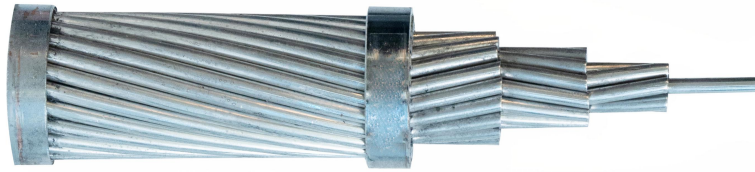


Bare Aluminum Cables



AAC — All Aluminium Conductor

IEC 61089 Standard

Technical Data

Conductor Material : Aluminium Alloy 1350 (H12/H22)

Stranding Class : Class A (compact), Class B / AA

Conductivity: $\geq 34.5 \text{ m}/\Omega \cdot \text{mm}^2$ (61.2 % IACS)

Applicable Standard: IEC 61089 / IEC 61597

Stranding	Overall Diameter	Nominal Cross-Section	Approx. Mass	Rated Tensile Strength	DC Resistance at 20°C	Current Capacity
No./wire dia. mm	mm	mm ²	kg/km	kN	Ω/km	A
7/1.96	5.89	21.2	58	4.2	1.3510	100
7/2.20	6.61	26.6	73	5.1	1.0720	120
7/2.47	7.42	33.6	92	6.3	0.8497	133
7/2.77	8.33	42.4	116	7.7	0.6739	153
7/3.12	9.36	53.5	146	9.3	0.5341	176
7/3.50	10.51	67.4	184	11.7	0.4236	202
7/3.93	11.80	85.0	232	14.2	0.3360	232
7/4.41	13.25	107.2	293	17.8	0.2664	267
7/4.96	14.90	135.2	369	22.5	0.2113	307
19/2.91	14.57	126.7	348	22.4	0.2274	299
19/3.01	15.05	135.2	372	23.9	0.2129	311
19/3.19	15.97	152.0	417	26.3	0.1880	333
19/3.38	16.91	170.5	467	29.5	0.1638	357
19/3.44	17.24	177.4	488	30.7	0.1624	366
19/3.67	18.36	201.4	554	34.1	0.1427	394
19/3.68	18.43	202.7	558	34.3	0.1421	395
19/3.90	19.55	228.0	626	37.8	0.1263	424
19/4.02	20.12	241.7	664	40.1	0.1188	439
19/4.12	20.60	253.4	695	42.0	0.1132	451
19/4.34	21.73	282.0	774	46.8	0.1018	481
37/3.09	21.67	278.7	768	48.1	0.1033	476
37/3.23	22.63	304.0	838	52.5	0.0948	505
37/3.33	23.31	322.3	888	55.7	0.0896	522
37/3.36	23.56	329.4	908	56.9	0.0876	529

Stranding	Overall Diameter	Nominal Cross-Section	Approx. Mass	Rated Tensile Strength	DC Resistance at 20°C	Current Capacity
No./wire dia. mm	mm	mm ²	kg/km	kN	Ω/km	A
37/3.49	24.45	354.7	978	61.2	0.0814	552
37/3.53	24.74	362.6	1000	62.6	0.0797	560
37/3.61	25.32	380.0	1048	64.3	0.0758	575
37/3.72	26.06	402.8	1112	68.2	0.0715	595
37/3.73	26.14	405.4	1118	68.6	0.0712	597
37/3.90	27.33	443.1	1222	73.4	0.0653	631
37/3.96	27.73	456.1	1257	75.5	0.0633	646
37/4.07	28.55	483.4	1333	80.1	0.0597	665
37/4.17	29.23	506.7	1396	83.9	0.0568	682
37/4.24	29.72	523.7	1445	86.7	0.0551	695
61/3.41	30.70	557.4	1539	96.2	0.0518	721
61/3.43	30.89	564.0	1559	97.3	0.0512	727
61/3.55	31.95	604.3	1670	104.2	0.0479	755
61/3.56	32.08	608.1	1679	102.8	0.0476	759
61/3.66	33.02	644.5	1781	108.9	0.0450	785
61/3.70	33.37	658.7	1818	111.3	0.0440	795
61/3.78	34.01	684.8	1893	115.7	0.0423	813
61/3.84	34.63	709.4	1958	117.5	0.0407	830
61/3.89	35.03	725.1	2004	120.0	0.0400	842
61/3.98	35.85	760.1	2098	125.8	0.0381	864
61/3.99	35.99	765.4	2116	126.6	0.0377	869
61/4.09	36.91	805.7	2226	133.3	0.0358	893
61/4.11	37.04	810.7	2238	134.2	0.0358	898
61/4.23	38.15	861.4	2378	142.7	0.0335	928
61/3.57	39.28	912.1	2521	154.0	0.0316	962

Notes: DC resistance calculated per IEC 61089 using conductivity 34.5 m/Ω-mm² at 20 °C. Rated Tensile Strength (RTS) is the minimum guaranteed UTS per IEC 61089 Annex A, based on wire strength ≥ 160 MPa (H12 temper). Current-carrying capacity per IEC 61597 (emissivity 0.5, absorptivity 0.5, sea level). Nominal cross-sectional areas are IEC preferred values.