

## ALUMINIUM CONDUCTOR AL.CLAD STEEL REINFORCED - ACSR/AW or ACSR/AS



### **APPLICATIONS**

Used as bare overhead transmission and as primary and secondary distribution cable. ACSR/AW offers strength characteristics similar to ACSR, along with slightly greater ampacity and resistance to corrosion due to aluminum-cladding of the steel core wires.

### **SPECIFICATIONS**

- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-502 Aluminum-Clad Steel Core Wire for Aluminum Conductors, Aluminum-Clad Steel Reinforced.
- B-549 Aluminum Conductors, Concentric-Lay-Stranded, Aluminum-Clad Steel Reinforced (ACSR/AW).

### **CONSTRUCTION**

Aluminum alloy 1350-H19 wires, concentrically stranded about an aluminum-clad steel core.

Conductor		Stranding		Cross Sectional		Overall		Weight			Rated	20 deg. DC
ACSR/AS	Size	No. / mm		Area mm <sup>2</sup>		Diameter		Kg/km			Strength	Resistance
Code Name	Awg/CM	Al.	AS/AW	Al.	AS/AW	ACSR/AS	AS/AW	Al.	AS/AW	ACSR/AS	kN	Ω /km
Turkey	6	6/1.679	1/1.679	13.28	2.214	5.037	1.679	36.44	14.59	51.03	5.05	2.0443
Swanate	4	7/1.961	1/2.614	21.15	5.367	6.536	2.614	58.01	35.37	93.38	10.17	1.2497
Swan	4	6/2.118	1/2.118	21.15	3.523	6.354	2.118	58	23.22	81.22	7.93	1.285
Sparrow	2	6/2.672	1/2.672	33.63	5.607	8.016	2.672	92.32	36.95	129.3	12.31	0.8073
Sparate	2	7/2.474	1/3.299	33.64	8.548	8.247	3.299	92.29	56.33	148.6	15.59	0.7852
Grouse	80,000	8/2.540	1/4.242	40.54	14.13	9.322	4.242	111.8	93.14	204.9	21.28	0.6358
Robin	1	6/3.000	1/3.000	42.41	7.069	9	3	116.4	46.58	163	15.31	0.6404
Patrel	0	12/2.339	7/2.339	51.58	30.08	11.7	7.017	142.8	199.2	342	43.98	0.6488
Raven	0	6/3.371	1/3.371	53.51	8.925	10.11	3.371	146.9	58.81	205.7	18.78	0.5072
Minorca	110,800	12/2.441	7/2.441	56.14	32.76	12.21	7.323	155.6	216.8	372.4	47.9	0.4305
Quail	0	6/3.782	1/3.782	67.44	11.23	11.35	3.782	185	74.03	259	22.57	0.403
Leghorn	134,600	12/2.690	7/2.690	68.2	39.78	13.45	8.07	188.9	263.05	452.4	57.84	0.3546
Guinea	159,000	12/2.924	7/2.924	80.57	47.01	14.62	8.772	223.2	311.3	534.5	67.96	0.3003

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Code Name	Awg/CM	Al.	AS/AW	Al.	AS/AW	ACSR/AS	AS/AW	Al.	AS/AW	ACSR/AS	kN	Ω /km
Pigeon	0	6/4.247	1/4.247	85.03	14.17	12.74	4.247	233.2	93.36	326.6	27.99	0.3196
Dotterel	176,900	12/3.084	7/3.084	89.64	52.29	15.42	9.252	248.3	346.3	594.6	75.17	0.2698
Dorking	190,800	12/3.203	7/3.203	96.68	56.41	16.02	9.609	267.9	373.6	641.5	81.08	0.25
Brahma	203,200	16/2.863	19/2.482	103	91.92	18.14	12.41	285.4	611.9	897.3	120.41	0.2158
Cochin	211,300	12/3.371	7/3.371	107.1	62.48	16.86	10.11	296.7	413.8	710.5	87.77	0.2257
Penguin	0	6/4.770	1/4.770	107.2	17.87	14.31	4.77	294.1	117.8	411.9	34.85	0.2534
Partridge	266,800	26/2.573	7/2.002	135.2	22.04	16.29	6.006	374.4	145.8	520.2	48.14	0.2031
Waxwing	266,800	18/3.091	1/3.091	135.2	7.504	15.46	3.091	372.3	49.45	421.8	30.04	0.2095
Ostrich	300,000	26/2.728	7/2.121	152	24.73	17.27	6.363	421.1	163.6	584.7	54.89	0.1807
Oriole	336,400	30/2.690	7/2.69	170.5	39.78	18.83	8.07	473.5	263.5	737	74.6	0.1579
Linnet	336,400	26/2.888	7/2.245	170.5	27.71	18.28	6.735	472	183.3	655.3	59.8	0.1612
Merlin	336,400	18/3.472	1/3.472	170.5	9.468	17.36	3.472	469.8	62.39	532.2	37.6	0.1661
Lark	397,500	30/2.924	7/2.924	201.4	47.01	20.47	8.772	559.5	311.3	870.8	87.21	0.1336
Ibis	397,500	26/3.139	7/2.441	201.4	32.76	19.88	7.323	557.5	216.7	774.2	69.74	0.1365
Brant	397,500	24/3.269	7/2.179	201.4	26.1	19.61	6.537	558.2	172.7	730.9	62.07	0.1378
Chickadee	397,500 .	18/3.774	1/3.774	201.4	11.19	18.87	3.774	555.2	73.72	628.9	42.74	0.1405
Flicker	477,000	24/3.581	7/2.388	241.7	31.35	21.48	7.164	669.6	207.4	877	74.51	0.1148
Pelican	477,000	18/4.135	1/4.135	241.7	13.43	20.68	4.135	666.5	88.5	755	50.86	0.1171
Hawk	477,000	26/3.439	7/2.675	241.7	39.34	21.78	8.025	669.2	260.3	929.5	84.96	0.1137
Hen	477,000	30/3.203	7/3.203	241.7	56.41	22.42	9.609	671.4	373.6	1,045	103.52	0.1114
Osprey	556,500	18/4.465	1/4.465	282	15.66	22.33	4.465	777	103.2	880.2	60.19	0.1004
Parakeet	556,500	24/3.868	7/2.578	282	36.54	23.2	7.734	781.3	241.8	1,023	85.58	0.0984
Dove	556,500	26/3.716	7/2.891	282	45.95	23.53	8.673	781.1	304	1,085	97.78	0.09736
Eagle	556,500	30/3.459	7/3.459	282	65.78	24.21	10.38	783	435.6	1,219	118.58	0.09545
Peacock	605,000	24/4.034	7/2.690	306.6	39.78	24.21	8.07	849.9	263.2	1.113	93.17	0.09047
Squab	605,000	26/3.874	7/3.012	306.6	49.88	24.53	9.036	849.1	330	1,179	104.77	0.08958
Wood Duck	605,000	30/3.607	7/3.607	306.6	71.54	25.25	10.82	851.4	473.7	1,325	126.54	0.08777
Teal	605,000	30/3.607	19/2.164	306.6	69.88	25.25	10.82	851.4	463.3	1,315	126.84	0.08793
Kingbird	636,000	18/4.775	1/4.775	322.3	17.91	23.88	4.775	888.6	118	1,007	68.83	0.08779
Rook	636,000	24/4.135	7/2.756	322.3	41.76	24.8	8.268	893	276.3	1,169	97.8	0.08623
Grosbeak	636,000	26/3.973	7/3.089	322.3	52.46	25.15	9.267	893	347.1	1,240	110.2	0.08518
Scoter	636,000	30/3.698	7/3.698	322.3	75.18	25.89	11.09	894.8	497.9	1,393	133.01	0.0835
Egret	636,000	30/3.698	19/2.220	322.3	73.55	25.89	11.1	894.8	487.6	1,382	133.43	0.08365
Swift	636,000	36/3.376	1/3.376	322.3	8.951	23.63	3.376	888.6	58.99	947.6	61.02	0.08863
Flamingo	666,600	24/4.234	7/2.822	337.8	43.79	25.4	8.466	936.3	289.7	1,226	102.54	0.08213
Gannet	666,600	26/4.067	7/3.162	337.8	54.97	25.75	9.486	935.7	363.7	1,299	115.47	0.08128

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Code Name	Awg/CM	Al.	AS/AW	Al.	AS/AW	ACSR/AS	AS/AW	Al.	AS/AW	ACSR/AS	kN	Ω /km
Starling	715,500	26/4.214	7/3.277	362.5	59.04	26.69	9.831	1.005	390.6	1,396	122.07	0.07571
Redwing	715,500	30/3.922	19/2.352	362.5	82.56	27.45	11.76	1,007	547.3	1,554	148.2	0.07438
Cuckoo	795,000	24/4.623	7/3.081	402.8	52.19	27.73	9.243	1,116	345.3	1461	121.24	0.06889
Drake	795,000	26/4.442	7/3.454	402.8	65.59	28.13	10.36	1,116	434	1,550	135.62	0.06814
Coot	795,000	36/3.774	1/3.774	402.8	11.19	26.42	3.774	1,110	73.72	1,184	74.01	0.07093
Tern	795,000	45/3.376	7/2.250	402.8	27.83	27.01	6.75	1,116	184.1	1,300	95.91	0.07028
Condor	795,000	54/3.081	7/3.081	402.8	52.19	27.73	9.243	1,115	345	1,460	122.2	0.06893
Mallard	795,000	30/4.135	19/2.482	402.8	91.92	28.95	12.41	1,119	609.4	1,728	164.92	0.0669
Ruddy	900,000	45/3.592	7/2.395	456	31.54	28.74	7.185	1,263	208.6	1,472	107.06	0.06208
Canary	900,000	54/3.279	7/3.279	456	59.11	29.51	9.837	1,264	390.7	1,655	137.05	0.06086
Catbird	954,000	36/4.135	1/4.135	483.4	13.43	28.95	4.135	1,333	88.5	1,422	87.95	0.05908
Rail	954,000	45/3.698	7/2.466	483.4	33.43	29.59	7.398	1,339	221.2	1,560	117.59	0.05857
Cardinal	954,000	54/3.376	7/3.376	483.4	62.66	30.39	10.13	1,339	414.2	1,753	149.39	0.05741
Tanger	1,033,500	36/4.303	1/4.303	523.7	14.54	30.12	4.303	1,443	95.83	1,539	77.84	0.05456
Ortolan	1,033,500	45/3.848	7/2.565	523.7	36.17	30.78	7.695	1,450	239.3	1,689	124.77	0.05409
Curlew	1,033,500	54/3.513	7/3.513	523.7	67.85	31.62	10.54	1,450	448.5	1,899	161.99	0.05302
Bluejay	1,113,000	45/3.995	7/2.664	564	39.02	31.96	7.992	1,553	258.2	1,821	134.52	0.05019
Finch	1,113,000	54/3.647	19/2.189	564	71.5	32.83	10.95	1,564	474	2,038	172.26	0.04924
Bunting	1,192,500	45/4.135	7/2.756	604.2	41.76	33.07	8.268	1,674	276.3	1,950	144.07	0.04685
Grackle	1,192,500	54/3.774	19/2.266	604.2	76.82	33.97	11.33	1,675	508	2,183	181.62	0.04598
Skylark	1,272,000	36/4.775	1/4.775	644.5	17.91	33.43	4.775	1,787	118	1,905	119.89	0.04452
Bittern	1,272,000	45/4.270	7/2.847	644.5	44.56	34.16	8.541	1,787	294.8	2,082	153.67	0.04393
Pheasant	1,272,000	54/3.899	19/2.339	644.5	81.64	35.09	11.7	1,788	541.2	2,329	193.69	0.04308
Dipper	1,351,500	45/4.402	7/2.934	684.8	47.33	35.21	8.802	1,898	313.1	2,211	163.28	0.04134
Martin	1,351,500	54/4.018	19/2.410	684.8	86.68	36.16	12.05	1,898	574.6	2,473	205.67	0.04057
Bobolink	1,431,000	45/4.529	7/3.020	725.1	50.14	36.23	9.06	2,009	331.8	2,341	172.88	0.03905
Plover	1,431,000	54/4.135	19/2.482	725.1	91.92	37.22	12.41	2,011	609.4	2,620	217.99	0.0383
Nuthatch	1,510,500	45/4.653	7/3.101	765.4	52.87	37.22	9.303	2,120	349.8	2,470	182.41	0.037
Parrot	1,510,000	54/4.247	19/2.548	765.4	96.88	38.22	12.74	2,121	642.3	2,763	229.83	0.03631
Lapwing	1,590,000	45/4.775	7/3.183	805.7	55.7	38.19	9.549	2,232	368.5	2,601	192.13	0.03513
Falcon	1,590,000	54/4.359	19/2.616	805.7	102.1	39.23	13.08	2,234	677	2,911	242.19	0.03464
Chukar	1,780,000	84/3.698	19/2.220	901.9	73.55	40.68	11.1	2,512	487.6	3,000	229.73	0.0314
Bluebird	2,156,000	84/4.069	19/2.441	1,092	88.92	44.76	12.21	3,033	589.4	3,633	272.75	0.02594
Kiwi	2,167,000	72/4.407	7/2.939	1,098	47.49	44.07	8.817	3,058	313.9	3,372	228.95	0.03447
Thrasher	2,312,000	76/4.430	19/2.068	1,172	63.82	45.78	10.34	3.261	423.8	3,685	257.13	0.0244