

# All Aluminium Alloy Conductor (AAAC)

AAAC (BS EN 50182)													
Code Name	Strands No.	Diameter (mm)			Area (mm <sup>2</sup> )		Weight of Conductor (kg/km)	Rated Strength (kN)	Resistance (Ω/km)			Coefficient of Linear Expansion *10 <sup>6</sup> (1/°C)	Modulus of Elasticity (final) (kg/mm <sup>2</sup> )
		Al.	Al.	Total	Al.	Total			DC at 20 °C	AC at 25 °C	AC at 75 °C		
Characteristics of All Aluminium Alloy Conductors used in Finland - Type AL2													
178-AL2	19	3.45	17.30	9.35	177.60	487.60	57.73	0.1880	0.1923	0.2246	23	6934.07	
346-AL2	37	3.45	24.20	9.35	345.90	952.80	112.41	0.0986	0.1005	0.1171	23	6934.07	
638-AL2	61	3.65	32.90	10.46	638.30	1764.00	201.06	0.0527	0.0570	0.0654	23	6934.07	
Characteristics of All Aluminium Alloy Conductors used in Germany - Type AL3													
16-AL3	7	1.70	5.10	2.27	15.89	43.40	4.69	2.0702	2.1075	2.4801	23	6934.07	
48-AL3	19	1.80	9.00	2.54	48.35	132.70	14.26	0.6841	0.6967	0.8197	23	6934.07	
24-AL3	7	2.10	6.30	3.46	24.24	66.20	7.15	1.3566	1.3811	1.6253	23	6934.07	
66-AL3	19	2.10	10.50	3.46	65.81	180.70	19.41	0.5026	0.5120	0.6023	23	6934.07	
147-AL3	37	2.25	15.80	3.98	147.11	405.30	43.40	0.2256	0.2305	0.2709	23	6934.07	
243-AL3	61	2.25	20.30	3.98	242.53	670.30	71.55	0.1373	0.1413	0.1657	23	6934.07	
34-AL3	7	2.50	7.50	4.91	34.36	93.80	10.14	0.9572	0.9746	1.1469	23	6934.07	
93-AL3	19	2.50	12.50	4.91	93.26	256.00	27.51	0.3547	0.3615	0.4252	23	6934.07	
182-AL3	37	2.50	17.50	4.91	181.62	500.30	53.58	0.1827	0.1870	0.2197	23	6934.07	
299-AL3	61	2.50	22.50	4.91	299.42	827.50	88.33	0.1112	0.1149	0.1347	23	6934.07	
117-AL3	19	2.80	14.00	6.16	116.99	321.20	34.51	0.2827	0.2884	0.3391	23	6934.07	
400-AL3	61	2.89	26.00	6.56	400.13	1105.90	118.04	0.0832	0.0869	0.1017	23	6934.07	
626-AL3	91	2.96	32.60	6.88	626.18	1737.70	184.73	0.0534	0.0578	0.0666	23	6934.07	
49-AL3	7	3.00	9.00	7.07	49.48	135.10	14.60	0.6648	0.6769	0.7966	23	6934.07	
500-AL3	61	3.23	29.10	8.19	499.82	1381.40	147.45	0.0666	0.0707	0.0819	23	6934.07	
802-AL3	91	3.35	36.90	8.81	802.06	2225.80	236.62	0.0417	0.0464	0.0538	23	6934.07	
1000-AL3	91	3.74	41.10	10.99	999.68	2774.30	294.91	0.0334	0.0392	0.0445	23	6934.07	
Characteristics of All Aluminium Alloy Conductors used in France - Type AL4													
22-AL4	7	2.00	6.00	3.14	21.99	60.00	7.15	16.4455	16.7416	19.7018	23	6934.07	
76-AL4	19	2.25	11.30	3.98	75.54	207.40	24.55	14.7007	14.9653	17.6114	23	6934.07	
34-AL4	7	2.50	7.50	4.91	34.36	93.80	11.17	13.1564	13.3932	15.7614	23	6934.07	
182-AL4	37	2.50	17.50	4.91	181.62	500.30	59.03	13.2761	13.5151	15.9048	23	6934.07	
117-AL4	19	2.80	14.00	6.16	116.99	321.20	38.02	11.8130	12.0257	14.1520	23	6934.07	
228-AL4	37	2.80	19.60	6.16	227.82	627.60	74.04	11.8537	12.0671	14.2007	23	6934.07	
55-AL4	7	3.15	9.45	7.79	54.55	148.90	17.73	10.4416	10.6296	12.5091	23	6934.07	
148-AL4	19	3.15	15.80	7.79	148.06	406.50	48.12	10.5005	10.6895	12.5796	23	6934.07	
288-AL4	37	3.15	22.10	7.79	288.34	794.30	93.71	10.5366	10.7263	12.6229	23	6934.07	
570-AL4	61	3.45	31.10	9.35	570.22	15760.00	185.33	9.6515	9.8252	11.5625	23	6934.07	
851-AL4	91	3.45	38.00	9.35	850.66	23607.00	276.47	9.6911	9.8656	11.6100	23	6934.07	
366-AL4	37	3.55	24.90	9.90	366.21	10089.00	115.36	9.3494	9.5177	11.2006	23	6934.07	
1144-AL4	91	4.00	44.00	12.57	1143.51	3173.40	360.22	8.3586	8.5090	10.0136	23	6934.07	
1596-AL4	127	4.000	52.000	12.57	1595.88	4427.50	502.72	8.3561	8.5066	10.0107	23	6934.07	