

## CU/MGT/XLPE/LSZH (2 Cores - 5 Cores)

Mica Tape, XLPE Insulated, LSZH Sheathed Cable

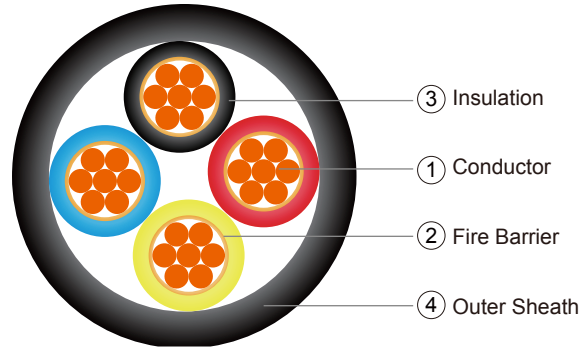
### Application

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 as per 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 Colour:

Number of Cores	Color Code to IEC 60502-1	Color Code to BS 5467
2	Red & Black	Brown & Blue
3	Red, Yellow and Blue	Brown, Black and Grey
4	Red, Yellow, Blue and Black	Blue, Brown, Black and Grey
5	Red, Yellow, Blue, Black and Green / Yellow	Green / Yellow, Blue, Brown, Black and Grey

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

④ Outer Sheath: Low smoke zero halogen (LSZH) compound ST8 (90°C) of IEC 60502-1.

Outer Sheath Colour: Black 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): 8 x cable overall diameter

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

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### Reference Standards

Design Specification: IEC60502-1

Conductor: EC60228, 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

### Dimension

#### 2 Cores

Nominal Conductor Area (mm <sup>2</sup> )	No. and Diameter of Wires (mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
2x1.5	7/0.53	0.7	1.8	11.4	144
2x2.5	7/0.67	0.7	1.8	12.2	175
2x4	7/0.85	0.7	1.8	13.3	222
2x6	7/1.04	0.7	1.8	14.4	279
2x10	7/1.35	0.7	1.8	16.3	391
2x16	7/1.70	0.7	1.8	18.4	545
2x25	7/2.14	0.9	1.8	21.8	798
2x35	7/2.52	0.9	1.8	24.1	1039
2x50	19/1.78	1.0	1.8	27.2	1352
2x70	19/2.14	1.1	1.9	31.4	1884
2x95	19/2.52	1.1	2.0	35.4	2524
2x120	37/2.03	1.2	2.2	39.4	3165
2x150	37/2.25	1.4	2.3	43.5	3860
2x185	37/2.52	1.6	2.5	48.5	4818
2x240	61/2.25	1.7	2.7	54.5	6238
2x300	61/2.52	1.8	2.9	60.2	7746
2X400	61/2.85	2.0	3.1	67.3	9817
2X500	61/3.20	2.2	3.3	74.8	12274
2X630	127/2.52	2.4	3.6	84.1	15726
2X800	127/2.85	2.6	4.0	94.3	20011
2x1000	127/3.20	2.8	4.3	104.8	25047

#### 3 Cores

Nominal Conductor Area (mm <sup>2</sup> )	No. and Diameter of Wires (mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
3x1.5	7/0.53	0.7	1.8	12.0	178
3x2.5	7/0.67	0.7	1.8	12.9	221
3x4	7/0.85	0.7	1.8	14.0	287
3x6	7/1.04	0.7	1.8	15.3	369
3x10	7/1.35	0.7	1.8	17.3	529
3x16	7/1.70	0.7	1.8	19.5	752
3x25	7/2.14	0.9	1.8	23.2	1119
3x35	7/2.52	0.9	1.8	25.7	1470
3x50	19/1.78	1.0	1.8	29.0	1929
3x70	19/2.14	1.1	2.0	33.7	2721
3x95	19/2.52	1.1	2.1	38.0	3660
3x120	37/2.03	1.2	2.3	42.3	4591
3x150	37/2.25	1.4	2.4	46.7	5609
3x185	37/2.52	1.6	2.6	52.0	7004
3x240	61/2.25	1.7	2.8	58.5	9085
3x300	61/2.52	1.8	3.0	64.5	11292
3x400	61/2.85	2.0	3.3	72.4	14368
3x500	61/3.20	2.2	3.5	80.5	17982
3X630	127/2.52	2.4	3.8	90.4	23055
3X800	127/2.85	2.6	4.2	101.3	29338
3x1000	127/3.20	2.8	4.6	112.8	36808

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#### 4 Cores

Nominal Conductor Area (mm <sup>2</sup> )	No. and Diameter of Wires (mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
4x1.5	7/0.53	0.7	1.8	13.0	215
4x2.5	7/0.67	0.7	1.8	14.0	271
4x4	7/0.85	0.7	1.8	15.3	356
4x6	7/1.04	0.7	1.8	16.7	463
4x10	7/1.35	0.7	1.8	18.9	674
4x16	7/1.70	0.7	1.8	21.5	966
4x25	7/2.14	0.9	1.8	25.6	1449
4x35	7/2.52	0.9	1.8	28.4	1912
4x50	19/1.78	1.0	1.9	32.3	2534
4x70	19/2.14	1.1	2.1	37.5	3576
4x95	19/2.52	1.1	2.3	42.5	4840
4x120	37/2.03	1.2	2.4	47.1	6043
4x150	37/2.25	1.4	2.6	52.2	7413
4x185	37/2.52	1.6	2.8	58.1	9255
4x240	61/2.25	1.7	3.0	65.3	12006
4x300	61/2.52	1.8	3.2	72.0	14925
4x400	61/2.85	2.0	3.5	80.7	18987
4x500	61/3.20	2.2	3.8	89.9	23815
4X630	127/2.52	2.4	4.2	101.2	30581
4X800	127/2.85	2.6	4.6	113.4	38896
4x1000	127/3.20	2.8	5.0	126.1	48783

#### 5 Cores

Nominal Conductor Area (mm <sup>2</sup> )	No. and Diameter of Wires (mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
5x1.5	7/0.53	0.7	1.8	14.1	253
5x2.5	7/0.67	0.7	1.8	15.2	322
5x4	7/0.85	0.7	1.8	16.7	427
5x6	7/1.04	0.7	1.8	18.2	559
5x10	7/1.35	0.7	1.8	20.7	820
5x16	7/1.70	0.7	1.8	23.6	1182
5x25	7/2.14	0.9	1.8	28.2	1780
5x35	7/2.52	0.9	1.9	31.5	2372
5x50	19/1.78	1.0	2.1	36.1	3163
5x70	19/2.14	1.1	2.3	41.9	4460
5x95	19/2.52	1.1	2.4	47.2	6009
5x120	37/2.03	1.2	2.6	52.5	7532
5x150	37/2.25	1.4	2.8	58.1	9235
5x185	37/2.52	1.6	3.0	64.7	11526
5x240	61/2.25	1.7	3.3	72.9	14988
5x300	61/2.52	1.8	3.5	80.4	18625
5x400	61/2.85	2.0	3.8	90.1	23683
5x500	61/3.20	2.2	4.2	100.5	29745
5X630	127/2.52	2.4	4.6	113.0	38172
5X800	127/2.85	2.6	5.0	126.5	48530
5x1000	127/3.20	2.8	5.5	140.9	60916