

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

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

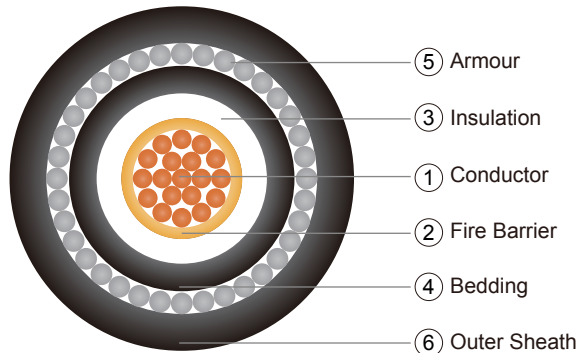
### Application

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	Red or Black	Brown or Blue

④ Bedding: Low smoke zero halogen (LSZH) compound type ST8 (90°C) of IEC 60502-1.  
Bedding Colour: Black.

⑤ Armour: Aluminium Wire Armoured (AWA).

⑥ 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

### Installation Reference

Min.Bending Radius (mm): 10 x cable overall diameter

Max.Pulling Tension (N/mm<sup>2</sup>): 50

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### Reference Standards

Design Specification: IEC60502-1

Conductor: IEC60228, BS EN60228

Fire Resistance: BS6387(C,W,Z), SS299(C,W,Z), IEC60331

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

### Dimension

Nominal Conductor Area (mm <sup>2</sup> )	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Bedding (mm)	Diameter Under Armour (mm)	Diameter of Armour Wire (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
1x50	19/1.78	1.0	1.0	13.8	1.25	1.8	19.9	1141
1x70	19/2.14	1.1	1.0	15.8	1.60	1.8	22.6	1588
1x95	19/2.52	1.1	1.0	17.7	1.60	1.8	24.5	1965
1x120	37/2.03	1.2	1.0	19.5	1.60	1.8	26.3	2326
1x150	37/2.25	1.4	1.0	21.5	1.60	1.8	28.3	2726
1x185	37/2.52	1.6	1.0	23.7	1.60	1.9	30.7	3266
1x240	61/2.25	1.7	1.0	26.6	2.00	2.0	34.6	4296
1x300	61/2.52	1.8	1.2	29.6	2.00	2.1	37.8	5184
1x400	61/2.85	2.0	1.2	33.0	2.00	2.2	41.4	6331
1x500	61/3.20	2.2	1.2	36.5	2.50	2.4	46.3	8110
1x630	127/2.52	2.4	1.4	41.3	2.50	2.6	51.5	10084
1x800	127/2.85	2.6	1.4	46.0	2.50	2.7	56.4	12368
1x1000	127/3.20	2.8	1.6	51.3	2.50	2.9	62.1	15151