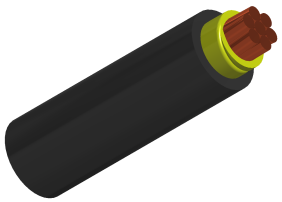
Caledonian

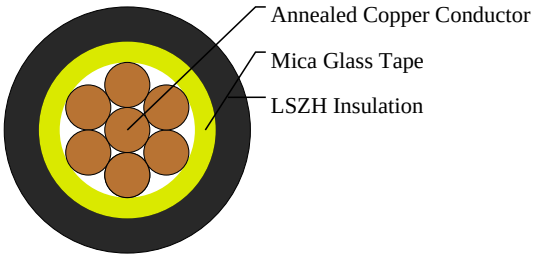
FIREFLIX Fire Resistant Power & Control Cables

www.caledonian-cables.com marketing@caledonian-cables.com

600/1000V Mica+LSZH Insulated, Non-sheathed Power Cables to BS EN 50525-3-41 (Single Core)

FFX100 1mZ-R (CU/MGT+LSZH 600/1000V 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 EN 50525-3-41

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
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: Crosslinked polyolefin material type EI 5 according to EN 50363-5.
Insulation Option: UV resistance, hydrocarbon resistance, oil resistance, anti-rodent and anti-termite properties can be offered as option.

COLOUR CODE

Black, Blue, Brown, Grey, Orange, Pink, Red, Turquoise, Violet, White, Green and Yellow. Bi-colours of any combination of the above mono-colours are permitted.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation: 90°C
Maximum short circuit temperature (5 Seconds): 250°C

Caledonian

FIREFLIX Fire Resistant Power & Control Cables

www.caledonian-cables.com marketing@caledonian-cables.com

Minimum bending radius
OD<8mm: 4 × Overall Diameter

Electrical Properties

Conductor operating temperature: 90°C
Ambient temperature: 30°

DIMENSION AND PARAMETERS

No. of Cores × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Approx. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	kg/km
1×6.0	2	0.8	5.8	78

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	A	A	A	A	A	A
6.0	45	40	54	48	59	54

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 2 cables, 1-phase a.c. (Cables touching)	Ref. Methods C,F 2 cables, 1-phase a.c. (Cables spaced)	Ref. Methods A,B 3 or 4 cables, 3-phase a.c.	Ref. Methods C,F 3 or 4 cables, 3-phase a.c. (Cables touching,Trefoil)	Ref. Methods C,F 3 or 4 cables, 3-phase a.c. (Cables touching,Flat)	Ref. Methods C,F 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
6.0	7.9	7.9	7.9	7.9	6.8	6.8	6.8	6.8

Rated voltage

BS EN 50525-3-41

Circuit Integrity
IEC 60331-21/BS6387/BS 8491


Flame Retardancy
IEC 60332-1-2

Halogen Free
IEC 60754-1


Low Corrosivity
IEC 60754-2


Low Smoke Emission
IEC 61034-2