



# Caledonian

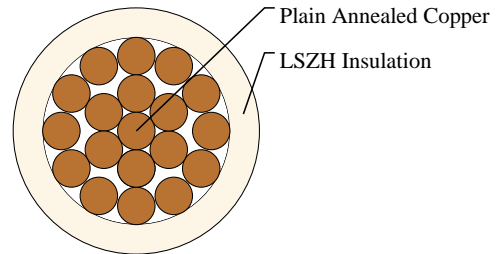
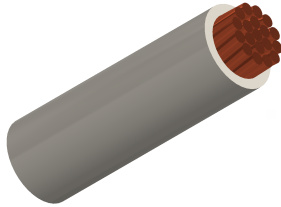
## FIRETOX LSZH Flame Retardant Power & Control Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

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

FTX100 1Z-R (CU/LSZH 600/1000V Class 2)



### APPLICATIONS

This 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 to BS EN 50525-3-41

### FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire 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.

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

Minimum bending radius

OD<8mm: 4 x Overall Diameter



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8mm<=OD<=12mm: 5 x Overall Diameter

OD>12mm: 6 x Overall Diameter

**Electrical Properties**

Conductor operating temperature: 90°C

Ambient temperature: 30°C

**DIMENSION AND PARAMETERS**

No. of Cores x Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Approx. Overall Diameter	Approx. Weight
No.xmm <sup>2</sup>		mm	mm	kg/km
1x50	2	1.4	12.0	510

**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	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 <sup>2</sup>	A	A	A	A	A	A	A	A	A	A	A
50	158	141	198	175	228	209	242	216	207	275	246

**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)
mm <sup>2</sup>	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
50	0.99	r:1.00 x:0.29 z:1.05	r:0.99 x:0.180 z:1.00	r:0.99 x:0.27 z:1.00	r:0.87 x:0.25 z:0.90	r:0.86 x:0.155 z:0.87	r:0.86 x:0.180 z:0.87	r:0.86 x:0.26 z:0.89



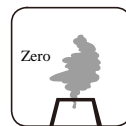
Rated voltage



BS EN 50525-3-41



Flame Retardancy IEC 60332-1-2



Halogen Free IEC 60754-1



Low Corrosivity IEC 60754-2



Low Smoke Emission IEC 61034-2