



Caledonian

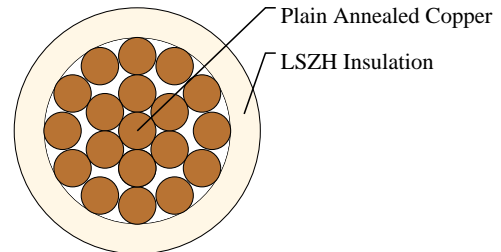
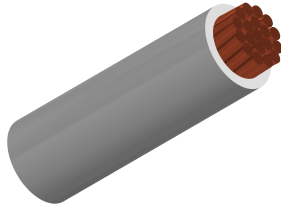
Airport Flame Retardant And Fire Resistant Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

450/750V LSZH Insulated, Non-sheathed Power Cables (Single Core)

FTX100 07Z1-R 1G35 (CU/LSZH 450/750V Class 2)



APPLICATIONS

This 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 BS 7211

FIRE PERFORMANCE

| | |
|---|--|
| Flame Retardance (Single Vertical Wire Test) | EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1* |
| Reduced Fire Propagation (Vertically-mounted bundled wires& cable test) | EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4 |
| Halogen Free | IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1* |
| No Corrosive Gas Emission | IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2* |
| Minimum Smoke Emission | IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2* |
| No Toxic Gases | NES 02-713; NF C 20-454 |

VOLTAGE RATING

450/750V

CABLE CONSTRUCTION

Conductor: Plain annealed copper wire, stranded according to IEC 60228 class 2.

Insulation: LSZH compound

COLOUR CODE



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Insulation Colour: Natural

PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation: -30°C ~ 90°C

Temperature Range during Installation : -5°C ~ 50°C

Minimum Bending Radius : 6 x OD

Electrical Properties

Dielectric Test:2500 V r.m.s. x 5' (core / core)

Insulation Resistance:500 MΩ x km (at 20°C)

Short circuit Temperature :250°C (up to 5 secs)

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

DIMENSION AND PARAMETERS

| Caledonian Cable Code | No. of Cores × Cross-sectional Area | No./Nominal Diameter of Strands | Nominal Insulation Thickness | Nom. Overall Diameter | Approx. Weight |
|-----------------------|-------------------------------------|---------------------------------|------------------------------|-----------------------|----------------|
| | No. × mm ² | no./mm | mm | mm | kg/km |
| FTX100 07Z1-R 1G35 | 1x35 | 19/1.53 | 1.2 | 10.2 | 375 |

Current-Carrying Capacities (Amp)

| Conductor Cross-sectional Area | Ref. Method 4 2cables, 1-phase a.c. or d.c. | Ref. Method 4 3/4 cables, 3-phase a.c. | Ref. Method 3 2cables, 1-phase a.c. or d.c. | Ref. Method 3 3/4 cables, 3-phase a.c. | Ref. Method 1 2 cables, 1-phase a.c. or d.c. flat and touching | Ref. Method 1 3/4 cables, 3-phase a.c. flat and touching or trefoil | Ref. Method 11 2 cables, 1-phase a.c. or d.c. flat and touching | Ref. Method 11 3/4 cables, 3-phase a.c. flat and touching or trefoil | Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Horizontal | Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Vertical | Ref. Method 12 3 cables trefoil, 3-phase a.c. |
|--------------------------------|--|--|--|--|--|---|---|--|--|--|---|
| mm ² | A | A | A | A | A | A | A | A | A | A | A |
| 35 | 125 | 111 | 156 | 138 | 176 | 161 | 195 | 176 | 226 | 203 | 171 |

Voltage Drop (Per Amp Per Meter)

| Nominal Cross sectional Area | 2 cables d.c. | Ref. Methods 3,4 2 cables, 1-phase a.c. | Ref. Methods 1,11 2 cables, 1-phase a.c. | Ref. Methods 3,4 3 or 4 cables, 3-phase a.c. | Ref. Methods 1,11,12 3 or 4 cables, 3-phase a.c. (in trefoil) | Ref. Methods 1,11 3 or 4 cables, 3-phase a.c. (Flat and touching) |
|------------------------------|---------------|--|---|--|--|--|
| mm ² | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m |
| 35 | 1.35 | r:1.35 x:0.29 z:1.35 | r:1.35 x:0.18 z:1.35 | r:1.15 x:0.25 z:1.15 | r:1.15 x:0.115 z:1.5 | r:1.15 x:0.18 z:1.15 |



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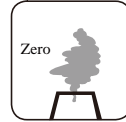
Rated voltage



BS 7211



Flame Retardant
NF C32-070-2, IEC2
IEC60332-1-2/EN50266-2-1



Halogen Free
IEC 60754-1



Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453



Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-962



Low Toxicity
NES 02-713/NF C 20-454



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4