

All Aluminium Conductors (A.A.C.)



(a) Description

- Hard drawn Aluminium wires, stranded in successive layers, in opposite direction to form the Aluminium stranded A.A.C. conductor.
- Conductors are produced according to BS EN 50182 or IEC 61089.

(b) Application

- All Aluminium bare conductors are used for aerial distribution lines having relatively short spans, aerial feeders and bus bars of substations.

(c) Technical data

Relevant Standard:	BS EN 50182 or IEC 61089.
Conductor :	Hard drawn Aluminium wires.
Packing Condition :	On non-returnable wooden drum.



Overhead Transmission Lines

(d) Product Data

Nominal Cross Sectional Area	Number and Nominal Diameter of Wires No x ϕ	Max. DC. resistance at 20 °C	Rated Strength	Approx. Overall Diameter	Approx. Weight
mm ²	n x mm	Ω /km	kN	mm	kg/km

a - According to BS EN 50182 - Germany

16	7 x 1.70	1.7986	3.02	5.1	43.4
25	7 x 2.10	1.1787	4.36	6.3	66.3
35	7 x 2.50	0.8317	6.01	7.5	93.9
50	7 x 3.00	0.5776	8.41	9	135.2
50	19 x 1.80	0.5944	8.94	9	132.9
70	19 x 2.10	0.4367	11.85	10.5	180.9
95	19 x 2.50	0.3081	16.32	12.5	256.3
120	19 x 2.80	0.2456	19.89	14	321.5
150	37 x 2.25	0.196	26.48	15.8	405.7
185	37 x 2.50	0.1588	31.78	17.5	500.9
240	61 x 2.25	0.1193	43.66	20.3	671.1
300	61 x 2.50	0.0966	52.4	22.5	828.5
400	61 x 2.89	0.0723	68.02	26	1107.1
500	61 x 3.23	0.0579	82.47	29.1	1382.9
625	91 x 2.96	0.0464	106.45	32.6	1739.7
800	91 x 3.35	0.0362	132.34	36.9	2228.3
1000	91 x 3.74	0.0291	159.95	41.1	2777.3

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mm ²	n x mm	Ω /km	kN	mm	kg/km

b - According to BS EN 50182 - United Kingdom

23.3	7 x 2.06	1.2249	4.2	6.18	63.8
26.9	7 x 2.21	1.0643	4.83	6.63	73.4
36.9	7 x 2.59	0.7749	6.27	7.77	100.8
42.8	7 x 2.79	0.6678	7.28	8.37	117
52.8	7 x 3.10	0.5409	8.72	9.3	144.4
63.6	7 x 3.40	0.4497	10.49	10.2	173.7
73.6	7 x 3.66	0.388	11.78	11	201.3
78.6	7 x 3.78	0.3638	12.57	11.3	214.7
84.1	7 x 3.91	0.34	13.45	11.7	229.7
95.6	7 x 4.17	0.2989	15.3	12.5	261.3
106	7 x 4.39	0.2697	16.95	13.2	289.6
106.4	19 x 2.67	0.2701	18.08	13.4	292.4
132	7 x 4.90	0.2165	21.12	14.7	360.8
157.6	19 x 3.25	0.1823	26.01	16.3	433.2
185.9	19 x 3.53	0.1546	29.75	17.7	511.1
213.2	19 x 3.78	0.1348	34.12	18.9	586
237.6	19 x 3.99	0.121	38.01	20	652.9
265.7	19 x 4.22	0.1081	42.52	21.1	730.4
322.7	19 x 4.65	0.0891	51.63	23.3	886.8
373.1	19 x 5.00	0.077	59.69	25	1025.3
372.4	37 x 3.58	0.0774	59.59	25.1	1027.1
415.2	37 x 3.78	0.0695	66.43	26.5	1145.1
486.1	37 x 4.09	0.0593	77.78	28.6	1340.6
529.8	37 x 4.27	0.0544	84.77	29.9	1461.2
628.3	37 x 4.65	0.0459	100.54	32.6	1732.9

The above data is approximate and subjected to manufacturing tolerance.

