

Caledonian

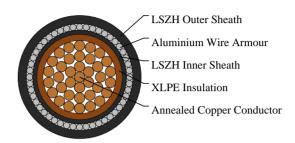
FIRETOX LSZH Flame Retardant Power & Control Cables

www.caledonian-cables.com marketing@caledonian-cables.com

600/1000V XLPE Insulated, LSZH Sheathed, Armoured Power Cables to BS 6724 (Single Core)

FTX300 1RZ1MAZ1-R 1C120 (CU/XLPE/LSZH/AWA/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 6724

APPROVALS

TUV Certification (No.B 098200 0030 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 |

CABLE CONSTRUCTION

Conductor: Annealed copper wire, stranded according to BS EN 60228 class 2.

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.

Bedding: Extruded layer of polymeric material.

Armouring: Aluminium wire.

Outer Sheath: Extruded layer of polymeric material LTS 1 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: Brown or blue; other colours can be offered upon request.



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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: 6 × 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 Bedding Thickness | Nominal Sheath Thickness | Nominal Aluminum Wire Armour Diameter | Approx. Overall Diameter | Approx. Weight |
|---------------------------------------|--------------------|------------------------------------|---------------------------------|--------------------------------|--|--------------------------------|-------------------|
| No.×mm² | | mm | mm | mm | mm | mm | kg/km |
| 1×120 | 2 | 1.2 | 0.8 | 1.6 | 1.25 | 24.2 | 1524 |

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4E3A

| Conductor Cross- sectional Area | 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 F 2 cables, 1- phase a.c. or d.c. flat | Ref. Method F 3 cables, 3-phase a.c. flat | Ref. Method F 3 cables, 3-phase a.c. trefoil | Ref. Method F Spaced by on cable diameter 2 cables, d.c. Horizontal | Ref. Method F Spaced by on cable diameter 2 cables, d.c. Vertical | Ref. Method F Spaced by on cable diameter 2 cables, 1- phase a.c. Horizontal | Ref. Method F Spaced by on cable diameter 2 cables, 1-phase a.c. Vertical | Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Horizontal | Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Vertical |
|--|--|---|--|---|--|---|---|---|---|---|--|
| mm² | Α | Α | Α | А | Α | Α | Α | Α | Α | Α | Α |
| 120 | 425 | 383 | 449 | 405 | 402 | 519 | 497 | 504 | 477 | 485 | 449 |

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4E3B

| Conductor Cross- sectional Area | 2 cables d.c. | Ref. Methods C,F 2 cables, 1-phase a.c. (Cables touching) | Ref. Methods C,F 2 cables, 1-phase a.c. (Cables spaced) | Ref. Methods C,F 3 or 4 cables, 3- phase a.c. (Cables touching,Trefoil) | Ref. Methods C,F 3 or 4 cables, 3- phase a.c. (Cables touching,Flat) | Ref. Methods C,F 3 or 4 cables, 3- phase a.c. (Cables spaced,Flat) |
|------------------------------------|---------------|---|---|--|---|---|
| mm² | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m |
| 120 | 0.39 | R:0.41 X:0.19 Z:0.45 | R:0.43 X:0.27 Z:0.51 | R:0.35 X:0.165 Z:0.39 | R:0.38 X:0.34 Z:0.44 | R:0.41 X:0.30 Z:0.51 |



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Rated voltage



BS 6724









