

## CU/MGT/XLPE/LSZH/SWA/LSZH (Multi Cores)

Mica Tape, XLPE Insulated, LSZH Bedded, Galvanised Steel Wire Armoured, LSZH Sheathed Cable

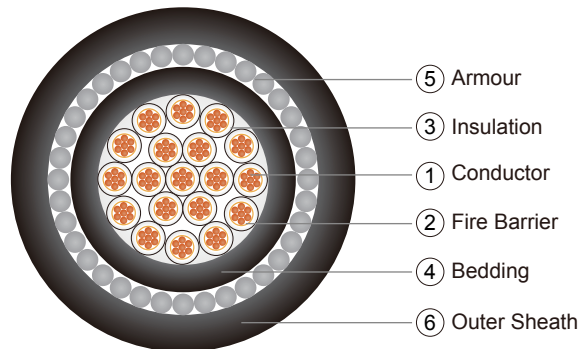
### Application

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
6 and above	White with Black Numbering or Others	White with Black Numbering or Others

Assembly: Cores cabled together with PP filler and covered with non-woven tape.

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

⑤ Armour: Galvanized steel wire armoured (SWA).

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>): 70

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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

No. of Cores	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)
5	1.5	7/0.53	0.7	1.0	12.5	1.25	1.8	18.6	681
7		7/0.53	0.7	1.0	13.7	1.25	1.8	19.8	784
10		7/0.53	0.7	1.0	17.6	1.60	1.8	24.4	1169
12		7/0.53	0.7	1.0	18.2	1.60	1.8	25.0	1253
19		7/0.53	0.7	1.0	21.5	1.60	1.8	28.3	1605
20		7/0.53	0.7	1.0	22.0	1.60	1.8	28.8	1661
24		7/0.53	0.7	1.0	25.3	2.00	2.0	33.3	2194
37		7/0.53	0.7	1.2	29.6	2.00	2.1	37.8	2846
5	2.5	7/0.67	0.7	1.0	13.6	1.25	1.8	19.7	784
7		7/0.67	0.7	1.0	14.9	1.25	1.8	21.0	915
10		7/0.67	0.7	1.0	19.2	1.60	1.8	26.0	1364
12		7/0.67	0.7	1.0	19.9	1.60	1.8	26.7	1475
19		7/0.67	0.7	1.0	23.6	1.60	1.9	30.6	1939
20		7/0.67	0.7	1.0	24.2	1.60	1.9	31.2	2010
24		7/0.67	0.7	1.2	28.3	2.00	2.1	36.5	2681
37		7/0.67	0.7	1.2	32.6	2.00	2.2	41.0	3467
5	4	7/0.85	0.7	1.0	15.1	1.60	1.6	21.5	1044
7		7/0.85	0.7	1.0	16.6	1.60	1.6	23.0	1227
10		7/0.85	0.7	1.0	21.4	1.60	1.8	28.2	1649
12		7/0.85	0.7	1.0	22.1	1.60	1.8	28.9	1801
19		7/0.85	0.7	1.0	26.3	2.00	2.0	34.3	2676
20		7/0.85	0.7	1.4	43.5	2.50	2.6	53.7	4264
24		7/0.85	0.7	1.6	50.6	2.50	2.9	61.4	5104
37		7/0.85	0.7	1.8	58.9	2.50	3.2	70.3	6527