



Epsilon Advanced Conductors Data Sheets

Conductor size			Aluminum Cross sectional area (kcmil)	Diameter (inch)	Core Diameter (inch)	Weight (lb/kft)	Core Rated Strength (kips)	Cond. Rated Strength (kips)	DC at 20°C / 68°F (Ohm/mile)	AC at 25°C / 77°F (Ohm/mile)	AC at 75°C / 167°F (Ohm/mile)	AC at 180°C / 356°F (Ohm/mile)	Ampacity <sup>(1)</sup>		
Reference	International Size	ASTM Size											75°C / 167°F	160°C / 320°F	180°C / 356°F
130 - 28	SILVASSA	-	243	0.565	0.235	263.3	13.4	15.1	0.3664	0.3747	0.4492	0.6056	681	722	759
160 - 28	HELSINKI	PASADENA	301	0.616	0.235	318.4	13.4	15.5	0.2955	0.3025	0.3625	0.4885	778	825	869
160 - 47	JAIPUR	-	304	0.650	0.305	344.8	23.8	25.9	0.2932	0.3002	0.3597	0.4848	794	843	887
160 - 18	BERN	-	314	0.610	0.190	318.3	8.8	10.9	0.2829	0.2897	0.3471	0.4678	793	841	885
180 - 40	ZADAR	-	350	0.673	0.280	379.6	20.0	22.4	0.2540	0.2603	0.3118	0.4201	862	915	964
190 - 28	ROVINJ	-	373	0.673	0.235	386.3	13.4	16.0	0.2383	0.2445	0.2927	0.3943	890	944	995
230 - 28	COPENHAGEN	LINNET	437	0.720	0.235	446.0	13.4	16.4	0.2036	0.2092	0.2504	0.3371	983	1,044	1,100
230 - 40	REYKJAVIK	ORIOLE	440	0.741	0.280	464.2	20.0	23.0	0.2020	0.2076	0.2484	0.3344	996	1,057	1,114
230 - 87	MONTE CARLO	-	452	0.818	0.415	535.3	44.0	47.1	0.1972	0.2027	0.2426	0.3265	1,039	1,104	1,164
240 - 47	GLASGOW	WACO	470	0.770	0.305	501.5	23.8	27.0	0.1893	0.1947	0.2329	0.3135	1,041	1,105	1,165
250 - 28	GDANSK	-	488	0.756	0.235	494.4	13.4	16.8	0.1820	0.1874	0.2241	0.3016	1,055	1,121	1,181
280 - 40	CASABLANCA	LAREDO	544	0.807	0.280	561.4	20.0	23.7	0.1635	0.1687	0.2016	0.2711	1,136	1,207	1,272
320 - 60	OSLO	IRVING	622	0.882	0.345	660.9	30.4	34.7	0.1431	0.1481	0.1768	0.2375	1,248	1,326	1,399
320 - 40	LISBON	HAWK	625	0.858	0.280	638.0	20.0	24.3	0.1423	0.1472	0.1759	0.2362	1,240	1,318	1,391
370 - 47	AMSTERDAM	DOVE	728	0.927	0.305	744.1	23.8	28.8	0.1221	0.1271	0.1515	0.2032	1,370	1,457	1,538
410 - 47	CORDOBA	-	790	0.962	0.305	802.3	23.8	29.2	0.1127	0.1176	0.1401	0.1877	1,443	1,535	1,620
430 - 52	BRUSSELS	GROSBEAK	832	0.989	0.320	848.1	26.2	31.9	0.1069	0.1118	0.1331	0.1782	1,494	1,590	1,679
470 - 60	STOCKHOLM	LUBBOCK	914	1.039	0.345	935.7	30.4	36.7	0.0972	0.1022	0.1215	0.1624	1,590	1,692	1,788
520 - 60	WARSAW	CUCKOO	1,013	1.091	0.345	1,029.8	30.4	37.3	0.0879	0.0930	0.1103	0.1472	1,696	1,806	1,909
530 - 71	DUBLIN	DRAKE	1,036	1.109	0.375	1,063.7	36.0	43.1	0.0858	0.0909	0.1078	0.1438	1,725	1,837	1,942
560 - 60	HAMBURG	PLANO	1,088	1.127	0.345	1,101.0	30.4	37.8	0.0818	0.0870	0.1030	0.1372	1,774	1,891	1,999
580 - 60	MILAN	CORPUS CHRISTI	1,130	1.146	0.345	1,140.0	30.4	38.1	0.0789	0.0841	0.0996	0.1325	1,815	1,935	2,046
600 - 71	ROME	ARLINGTON	1,175	1.176	0.375	1,195.4	36.0	44.0	0.0758	0.0812	0.0960	0.1276	1,866	1,989	2,104
640 - 60	VIENNA	CARDINAL	1,244	1.198	0.345	1,248.2	30.4	38.9	0.0716	0.0771	0.0910	0.1208	1,929	2,057	2,176
680 - 71	BUDAPEST	FORT WORTH	1,323	1.240	0.375	1,335.8	36.0	45.0	0.0673	0.0729	0.0859	0.1138	2,010	2,144	2,269
700 - 60	PRAGUE	EL PASO	1,373	1.252	0.345	1,369.1	30.4	39.8	0.0649	0.0706	0.0831	0.1099	2,052	2,189	2,317
740 - 71	MUNICH	BEAUMONT	1,456	1.294	0.375	1,460.8	36.0	45.9	0.0612	0.0670	0.0788	0.1039	2,132	2,276	2,410
750 - 87	WARWICK	-	1,482	1.315	0.415	1,502.4	44.0	54.1	0.0600	0.0660	0.0775	0.1021	2,162	2,308	2,445
770 - 75	LONDON	SAN ANTONIO	1,503	1.316	0.385	1,510.6	37.9	48.2	0.0592	0.0652	0.0765	0.1008	2,176	2,323	2,461
820 - 60	PARIS	BITTERN	1,608	1.346	0.345	1,590.2	30.4	41.4	0.0554	0.0615	0.0721	0.0947	2,263	2,417	2,561
880 - 87	BORDEAUX	-	1,725	1.408	0.415	1,733.1	44.0	55.8	0.0515	0.0579	0.0676	0.0885	2,374	2,537	2,690
950 - 75	ANTWERP	DALLAS	1,862	1.453	0.385	1,848.6	37.9	50.6	0.0478	0.0545	0.0634	0.0827	2,482	2,654	2,816
1020 - 75	MADRID	LAPWING	1,999	1.503	0.385	1,978.3	37.9	51.6	0.0446	0.0515	0.0598	0.0776	2,591	2,772	2,942
1160 - 79	-	CHUKAR	2,282	1.604	0.395	2,253.1	39.9	55.5	0.0391	0.0466	0.0537	0.0691	2,804	3,004	3,191

(1) Ampacity values based on IEEE Standard 738-2012, according to the following data: 60 Hz, zero elevation, 25°C (77°F) ambient temperature, 0.5 Solar Absorptivity, 0.6 Emissivity, 0.61 m/s (2 ft/s) wind and 1000 W/m<sup>2</sup> (92.9 W/ft<sup>2</sup>), at corresponding surface temperatures. Coefficient of thermal resistance is 0.00407°C<sup>-1</sup>/0.002109°F<sup>-1</sup> for US sizes.

Governing Units: Metric to US Customary (Unit conversion).

Depending on conductor manufacturer rated specifications may slightly change.

Revision 01

19/04/2024