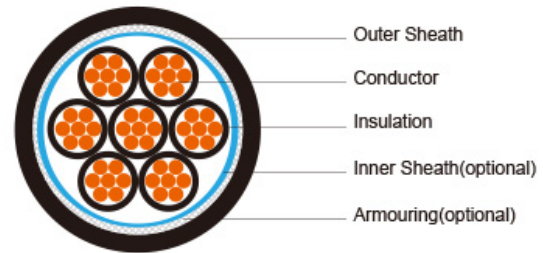


600/1000V LSZH Sheathed, Armoured (multicore)



Application: This range of screened cables drastically reduce interferences from electrical noise, especially in Variable Speed Drive (VSD) applications and are manufactured with fixed conductors.

Standard: Basic design to IEC 60502-1; BS 6724

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	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
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	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
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2
minimum Smoke Emission	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
No Toxic gases	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.

Inner Sheath(optional): LSZH Compound

Armouring(optional): Galvanized Steel Wire

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
2Cores	-	Brown,Blue
3Cores	Yellow/Green,Brown,Blue	Brown,Gray,Black

4Cores	Yellow/Green,Brown,Gray,Black	Brown,Gray,Black,Blue
5Cores	Yellow/Green,Brown,Gray,Black,Blue	Brown,Gray,Black,Blue,Black
above 5 Cores	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: 8 x Overall Diameter (unarmoured cable)

10 x Overall Diameter (armoured cable)

CONSTRUCTION PARAMETERS

Conductor								
No. of Core Cross Section	X No./Nominal Diameter Of Strands	Nominal Insulation Thickness	Unarmoured		Armoured			
			Nominal Overall Diameter	Approx. Weight	Diameter Under Armour	Armour Wire Diameter	Nominal Overall Diameter	Approx. Weight
mm ²	No./mm	mm	mm	kg/km	mm	mm	mm	kg/km
5x1.5	7/0.53	0.7	11.3	184	9.9	0.9	14.5	402
7x1.5	7/0.53	0.7	12.4	225	11.2	0.9	16.0	490
10x1.5	7/0.53	0.7	15.6	325	14.3	1.25	20.0	761
12x1.5	7/0.53	0.7	16.2	370	14.8	1.25	20.5	827
19x1.5	7/0.53	0.7	19.0	516	17.4	1.6	24.0	1186
27x1.5	7/0.53	0.7	22.7	712	21.3	1.6	28.1	1537
37x1.5	7/0.53	0.7	25.5	941	23.9	1.6	30.7	1856
48x1.5	7/0.53	0.7	29.0	1186	27.5	1.6	34.6	2276
5x2.5	7/0.67	0.7	12.8	237	11.2	0.9	15.8	496
7x2.5	7/0.67	0.7	13.8	303	12.4	0.9	17.2	602
10x2.5	7/0.67	0.7	17.5	426	15.9	1.25	21.8	943
12x2.5	7/0.67	0.7	18.1	489	16.5	1.25	22.4	1020
19x2.5	7/0.67	0.7	21.3	725	19.9	1.6	26.7	1498
27x2.5	7/0.67	0.7	25.5	1004	23.9	1.6	30.9	1933
37x2.5	7/0.67	0.7	28.7	1334	26.9	1.6	33.9	2372
48x2.5	7/0.67	0.7	32.9	1706	31.3	2.0	39.6	3252
5x4	7/0.85	0.7	14.2	324	12.6	1.25	18.2	712
7x4	7/0.85	0.7	15.5	422	14.1	1.25	19.8	871
10x4	7/0.85	0.7	19.7	597	18.5	1.25	24.4	1213
12x4	7/0.85	0.7	20.3	690	19.1	1.6	25.7	1462

19x4	7/0.85	0.7	24.0	1037	22.6	1.6	29.4	1931
27x4	7/0.85	0.7	28.8	1445	27.2	1.6	34.4	2532
37x4	7/0.85	0.7	32.5	1932	31.1	2.0	39.3	3448
48x4	7/0.85	0.7	37.3	2479	35.7	2.0	44.2	4273

Note : Other conductor sizes & core configurations are available upon request.

Electrical PROPERTIES

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

Unarmoured Current-Carrying Capacities (Amp)

Conductor or cross-sectional area	Reference method 4 (enclosed in conduit thermally insulating wall etc)		Reference method 3 (enclosed in conduit on a wall or in trunking etc)		Reference method 1 (clipped direct)		Reference method 11 (on a perforated cable tray, horizontal or vertical)		Reference method 12 (free air)		
	2 cables, single phase a.c. or d.c.	3 or 4 cables, 3-phase a.c.	2 cables, single phase a.c. or d.c.	3 or 4 cables, 3-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, 3-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. or flat and touching	3 or 4 cables, 3-phase a.c. flat and touching or trefoil	Horizontal flat spaced	Vertical flat spaced	Trefoil
1	2	3	4	5	6	7	8	9	10	11	12
mm ²	A	A	A	A	A	A	A	A	A	A	A
1.5	18	17	22	19	25	23	-	-	-	-	-
2.5	24	23	30	26	34	31	-	-	-	-	-
4	33	30	40	35	46	41	-	-	-	-	-

Voltage Drop (Per Amp Per Meter)

Size of conductor	2 cables d.c.	2 cables, single-phase a.c.		3 or 4 cables, 3-phase a.c.		
		Ref. Methods 3 and 4 (enclosed in conduit etc, in or on a wall)	Ref. Methods 1 and 11 (clipped direct or on trays touching)	Ref. Methods 3 and 4 (enclosed in conduit etc, in or on a wall)	Ref. Methods 1, 11 and 12 (in trefoil)	Ref. Methods 1 and 11 (Flat and touching)
1	2	3	4	5	6	7
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m

1.5	31	31	27	27	27	27
2.5	19	19	16	16	16	16
4	33	12	10	10	10	10

Armoured Current-Carrying Capacities (Amp)

Conductor cross-sectional area	Reference Method 1 (clipped direct)		Reference Method 11 (on a perforated horizontal cable tray 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 ²	A	A	A	A	A	A	A	A
1.5	27	23	29	25	-	23	-	28
2.5	36	31	39	33	-	30	-	36
4	49	42	52	44	-	40	-	48

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	In ducts or in ground	In ducts or in ground
1	2	3	4	5	6	5	6
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
1.5	31.0	31.0	27.0	31.0	25.0	31.0	25.0
2.5	19.0	19.0	16.0	19.0	15.0	19.0	15.0
4	12.0	12.0	10.0	12.0	9.7	12.0	9.7