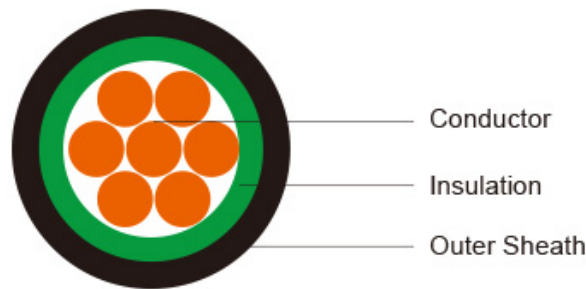


300/500V XLPE Insulated Power Cables (single core)



Conductor

Insulation

Outer Sheath

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 IEC 60502-1

APPLICATION

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) SWB Steel wire braid

CONSTRUCTION PARAMETERS

Conductor		Nominal Thickness	Insulation	Nominal Diameter	Overall	Approx. Weight
No. of Core X Cross Section	No./Nominal Diameter of Strands	mm		mm		kg/km
Noxmm2	No./mm					
1x1.5	7/0.53	0.50		3.8		27
1x2.5	7/0.67	0.50		4.2		37
1x4.0	7/0.85	0.50		4.8		54

Electrical PROPERTIES

Conductor Operating Temperature : 90°C Ambient Temperature : 30°C **Current-Carrying Capacities (Amp)**

Conductor crossectional 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)		
					Horizontal flat spaced	Vertical flat spaced	Trefoil
1	2	2	2	2	2	2	2
mm2	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