



# Caledonian

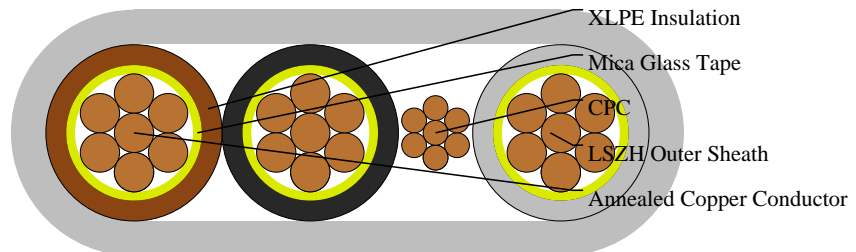
## FIREFLIX Fire Resistant Power & Control Cables

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### 300/500V Mica+XLPE Insulated, LSZH Sheathed Power Cables to BS 7211 ( 3C10 )

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 × 10	2	0.7	4.0	2	1.2	8.3 × 22.5	9.8 × 26.6	460

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
10	57	51	69	60	80	71	86	75

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
10	4.7	4.7	4.0