

# ACSR

## ALUMINUM CONDUCTOR STEEL REINFORCED



### APPLICATIONS

ACSR (ALUMINUM CONDUCTOR STEEL REINFORCED) WIRE FOR USE IN OVERHEAD POWER TRANSMISSION AND DISTRIBUTION LINES

### CONSTRUCTION

CONCENTRICALLY STRANDED CONDUCTOR CONSISTING OF ONE OR MORE LAYERS OF ALUMINUM ALLOY 1350-H119 WIRES AROUND A STRANDED STEEL CORE

### STANDARDS

- ASTM B-230: ALUMINUM WIRE, 1350-H19 FOR ELECTRICAL PURPOSES
- ASTM B-231: ALUMINUM CONDUCTORS, CONCENTRIC-LAY-STRANDED
- ASTM B-232: ALUMINUM CONDUCTORS, CONCENTRIC-LAY-STRANDED, COATED STEEL REINFORCED (ACSR)
- ASTM B-341: ALUMINUM-COATED STEEL CORE WIRE FOR ALUMINUM CONDUCTORS, STEEL REINFORCED (ACSR/AZ)
- ASTM B-498: ZINC-COATED STEEL CORE WIRE FOR ALUMINUM CONDUCTORS, STEEL REINFORCED (ACSR)
- ASTM B-500: METALLIC COATED STRANDED STEEL CORE FOR ALUMINUM CONDUCTORS, STEEL REINFORCED (ACSR)

CODE NAME	CONDUCTOR SIZE (AWG/KCMIL)	STRAND	NOM. OD (INCHES)			NOM. WEIGHT (LBS/MFT)			RATED BREAKING STRENGTH (LBS/MFT)	RESISTANCE OHMS/MFT	RESISTANCE OHMS/MFT	ALLOWABLE AMPACITY (AMPS)
			AL	STEEL	CBL OD	AL	STEEL	CBL OD		DC @ 20°	DC @ 75°	
TURKEY	6	6/1	0.066	0.066	0.198	24.5	11.6	36.1	1190	0.641	0.806	105
SWAN	4	6/1	0.083	0.083	0.250	39	18.4	57.4	1860	0.403	0.515	140
SWANATE	4	7/1	0.077	0.103	0.257	39	28.0	67	2360	0.399	0.519	140
SPARROW	2	6/1	0.105	0.105	0.316	62	29.3	91.3	2850	0.254	0.332	184
SPARATE	2	7/1	0.097	0.130	0.325	62	44.7	106.7	3460	0.251	0.338	184
ROBIN	1	6/1	0.118	0.118	0.355	78.2	37.0	115.2	3550	0.201	0.268	212
RAVEN	1/0	6/1	0.133	0.133	0.398	98.7	46.6	145.3	4380	0.159	0.217	242
QUAIL	2/0	6/1	0.149	0.149	0.447	124.3	58.8	183.1	5310	0.126	0.176	276
PIGEON	3/0	6/1	0.167	0.167	0.502	156.7	74.1	230.8	6620	0.100	0.144	315
PENGUIN	4/0	6/1	0.188	0.188	0.563	197.7	93.4	291.1	8350	0.080	0.119	357
WAXWING	266.8	18/1	0.122	0.122	0.609	250.3	39.2	289.5	6880	0.064	0.079	449
PARTRIDGE	266.8	26/7	0.101	0.079	0.642	251.7	115.6	367.3	11300	0.064	0.078	475
OSTRICH	300	26/7	0.107	0.084	0.680	283	130	412	12700	0.057	0.069	492
MERLIN	336.4	18/1	0.137	0.137	0.684	315.8	49.5	365.3	8680	0.051	0.063	519
LINNET	336.4	26/7	0.114	0.089	0.721	317.1	145.5	462.6	14100	0.051	0.062	529
ORIOLE	336.4	30/7	0.106	0.106	0.741	381	209	526	17300	0.050	0.061	535
CHICKADEE	397.5	18/1	0.149	0.149	0.743	373.1	58.5	431.6	9940	0.043	0.053	576
BRANT	397.5	24/7	0.129	0.086	0.772	374	137	511	14600	0.043	0.053	584
IBIS	397.5	26/7	0.124	0.096	0.793	374.7	171.9	546.6	16300	0.043	0.052	587
LARK	397.5	30/7	0.115	0.115	0.806	375	247	622	20300	0.043	0.052	594
PELICAN	477	18/1	0.163	0.163	0.814	447.8	70.2	518	11800	0.036	0.044	646
FLICKER	477	24/7	0.141	0.094	0.846	449	164	614	17200	0.036	0.044	655
HAWK	477	26/7	0.135	0.105	0.858	449.6	206.4	656	19500	0.036	0.044	659
HEN	477	30/7	0.126	0.126	0.883	451.1	296.3	747.4	23800	0.035	0.043	666
OSPREY	556.5	18/1	0.176	0.176	0.879	522	82	603	13700	0.031	0.038	711
PARAKEET	556.5	24/7	0.152	0.102	0.914	525	191.8	716.8	19800	0.031	0.038	721
DOVE	556.5	26/7	0.146	0.114	0.927	525	241	766	22600	0.031	0.038	726
EAGLE	556.5	30/7	0.136	0.136	0.953	525	345	871	27800	0.030	0.037	734
PEACOCK	605	24/7	0.159	0.106	0.953	570	209	779	21600	0.028	0.035	760

DATA SUBJECT TO NORMAL MANUFACTURING TOLERANCES

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			AL	STEEL	CBL OD	AL	STEEL	CBL OD				
SQUAB	605	26/7	0.153	0.119	0.966	570	262	832	24300	0.028	0.035	765
WOOD DUCK	605	30/7	0.142	0.142	0.994	571	375	946	28900	0.028	0.034	774
TEAL	605	30/19	0.142	0.085	0.994	571	367	939	30000	0.028	0.034	773
KINGBIRD	636	18/1	0.188	0.188	0.940	597.2	93.6	690.8	15700	0.027	0.033	773
SWIFT	636	36/1	0.133	0.133	0.930	596	47	643	13690	0.027	0.033	769
ROOK	636	24/7	0.163	0.109	0.977	600	219.2	819.2	22600	0.027	0.033	784
GROSBEAK	636	26/7	0.156	0.122	0.990	600	275.2	875.2	25200	0.027	0.033	789
SCOTER	636	30/7	0.146	0.146	1.019	600	395	995	30400	0.026	0.033	798
EGRET	636	30/19	0.146	0.087	1.019	600	386	987	31500	0.027	0.033	798
FLAMINGO	666.6	24/7	0.167	0.111	1.000	629.1	229.8	858.9	23700	0.026	0.032	807
GANNET	666.6	24/7	0.160	0.125	1.014	629	289	916	26400	0.026	0.031	812
STILT	715.5	24/7	0.173	0.115	1.036	674	247	920	25500	0.024	0.029	844
STARLING	715.5	26/7	0.166	0.129	1.051	674	310	984	28400	0.024	0.029	849
REDWING	715.5	30/19	0.154	0.093	1.081	676	435	1110	34600	0.024	0.029	859
COOT	795	36/1	0.149	0.149	1.040	745	58	804	16710	0.022	0.027	884
DRAKE	795	26/7	0.175	0.136	1.108	750	344	1094	31500	0.021	0.026	907
TERN	795	45/7	0.133	0.089	1.063	749	146	895	22100	0.022	0.027	887
CONDOR	795	54/7	0.121	0.121	1.092	749	274	1023	28200	0.022	0.027	889
MALLARD	795	30/19	0.163	0.098	1.140	751	483	1234	38400	0.021	0.026	918
RUDDY	900	45/7	0.141	0.094	1.131	849	166	1015	24400	0.019	0.024	958
CANARY	900	54/7	0.129	0.129	1.162	849	310	1159	31900	0.019	0.024	961
RAIL	954	45/7	0.146	0.097	1.165	900	176	1076	25900	0.018	0.023	993
CARDINAL	954	54/7	0.133	0.133	1.196	900	329	1229	33800	0.018	0.023	996
ORTOLAN	1033.5	45/7	0.152	0.101	1.212	974	190	1163	27700	0.017	0.021	1043
CURLEW	1033.5	54/7	0.138	0.138	1.244	974	356	1330	36600	0.017	0.021	1047
BLUEJAY	1113	45/7	0.157	0.105	1.259	1050	205	1255	29800	0.016	0.019	1092
FINCH	1113	54/19	0.144	0.086	1.293	1055	376	1431	39100	0.015	0.020	1093
BUNTING	1192.5	45/7	0.163	0.109	1.302	1125	219	1344	32000	0.014	0.018	1139
GRACKLE	1192.5	54/19	0.149	0.089	1.337	1129	402	1531	41900	0.014	0.018	1140
BITTERN	1272	45/7	0.168	0.112	1.345	1200	234	1434	34100	0.014	0.017	1184
PHEASANT	1272	54/19	0.154	0.092	1.381	1204	429	1633	43600	0.014	0.017	1187
DIPPER	1351.5	45/7	0.173	0.116	1.386	1273	248	1521	36200	0.013	0.016	1229
MARTIN	1351.5	54/19	0.158	0.095	1.424	1279	456	1735	46300	0.013	0.016	1232
BOBOLINK	1431	45/7	0.178	0.119	1.427	1348	263	1611	38300	0.012	0.015	1272
PLOVER	1431	54/19	0.163	0.098	1.465	1357	483	1840	49100	0.012	0.016	1275
LAPWING	1590	45/7	0.188	0.125	1.504	1498	292	1790	42200	0.011	0.014	1354
FALCON	1590	54/19	0.172	0.103	1.544	1505	536	2041	54500	0.011	0.014	1359
CHUKAR	1780	84/19	0.146	0.087	1.602	1685	386	2072	51000	0.010	0.013	1453
BLUEBIRD	2156	84/19	0.160	0.096	1.762	2040	468	2508	60300	0.008	0.011	1623
KIWI	2167	72/7	0.174	0.116	1.735	2051	249	2300	49800	0.008	0.011	1607

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