



Caledonian

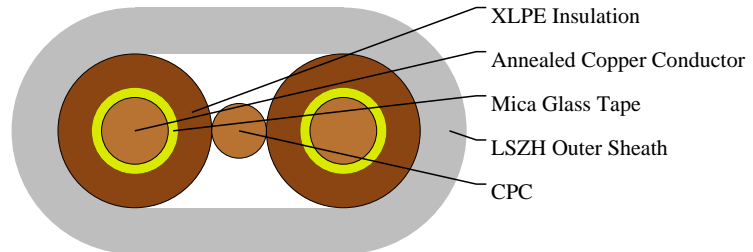
FIREFLIX Fire Resistant Power & Control Cables

www.caledonian-cables.com

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300/500V Mica+XLPE Insulated, LSZH Sheathed Power Cables to BS 7211 (2C1.5)

FFX200 05mRZ1-U (CU/MGT+XLPE/LSZH Class 1)



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, solid according to BS EN 60228 class 1 .

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:Twin: Brown and blue or, for 2x1.0 and 2x1.5 cables, brown and brown.

Position of CPC:Twin: Centrally placed between 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 ²		mm	mm ²		mm	mm	mm	kg/km
2×1.5	1	0.7	1.0	1	0.9	5.4x 10.1	6.3x11.7	101

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 ²	A	A	A	A	A	A	A	A
1.5	18.5	16.5	22	19.5	24	22	26	23

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 ²	mV/A/m	mV/A/m	mV/A/m
1.5	31	31	27



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Rated voltage



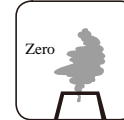
BS 7211



Circuit Integrity
IEC 60331-21/BS 6387



Flame Retardancy
BS/EN/IEC 60332-1-2



Halogen Free
IEC 60754-1



Low Corrosivity
IEC 60754-2



Low Smoke Emission
EN 61034-2