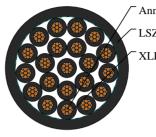


### Caledonian FIRETOX LSZH Flame Retardant Power & Control Cables www.caledonian-cables.com marketing@caledonian-cables.com

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

FTX400 1RZ1-R 21C2.5 (CU/XLPE/LSZH 600/1000V Class 2)





Annealed Copper Conductor LSZH Outer Sheath

XLPE Insulation

#### **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-termiteproperties can be offered as option.

#### COLOUR CODE

Insulation Colour

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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<=25mm : 4 × Overall Diameter circular copper conductors OD>25mm: 6 × Overall Diameter shaped copper conductors: 8 × Overall Diameter

#### **Electrical Properties**

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

#### DIMENSION AND PARAMETERS

| No. of Cores<br>× Cross-<br>sectional Area | Conductor Class | Nominal<br>Insulation<br>Thickness | Nominal Sheath<br>Thickness | Approx. Overall<br>Diameter | Approx.<br>Weight |
|--|-----------------|------------------------------------|-----------------------------|-----------------------------|-------------------|
| No.×mm <sup>2</sup>                        |                 | mm                                 | mm                          | mm                          | kg/km             |
| 21x2.5                                     | 2               | 0.7                                | 1.8                         | 21.7                        | 881               |

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

| Conductor<br>Cross-<br>sectional Area | Ref. Method<br>A 2cables,<br>1-phase<br>a.c. or d.c. | Ref. Method<br>A 3/4 cables,<br>3-phase a.c. | Ref. Method B 2<br>cables, 1-phase<br>a.c. or d.c |    | Ref. Method C 2<br>cables, 1-phase<br>a.c. or d.c. flat<br>and touching | Ref. Method C<br>3/4 cables, 3-<br>phase a.c. flat<br>and touching<br>or trefoil | Ref. Method<br>E One 2C<br>cable, 1-phase<br>a.c. or d.c. | Ref. Method<br>E One 3C or<br>4C cable, 3-<br>phase a.c. |
|---------------------------------------|--|--|---|----|---|--|---|--|
| mm²                                   | А  | А  | A   | A  | A   | А  | A   | А  |
| 2.5                                   | 25   | 22   | 30  | 26 | 33  | 30   | 36  | 32   |

#### 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. |
|--------------------------------|----------------|------------------------|------------------------------|
| mm²                            | mV/A/m         | mV/A/m                 | mV/A/m                       |
| 2.5                            | 19             | 19                     | 16                           |



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600/1000V

Rated voltage











