

ALL ALUMINUM CONDUCTOR (AAC)

All Aluminium Conductor (AAC): is made up of one or more strands of hard drawn Aluminium Wires. The EC grade Alloy Conductor has a minimum conductivity of 61.2% IACS.

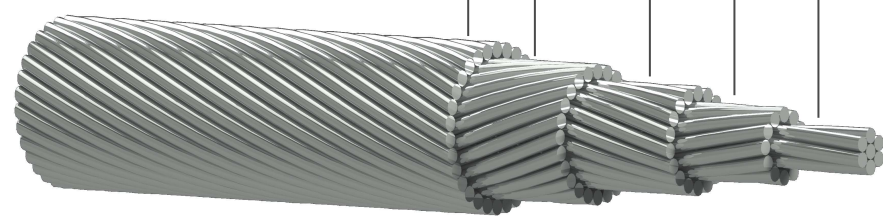
Construction

Aluminum 1350–H19 Wires, concentrically stranded over a central wire of Aluminum 1350–H19.

Aluminum 1350- 19 Wires



Aluminum 1350- 19 Wires



Features:

- High current carrying capacity.
- Suitable for low and medium voltage lines in urban area Excellent resistance to corrosion
- Ideal for use in low humid and low corrosive areas

Available with Non-Specular (Dull) Surface Finish and Color Coated as per customized requirements.

ALL ALUMINUM CONDUCTOR (AAC) - GOST 839

Nominal Area	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
		(mm ²)	(No.)					(mm)	(Kg/m)
150	148.00	19	3.15	15.75	406.0	24.42	0.1944	302	371
160	160.00	19	3.27	16.35	439.8	26.40	0.1798	316	388
185	182.80	19	3.50	17.50	502.0	29.83	0.1574	342	421
200	200.00	19	3.66	18.30	549.7	32.00	0.1438	360	445
240	238.70	19	4.00	20.00	655.0	38.19	0.1205	399	494
250	250.00	19	4.09	20.47	687.1	40.00	0.1150	409	509
300	288.30	37	3.15	22.10	794.0	47.57	0.1000	444	554
315	315.00	37	3.29	23.05	867.5	51.97	0.0915	466	584
350	345.80	37	3.45	24.20	952.0	57.06	0.0833	492	617
400	389.20	37	3.66	25.60	1072.0	63.42	0.0740	525	662
450	449.10	37	3.90	27.30	1206.0	71.86	0.0642	568	719
500	500.40	37	4.15	29.10	1378.0	80.00	0.0576	603	767
550	544.00	61	3.37	30.30	1500.0	89.76	0.0529	632	806
560	560.00	37	4.39	30.73	1542.2	89.60	0.0531	632	807
600	586.80	61	3.50	31.50	1618.0	95.63	0.0491	658	842
630	630.00	61	3.63	32.64	1738.0	100.80	0.0458	683	877
650	641.70	61	3.66	32.90	1771.0	104.58	0.0450	689	885
700	691.70	61	3.80	34.20	1902.0	112.73	0.0417	717	925
710	710.00	61	3.85	34.65	1959.0	113.60	0.0406	727	939
750	747.40	61	3.95	35.60	2062.0	119.58	0.0386	747	966

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation. Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM CONDUCTOR (AAC) - AS 1531

Code Name	Cross-sectional Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
	(mm ²)	(No.)	(mm)	(mm)	(Kg/m)	KN	(Ω/Km)	(Ampere)	(Ampere)
Leo	34.36	7	2.50	7.50	94.3	5.71	0.8330	128	152
Leonids	41.58	7	2.75	8.25	113.0	6.72	0.6890	143	171
Libra	49.48	7	3.00	9.00	135.0	7.98	0.5790	159	190
Mars	77.31	7	3.75	11.30	211.0	11.80	0.3700	207	250
Mercury	111.30	7	4.50	13.50	304.0	16.90	0.2580	256	311
Moon	124.04	7	4.75	14.30	339.0	18.90	0.2320	272	332
Neptune	157.62	19	3.25	16.30	433.0	24.70	0.1830	313	385
Orion	182.80	19	3.50	17.50	503.0	28.70	0.1570	342	422
Pluto	209.85	19	3.75	18.80	576.0	31.90	0.1370	370	458
Saturn	261.54	37	3.00	21.00	721.0	42.20	0.1100	420	523
Sirius	306.94	37	3.25	22.80	845.0	48.20	0.0940	460	575
Taurus	336.69	19	4.75	23.80	924.0	51.30	0.0857	484	607
Triton	408.65	37	3.75	26.30	1120.0	42.20	0.0706	540	681
Uranus	506.04	61	3.25	29.30	1400.0	48.20	0.0572	606	771
Ursula	586.89	61	3.50	31.50	1620.0	51.30	0.0493	657	840
Venus	673.73	61	3.75	33.80	1860.0	97.20	0.0429	707	910

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.
Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM CONDUCTOR (AAC) - IEC 61089

Nominal Area	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
		(mm ²)	(No.)					(mm)	(Kg/m)
10	10.02	7	1.35	4.05	27.4	1.95	2.8633	61	72
16	16.08	7	1.71	5.12	43.8	3.04	1.7896	81	95
25	24.94	7	2.13	6.40	68.4	4.50	1.1453	106	125
40	40.08	7	2.70	8.09	109.4	6.80	0.7158	140	167
63	63.18	7	3.39	10.20	172.3	10.39	0.4545	183	221
100	100.10	19	2.59	12.90	274.8	17.00	0.2877	240	292
125	124.64	19	2.89	14.50	343.6	21.25	0.2302	274	335
160	159.57	19	3.27	16.40	439.8	26.40	0.1798	317	389
200	199.90	19	3.66	18.30	549.7	32.00	0.1439	360	444
250	249.63	19	4.09	20.50	687.1	40.00	0.1151	409	508
315	314.55	37	3.29	23.00	867.9	51.97	0.0916	466	583
400	399.98	37	3.71	26.00	1102.0	64.00	0.0721	533	672
450	451.11	37	3.94	27.50	1239.8	72.00	0.0641	569	720
500	500.48	37	4.15	29.00	1377.6	80.00	0.0577	603	766
560	560.04	37	4.39	30.70	1542.9	89.60	0.0515	641	819
630	631.30	61	3.63	32.60	1738.3	100.80	0.0458	683	876
710	710.14	61	3.85	34.60	1959.1	113.60	0.0407	726	938
800	801.43	61	4.09	36.80	2207.4	128.00	0.0361	773	1003
900	898.25	61	4.33	39.00	2483.3	144.00	0.0321	820	1071
1000	1000.58	61	4.57	41.10	2759.2	160.00	0.0289	863	1134
1120	1120.79	91	3.96	43.50	3093.5	179.20	0.0258	911	1204
1250	1248.78	91	4.18	46.00	3452.6	200.00	0.0231	958	1275
1400	1402.62	91	4.43	48.70	3866.9	224.00	0.0207	1005	1347
1500	1499.21	91	4.58	50.40	4143.1	240.00	0.0193	1034	1393

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation. Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM CONDUCTOR (AAC) - EN 50182

Code Word	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
		(mm ²)	(No.)					(mm)	(KN)
24-AL1	24.20	7	2.10	6.30	66.3	4.36	1.1787	104	123
34-AL1	34.30	7	2.50	7.50	93.9	6.01	0.8317	128	152
49-AL1	49.50	7	3.00	9.00	135.2	8.41	0.5776	159	191
66-AL1	65.80	19	2.10	10.50	180.9	11.85	0.4367	188	227
93-AL1	93.90	19	2.50	12.50	256.3	16.32	0.3081	231	280
117-AL1	117.00	19	2.80	14.00	321.5	19.89	0.2456	264	322
147-AL1	147.10	37	2.25	15.80	405.7	26.48	0.1960	301	369
182-AL1	181.60	37	2.50	17.50	500.9	31.78	0.1588	340	419
243-AL1	242.50	61	2.25	20.30	671.1	43.66	0.1193	401	498
299-AL1	299.40	61	2.50	22.50	828.5	52.40	0.0966	453	565
400-AL1	400.10	61	2.89	26.00	1107.1	68.02	0.0723	532	672
452-AL1	451.50	61	3.07	27.60	1249.3	74.50	0.0641	569	721
500-AL1	499.80	61	3.23	29.10	1382.9	82.47	0.0579	602	765
625-AL1	626.20	91	2.96	32.60	1739.7	106.45	0.0464	678	871
800-AL1	802.10	91	3.35	36.90	2228.3	132.34	0.0363	771	1001
1000-AL1	999.70	91	3.74	41.10	2777.3	159.95	0.0291	861	1130

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation. Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM CONDUCTOR (AAC) - ASTM B231

Code Name	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
		(mm ²)	(No.)					(mm)	(Kg/m)
Jessamine	885.84	61	4.30	38.70	2442	132.00	0.0324	816	1065
Coreopsis	805.36	61	4.10	36.90	2216	120.00	0.0357	777	1009
Gladiolus	766.55	61	4.00	36.00	2108	114.00	0.0375	758	982
Carnation	724.97	61	3.89	35.01	1997	108.00	0.0396	737	952
Columbine	684.55	61	3.78	34.02	1884	104.00	0.0420	715	921
Narcissus	645.29	61	3.67	33.03	1774	98.10	0.0445	693	891
Hawthorn	603.78	61	3.55	31.95	1662	93.50	0.0476	669	857
Marigold	563.65	61	3.43	30.87	1553	87.30	0.0510	644	823
Bluebell	524.89	37	4.25	29.75	1441	78.80	0.0547	620	790
Hawkweed	507.74	37	4.18	29.26	1395	76.20	0.0566	609	775
Magnolia	483.74	37	4.08	28.56	1553	76.20	0.0594	593	753
Goldenrod	484.48	61	3.18	28.62	1331	78.30	0.0593	594	754
Cockscomb	455.70	37	3.96	27.72	1256	72.60	0.0631	574	727
Arbutus	380.81	37	3.62	25.34	1109	61.80	0.0755	520	654
Petunia	362.11	37	3.53	24.71	1046	58.60	0.0794	505	635
Verbena	353.95	37	3.49	24.43	976	55.40	0.0812	499	626
Heuchera	330.03	37	3.37	23.59	907	51.70	0.0871	479	601
Orchid	322.24	37	3.33	23.31	887	50.40	0.0892	473	592
Meadowsweet	303.18	37	3.23	22.61	836	47.50	0.0948	457	571
Dahlia	282.37	19	4.35	21.75	776	43.30	0.1018	439	547
Zinnia	253.30	19	4.12	20.60	697	38.90	0.1134	413	513
Cosmos	241.16	19	4.02	20.10	665	37.00	0.1192	401	498
Goldentuft	228.14	19	3.91	19.55	628	35.00	0.1260	389	481
Canna	200.99	19	3.67	18.35	555	31.60	0.1430	361	446
Daisy	135.25	7	4.96	14.88	372	21.40	0.2125	287	350
Sneezewort	126.67	7	4.80	14.40	349	20.10	0.2268	276	337
Oxlip	107.41	7	4.42	13.26	295	17.00	0.2675	250	305
Phlox	84.91	7	3.93	11.79	234	13.50	0.3384	218	264
Aster	67.35	7	3.50	10.50	186	11.10	0.4266	190	229

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation. Customized conductor sizes based on customer's requirement can also be designed.

ALL ALUMINUM CONDUCTOR (AAC) - CAN/CSA-C61089-11

Code Word	Sectional Area	Stranding		Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @ 20°C	Current Capacity	
		No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
		(mm ²)	(No.)					(mm)	(Kg/m)
10-A1-7	10.00	7	1.35	4.05	0	2.00	2.8630	61	72
16-A1-7	16.00	7	1.71	5.12	0	3.12	1.7900	81	95
25-A1-7	25.00	7	2.13	6.40	0	4.75	1.1450	106	125
40-A1-7	40.00	7	2.70	8.09	0	7.20	0.7159	140	167
63-A1-7	63.00	7	3.39	10.20	0	10.70	0.4545	183	221
100-A1-19	100.00	19	2.59	12.90	0	18.00	0.2877	240	292
125-A1-19	125.00	19	2.89	14.50	0	21.90	0.2302	274	335
160-A1-19	160.00	19	3.27	16.40	0	27.20	0.1798	317	389
200-A1-19	200.00	19	3.66	18.30	1	34.00	0.1439	360	444
250-A1-19	250.00	19	4.09	20.50	1	41.30	0.1151	409	508
315-A1-37	315.00	37	3.29	23.00	1	53.60	0.0916	466	583
400-A1-37	400.00	37	3.71	26.00	1	68.00	0.0721	533	672
450-A1-37	450.00	37	3.94	27.50	1	74.30	0.0641	569	720
500-A1-37	500.00	37	4.15	29.00	1	82.50	0.0577	603	766
560-A1-37	560.00	37	4.39	30.70	2	92.40	0.0515	641	819
630-A1-61	630.00	61	3.63	32.60	2	107.00	0.0459	682	876
710-A1-61	710.00	61	3.85	34.60	2	117.00	0.0407	727	938
800-A1-61	800.00	61	4.09	36.80	2	132.00	0.0361	773	1003
900-A1-61	900.00	61	4.33	39.00	2	149.00	0.0321	820	1071
1000-A1-61	1000.00	61	4.57	41.10	3	165.00	0.0289	864	1134
1120-A1-91	1120.00	91	3.96	43.50	3	185.00	0.0258	911	1204
1250-A1-91	1250.00	91	4.18	46.00	3	206.00	0.0231	958	1274
1400-A1-91	1400.00	91	4.43	48.70	4	231.00	0.0207	1006	1348
1500-A1-91	1500.00	91	4.58	50.40	4	248.00	0.0193	1035	1394

NOTE :

Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation. Customized conductor sizes based on customer's requirement can also be designed.