

Caledonian

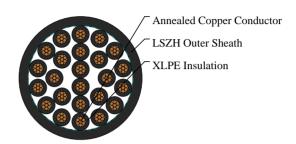
FIRETOX LSZH Flame Retardant Power & Control Cables

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

FTX400 1RZ1-R 24C2.5 (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-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 × Cross- sectional Area | Conductor Class | Nominal Insulation Thickness | Nominal Sheath Thickness | Approx. Overall Diameter | Approx. Weight |
|--|-----------------|------------------------------------|-----------------------------|-----------------------------|-------------------|
| No.×mm² | | mm | mm | mm | kg/km |
| 24x2.5 | 2 | 0.7 | 1.8 | 24.1 | 1002 |

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 E One 2C cable, 1-phase a.c. or d.c. | Ref. Method E One 3C or 4C cable, 3- phase a.c. |
|---------------------------------------|--|--|---|--|---|----|---|--|
| mm² | Α | Α | Α | Α | А | Α | A | Α |
| 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 | Conductor 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 | |
| 2.5 | 19 | 19 | 16 | |



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IEC60502-1





