



Caledonian

Airport Flame Retardant And Fire Resistant Cables

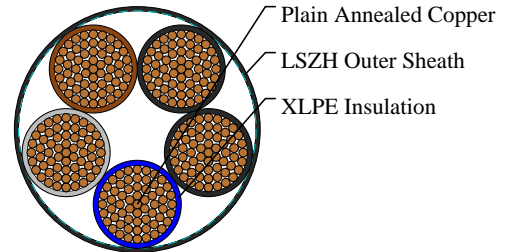
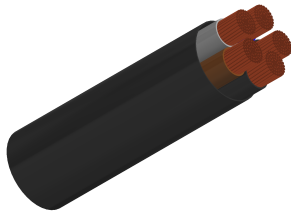
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600/1000V XLPE Insulated, LSZH Sheathed, Power Cables (5 Cores)

FTX400 1RZ1-R 5G500 (CU/XLPE/LSZH 600/1000V Class 2)

Indoor Lighting, Socket and UPS Outlet Power Cables



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 IEC 60502-1

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

600/1000V

CABLE CONSTRUCTION

Conductor: Plain annealed copper wire, shaped stranded according to IEC 60228 class 2. Insulation: Extruded cross-linked XLPE compound.



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Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1.

COLOUR CODE

Insulation Colour: Brown, Gray, Black, Blue, Black

Sheath Colour: Black (other colors upon request)

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: 3500 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 |
| FTX400 1RZ1-R 5G500 | 5x500S | 61/3.20 | 2.2 | 94.4 | 24613 |

Current-Carrying Capacities (Amp)

| Conductor Cross-sectional Area | 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 1 1 2 cables, 1-phase a.c. or d.c. flat and touching | Ref. Method 1 1 3/4 cables, 3-phase a.c. flat and touching or trefoil | Ref. Method 1 2 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Horizontal | Ref. Method 1 2 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Vertical | Ref. Method 1 2 3 cables trefoil, 3-phase a.c. |
|--------------------------------|---|--|--|---|--|---|---|---|--|
| mm ² | A | A | A | A | A | A | A | A | A |
| 500 | 783 | 666 | 990 | 904 | 1044 | 973 | 1128 | 1150 | 936 |

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 |
| 500 | 0.093 | r:0.12 x:0.25 z:0.28 | r:0.105 x:0.155 z:0.185 | r:0.1 x:0.22 z:0.24 | r:0.09 x:0.135 z:0.16 | r:0.088 x:0.16 z:0.18 |



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Rated voltage



Flame Retardant
NF C32-070-2.1(C2)
IEC60332-1-2/EN50266-2-1



Halogen Free
IEC 60754-1



IEC60502-1



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 20-462



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



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