

Caledonian

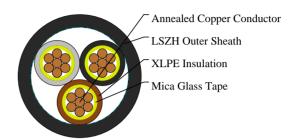
FIREFLIX Fire Resistant Power & Control Cables

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600/1000V Mica+XLPE Insulated, LSZH Sheathed Power Cables to BS 8573 (3 Cores)

FFX400 1mRZ1-R (CU/MGT+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.

STANDARDS

Basic design adapted from BS 8573:2012

APPROVALS

TUV Certification(B 098200 0027 Rev.00)

FIRE PERFORMANCE

| Circuit Integrity | EC 60331-21; BS 6387; BS 8491 |
|---|-------------------------------|
| 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 conductor, stranded according to BS EN 60228 class 2.

Fire Barrier: Mica glass tape.

Insulation: Thermosetting insulation XLPE Type GP 8 according to BS 7655-1.3. HEPR Type GP 6 according to BS 7655-1.2 or crosslinked polyolefin material type EI 5 according to BS EN 50363-5 can be offered as option. Inner Covering Option: The optional inner covering, where used, shall consist of an extruded layer of synthetic polymeric material. It shall surround the single core and the laid-up two, three, four or five cores, giving the assembly a practically circular shape.



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Outer Sheath: Extruded layer of polymeric material LTS 4 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.

COLOUR CODE

Insulation Colour

3-core: Brown, black and grey.

Alternatively, green-and-yellow, blue, brown.

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 x Overall Diameter

shaped copper conductors: 8 x Overall Diameter

DIMENSION AND PARAMETERS

| No. of Cores × Cross- sectional Area | Conductor Class | Nominal Insulation Thickness | Nominal Thickness of Inner Covering | Nominal Sheath Thickness | Approx. Overall Diameter | Approx. Weight |
|---------------------------------------|--------------------|------------------------------------|---|--------------------------------|--------------------------------|-------------------|
| No.xmm² | | mm | mm | mm | mm | kg/km |
| 3x10 | 2 | 0.7 | 0.6 | 1.8 | 17.5 | 479 |

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 | A | Α | Α | Α |
| 10 | 57 | 51 | 69 | 60 | 80 | 71 | 86 | 75 |

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 | |
| 10 | 4.7 | 4.7 | 4.0 | |



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Rated voltage



BS 8573











