   |
| Insulation             | Cross linked Polyethylene<br>Core 1: Black<br>Core 2: Red<br>Core 2: White |
| Screen                 | Aluminium/Polyester 100% Coverage  |
| Drain Wire             | Tinned Copper wire   |
| Sheath Material        | Halogen Free Flame-Retardant (HFFR/LSZH)<br>Colour: Red                    |
| 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.

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## Three Core, Overall Screen, Fire Rated



**C1477, C1478, C1505, C1506**

### Physical Characteristics

| Part Number  | C1477       | C1478    | C1505   | C1506   |
|--|-------------|----------|---------|---------|
| No of cores x cross section in sqmm (mm <sup>2</sup> ) | 3 x 0.75    | 3 x 1.0  | 3 x 1.5 | 3 x 2.5 |
| Nom. Diameter Conductor (mm)                           | 1 x 1.0     | 1 x 1.13 | 1 x 1.4 | 1 x 1.8 |
| Nom. Radial Thickness Insulation (mm)                  | 0.7         | 0.7      | 0.7     | 0.8     |
| Diameter over insulation (mm)                          | 2.4         | 2.5      | 2.8     | 3.4     |
| Screen Coverage (%)                                    | 115         |          |         |         |
| Nom. Cross Section Drain Wire (mm <sup>2</sup> )       | 0.50        | 0.50     | 0.50    | 0.50    |
| Nom. Overall Diameter (mm)                             | 7.7         | 8.0      | 8.9     | 10.2    |
| Operating Temperature (°C)                             | -40 to +105 |          |         |         |
| Minimum bending radius (mm)                            | 80          | 80       | 90      | 100     |
| Max. recommended pulling tension (N)                   | 190         | 240      | 350     | 570     |

### Electrical Characteristics at 20°C

| Part Number                             | C1477    | C1478   | C1505   | C1506   |
|---|----------|---------|---------|---------|
| No of Cores x AWG Gauge                 | 3 x 0.75 | 3 x 1.0 | 3 x 1.5 | 3 x 2.5 |
| Max. DC Resistance Conductor (Ω/km)     | 24.5     | 18.1    | 12.1    | 7.41    |
| Max. DC Resistance Screen (Ω/km)        | 52.7     |         |         |         |
| Max. Recommended Current at 25°C (Amps) | 12       | 18      | 21      | 30      |
| Max. Operating Voltage (Vrms)           | 300      |         |         |         |

### Reference Standards

|                |                 |
|----------------|-----------------|
| IEC 60332-3-24 | IEC 61034       |
| IEC 60754-1&-2 | RoHS directives |