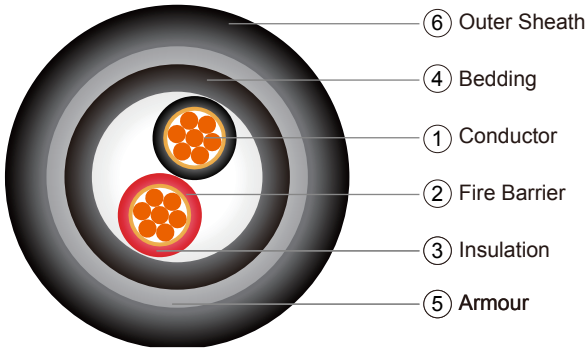
CU/MGT/XLPE/LSZH/DSTA/LSZH (2 Cores - 5 Cores)

Mica Tape, XLPE Insulated, LSZH Bedded, Double Steel Tape 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 polyethlene (XLPE) compound as per IEC 60502-1.
Insulation Color Code:

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 Bedding: Low smoke zero halogen (LSZH) compound type ST8 (90°C) of IEC 60502-1.
Bedding Colour: Black.
⑤ Armour: Double steel tape armoured (DSTA).
⑥ Outer Sheath: Low smoke zero halogen (LSZH) compound type ST1 (80°C), ST2 (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
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

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Installation Reference

Min.Bending Radius (mm): 10 x cable overall diameter
Max.Pulling Tension (N/mm^2): 70

Dimension

2 Cores

Nominal Conductor Area (mm^2)	No.and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Bedding (mm)	Diameter Under Armour (mm)	Thickness of Armour Tape (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
2x1.5	7/0.53	0.7	1.0	9.8	0.2	1.8	14.2	308
2x2.5	7/0.67	0.7	1.0	10.6	0.2	1.8	15.0	352
2x4	7/0.85	0.7	1.0	11.7	0.2	1.8	16.1	415
2x6	7/1.04	0.7	1.0	12.8	0.2	1.8	17.2	490
2x10	7/1.35	0.7	1.0	14.7	0.2	1.8	19.1	630
2x16	7/1.70	0.7	1.0	16.8	0.2	1.8	21.2	815
2x25	7/2.14	0.9	1.0	20.2	0.2	1.8	24.6	1121
2x35	7/2.52	0.9	1.0	22.5	0.2	1.8	26.9	1395
2x50	19/1.78	1.0	1.0	25.6	0.2	1.9	30.2	1770
2x70	19/2.14	1.1	1.2	30.0	0.2	2.0	34.8	2403
2x95	19/2.52	1.1	1.2	33.8	0.5	2.2	40.2	3655
2x120	37/2.03	1.2	1.4	37.8	0.5	2.3	44.4	4446
2x150	37/2.25	1.4	1.4	41.7	0.5	2.5	48.7	5293
2x185	37/2.52	1.6	1.4	46.3	0.5	2.6	53.5	6379
2x240	61/2.25	1.7	1.6	52.3	0.5	2.9	60.1	8084
2x300	61/2.52	1.8	1.6	57.6	0.5	3.0	65.6	9743
2x400	61/2.85	2.0	1.8	64.7	0.5	3.3	73.3	12162
2x500	61/3.20	2.2	1.8	71.8	0.8	3.6	82.2	16028
2x630	127/2.52	2.4	1.8	80.5	0.8	3.9	91.5	19929
2x800	127/2.85	2.6	2.0	90.3	0.8	4.2	101.9	24762
2x1000	127/3.20	2.8	2.0	100.2	0.8	4.6	112.6	30367

3 Cores

Nominal Conductor Area (mm^2)	No.and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Bedding (mm)	Diameter Under Armour (mm)	Thickness of Armour Tape (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
3x1.5	7/0.53	0.7	1.0	10.4	0.2	1.8	14.8	351
3x2.5	7/0.67	0.7	1.0	11.3	0.2	1.8	15.7	408
3x4	7/0.85	0.7	1.0	12.4	0.2	1.8	16.8	491
3x6	7/1.04	0.7	1.0	13.7	0.2	1.8	18.1	592
3x10	7/1.35	0.7	1.0	15.7	0.2	1.8	20.1	783
3x16	7/1.70	0.7	1.0	17.9	0.2	1.8	22.3	1039
3x25	7/2.14	0.9	1.0	21.6	0.2	1.8	26.0	1462
3x35	7/2.52	0.9	1.0	24.1	0.2	1.8	28.5	1851
3x50	19/1.78	1.0	1.2	27.8	0.2	2.0	32.6	2427
3x70	19/2.14	1.1	1.2	32.1	0.5	2.1	38.3	3780
3x95	19/2.52	1.1	1.2	36.2	0.5	2.3	42.8	4871
3x120	37/2.03	1.2	1.4	40.5	0.5	2.4	47.3	5962
3x150	37/2.25	1.4	1.4	44.7	0.5	2.6	51.9	7143
3x185	37/2.52	1.6	1.6	50.0	0.5	2.8	57.6	8771
3x240	61/2.25	1.7	1.6	56.1	0.5	3.0	64.1	11062
3x300	61/2.52	1.8	1.6	61.7	0.5	3.2	70.1	13466
3x400	61/2.85	2.0	1.8	69.4	0.5	3.4	78.2	16844
3x500	61/3.20	2.2	1.8	77.1	0.8	3.8	87.9	22007
3x630	127/2.52	2.4	2.0	86.8	0.8	4.1	98.2	27674
3x800	127/2.85	2.6	2.0	96.9	0.8	4.5	109.1	34488
3x1000	127/3.20	2.8	2.0	107.6	0.8	4.8	120.4	42459

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4 Cores

Nominal Conductor Area (mm^2)	No.and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Bedding (mm)	Diameter Under Armour (mm)	Thickness of Armour Tape (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
4x1.5	7/0.53	0.7	1.0	11.4	0.2	1.8	15.8	404
4x2.5	7/0.67	0.7	1.0	12.4	0.2	1.8	16.8	475
4x4	7/0.85	0.7	1.0	13.7	0.2	1.8	18.1	580
4x6	7/1.04	0.7	1.0	15.1	0.2	1.8	19.5	708
4x10	7/1.35	0.7	1.0	17.3	0.2	1.8	21.7	952
4x16	7/1.70	0.7	1.0	19.9	0.2	1.8	24.3	1282
4x25	7/2.14	0.9	1.0	24.0	0.2	1.8	28.4	1828
4x35	7/2.52	0.9	1.0	26.8	0.2	1.9	31.4	2348
4x50	19/1.78	1	1.2	30.9	0.5	2.1	37.1	3570
4x70	19/2.14	1.1	1.2	35.7	0.5	2.3	42.3	4770
4x95	19/2.52	1.1	1.4	40.7	0.5	2.4	47.5	6217
4x120	37/2.03	1.2	1.4	45.1	0.5	2.6	52.3	7589
4x150	37/2.25	1.4	1.6	50.2	0.5	2.8	57.8	9184
4x185	37/2.52	1.6	1.6	55.7	0.5	3.0	63.7	11218
4x240	61/2.25	1.7	1.6	62.5	0.5	3.2	70.9	14204
4x300	61/2.52	1.8	1.8	69.2	0.5	3.4	78.0	17430
4x400	61/2.85	2	1.8	77.3	0.8	3.8	88.1	23027
4x500	61/3.20	2.2	2.0	86.3	0.8	4.1	97.7	28406
4x630	127/2.52	2.4	2.0	96.8	0.8	4.5	109.0	35725
4x800	127/2.85	2.6	2.0	108.2	0.8	4.8	121.0	44575
4x1000	127/3.20	2.8	2.0	120.1	0.8	5.3	133.9	55149

5 Cores

Nominal Conductor Area (mm^2)	No.and Diameter of Wires (no./mm)	Thickness of Insulation (mm)	Thickness of Bedding (mm)	Diameter Under Armour (mm)	Thickness of Armour Tape (mm)	Thickness of Sheath (mm)	Overall Diameter (mm)	Approximate Weight (kg/km)
5x1.5	7/0.53	0.7	1.0	12.5	0.2	1.8	16.9	458.9
5x2.5	7/0.67	0.7	1.0	13.6	0.2	1.8	18.0	544.8
5x4	7/0.85	0.7	1.0	15.1	0.2	1.8	19.5	672.1
5x6	7/1.04	0.7	1.0	16.6	0.2	1.8	21.0	827.1
5x10	7/1.35	0.7	1.0	19.1	0.2	1.8	23.5	1125.4
5x16	7/1.70	0.7	1.0	22.0	0.2	1.8	26.4	1530.1
5x25	7/2.14	0.9	1.0	26.6	0.2	1.9	31.2	2213.8
5x35	7/2.52	0.9	1.2	30.1	0.5	2.1	36.3	3383.5
5x50	19/1.78	1.0	1.2	34.3	0.5	2.2	40.7	4291.1
5x70	19/2.14	1.1	1.4	40.1	0.5	2.4	46.9	5816.0
5x95	19/2.52	1.1	1.4	45.2	0.5	2.6	52.4	7558.9
5x120	37/2.03	1.2	1.6	50.5	0.5	2.8	58.1	9313.6
5x150	37/2.25	1.4	1.6	55.7	0.5	3.0	63.7	11199.1
5x185	37/2.52	1.6	1.6	61.9	0.5	3.2	70.3	13704.8
5x240	61/2.25	1.7	1.8	69.9	0.5	3.5	78.9	17519.2
5x300	61/2.52	1.8	1.8	77.0	0.8	3.8	87.8	22645.9
5x400	61/2.85	2.0	2.0	86.5	0.8	4.1	97.9	28283.1
5x500	61/3.20	2.2	2.0	96.1	0.8	4.4	108.1	34796.2
5x630	127/2.52	2.4	2.0	107.8	0.8	4.8	120.6	43834.7
5x800	127/2.85	2.6	2.0	120.5	0.8	5.3	134.3	54915.2
5x1000	127/3.20	2.8	2.0	133.9	0.8	5.7	148.5	67930.1