

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

Mica Tape, XLPE Insulated, LSZH Sheathed Cable

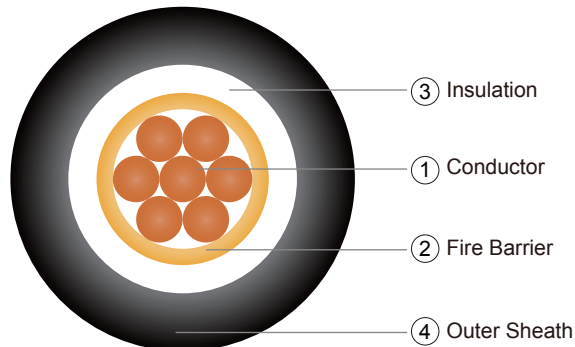
### Application

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 polyethylene (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<sup>2</sup>): 50

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## Dimension

Nominal Conductor Area (mm <sup>2</sup> )	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