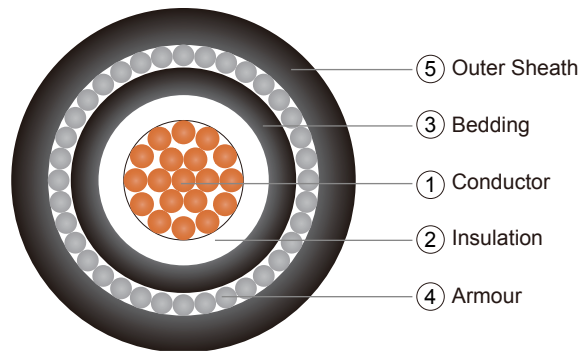


CU/XLPE/LSZH/AWA/LSZH (Single Core)

XLPE Insulated, LSZH Bedded, Aluminium Wire Armoured, LSZH Sheathed Cable

Application

These power cable for fixed installations such as distribution networks or industrial installations. Such as Plant engineering; Industrial machinery; Heating and air-conditioning systems; Power stations; Stage applications etc. Armoured cable suitable for direct burial.



Construction

- ① Conductor: Plain annealed copper, class1 solid or class 2 stranded circular or compacted.
- ② Insulation: Cross-linked polyethylene (XLPE) compound as per IEC 60502-1.
Insulation Colour:

| Number of Cores | Color Code to IEC 60502-1 | Color Code to BS 5467 |
|-----------------|---------------------------|-----------------------|
| 1 | Natural | |

- ③ Bedding: Low smoke zero halogen (LSZH) compound ST8 (90°C) of IEC 60502-1.
Bedding Colour: Black or other color as per customer request.
- ④ Armour: Aluminium wire armoured (AWA).
- ⑤ Outer Sheath: Low smoke zero halogen (LSZH) compound ST8 (90°C) of IEC 60502-1.
Outer Sheath Colour: Black or other color as per customer request.

Electrical Characteristics

Recommended rated voltages U_0

| Highest system voltage (U_m) (kV) | Rated voltage (U_0) (kV) | |
|--|------------------------------|------------|
| | Categories A and B | Category C |
| 1,2 | 0,6 | 0,6 |

Routine test voltages

| | |
|--------------------------|-----|
| Rated voltage U^0 (kV) | 0,6 |
| Test voltage (kV) | 3,5 |

Maximum conductor temperatures for different types of insulating compound

| Maximum conductor temperature (°C) | |
|------------------------------------|--------------------------------------|
| Normal operation | Short-circuit (5 s maximum duration) |
| 90 | 250 |

Operating Temperature: -15°C to 90°C

Test Voltage: 3.5 kV for 5 minutes

Reference Standards

Design Specification: BS6724

Conductor: IEC60228, BS EN60228

Flame Retardancy: IEC60332-3-22, BS EN60332-3-22

Low Smoke Zero Halogen: IEC61034-2, BS EN61034-2, IEC60754-1, IEC60754-2, BS EN50267-2-1, BS EN50267-2-2

Installation Reference

Min. Bending Radius (mm): 8 x cable overall diameter

Max. Pulling Tension (N/mm²): 50

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Dimension

| Nominal Conductor Area (mm ²) | No. and Diameter of Wires (no./mm) | Diameter Under Armour (mm) | Thickness of Bedding (mm) | Diameter of Armour Wire (mm) | Thickness of Sheath (mm) | Overall Diameter (mm) | Approximate Weight (kg/km) |
|---|------------------------------------|----------------------------|---------------------------|------------------------------|--------------------------|-----------------------|----------------------------|
| 1x50 | 19/1.78 | 12.9 | 1.0 | 1.25 | 1.8 | 19.0 | 1086 |
| 1x70 | 19/2.14 | 14.9 | 1.0 | 1.25 | 1.8 | 21.0 | 1387 |
| 1x95 | 19/2.52 | 16.8 | 1.0 | 1.60 | 1.8 | 23.6 | 1881 |
| 1x120 | 37/2.03 | 18.6 | 1.0 | 1.60 | 1.8 | 25.4 | 2227 |
| 1x150 | 37/2.25 | 20.6 | 1.0 | 1.60 | 1.8 | 27.4 | 2611 |
| 1x185 | 37/2.52 | 22.8 | 1.0 | 1.60 | 1.9 | 29.8 | 3132 |
| 1x240 | 61/2.25 | 25.7 | 1.0 | 2.00 | 2.0 | 33.7 | 4131 |
| 1x300 | 61/2.52 | 28.7 | 1.2 | 2.00 | 2.1 | 36.9 | 4988 |
| 1x400 | 61/2.85 | 32.1 | 1.2 | 2.00 | 2.2 | 40.5 | 6091 |
| 1x500 | 61/3.20 | 35.6 | 1.2 | 2.50 | 2.4 | 45.4 | 7823 |
| 1x630 | 127/2.52 | 40.4 | 1.4 | 2.50 | 2.5 | 50.4 | 9702 |
| 1x800 | 127/2.85 | 45.1 | 1.4 | 2.50 | 2.7 | 55.5 | 11924 |
| 1x1000 | 127/3.20 | 50.4 | 1.6 | 2.50 | 2.9 | 61.2 | 14606 |