



# Caledonian

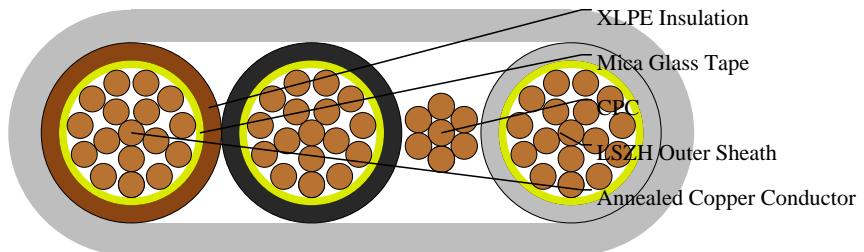
## FIREFLIX Fire Resistant Power & Control Cables

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### 300/500V Mica+XLPE Insulated, LSZH Sheathed Power Cables to BS 7211 ( 3C16 )

FFX200 05mRZ1-R (CU/MGT+XLPE/LSZH Class 2)



### APPLICATIONS

The cables are mainly used in power stations, mass transit underground passenger systems, airports, petrochemical plants, hotels, hospitals and high-rise buildings.

### STANDARDS

Basic design adapted from BS 7211:2012

### FIRE PERFORMANCE

|   |                               |
|---|-------------------------------|
| Circuit Integrity   | IEC 60331-21; BS 6387         |
| Flame Retardance (Single vertical wire or cable test)                     | IEC 60332-1-2; EN 60332-1-2   |
| Reduced Fire Propagation (Vertically-mounted bundled wires & cables test) | IEC 60332-3-24; EN 60332-3-24 |
| Halogen Free  | IEC 60754-1; EN 50267-2-1     |
| No Corrosive Gas Emission   | IEC 60754-2; EN 50267-2-2     |
| Minimum Smoke Emission  | IEC 61034-2; EN 61034-2       |

### VOLTAGE RATING

300/500V

### CABLE CONSTRUCTION

Conductor: Annealed copper conductor, stranded according to BS EN 60228 class 2.

Fire Barrier: Mica glass tape.

Insulation: XLPE type GP 8 according to BS 7655-1.3. Crosslinked polyolefin material type EI 5 according to EN 50363-5 can be offered as option.

CPC (Circuit Protective Conductor): Uninsulated copper conductor.

Outer Sheath: Extruded LSZH type LTS 2 according to BS 7655-6.1.

Outer Sheath Option: UV resistance, hydrocarbon resistance, oil resistance, anti-rodent and anti-termite properties can be offered as option.

### COLOUR CODE



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Insulation Colour: Three cores: Brown, black (centre core) and grey.

Position of CPC: Centrally placed between black and grey cores in same plane.

Sheath Colour: White; other colours can be offered upon request.

### PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation: 90°C

Maximum short circuit temperature (5 Seconds): 250°C

Minimum bending radius :

OD < 8mm: 4 × Overall Diameter

8mm ≤ OD ≤ 12mm: 5 × Overall Diameter

OD > 12mm: 6 × Overall Diameter

### Electrical Properties

Conductor operating temperature: 90°C

Ambient temperature: 30°C

### DIMENSION AND PARAMETERS

| No. of Cores × Cross-sectional Area | Conductor Class | Nominal Insulation Thickness | Cross-sectional Area of CPC | Class of CPC | Nominal Sheath Thickness | Overall Diameter (min.) | Overall Diameter (max.) | Approx. Weight |
|-------------------------------------|-----------------|------------------------------|-----------------------------|--------------|--------------------------|-------------------------|-------------------------|----------------|
| No. × mm <sup>2</sup>               |                 | mm                           | mm <sup>2</sup>             |              | mm                       | mm                      | mm                      | kg/km          |
| 3 × 16                              | 2               | 0.7                          | 6.0                         | 2            | 1.3                      | 9.4 × 22.5              | 11.1 × 30.6             | 690            |

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E2A

| Conductor Cross-sectional Area | Ref. Method A One 2C cable, 1-phase a.c. or d.c. | Ref. Method A One 3C or 4C cable, 3-phase a.c. | Ref. Method B One 2C cable, 1-phase a.c. or d.c. | Ref. Method B One 3C or 4C cable, 3-phase a.c. | Ref. Method C One 1C cable, 1-phase a.c. or d.c. | Ref. Method C One 3C or 4C cable, 3-phase a.c. | Ref. Method E One 2C cable, 1-phase a.c. or d.c. | Ref. Method E One 3C or 4C cable, 3-phase a.c. |
|--------------------------------|--|--|--|--|--|--|--|--|
| mm <sup>2</sup>                | A  | A  | A  | A  | A  | A  | A  | A  |
| 16                             | 76   | 68   | 91   | 80   | 107  | 96   | 115  | 100  |

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4E2B

| Conductor Cross-sectional Area | 2C cable, d.c. | 2C cable, 1-phase a.c. | 3C or 4C cable, 3-phase a.c. |
|--------------------------------|----------------|------------------------|------------------------------|
| mm <sup>2</sup>                | mV/A/m         | mV/A/m                 | mV/A/m                       |
| 16                             | 2.9            | 2.9                    | 2.5                          |