



OVERHEAD CONDUCTORS



Gables International Plaza, 2655 Le Jeune Rd. Ste#905, Coral Gables, FL 33134

www.uselectricwire.com | (954) 410-6574

© 2025, US Electric Wire Corp. All Rights Reserved

ACSR/AW

Aluminum Conductor. Aluminum-Clad Steel Reinforced. Bare.

Applications

ACSR/AW bare conductors are specifically designed for overhead transmission and distribution lines in severe environments with high corrosion concerns. These conductors serve effectively in coastal areas, industrial zones with chemical emissions, and regions with high atmospheric pollution. ACSR/AW provides enhanced corrosion protection while maintaining the mechanical advantages of steel-reinforced conductors, making it ideal for applications requiring both strength and extended service life under harsh conditions.

Specifications (Standards)

ACSR/AW bare conductor meets or exceeds the following ASTM 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	Reinforced (ACSR/AW). Aluminum Conductors, Concentric-Lay-Stranded, Aluminum-Clad Steel

Construction

ACSR/AW conductors incorporate a central core of aluminum-clad steel wires surrounded by one or more layers of 1350-H19 hard-drawn aluminum wires in concentric layers. The steel core provides mechanical strength while the aluminum cladding on the steel creates a protective barrier against corrosion and galvanic action. This construction maintains a standard operating temperature of 75°C continuously, with emergency ratings up to 100°C, while offering significantly improved corrosion resistance compared to standard ACSR conductors.

ACSR/AW

Code Word	Size (AWG or kcmil)	Strand- ing (Al/ Aw)	Diameter (ins.)				Weight Per 1000 ft. (lbs.)			Rated Strength (lbs.)	Resistance OHMS/1000 ft.		Allowable Ampacity+ (Amps)
			Individual Wires		Aw Core	Comp. Cable	Al	Aw	Total		DC @ 20°C	AC @ 75°C	
			Al	Aw									
Swan/Aw	4	6/1	.0834	.0834	.0834	.25	39	16	55	1780	.3917	.4770	145
Swanate/Aw	4	7/1	.0772	.103	.103	.257	39	24	63	2280	.3814	.4642	148
Sparrow/Aw	2	6/1	.1052	.1052	.1052	.316	62	25	87	2760	.2462	.2997	194
Sparate/Aw	2	7/1	.0974	.1298	.1298	.325	62	38	100	3510	.2396	.2917	198
Robin/Aw	1	6/1	.1181	.1181	.1181	.354	78	31	109	3450	.1950	.2373	225
Raven/Aw	1/0	6/1	.1327	.1327	.1327	.398	99	39	138	4250	.1547	.1884	260
Quail/Aw	2/0	6/1	.1489	.1489	.1489	.447	124	50	174	5130	.1227	.1494	301
Pigeon/Aw	3/0	6/1	.1672	.1672	.1672	.502	156	63	219	6300	.09747	.1188	347
Penguin/Aw	4/0	6/1	.1878	.1878	.1878	.563	197	79	277	7690	.07726	.09422	402
Waxwing/Aw	266.8	18/1	.1217	.1217	.1217	.609	250	33	283	6820	.06364	.07776	451
Partridge/Aw	266.8	26/7	.1013	.0788	.2363	.642	251	98	349	10800	.06169	.07541	465
Ostrich/Aw	300.0	26/7	.1074	.0835	.2506	.68	283	110	393	12100	.05489	.06712	500
Merlin/Aw	336.4	18/1	.1367	.1367	.1367	.684	315	42	357	8540	.05044	.06175	522
Linnet/Aw	336.4	26/7	.1137	.0885	.2654	.72	317	123	440	13500	.04897	.05989	537
Oriole/Aw	336.4	30/7	.1059	.1059	.3177	.741	318	177	494	16700	.04795	.05861	547
Chickadee/Aw	397.5	18/1	.1486	.1486	.1486	.743	373	50	422	9780	.04268	.05230	580
Brant/Aw	397.5	24/7	.1287	.0858	.2574	.772	374	116	490	14100	.04185	.05124	592
Ibis/Aw	397.5	26/7	.1236	.0962	.2885	.783	374	146	520	15800	.04144	.05072	597
Lark/Aw	397.5	30/7	.1151	.1151	.3453	.806	375	209	584	19600	.04059	.04965	608
Pelican/Aw	477	18/1	.1628	.1628	.1628	.814	447	59	507	11500	.03556	.04344	651
Flicker/Aw	477	24/7	.141	.094	.2819	.846	449	139	589	16700	.03487	.04273	663
Hawk/Aw	477.0	26/7	.1354	.1053	.316	.858	449	175	624	18900	.03453	.04231	669
Hen/Aw	477.0	30/7	.1261	.1261	.3783	.883	450	251	701	23400	.03382	.04139	682
Osprey/Aw	556.5	18/1	.1758	.1758	.1758	.879	522	69	591	13200	.03050	.03749	715
Parakeet/Aw	556.5	24/7	.1523	.1015	.3045	.914	524	163	687	19300	.02989	.03667	731
Dove/Aw	556.5	26/7	.1463	.1138	.3413	.927	524	204	728	21900	.02958	.03627	737
Eagle/Aw	556.5	30/7	.1362	.1362	.4086	.953	525	293	818	26800	.02899	.03551	751
Peacock/Aw	605.0	24/7	.1588	.1058	.3175	.953	570	177	746	21000	.02749	.03377	770
Squab/Aw	605.0	26/7	.1525	.1186	.3559	.966	570	222	792	23600	.02588	.03341	777
Teal/Aw	605.0	30/19	.142	.0852	.426	.994	571	311	883	28500	.02672	.03274	791
Kingbird/Aw	636.0	18/1	.188	.188	.188	.94	596	79	675	15000	.02667	.03286	778
Rook/Aw	636.0	24/7	.1628	.1085	.3256	.977	599	186	785	22000	.02616	.03216	794
Grosbeak/Aw	636.0	26/7	.1564	.1216	.3649	.991	599	233	832	24800	.02588	.03179	801
Flamingo/Aw	666.6	24/7	.1667	.1111	.3333	1	628	195	823	23100	.02495	.03069	818
Gannet/Aw	666.6	26/7	.1601	.1245	.3736	1.014	628	245	872	26000	.02470	.03034	825
Starling/Aw	715.5	26/7	.1659	.129	.3871	1.051	674	263	936	27500	.02300	.02830	863

ACSR/AW

Redwing/Aw	715.5	30/19	.1544	.0927	.4633	1.081	676	368	1044	33400	.02260	.02777	878
Cuckoo/Aw	795.0	24/7	.182	.1213	.364	1.092	749	232	981	27500	.02093	.02582	913
Drake/Aw	795	26/7	.1749	.136	.408	1.107	749	292	1040	30500	.02070	.02549	922
Tern/Aw	795	45/7	.1329	.0886	.2658	1.063	749	124	873	21500	.02135	.02638	896
Condor/Aw	795	54/7	.1213	.1213	.364	1.092	749	232	981	27800	.02091	.02578	913
Mallard/Aw	795	30/19	.1628	.0977	.4884	1.139	751	409	1160	37100	.02033	.02500	938
Ruddy/Aw	900	45/7	.1414	.0943	.2828	1.131	848	140	988	24000	.01886	.02330	970
Canary/Aw	900	54/7	.1291	.1291	.3873	1.162	848	263	1111	31000	.01849	.02286	986
Rail/Aw	954	45/7	.1456	.0971	.2912	1.165	899	149	1047	25400	.01779	.02210	1003
Cardinal/Aw	954	54/7	.1329	.1329	.3987	1.196	899	279	1177	32900	.01744	.02161	1022
Ortolan/Aw	1033.5	45/7	.1515	.101	.3031	1.212	973	161	1134	27200	.01641	.02044	1054
Curlew/Aw	1033.5	54/7	.1383	.1383	.415	1.245	973	302	1275	35200	.01609	.01997	1074
Bluejay/Aw	1113	45/7	.1573	.1048	.3145	1.258	1048	173	1222	29300	.01606	.01905	1103
Pheasant/Aw	1272	54/19	.1535	.0921	.4604	1.381	1204	364	1568	42400	.01315	.01646	1216
Bobolink/Aw	1431	45/7	.1783	.1189	.3566	1.427	1348	223	1571	37600	.01186	.01503	1283
Lapwing/Aw	1590	45/7	.188	.1253	.3759	1.504	1498	248	1745	41800	.01069	.01366	1365

+Conductor temperature of 75°C ambient temperature 25°C, emissivity 0.5, wind 2 ft./sec., in sun.

Code Word	Size (AWG or kcmil)	Strand- ing (Al/ Aw)	Diameter (ins.)				Weight Per 1000 ft. (lbs.)			Rated Strength (lbs.)	Resistance OHMS/1000 ft.		Allowable Ampacity+ (Amps)
			Individual Wires		Aw Core	Comp. Cable	Al	Aw	Total		DC @ 20°C	AC @ 75°C	
			Al	Aw									
Grouse/AW	80.0	8/1	.1000	.1670	.1670	.367	75.1	62.6	137.7	4,890	.1942	.2357	227
Petrel/AW	101.8	12/7	.0921	.0921	.2763	.460	96.0	133.9	229.9	9,910	.1425	.1736	281
Minorca/AW	110.8	12/7	.0961	.0961	.2883	.481	104.5	145.8	250.3	10,800	.1326	.1594	297
Leghorn/AW	134.6	12/7	.1059	.1059	.3177	.530	127.0	177.0	304.0	13,000	.1078	.1313	335
Guinea/AW	159.0	12/7	.1151	.1151	.3453	.576	150.0	209.1	359.1	15,300	.09123	.1112	372
Dotterel/AW	176.9	12/7	.1214	.1214	.3642	.607	166.8	232.7	399.5	16,900	.08201	.09988	398
Dorking/AW	190.8	12/7	.1261	.1261	.3783	.631	180.0	251.0	431.0	18,300	.07601	.09261	418
Brahma/AW	203.2	16/19	.1127	.0977	.4885	.714	191.7	411.0	602.7	27,100	.06570	.07994	464
Cochin/AW	211.3	12/7	.1327	.1327	.3981	.664	199.3	278.0	477.3	19,800	.06863	.08364	445

+Conductor temperature of 75°C ambient temperature 25°C, emissivity 0.5, wind 2 ft./sec., in sun.



**Gables International Plaza
2655 Le Jeune Rd. Ste#905
Coral Gables, FL 33134
Phone: (954) 410-6574**