Caledonian

FIRETOX LSZH Flame Retardant Power & Control Cables

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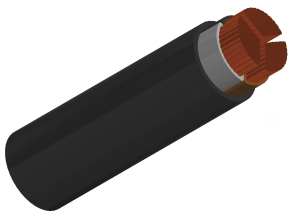
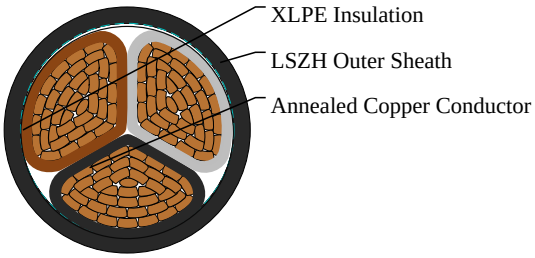
600/1000V XLPE Insulated, LSZH Sheathed Power Cables to BS 8573 (3Cores)

FTX400 1RZ1-R (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 BS 8573:2012

APPROVALS

TUV Certification (Z1 17 09 98200 010)

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 conductor, stranded according to BS EN 60228 class 2.
Insulation: Thermosetting 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.
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.
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
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	Nominal Copper Weight
No.×mm²		mm	mm	mm	kg/km
3x50	2	1.0	1.8	23.7	1751

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 C 3/4 cables, 3-phase a.c. flat and touching or trefoil	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	A	A	A	A	A	A	A	A
50	145	130	175	154	209	179	225	192

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.

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mm²	mV/A/m	mV/A/m	mV/A/m
50	0.98	r:0.99 x:0.155 z:1.00	r:0.86 x:0.135 z:0.87

Rated voltage

BS 8573


Flame Retardancy
IEC 60332-1-2

Halogen Free
IEC 60754-1


Low Corrosivity
IEC 60754-2


Low Smoke Emission
IEC 61034-2


Reduced Fire Propagation
IEC 60332-3-24