



Caledonian

FIRETOX LSZH Flame Retardant Power & Control Cables

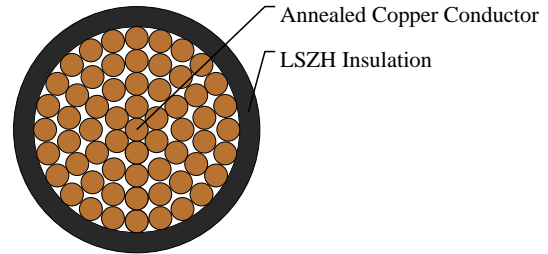
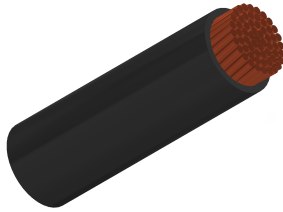
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450/750V LSZH Insulated, Non-sheathed Power Cables to BS EN 50525-3-31 (Single Core)

FTX100 07Z1-R(CU/LSZH 450/750V Class2)

HAR Code:H07Z1-R



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 50525-3-31

FIRE PERFORMANCE

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

450/750V

CABLE CONSTRUCTION

Conductor: Copper conductor according to BS EN 60228 class 2.

Insulation: Thermoplastic compound of type TI 7 to EN 50363-7.

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.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation: 70°C

Maximum short circuit temperature (5 Seconds): 160°C



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Minimum bending radius: 4 x Overall Diameter

Electrical Properties

Conductor operating temperature: 70°C

Ambient temperature: 30°C

DIMENSION AND PARAMETERS

No. of Cores x Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Overall Diameter (min.)	Overall Diameter (max.)	Approx. Weight
No. x mm ²		mm	mm	mm	kg/km
1x500	2	2.8	30.5	36.9	5343

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4D1A

Conductor Cross-sectional Area	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	Ref. Method F 2 cables, 1-phase a.c. or d.c. flat	Ref. Method F 3 cables, 3-phase a.c. flat	Ref. Method F 3 cables, 3-phase a.c. trefoil	Ref. Method F 2 cables 1-phase 3 cables 3-phase flat Horizontal	Ref. Method F 2 cables 1-phase 3 cables 3-phase flat Vertical
mm ²	A	A	A	A	A	A	A	A	A
500	626	533	792	723	868	789	749	982	920

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4D1B

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)
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
500	0.086	r:0.11 x:0.26 z:0.28	r:0.098 x:0.155 z:0.185	r:0.093 x:0.24 z:0.26	r:0.1 x:0.22 z:0.25	r:0.086 x:0.135 z:0.16	r:0.086 x:0.21 z:0.23	r:0.081 x:0.29 z:0.30



Rated voltage



BS EN 50525-3-31



Flame Retardancy IEC 60332-1-2



Halogen Free IEC 60754-1



Low Corrosivity IEC 60754-2



Low Smoke Emission IEC 61034-2



Reduced Fire Propagation IEC 60332-3-24