



ACSR/AW - Aluminum Conductor Steel Reinforced/AW Core

APPLICATIONS & FEATURES

Primarily used as the phase conductor for overhead transmission and distribution. It is preferred over conventional ACSR because of its higher corrosion resistance, lighter weight, longer service life, and reduced power loss.

INDUSTRY COMPLIANCES

ASTM B-230 Aluminum wire, 1350-H19 for electrical purposes
 ASTM B-502 Aluminum-clad steel core wire for aluminum conductors, aluminum-clad steel reinforced, either AW2 (normal strength) or AW3 (high strength)
 ASTM B-549 Aluminum conductors, concentric-lay-stranded, aluminum-clad steel reinforced (ACSR/AW)

CONSTRUCTION

Concentric-lay-stranded conductors made from round Aluminum Alloy 1350-H19 with an aluminum-clad steel core, either AW2 (normal strength) or AW3 (high strength).

CODE WORD	AWG	STRANDING	DIAMETER			POUNDS PER 1000 FT			RATED STRENGTH (LBS)
			INDIVIDUAL WIRES		COMPLETE CORE	ALUM	AW	TOTAL	
			ALUM	AW					
Swan/AW	4	6/1	.0834	.0834	.250	39	16	55	1780
Swanate/AW	4	7/1	.0772	.1029	.257	39	24	63	2280
Sparrow/AW	2	6/1	.1052	.1052	.316	62	25	87	2760
Sparate/AW	2	7/1	.0974	.1299	.325	62	38	100	3510
Robin/AW	1	6/1	.1182	.1182	.355	78	31	109	3450
Raven/AW	1/0	6/1	.1327	.1327	.398	99	39	138	4250
Quail/AW	2/0	6/1	.1490	.1490	.447	124	50	174	5130
Pigeon/AW	3/0	6/1	.1672	.1672	.502	156	63	219	6300
Penguin/AW	4/0	6/1	.1878	.1878	.563	197	79	277	7690
Waxwing/AW	266.8	18/1	0.1217	0.1217	0.609	250	33	283	6820
Partridge/AW	266.8	26/7	0.1013	0.0788	0.642	251	98	349	10800
Ostrich/AW	300	26/7	0.1074	0.0835	0.68	283	110	393	12100
Merlin/AW	336.4	18/1	0.1367	0.1367	0.684	315	42	357	8540
Linnet/AW	336.4	26/7	0.1138	0.0885	0.721	317	123	440	13500
Oriole/AW	336.4	30/7	0.1059	0.1059	0.741	318	177	494	16700
Chickadee/AW	397.5	18/1	0.1486	0.1486	0.743	373	50	422	9780
Brant/AW	397.5	24/7	0.1287	0.0858	0.772	374	116	490	14100
Ibis/AW	397.5	26/7	0.1236	0.0961	0.783	374	146	520	15800
Lark/AW	397.5	30/7	0.1151	0.1151	0.806	375	209	584	19600
Pelican/AW	477	18/1	0.1628	0.1628	0.814	447	59	507	11500
Flicker/AW	477	24/7	0.141	0.094	0.846	449	139	589	16700
Hawk/AW	477	26/7	0.1355	0.1054	0.858	449	175	624	18900
Hen/AW	477	30/7	0.1261	0.1261	0.883	450	251	701	23400
Osprey/AW	556.5	18/1	0.1758	0.1758	0.879	522	69	591	13200
Parakeet/AW	556.5	24/7	0.1523	0.1015	0.914	524	163	687	19300
Dove/AW	556.5	26/7	0.1463	0.1138	0.927	524	204	728	21900
Eagle/AW	556.5	30/7	0.1362	0.1362	0.953	525	293	818	26800
Peacock/AW	605	24/7	0.1588	0.1059	0.953	570	177	746	21000
Squab/AW	605	26/7	0.1525	0.1186	0.966	570	222	792	23600
Teal/AW	605	30/19	0.142	0.0852	0.994	571	311	883	28500
Kingbird/AW	636	18/1	0.188	0.188	0.94	596	79	675	15000
Rook/AW	636	24/7	0.1628	0.1085	0.977	599	186	785	22000
Grosbeak/AW	636	26/7	0.1564	0.1216	0.99	599	233	832	24800
Egret/AW	636	30/19	0.1456	0.0874	1.019	601.4	327.5	928.9	29930
Flamingo/AW	666.6	24/7	0.1667	0.1111	1.000	628	195	823	23100
Gannet/AW	666.6	26/7	0.1601	0.1245	1.014	628	245	872	26000
Starling/AW	715.5	26/7	0.1659	0.129	1.051	674	263	939	27500
Redwing/AW	715.5	30/19	0.1544	0.0926	1.081	676	368	1044	33400
Tern/AW	795	45/7	0.1329	0.0886	1.063	749	124	873	21500
Cuckoo/AW	795	24/7	0.182	0.1213	1.092	749	232	981	27500
Drake/AW	795	26/7	0.1749	0.136	1.108	749	292	1040	30500
Condor/AW	795	54/7	0.1213	0.1214	1.093	749	232	981	27800
Mallard/AW	795	30/19	0.1628	0.0977	1.14	751	409	1160	37100
Ruddy/AW	900	45/7	0.1414	0.0943	1.131	848	140	988	24000
Canary/AW	900	54/7	0.1291	0.1291	1.162	848	263	1111	31000
Catbird/AW	954	36/1	0.1628	0.1628	1.14	938	6.2	955	19460
Rail/AW	954	45/7	0.1456	0.0971	1.165	899	149	1047	25400
Cardinal/AW	954	54/7	0.1329	0.1329	1.196	899	279	1177	32900
Ortolan/AW	1033.5	45/7	0.1515	0.101	1.212	973	161	1134	27200
Curlew/AW	1033.5	54/7	0.1383	0.1383	1.244	973	302	1275	35200
Bluejay/AW	1113	45/7	0.1573	0.1049	1.259	1048	173	1222	29300
Finch/AW	1113	54/19	0.1436	0.0862	1.293	1055	319	1374	37500
Bunting/AW	1192.5	45/7	0.1628	0.1085	1.302	1125	186	1311	31300
Bittern/AW	1272	45/7	0.1681	0.1121	1.345	1200	198	1398	33400
Pheasant/AW	1272	54/19	0.1535	0.0921	1.382	1204	364	1568	42400
Bobolink/AW	1431	45/7	0.1783	0.1189	1.427	1348	223	1571	37600
Lapwing/AW	1590	45/7	0.188	0.1253	1.504	1498	248	1745	41800
Grouse/AW	80.0	8/1	.1000	.1670	.367	75.1	62.6	137.7	4.890
Petrel/AW	101.8	12/7	.0921	.0921	.460	96.0	133.9	229.9	9.910
Minorca/AW	110.8	12/7	.0961	.0961	.481	104.5	145.8	250.3	10.800
Leghorn/AW	134.6	12/7	.1059	.1059	.530	127.0	177.0	304.0	13.000
Guinea/AW	159.0	12/7	.1151	.1151	.576	150.0	209.1	359.1	15.300
Dotterel/AW	176.9	12/7	.1261	.1261	.631	180.0	251.0	399.5	16.900
Dorking/AW	190.8	12/7	.1261	.1261	.631	180.0	251.0	431.0	18.300
Brahma/AW	203.2	16/19	.1127	.0977	.714	191.7	411.0	602.7	21.100
Cochin/AW	211.3	12/7	.1327	.1327	.664	199.3	278.0	477.3	19800