

Caledonian

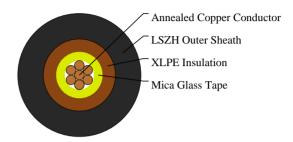
FIREFLIX Fire Resistant Power & Control Cables

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600/1000V Mica+XLPE Insulated, LSZH Sheathed Power Cables to BS 8573 (1C1.5)

FFX300 1mRZ1-R (CU/MGT+XLPE/LSZH 600/1000V Class 2)





APPLICATIONS

These XLPE insulated and LSZH sheathed cables are generally used for fixed installation. Suitable forbuilding wiring, especially in areas where smoke and fume emissions may cause a potential threat to life butnot for burial in the ground, either directly or in ducts.

STANDARDS

Basic design adapted from BS 8573:2012

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-21; BS 6387; BS 8491
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

600/1000V

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. HEPR type GP 6 according to BS 7655-1.2 or crosslinked polyolefin material type EI 5 according to BS EN 50363-5 can be offered as option.

Inner Covering Option: The optional inner covering, where used, shall consist of an extruded layer of synthetic polymeric material. It shall surround the single core and the laid-up two, three, four or five cores, giving the assembly a practically circular shape.

Outer Sheath: Extruded layer of polymeric material LTS 4 according to BS 7655-6.1.



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

COLOUR CODE

Insulation Colour: Brown or blue.

Sheath Colour: Black; 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:

circular copper conductors OD<=25mm: 4 × Overall Diameter circular copper conductors OD>25mm: 6 × Overall Diameter

shaped copper conductors: 8 × 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	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	kg/km
1×1.5	2	0.7	1.4	6.8	58

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E1A

Conductor Cross- sectional Area	Ref. Method A 2cables, 1- phase a.c. or d.c.	Ref. Method A 3/4 cables, 3-phase a.c.	Ref. Method B 2 cables, 1- phase a.c. or d.c	Ref. Method B 3/4 cables, 3-phase a.c.	Ref. Method C 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method C 3/4 cables, 3- phase a.c. flat and touching or trefoil
mm²	Α	Α	А	А	А	Α
1.5	19	17	23	20	25	23

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4E1B

Conductor Cross- sectional Area	2 cables d.c.	Ref. Methods A,B 2 cables, 1-phase a.c.	Ref. Methods C,F,G 2 cables, 1-phase a.c. (Cables touching)	Ref. Methods C,F,G 2 cables, 1-phase a.c. (Cables spaced)	Ref. Methods A,B 3 or 4 cables, 3- phase a.c.	Ref. Methods C,F,G 3 or 4 cables, 3-phase a.c. (Cables touching,Trefoil)	Ref. Methods C,F,G 3 or 4 cables, 3-phase a.c. (Cables touching,Flat)	Ref. Methods C,F,G 3 or 4 cables, 3-phase a.c. (Cables spaced,Flat)
mm²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
1.5	31	31	31	31	27	27	27	27



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Rated voltage



BS 8573











