

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

# 600/1000V XLPE Insulated, LSZH Sheathed, Armoured Power Cables (3 cores)

FTX400 1RZ1MZ1-R (CU/XLPE/LSZH/SWA/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 BS 6724

#### **APPROVALS**

TUV Certification (No.B 098200 0030 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: Annealed copper wire, stranded according to BS EN 60228 class 2.

Insulation: XLPE type GP8 according to BS 7655-1.3. HEPR type GP6 according to BS 7655-1.2 or crosslinked polyolefin material type EI 5 according to BS EN 50363-5 can be offered as option.

Bedding: Extruded layer of polymeric material.

Armouring: Galvanized steel wire.

Outer Sheath: Extruded layer of polymeric material LTS 1 according to BS 7655-6.1.

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

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# **COLOUR CODE**

Insulation Colour: Brown, black and grey. 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: 8 × Overall Diameter

### **Electrical Properties**

Conductor operating temperature: 90°C Air ambient temperature: 30°C Ground ambient temperature: 20°C

## **DIMENSION AND PARAMETERS**

| No. of Cores<br>× Cross-<br>sectional<br>Area | Conductor<br>Class | Nominal<br>Insulation<br>Thickness | Nominal<br>Bedding<br>Thickness | Nominal<br>Sheath<br>Thickness | Nominal<br>Steel Wire<br>Armour<br>Diameter | Approx.<br>Overall<br>Diameter | Approx.<br>Weight |
|---|--------------------|------------------------------------|---------------------------------|--------------------------------|---|--------------------------------|-------------------|
| No.×mm <sup>2</sup>                           |                    | mm                                 | mm                              | mm                             | mm  | mm                             | kg/km             |
| 3×400   | 2                  | 2.0                                | 1.6                             | 2.9                            | 2.5   | 66.6                           | 17765             |

# Current-Carrying Capacities (Amp) according to Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E4A

| Conductor Cross-<br>sectional Area | Ref. Method C One 1C cable, 1-phase a.c. or d.c. | Ref. Method C One 3C or 4C cable, 3-phase a.c. | 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. |
|------------------------------------|--|--|--|--|
| mm²                                | А  | А  | А  | A  |
| 400                                | 787  | 673  | 847  | 728  |

# Voltage Drop (Per Amp Per Meter) according to Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E4B

| Conductor Cross-sectional Area | uctor Cross-sectional Area 2C cable, d.c. |        | 3C or 4C cable, 3-phase a.c. |  |
|--------------------------------|---|--------|------------------------------|--|
| mm² mV/A/m                     |   | mV/A/m | mV/A/m                       |  |
| 400                            | 400 0.120                                 |        | r:0.115 x:0.120 z:0.165      |  |



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uced Fire Propaga IEC 60332-3-24

Rated voltage













