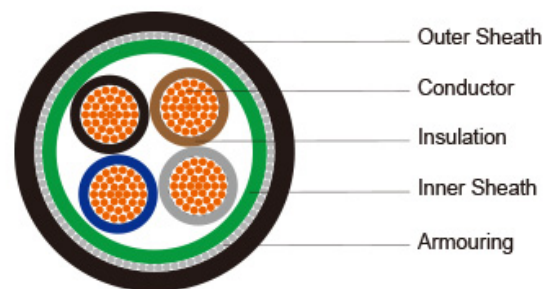


300/500V XLPE Insulated Power Cables (2-4cores)



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 adapted 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 300/500V

CABLE CONSTRUCTION

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

Insulation: Extruded cross-linked XLPE compound.

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: 6 x Overall Diameter (unarmoured cable) 10 x Overall Diameter (armoured cable)

CONSTRUCTION PARAMETERS

Conductor									
				Unarmoured		Armoured			
No. of Core X Cross Section	No./Nominal Diameter of Strands	Nominal Insulation Thickness		Nominal Overall Diameter	Approx. Weight	Diameter Under Armour	Armour Wire Diameter	Nominal Overall Diameter	Approx. Weight
Noxmm2	No./mm	No./mm		mm	mm	mm	mm	mm	kg/km
2x1.5	7/0.53	0.50		6.5	65	6.5	0.9	11.2	246
2x2.5	7/0.67	0.50		7.3	91	7.3	0.9	12.0	292
2x4	7/0.85	0.50		8.4	131	8.4	0.9	13.1	360
3x1.5	7/0.53	0.50		6.9	81	6.9	0.9	11.6	275
3x2.5	7/0.67	0.50		7.8	116	7.8	0.9	12.5	331
3x4	7/0.85	0.50		9.0	169	9.0	0.9	13.7	413
4x1.5	7/0.53	0.50		7.6	101	7.6	0.9	12.3	309
4x2.5	7/0.67	0.50		8.6	144	8.6	0.9	13.3	380
4x4	7/0.85	0.50		9.9	213	9.9	0.9	14.6	479

Electrical PROPERTIES

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

Current-Carrying Capacities (Amp)

Conductor crosssectional 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
mm2	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
mm2	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

Current-Carrying Capacities (Amp)

Conductor crossectional 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 2- core cable single phase a.c. or d.c.	one 3- core or 4- 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 2- core cable single phase a.c. or d.c.	one 3- core or 4- 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.
1	2	3	4	5	6	7	8	9
mm2	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)

Nominal Cross Section Area	2 cables 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		
mm2	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m		
1.5	31	31	27	31	25		
2.5	19	19	16	19	15		
4	12	12	10	12	9.7		