

LOW VOLTAGE XLPE INSULATED CABLE

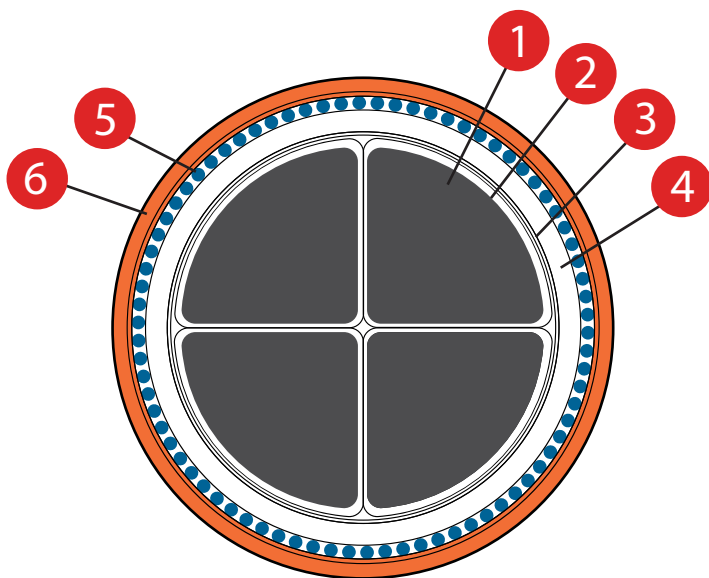
Standard Specification: BS 7870-3.50, NPS/002/019 VERSION 5.2

Cable Type: XLPE/NE(WAVEFORM)/LSOH

Rated Voltage U_0/U (U_{max}): 0.6/1 (1.2) kV

Four-core cable with aluminium sector shaped solid conductors, XLPE insulation, concentric copper conductor, LSOH oversheath

Nominal cross-section	4x95 mm ²	4x185 mm ²	4x300 mm ²
Approximate cable overall diameter	36 mm	49 mm	60 mm
Approximate cable overall weight	2.3 kg/m	4.3 kg/m	6.1 kg/m
Nominal drum length (Tolerance)	500 m (±0%)	250 m (±0%)	250 m (±0%)



1 Conductor

Aluminium sector shaped solid class 1 (maximum DC resistance according to BS EN 60228 and geometrical shape according to BS 3988) of nominal cross-section equal to 300 sq.mm

2 Insulation

XLPE type DIX3 according to BS 7870-1 of 1.8 mm minimum average thickness.

Core identification: Blue - Brown - Black - Grey

3 Binding tape

4 Extruded rubber filling compound

5 Concentric conductor

Copper wires concentrically applied over core with a waveform lay with a structure of (no of wires x diameter) 42x1.88 ±0.03mm, wrapped with a binding yarn.

6 Sheath

LSOH type DMZ4 according to BS 7870-1 of 3.1 mm minimum average thickness with UV-additive. Sheath colour: Orange

Nominal cross-section	Frequency	Max temp	Max DC resistance 20°C	AC resistance max temp	Max DC resistance conductor 20°C	Calc. inductive reactance	Calc. phase capacitance	Calc. charging current
4x95 mm ²	50 Hz	90°C	0.320 Ω/km	0.411 Ω/km	0.320 Ω/km	0.07 Ω/km	0.84-10 ⁶	0.16 A/m/phase
4x185 mm ²	50 Hz	90°C	0.164 Ω/km	0.211 Ω/km	0.164 Ω/km	0.07 Ω/km	0.81-10 ⁶	0.15 A/m/phase
4x300 mm ²	50 Hz	90°C	0.100 Ω/km	0.130 Ω/km	0.100 Ω/km	0.07 Ω/km	0.92-10 ⁶	0.17 A/m/phase