

## LV Aerial Bundled Conductor (ABC) Cables

### 600/1000V ABC –Aerial Bundled Cables to BS 7870-5 (AL/XLPE)

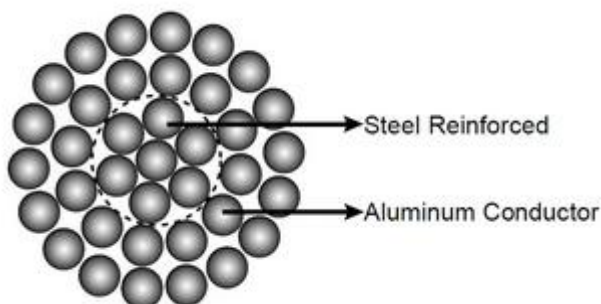
#### Application

The aerial bundled cables designed for overhead distribution lines have all conductors made of aluminium 1350 and insulated with XLPE. Phase and neutral cores are laid up in a bundle with a left hand lay. Can be used for fixed installation as overhead power lines up to 1000 V incl.

#### Standard

BS 7870-5:1999

#### Cable Construction



Conductor (for either phase, neutral or street lighting)	The conductors shall be of aluminium 1350 wires and are compacted circular stranded(RM).
Insulation	XLPE. 1, 2 and 3 raised longitudinal ribs on the surface of the cores. The surface of the neutral core should have at least 12 ribs for cross-sections up to 50 mm <sup>2</sup> and a minimum of 16 ribs for cores above 50 mm <sup>2</sup> . In the case of five core bundles the surface of the protective core should be smooth.
Assembly	2 up to 4 cores of equal cross section are stranded together in left-hand lay, additionally 1 or 2 cores of reduced cross section can be co-stranded.

#### Electrical Properties

Rated voltage	kV	0.6/1
Test voltage	V <sub>eff</sub> kV	4
Laying temperature	°C	min. -20
Operating temperature	°C	-30 ~ +80
Conductor temperature	°C	max. +80
Short-circuit temperature	°C/s	max. +130 /5
Bending radius (min.)		18 × ø of cable

## Dimensions

number of cores x nominal cross section	max. conductor- resistance	min. breaking load of conductor strand	Current rating in the air	Outer diameter	Total weight
mm <sup>2</sup>	Ohm/km	kN	A	mm	kg/km
1x 16 RM	1,910	2,5	72	80	74
1x 25 RM	1,200	4,0	107	90	106
1x 35 RM	0,868	5,5	132	105	138
1x 50 RM	0,641	8,0	165	118	182
1x 70 RM	0,443	10,7	205	130	252
1x 95 RM	0,320	13,7	240	154	333
1x 120 RM	0,253	18,6	290	170	408
1x 150 RM	0,206	23,2	334	190	502
1x 185 RM	0,164	28,7	389	210	611
1x 240 RM	0,125	37,2	467	240	801
2x 16 RM	1,910	2,5	72	156	147
2x 25 RM	1,200	4,0	107	180	208
2x 35 RM	0,868	5,5	132	200	277
2x 50 RM	0,641	8,0	165	235	361
2x 70 RM	0,443	10,7	205	254	505
2x 95 RM	0,320	13,7	240	303	666
2x 150 RM	0,206	23,2	334	380	1004
4x 16 RM	1,910	2,5	72	188	286
4x 25 RM	1,200	4,0	107	212	430
4x 35 RM	0,868	5,5	132	241	553
4x 50 RM	0,641	8,0	165	278	746
4x 70 RM	0,443	10,7	205	318	1009
4x 95 RM	0,320	13,7	240	378	1332
4x 120 RM	0,253	18,6	290	544	1632
4x 50 + 1x 25 RM	0,641/1,200	8,0/4,0	165/107	319	814
4x 50 + 1x 35 RM	0,641/0,868	8,5/5,5	165/132	319	845
4x 70 + 1x 25 RM	0,443/1,200	10,7/4,0	205/107	360	1105
4x 70 + 2x 25 RM	0,443/1,200	10,7/4,0	205/107	400	1217
4x 95 + 1x 25 RM	0,320/1,200	13,7/4,0	240/107	418	1438
4x 95 + 2x 25 RM	0,320/1,200	13,7/4,0	240/107	420	1544
4x120 + 1x 25 RM	0,253/1,200	18,6/4,0	290/107	590	2050

other cross-sections on request