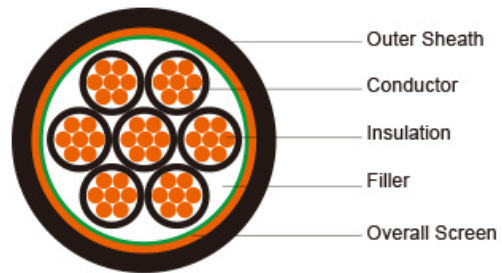


450/750V LSZH Sheathed, Screened (multicore)



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

Standard: Basic design to BS 7211; IEC 60502-1

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

450/750V

CABLE CONSTRUCTION

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

Insulation: Extruded cross-linked XLPE compound.

Filler, binder (if any): PP, PET, LSZH

Overall 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
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

CONSTRUCTION PARAMETERS

Conductor												
No. of Core X Cross Section	No./Nominal Diameter Of Strands	Nominal Overall Diameter Of Conductor	Nominal Insulation Thickness	Nominal Copper Tape Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Max.Dc Resistance Of Conductor @20°C	Approx . Weight				
Noxmm ²	No./mm	mm	mm	mm	mm	mm	Ω/km	kg/km				
7x1.0	7/0.44	1.32	0.7	0.1	1.2	10.7	18.1	309				
7x1.5	7/0.53	1.59	0.7	0.1	1.3	11.3	12.1	366				
7x2.5	7/0.67	2.01	0.7	0.1	1.3	12.2	7.41	468				
12x1.5	7/0.85	2.55	0.7	0.1	1.3	13.4	4.61	560				
12x2.5	7/0.44	1.32	0.7	0.1	1.3	11.2	18.1	727				
19x1.5	7/0.53	1.59	0.7	0.1	1.3	11.8	12.1	786				
19x2.5	7/0.67	2.01	0.7	0.1	1.3	12.8	7.41	1037				

Electrical PROPERTIES

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

Current-Carrying Capacities (Amp)

Conductor cross-sectional area	Reference Method 4 (enclosed in conduit in 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)

Nominal Cross Section Area	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