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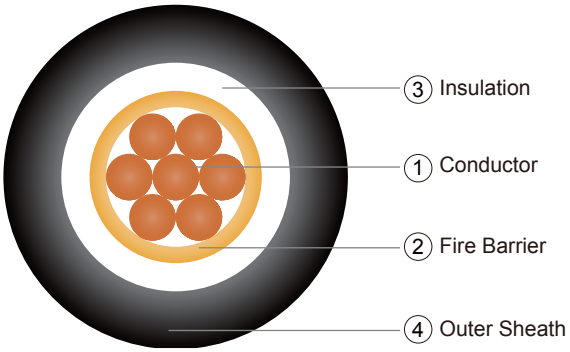
## CU/MGT/XLPE/LSZH (Single Core)

Mica Tape, XLPE Insulated, LSZH Sheathed Cable

### Application

These cables are suitable for indoor and outdoor applications, where a high safety against flame is required .
Public address and emergency voice communication system and traffic control centres.
Control and instrumentation service in industrial, commercial and residential buildings.
Such as: Schools&Universities, Hospital, Markets & Malls, Hotels, Theatres, Cinemas, Airports, Underground stations, Tunnels, Recreational places& Amusement parks, Indoor work places.




### Construction

① Conductor: Plain annealed copper, class1 solid or class 2 stranded acc. to IEC 60228.
Flexible class 5 or tinned conductor could be offer upon request.
② Fire Barrier: Mica tape (MGT).
③ Insulation: Cross-linked polyethlene (XLPE) compound as per IEC 60502-1.
Insulation Color Code:

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

④ Outer Sheath: Low smoke zero halogen (LSZH) compound type ST8 (90°C) of IEC 60502-1.
Outer Sheath Color: Orange 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: IEC60502-1
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 ($N/mm^2$): 50

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### Dimension

| Nominal Conductor Area ($mm^2$) | No.and Diameter of Wires (no./mm) | Thickness of Insulation (mm) | Thickness of Sheath (mm) | Overall Diameter (mm) | Approximate Weight (kg/km) |
|---|---|---|---|---|---|
| 1x1.5 | 7/0.53 | 0.7 | 1.4 | 6.7 | 65 |
| 1x2.5 | 7/0.67 | 0.7 | 1.4 | 7.1 | 80 |
| 1x4 | 7/0.85 | 0.7 | 1.4 | 7.7 | 102 |
| 1x6 | 7/1.04 | 0.7 | 1.4 | 8.2 | 129 |
| 1x10 | 7/1.35 | 0.7 | 1.4 | 9.2 | 182 |
| 1x16 | 7/1.70 | 0.7 | 1.4 | 10.2 | 255 |
| 1x25 | 7/2.14 | 0.9 | 1.4 | 11.9 | 377 |
| 1x35 | 7/2.52 | 0.9 | 1.4 | 13.1 | 492 |
| 1x50 | 19/1.78 | 1.0 | 1.4 | 14.6 | 643 |
| 1x70 | 19/2.14 | 1.1 | 1.4 | 16.6 | 892 |
| 1X95 | 19/2.52 | 1.1 | 1.5 | 18.7 | 1203 |
| 1X120 | 37/2.03 | 1.2 | 1.6 | 20.7 | 1503 |
| 1X150 | 37/2.25 | 1.4 | 1.6 | 22.7 | 1828 |
| 1X185 | 37/2.52 | 1.6 | 1.7 | 25.1 | 2279 |
| 1X240 | 61/2.25 | 1.7 | 1.8 | 28.2 | 2952 |
| 1X300 | 61/2.52 | 1.8 | 1.9 | 31.0 | 3665 |
| 1X400 | 61/2.85 | 2.0 | 2.0 | 34.6 | 4649 |
| 1X500 | 61/3.20 | 2.2 | 2.1 | 38.3 | 5817 |
| 1X630 | 127/2.52 | 2.4 | 2.3 | 43.1 | 7465 |
| 1X800 | 127/2.85 | 2.6 | 2.5 | 48.2 | 9492 |
| 1x1000 | 127/3.20 | 2.8 | 2.6 | 53.3 | 11874 |