

All Aluminum-Alloy Conductor

DIN 68201, All Aluminum-Alloy Stranded Conductor

Size (mm)	Calculated Area	Stranding and wire diameter	Overall diameter	Linear Mass	Rated Strength	Max. DC resistance at 20°C
	mm ²	mm	mm	kg/km	daN	Ω/km
16	15.89	7/1.70	5.1	43	444	2.091
25	24.25	7/2.10	6.3	66	677	1.3703
35	34.36	7/2.50	7.5	94	960	0.9669
50	49.48	7/3.00	9	135	1382	0.6714
50	48.36	19/1.80	9	133	1350	0.6905
70	65.82	19/2.10	10.5	181	1838	0.5073
95	93.27	19/2.50	12.5	256	2605	0.3579
120	117	19/2.80	14	322	3268	0.2854
150	147.1	37/2.25	15.2	406	4109	0.2274
185	181.6	37/2.50	17.5	500	5073	0.1842
240	242.54	61/2.25	20.2	670	6774	0.1383
300	299.43	61/2.50	22.5	827	8363	0.112
400	400.14	61/2.89	26	1104	11176	0.0838
500	499.83	61/3.23	29.1	1379	13960	0.06709
625	626.2	91/2.96	32.6	1732	17490	0.054
800	802.1	91/3.35	36.8	2218	22402	0.0418
1000	999.71	91/3.74	41.1	2767	27922	0.0335

Physical contents of aluminum alloy:

1. Resistivity - 0.0326 Ohms mm²/m at 20°C
2. Density - 2.70 kgm/dm³ at 20°C
3. Coefficient of Linear Expansion - $23 \times 10^{-6} / ^\circ\text{C}$
4. Constant Mass Temperature Coefficient (a) - 0.00360/ °C
5. Material - Heat treated Al. Mg. Si. Alloy - Approximately 0.5% Mg & 0.5% Si