

# Caledonian

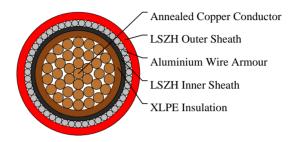
# **FIRETOX LSZH Flame Retardant Power & Control Cables**

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

FTX300 1RZ1MAZ1-R (CU/XLPE/LSZH/AWA/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 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 IEC60228.

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

Insulation: Thermosetting XLPE compound as per IEC 60502-1.

Inner Covering Option: Thermoplastic halogen free compound ST8 as per IEC 60502-1.

Armouring: Aluminium wire.

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



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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; 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: 6 x 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 Thickness of Inner Covering	Nominal Outer Sheath Thickness	Nominal Aluminum Wire Armour Diameter	Approx. Overall Diameter	Approx. Weight
No.xmm²		mm	mm	mm	mm	mm	kg/km
1×185	2	1.6	1.0	1.8	1.6	30.4	2668

# **Current-Carrying Capacities (Amp)**

Conductor Cross- sectional Area	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 Spaced by on cable diameter 2 cables, d.c. Horizontal	Ref. Method F Spaced by on cable diameter 2 cables, d.c. Vertical	Ref. Method F Spaced by on cable diameter 2 cables, 1- phase a.c. Horizontal	Ref. Method F Spaced by on cable diameter 2 cables, 1-phase a.c. Vertical	Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Horizontal	Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Vertical
mm²	А	А	Α	А	А	А	А	А	А	А	А
185	557	496	587	524	529	688	660	643	614	618	574

# **Voltage Drop (Per Amp Per Meter)**

Conductor Cross- sectional Area	2 cables d.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 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
185	0.25	R:0.27 X:0.185 Z:0.33	R:0.30 X:0.26 Z:0.40	R:0.23 X:0.160 Z:0.28	R:0.26 X:0.23 Z:0.34	R:0.29 X:0.39 Z:0.41



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Rated voltage







IEC60502-1





