



# Caledonian

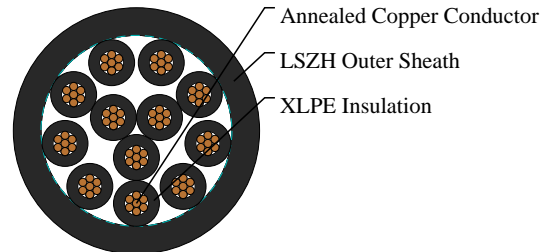
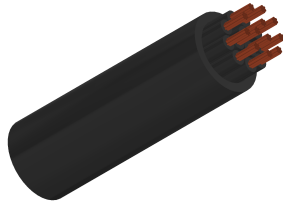
FIRETOX LSZH Flame Retardant Power & Control Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

## 600/1000V XLPE Insulated, LSZH Sheathed Power Cables to IEC 60502-1 (Multicore)

FTX400 1RZ1-R 12C1.5 (CU/XLPE/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. This product type is TUV approved.

### STANDARDS

Basic design to IEC 60502-1

### APPROVALS

TUV Certification (B 098200 0033 Rev.00)

### 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

600/1000V

### CABLE CONSTRUCTION

Conductor: The conductors shall be class 2 plain or metal-coated annealed copper in accordance with IEC 60228.

Class 1 and class 5 conductor can be offered as option.

Insulation: Thermosetting XLPE material and thickness shall be as per IEC 60502-1.

Outer Sheath: Thermoplastic halogen free compound ST8 as per IEC 60502-1.

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

### COLOUR CODE

Insulation Colour



# Caledonian

FIRETOX LSZH Flame Retardant Power & Control Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

2-core: Brown and blue.

3-core: Brown, black and grey.

4-core: Blue, brown, black and grey.

5-core: Green and yellow, blue, brown, black, grey.

Above 5 Cores: Black cores with white numerals.

Other colours can be offered upon request.

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  $OD \leq 25\text{mm}$  :  $4 \times$  Overall Diameter

circular copper conductors  $OD > 25\text{mm}$ :  $6 \times$  Overall Diameter

shaped copper conductors:  $8 \times$  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. × mm <sup>2</sup>		mm	mm	mm	kg/km
12x1.5	2	0.7	1.8	16	408

## Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E2A

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 E One 2C cable, 1-phase a.c. or d.c.	Ref. Method E One 3C or 4C cable, 3-phase a.c.
mm <sup>2</sup>	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 <sup>2</sup>	mV/A/m	mV/A/m	mV/A/m
1.5	31	31	27



# Caledonian

FIRETOX LSZH Flame Retardant Power & Control Cables

[www.caledonian-cables.com](http://www.caledonian-cables.com)

[marketing@caledonian-cables.com](mailto:marketing@caledonian-cables.com)



Rated voltage



Flame Retardancy  
IEC 60332-1-2



Halogen Free  
IEC 60754-1



IEC60502-1



Low Corrosivity  
IEC 60754-2



Low Smoke Emission  
IEC 61034-2



Reduced Fire Propagation  
IEC 60332-3-24