

CU/MGT/XLPE/LSZH (Multi - Cores)

Mica Tape, XLPE Insulated, LSZH Sheathed, LSZH Sheathed Cable

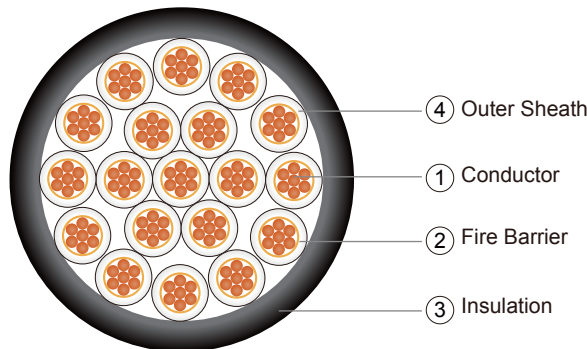
Application

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 Outer Sheath: Low smoke zero halogen (LSZH) compound type ST8 (90°C) of IEC 60502-1.
Outer Sheath Color: Orange or others.

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): 8 x cable overall diameter

Max.Pulling Tension (N/mm²): 50

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References 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 ²)	No. and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
5	1.5	7/0.53	0.7	1.8	14.1	253
7		7/0.53	0.7	1.8	15.3	320
10		7/0.53	0.7	1.8	19.2	441
12		7/0.53	0.7	1.8	19.8	503
19		7/0.53	0.7	1.8	23.1	730
20		7/0.53	0.7	1.8	23.6	764
24		7/0.53	0.7	1.8	26.9	907
37		7/0.53	0.7	1.9	31.0	1325
5	2.5	7/0.67	0.7	1.4	14.4	292
7		7/0.67	0.7	1.4	15.7	381
10		7/0.67	0.7	1.6	20.4	552
12		7/0.67	0.7	1.6	21.1	637
19		7/0.67	0.7	1.7	25.0	959
20		7/0.67	0.7	1.7	25.6	1004
24		7/0.67	0.7	1.9	29.7	1225
37		7/0.67	0.7	2.0	34.2	1803
5	4	7/0.85	0.7	1.4	15.9	394
7		7/0.85	0.7	1.5	17.6	530
10		7/0.85	0.7	1.6	22.6	753
12		7/0.85	0.7	1.7	23.5	888
19		7/0.85	0.7	1.8	27.9	1346
20		7/0.85	0.7	2.4	54.8	1804
24		7/0.85	0.7	2.6	63.4	2201
37		7/0.85	0.7	2.9	73.7	3198