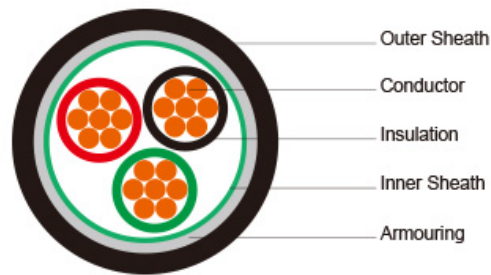


**600/1000V LSZH Sheathed, Armoured (3cores)**



**Application:** The cables is mainly used in power stations, mass transit underground passenger systems, airports, petrochemical plants, hotels, hospitals, and high-rise buildings.

**Standard:** Basic design to IEC 60502-1

**FIRE PERFORMANCE**

<b>Flame Retardance (Single Vertical Wire Test)</b>	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1; CEI 20-35/1-2; EN 50265-2-1; DIN VDE 0482-265-2-1
<b>Reduced Fire Propagation (Vertically-mounted bundled wires &amp; cable test)</b>	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; CEI 20-22/3-4; EN 50266-2- 4; DIN VDE 0482-266-2-4
<b>Halogen Free</b>	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1
<b>No Corrosive Gas Emission</b>	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2
<b>minimum Smoke Emission</b>	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2; BS 7622-1&2
<b>No Toxic gases</b>	NES 02-713

**VOLTAGE RATING**

600/1000V

**CABLE CONSTRUCTION**

Conductor: Plain annealed copper wire, stranded according to IEC(EN) 60228 class 2.

Insulation: Extruded cross-linked XLPE compound.

Screen: Copper Tape

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered.)

**COLOUR CODE**

Insulation Colour as per BS7671

	with earth conductor	without earth conductor
<b>2Cores</b>		Brown,Blue
<b>3Cores</b>	Yellow/Green,Brown,Blue	Brown,Gray,Black
<b>4Cores</b>	Yellow/Green,Brown,Gray,Black	Brown,Gray,Black,Blue

<b>5Cores</b>	Yellow/Green,Brown,Gray,Black,Blue	Brown,Gray,Black,Blue,Black
<b>above 5 Cores</b>	Yellow/Green,Black Numbered	Black Numbered

Sheath Colour: Black

**Physical AND THERMAL PROPERTIES**

Temperature range during operation: Max.90°C for XLPE

250°C in short-circuit for 5s max.

Minimum bending radius: 10x Overall Diameter

**CONSTRUCTION PARAMETERS**

Conductor										
No. of Core X Cross Section	Phases	Neutral	Nominal Diameter Overall Conductor		Nominal Insulation Thickness		Nominal Steel Tape Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
			Pha.	Neu.	Pha.	Neu.				
mm <sup>2</sup>	No./mm	No./mm	mm	mm	mm	mm	mm	mm	mm	Kg/km
3x10+1x6	7/Com	7/Com	3.75	2.90	0.7	0.7	0.2	1.8	20.1	740
3x16+1x10	7/Com	7/Com	4.75	3.75	0.7	0.7	0.2	1.8	22.5	1004
3x25+2x16	7/Com	7/Com	5.85	4.75	0.9	0.7	0.2	1.8	25.8	1421
3x35+1x16	7/Com	7/Com	6.90	4.75	0.9	0.7	0.2	1.8	27.7	1745
3x35+1x25	7/Com	7/Com	6.90	5.85	0.9	0.9	0.2	1.8	28.6	1864
3x50+1x25	7/Com	7/Com	8.15	5.85	1.0	0.9	0.2	1.8	31.3	2358
3x50+1x35	7/Com	7/Com	8.15	6.90	1.0	0.9	0.2	1.9	32.0	2.72
3x70+1x35	7/Com	7/Com	9.75	6.90	1.1	0.9	0.2	2.0	35.9	3166
3x70+1x50	7/Com	7/Com	9.75	8.15	1.1	1.0	0.2	2.0	36.8	3341
3x95+1x50	19/Com	7/Com	11.4	8.15	1.1	1.0	0.5	2.1	41.4	4611
3x120+1x70	19/Com	19/Com	12.8	9.75	1.2	1.1	0.5	2.3	45.6	5682
3x150+1x95	19/Com	19/Com	14.3	11.4	1.4	1.1	0.5	2.4	50.8	7072
3x150+1x120	19/Com	19/Com	14.3	12.8	1.4	1.2	0.5	2.5	51.8	7357
3x185+1x95	37/Com	19/Com	15.9	11.4	1.6	1.1	0.5	2.6	54.7	8348
3x185+1x120	37/Com	19/Com	15.9	12.8	1.6	1.2	0.5	2.6	55.8	8638
3x240+1x120	37/Com	19/Com	18.2	12.8	1.7	1.2	0.5	2.7	61.0	10660
3x240+1x150	37/Com	19/Com	18.2	14.3	1.7	1.4	0.5	2.8	62.2	11024
3x300+1x150	37/Com	19/Com	20.4	14.3	1.8	1.4	0.5	2.9	66.8	12809
3x300+1x185	37/Com	37/Com	20.4	15.9	1.8	1.6	0.5	3.0	68.1	13256

Notes: 1)

\*All conductors in accordance with IEC 60228. Compact shape (Com.) or non-compact depending on order.

2) Beside above list we can also provide others size depend on customer's requirement.

**Electrical PROPERTIES**

No. of Core X Cross Section	Conductor				Max.DC resistance of conductor @20°C	
	Phases	Neutral	Dia.Overall Conductor		Pha.	Neu.
	No./Nominal Diameter of Strands	No./Nominal Diameter of Strands	Pha.	Neu.		
mm <sup>2</sup>	No/mm	No/mm	mm	mm	Ω/km	Ω/km
3x10+1x6	7/Com	7/Com	3.75	2.90	1.83	3.08
3x16+1x10	7/Com	7/Com	4.75	3.75	1.15	1.83
3x25+2x16	7/Com	7/Com	5.85	4.75	0.727	1.15
3x35+1x16	7/Com	7/Com	6.90	4.75	0.524	1.15
3x35+1x25	7/Com	7/Com	6.90	5.85	0.524	0.727
3x50+1x25	7/Com	7/Com	8.15	5.85	0.387	0.727
3x50+1x35	7/Com	7/Com	8.15	6.90	0.387	0.524
3x70+1x35	7/Com	7/Com	9.75	6.90	0.268	0.524
3x70+1x50	19/Com	7/Com	9.75	8.15	0.268	0.387
3x95+1x50	19/Com	7/Com	11.4	8.15	0.193	0.387
3x120+1x70	19/Com	19/Com	12.8	9.75	0.153	0.268
3x150+1x95	19/Com	19/Com	14.3	11.4	0.124	0.193
3x150+1x120	19/Com	19/Com	14.3	12.8	0.124	0.153
3x185+1x95	37/Com	19/Com	15.9	11.4	0.0991	0.193
3x185+1x120	37/Com	19/Com	15.9	12.8	0.0991	0.153
3x240+1x120	37/Com	19/Com	18.2	12.8	0.0754	0.153
3x240+1x150	37/Com	19/Com	18.2	14.3	0.0754	0.124
3x300+1x150	37/Com	19/Com	20.4	14.3	0.0601	0.124
3x300+1x185	37/Com	37/Com	20.4	15.9	0.0601	0.0991

**Electrical PROPERTIES**

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

**Current-Carrying Capacities (Amp)**

Conductor cross-sectional area	Reference Method 1 (clipped direct		Reference Method 11 (on a perforated horizontal cable tray or Reference Method 13 [free air ] )		In single-way ducts		Laid direct in ground	
	one core cable single phase a.c. or d.c.	2- core or 3- core cable 3-phase a.c.	one 2- core cable single phase a.c. or d.c.	one 3- core or 4- core cable 3-phase a.c.	one core cable single phase a.c. or d.c.	2- core or 3- core cable 3-phase a.c.	one core cable single phase a.c. or d.c.	2- core or 3- core cable 3-phase a.c.
1	2	3	4	5	6	7	8	9
mm <sup>2</sup>	A	A	A	A	A	A	A	A
10	85	73	90	78	-	65	-	80
16	110	94	115	99	115	94	140	115
25	146	124	152	131	145	125	180	150
35	180	154	188	162	175	150	215	180
50	219	187	228	197	210	175	255	215
70	279	238	291	251	260	215	315	265
95	338	289	354	304	310	260	315	265
120	392	335	410	353	355	300	430	360
150	451	386	472	406	400	335	480	405
185	515	441	539	463	455	380	540	460
240	607	520	636	546	520	440	630	530
300	698	599	732	628	590	495	700	590

**Voltage Drop (Per Amp Per Meter)**

Conductor cross-sectional area	2-core cable d.c.	2 cables, single-phase a.c.			3 or 4 cables, 3-phase a.c.			2 cables, single-phase a.c.	3 or 4 cables, 3-phase a.c.
								In ducts or in ground	In ducts or in ground
1	2	3			4			5	6
mm <sup>2</sup>	mV/A/m	mV/A/m			mV/A/m			mV/A/m	mV/A/m
6	7.9	7.9			6.8			7.9	6.5
10	4.7	4.7			4.0			4.7	3.9
16	2.9	2.9			2.5			2.9	2.6
		r	x	z	r	x	z		

25	1.850	1.350	0.160	1.900	1.600	0.140	1.650	1.900	1.600
35	1.350	1.350	0.155	1.350	1.150	0.135	1.150	1.350	1.200
50	0.980	0.990	0.155	1.000	0.860	0.135	0.870	1.000	0.870
70	0.670	0.670	0.150	0.690	0.590	0.130	0.600	0.690	0.610
95	0.490	0.500	0.150	0.520	0.430	0.130	0.450	0.520	0.450
120	0.390	0.400	0.145	0.420	0.340	0.130	0.370	0.420	0.360
150	0.310	0.320	0.145	0.350	0.280	0.125	0.300	0.350	0.300
185	0.250	0.260	0.145	0.290	0.220	0.125	0.260	0.290	0.250
240	0.195	0.200	0.140	0.240	0.175	0.125	0.210	0.240	0.210
300	0.155	0.160	0.140	0.210	0.140	0.120	0.185	0.210	0.190
400	0.120	0.130	0.140	0.190	0.115	0.120	0.165	0.190	0.180