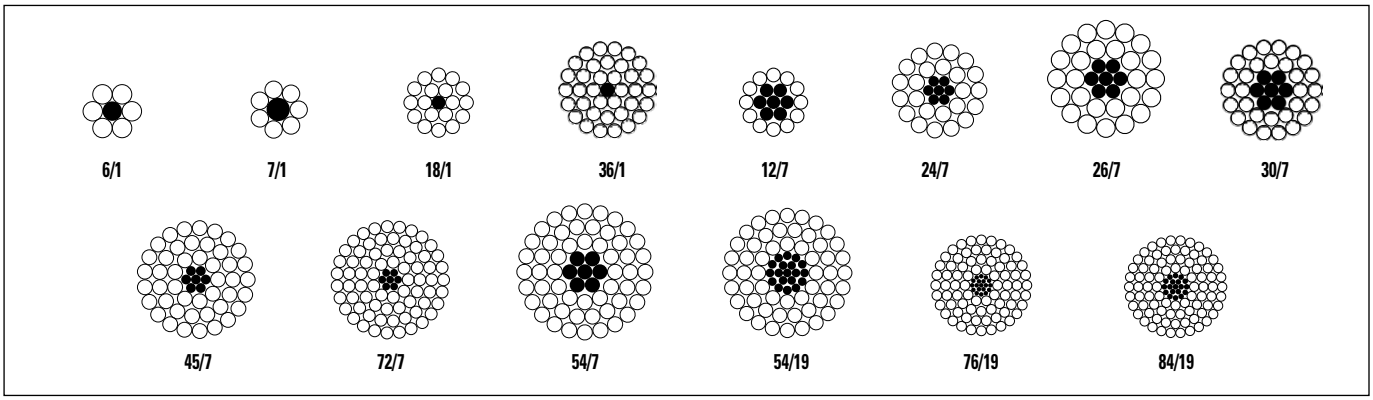
TransPowr® ACSR Bare Overhead Conductor

Aluminum Conductor Steel-Reinforced Concentric-Lay-Stranded



Product Construction:

Complete Conductor:

ACSR is a composite concentric-lay-stranded conductor. ACSR conductors are manufactured in accordance with the requirements of the latest issue of ASTM B232.

The steel strand or strands form the central core of the conductor, around which is stranded one or more layers of aluminum 1350-H19 wires. The steel core may consist of a single strand or a concentric-stranded cable of 7, 19, 37 or more wires. Numerous combinations of aluminum and steel strands and layers are possible. The sizes and strandings listed on the following pages are those most frequently used for overhead lines.

Features and Benefits:

ACSR conductors are recognized for their record of economy, dependability and favorable strength/weight ratio. ACSR conductors combine the light weight and good conductivity of aluminum with the high tensile strength and ruggedness of steel. In line design, this can provide higher tensions, less sag and longer span lengths than obtainable with most other types of overhead conductors. The steel strands are added as mechanical reinforcement. The cross-sections above illustrate some common strandings.

Features and Benefits (cont'd.):

The steel core wires are protected from corrosion by galvanizing. The standard Class A zinc coating is usually adequate for ordinary environments. For greater protection, Class C galvanized coatings may be specified. High-Strength (/GA3), Extra-High-Strength (/GA4) and Ultra-High-Strength (/GA5) steel core with Class A galvanizing and High-Strength (/MA3), Extra-High-Strength (/MA4) and Ultra-High-Strength (/MA5) steel core with Class A zinc-5% aluminum mischmetal coating are also available.

The product is also available with corrosion inhibitor treatment applied to the central steel component.

Applications:

Aluminum Conductors, Steel-Reinforced (ACSR) are extensively used for overhead distribution and transmission lines.

Options:

- E3X® surface coating (/E3X)
- High-conductivity aluminum (/HC) (62.2% IACS)
- Regular-strength Class C galvanized steel core (/GC2)
- High-strength Class A galvanized steel core (/GA3 to ASTM B606)

Options (cont'd.):

- Extra-high-strength Class A galvanized steel core (/GA4 to ASTM B957)
- Ultra-high-strength Class A galvanized steel core (/GA5 to ASTM B957)
- Regular-strength Class A zinc-5% aluminum mischmetal alloy-coated steel core (/MA2 to ASTM B802)
- High-strength Class A zinc-5% aluminum mischmetal alloy-coated steel core (/MA3 to ASTM B803)
- Extra-high-strength Class A zinc-5% aluminum mischmetal alloy-coated steel core (/MA4 to ASTM B958)
- Ultra-high-strength Class A zinc-5% aluminum mischmetal alloy-coated steel core (/MA5 to ASTM B958)
- Aluminum-clad steel core (/AW)—see ACSR/AW catalog section
- Non-specular surface finish (/NS)
- Compact ACSR (ASTM B401) designs are available
- Trapezoidal-shaped aluminum strands (/TW)—see ACSR/TW catalog section
- Aluminum Alloy Steel Reinforced Conductors AACSR (ASTM B711) designs are available

TransPowr® ACSR Bare Overhead Conductor

Aluminum Conductor Steel-Reinforced Concentric-Lay-Stranded

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED (MECHANICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	APPROX. WEIGHT LB/KFT (2)			PERCENT BY WEIGHT		RATED STRENGTH LBS		
		AL	STEEL	TOTAL	AL		TOTAL	AL	STEEL	AL	STEEL	GA2	GA3 (HS)	GA5 (UHS)
Turkey	#6	6x0.0661	1x0.0661	0.0240	0.0206	0.198	36.0	24.4	11.6	67.86%	32.11%	1190	1260	1320
Swan	#4	6x0.0834	1x0.0834	0.0382	0.0328	0.250	57.4	38.9	18.4	67.88%	32.12%	1860	1970	2070
Swanate	#4	7x0.0772	1x0.1029	0.0411	0.0328	0.257	66.9	38.8	28.0	58.08%	41.92%	2360	2520	2680
Sparrow	#2	6x0.1052	1x0.1052	0.0608	0.0522	0.316	91.2	61.9	29.3	67.88%	32.12%	2850	3010	3180
Sparate	#2	7x0.0974	1x0.1299	0.0654	0.0522	0.325	106.5	61.8	44.7	58.07%	41.96%	3640	3900	4150
Robin	#1	6x0.1181	1x0.1181	0.0767	0.0657	0.354	115.0	78.1	36.9	67.88%	32.12%	3550	3760	3980
Raven	1/0	6x0.1327	1x0.1327	0.0968	0.0830	0.398	145.2	98.6	46.6	67.88%	32.12%	4380	4650	4910
Quail	2/0	6x0.1489	1x0.1489	0.1219	0.1045	0.447	182.8	124.1	58.7	67.89%	32.12%	5300	5720	6050
Pigeon	3/0	6x0.1672	1x0.1672	0.1537	0.1317	0.502	230.5	156.5	74.0	67.90%	32.12%	6620	7150	7570
Penguin	4/0	6x0.1878	1x0.1878	0.1939	0.1662	0.563	290.8	197.4	93.4	67.88%	32.12%	8350	9010	9550
Waxwing	266.8	18x0.1217	1x0.1217	0.2210	0.2094	0.608	288.7	249.4	39.2	86.39%	13.59%	6880	7100	7320
Spoonbill	266.8	22x0.1101	7x0.0612	0.2300	0.2095	0.624	319.8	250.0	69.8	78.17%	21.81%	8720	9120	9510
Scaup	266.8	24x0.1054	7x0.0703	0.2366	0.2094	0.632	342.2	250.1	92.0	73.09%	26.90%	10000	10500	11100
Partridge	266.8	26x0.1013	7x0.0788	0.2437	0.2095	0.642	366.1	250.5	115.6	68.42%	31.58%	11300	11900	12600
Junco	266.8	30x0.0943	7x0.0943	0.2584	0.2095	0.660	416.4	250.8	165.6	60.23%	39.77%	13900	14900	15800
Ostrich	300.0	26x0.1074	7x0.0835	0.2739	0.2355	0.680	411.4	281.6	129.8	68.45%	31.55%	12700	13400	14200
Merlin	336.4	18x0.1367	1x0.1367	0.2789	0.2642	0.684	364.2	314.7	49.5	86.41%	13.59%	8680	8960	9240
Trogon	336.4	20x0.1297	7x0.0576	0.2825	0.2642	0.692	377.3	315.5	61.8	83.62%	16.38%	9470	9820	10200
Woodcock	336.4	22x0.1237	7x0.0687	0.2903	0.2644	0.701	403.5	315.6	87.9	78.22%	21.78%	10900	11400	11900
Widgeon	336.4	24x0.1184	7x0.0789	0.2985	0.2642	0.710	431.6	315.7	115.9	73.15%	26.85%	12500	13200	13800
Linnet	336.4	26x0.1137	7x0.0884	0.3070	0.2640	0.720	461.1	315.6	145.5	68.45%	31.55%	14100	14900	15700
Oriole	336.4	30x0.1059	7x0.1059	0.3259	0.2642	0.741	525.2	316.3	208.9	60.22%	39.78%	17300	18500	19700
Chickadee	397.5	18x0.1486	1x0.1486	0.3295	0.3122	0.743	430.4	371.9	58.5	86.41%	13.59%	9940	10400	10700
Ptarmigan	397.5	20x0.1410	7x0.0627	0.3339	0.3123	0.752	446.1	372.9	73.2	83.59%	16.41%	11100	11500	11900
Stork	397.5	22x0.1344	7x0.0747	0.3428	0.3121	0.762	476.5	372.6	103.9	78.20%	21.80%	12900	13400	14000
Brant	397.5	24x0.1287	7x0.0858	0.3527	0.3122	0.772	510.1	373.0	137.1	73.12%	26.88%	14600	15400	16200
Ibis	397.5	26x0.1236	7x0.0961	0.3627	0.3120	0.783	544.9	372.9	172.0	68.43%	31.57%	16300	17200	18200
Lark	397.5	30x0.1151	7x0.1151	0.3850	0.3121	0.806	620.4	373.7	246.7	60.24%	39.76%	20300	21700	23100
Pelican	477.0	18x0.1628	1x0.1628	0.3955	0.3747	0.814	516.6	446.4	70.2	86.41%	13.59%	11800	12300	12700
Tailorbird	477.0	20x0.1544	7x0.0686	0.4003	0.3745	0.823	534.7	447.1	87.6	83.62%	16.39%	13100	13600	14100
Toucan	477.0	22x0.1472	7x0.0818	0.4112	0.3744	0.834	571.5	446.9	124.6	78.20%	21.80%	15200	15900	16700
Flicker	477.0	24x0.1410	7x0.0940	0.4233	0.3747	0.846	612.2	447.7	164.6	73.13%	26.89%	17200	18100	19000
Hawk	477.0	26x0.1354	7x0.1053	0.4353	0.3744	0.858	654.0	447.5	206.5	68.43%	31.57%	19500	20700	21900
Hen	477.0	30x0.1261	7x0.1261	0.4621	0.3747	0.883	744.7	448.5	296.1	60.23%	39.76%	23800	25500	27200
Heron	500.0	30x0.1291	7x0.1291	0.4843	0.3927	0.904	780.5	470.1	310.4	60.23%	39.77%	25000	26700	28500
Osprey	556.5	18x0.1758	1x0.1758	0.4612	0.4369	0.879	602.4	520.5	81.8	86.40%	13.59%	13700	14300	14800
Tody	556.5	20x0.1668	7x0.0741	0.4672	0.4370	0.890	624.1	521.8	102.3	83.61%	16.39%	15300	15800	16400
Sapsucker	556.5	22x0.1590	7x0.0883	0.4797	0.4368	0.901	666.6	521.4	145.2	78.22%	21.78%	17600	18400	19200
Parakeet	556.5	24x0.1523	7x0.1015	0.4939	0.4372	0.914	714.1	522.3	191.9	73.14%	26.87%	19800	20900	22000
Dove	556.5	26x0.1463	7x0.1138	0.5083	0.4371	0.927	763.7	522.5	241.2	68.42%	31.58%	22600	24000	25300
Eagle	556.5	30x0.1362	7x0.1362	0.5391	0.4371	0.953	868.7	523.3	345.5	60.24%	39.77%	27800	29700	31700
Peacock	605.0	24x0.1588	7x0.1059	0.5370	0.4753	0.953	776.7	567.8	208.9	73.10%	26.90%	21600	22700	23900
Squab	605.0	26x0.1525	7x0.1186	0.5522	0.4749	0.966	829.7	567.7	261.9	68.42%	31.57%	24300	25800	27300
Wood Duck	605.0	30x0.1420	7x0.1420	0.5860	0.4751	0.994	944.3	568.8	375.5	60.24%	39.76%	28900	31600	33700
Teal	605.0	30x0.1420	19x0.0852	0.5834	0.4751	0.994	937.2	568.8	368.4	60.69%	39.31%	30000	32000	34000
Swift	636.0	36x0.1329	1x0.1329	0.5133	0.4994	0.930	643.5	596.7	46.8	92.73%	7.27%	13800	14000	14300
Kingbird	636.0	18x0.1880	1x0.1880	0.5274	0.4997	0.940	688.9	595.3	93.6	86.41%	13.59%	15700	16300	16900
Turacos	636.0	20x0.1783	7x0.0792	0.5339	0.4994	0.951	713.1	596.2	116.8	83.61%	16.38%	17400	18100	18800
Goldfinch	636.0	22x0.1700	7x0.0944	0.5483	0.4994	0.963	762.0	596.1	166.0	78.23%	21.78%	19800	20800	21700
Rook	636.0	24x0.1628	7x0.1085	0.5643	0.4996	0.977	816.0	596.8	219.2	73.14%	26.86%	22600	23900	25100
Grosbeak	636.0	26x0.1564	7x0.1216	0.5808	0.4995	0.990	872.5	597.1	275.4	68.44%	31.56%	25200	26800	28300
Scoter	636.0	30x0.1456	7x0.1456	0.6160	0.4995	1.019	992.8	598.0	394.8	60.23%	39.77%	30400	33200	35400
Egret	636.0	30x0.1456	19x0.0874	0.6135	0.4995	1.019	985.6	598.0	387.7	60.67%	39.34%	31500	33600	35800
Flamingo	666.6	24x0.1667	7x0.1111	0.5917	0.5238	1.000	855.6	625.7	229.9	73.13%	26.87%	23700	25000	26300
Gannet	666.6	26x0.1601	7x0.1245	0.6086	0.5234	1.014	914.4	625.7	288.7	68.43%	31.57%	26400	28000	29700
Stilt	715.5	24x0.1727	7x0.1151	0.6350	0.5622	1.036	918.3	671.6	246.7	73.14%	26.86%	25500	26900	28300
Starling	715.5	26x0.1659	7x0.1290	0.6535	0.5620	1.051	981.8	671.9	309.9	68.44%	31.56%	28400	30100	31900
Redwing	715.5	30x0.1544	19x0.0926	0.6897	0.5617	1.081	1108	672.4	435.2	60.69%	39.28%	34600	36900	39300
Coot	795.0	36x0.1486	1x0.1486	0.6417	0.6244	1.040	804.5	746.0	58.5	92.73%	7.27%	16800	17200	17500
Macaw	795.0	42x0.1376	7x0.0764	0.6567	0.6246	1.055	857.7	749.0	108.7	87.33%	12.67%	20100	20700	21300
Turbit	795.0	20x0.1994	7x0.0886	0.6677	0.6246	1.063	891.9	745.7	146.2	83.61%	16.39%	21800	22600	23500
Tern	795.0	45x0.1329	7x0.0886	0.6674	0.6242	1.063	895.2	749.0	146.2	83.67%	16.33%	22100	22900	23700
Puffin	795.0	22x0.1901	7x0.1056	0.6857	0.6244	1.077	953.0	745.3	207.7	78.21%	21.79%	24800	26000	27200
Cuckoo	795.0	24x0.1820	7x0.1213	0.7053	0.6244	1.092	1020	745.8	274.0	73.12%	26.86%	27900	29500	31000
Condor	795.0	54x0.1213	7x0.1213	0.7049	0.6240	1.092	1024	749.8	274.0	73.22%	26.76%	28200	29700	31300
Drake	795.0	26x0.1749	7x0.1360	0.7263	0.6247	1.108	1091	746.8	344.4	68.45%	31.57%	31500	33500	35400
Mallard	795.0	30x0.1628	19x0.0977	0.7669	0.6245	1.140	1232	747.6	484.4	60.68%	39.32%	38400	41100	43700

(1) Code words shown denote ACSR with regular-strength Class A Galvanized steel core (/GA2). See the Options section to find the appropriate code word modifier designation for alternative design options.
(2) Due to rounding, total values may be slightly greater or slightly less than the sum of the component values.
Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

General Cable

TransPowr® ACSR Bare Overhead Conductor

Aluminum Conductor Steel-Reinforced Concentric-Lay-Stranded

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED (ELECTRICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	RESISTANCE (3) OHMS/KFT			AMPACITY @75°C (4)		GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/KFT (5)	CAPACITIVE REACTANCE MEGAOHM/KFT (5)
		AL	STEEL	TOTAL	AL		DC @20°C	AC @25°C	AC @75°C	STANDARD	E3X®			
Turkey	#6	6x0.0661	1x0.0661	0.0240	0.0206	0.198	0.640	0.655	0.819	105	110	0.0017	0.1465	0.7512
Swan	#4	6x0.0834	1x0.0834	0.0382	0.0328	0.250	0.402	0.411	0.524	140	150	0.0026	0.1372	0.7148
Swanate	#4	7x0.0772	1x0.1029	0.0411	0.0328	0.257	0.397	0.407	0.529	140	150	0.0022	0.1410	0.7105
Sparrow	#2	6x0.1052	1x0.1052	0.0608	0.0522	0.316	0.253	0.259	0.337	185	200	0.0039	0.1273	0.6785
Sparate	#2	7x0.0974	1x0.1299	0.0654	0.0522	0.325	0.249	0.256	0.341	170	185	0.0037	0.1289	0.6740
Robin	#1	6x0.1181	1x0.1181	0.0767	0.0657	0.354	0.201	0.205	0.271	210	230	0.0048	0.1226	0.6603
Raven	1/0	6x0.1327	1x0.1327	0.0968	0.0830	0.398	0.159	0.163	0.218	240	265	0.0059	0.1178	0.6421
Quail	2/0	6x0.1489	1x0.1489	0.1219	0.1045	0.447	0.126	0.129	0.177	275	305	0.0072	0.1133	0.6240
Pigeon	3/0	6x0.1672	1x0.1672	0.1537	0.1317	0.502	0.100	0.102	0.143	315	350	0.0086	0.1093	0.6059
Penguin	4/0	6x0.1878	1x0.1878	0.1939	0.1662	0.563	0.0793	0.0812	0.116	365	400	0.0101	0.1055	0.5877
Waxwing	266.8	18x0.1217	1x0.1217	0.2210	0.2094	0.608	0.0642	0.0656	0.0785	450	500	0.0196	0.0904	0.5756
Spoonbill	266.8	22x0.1101	7x0.0612	0.2300	0.2095	0.624	0.0639	0.0653	0.0781	455	505	0.0206	0.0892	0.5717
Scaup	266.8	24x0.1054	7x0.0703	0.2366	0.2094	0.632	0.0637	0.0650	0.0778	455	505	0.0210	0.0888	0.5696
Partridge	266.8	26x0.1013	7x0.0788	0.2437	0.2095	0.642	0.0634	0.0647	0.0774	460	510	0.0215	0.0882	0.5673
Junco	266.8	30x0.0943	7x0.0943	0.2584	0.2095	0.660	0.0628	0.0641	0.0767	465	520	0.0225	0.0872	0.5629
Ostrich	300.0	26x0.1074	7x0.0835	0.2739	0.2355	0.680	0.0564	0.0576	0.0689	495	550	0.0228	0.0869	0.5582
Merlin	336.4	18x0.1367	1x0.1367	0.2789	0.2642	0.684	0.0509	0.0521	0.0623	520	580	0.0220	0.0877	0.5574
Trogon	336.4	20x0.1297	7x0.0576	0.2825	0.2642	0.692	0.0509	0.0521	0.0623	520	585	0.0226	0.0871	0.5556
Woodcock	336.4	22x0.1237	7x0.0687	0.2903	0.2644	0.701	0.0506	0.0518	0.0619	525	585	0.0231	0.0866	0.5535
Widgeon	336.4	24x0.1184	7x0.0789	0.2985	0.2642	0.710	0.0504	0.0516	0.0617	525	590	0.0236	0.0861	0.5514
Linnet	336.4	26x0.1137	7x0.0884	0.3070	0.2640	0.720	0.0503	0.0514	0.0615	530	595	0.0242	0.0855	0.5493
Oriole	336.4	30x0.1059	7x0.1059	0.3259	0.2642	0.741	0.0498	0.0509	0.0609	535	600	0.0253	0.0845	0.5447
Chickadee	397.5	18x0.1486	1x0.1486	0.3295	0.3122	0.743	0.0431	0.0441	0.0528	575	645	0.0240	0.0857	0.5443
Ptarmigan	397.5	20x0.1410	7x0.0627	0.3339	0.3123	0.752	0.0430	0.0441	0.0527	580	650	0.0245	0.0852	0.5424
Stork	397.5	22x0.1344	7x0.0747	0.3428	0.3121	0.762	0.0429	0.0439	0.0525	580	655	0.0251	0.0847	0.5404
Brant	397.5	24x0.1287	7x0.0858	0.3527	0.3122	0.772	0.0427	0.0437	0.0523	585	660	0.0257	0.0841	0.5383
Ibis	397.5	26x0.1236	7x0.0961	0.3627	0.3120	0.783	0.0426	0.0435	0.0521	590	660	0.0263	0.0836	0.5362
Lark	397.5	30x0.1151	7x0.1151	0.3850	0.3121	0.806	0.0422	0.0431	0.0515	595	670	0.0275	0.0826	0.5317
Pelican	477.0	18x0.1628	1x0.1628	0.3955	0.3747	0.814	0.0359	0.0368	0.0440	645	730	0.0262	0.0837	0.5300
Tailorbird	477.0	20x0.1544	7x0.0686	0.4003	0.3745	0.823	0.0359	0.0368	0.0440	650	730	0.0269	0.0831	0.5282
Toucan	477.0	22x0.1472	7x0.0818	0.4112	0.3744	0.834	0.0357	0.0367	0.0438	650	735	0.0275	0.0826	0.5262
Flicker	477.0	24x0.1410	7x0.0940	0.4233	0.3747	0.846	0.0356	0.0365	0.0436	655	740	0.0281	0.0821	0.5240
Hawk	477.0	26x0.1354	7x0.1053	0.4353	0.3744	0.858	0.0355	0.0363	0.0434	660	745	0.0288	0.0815	0.5219
Hen	477.0	30x0.1261	7x0.1261	0.4621	0.3747	0.883	0.0351	0.0360	0.0430	670	755	0.0301	0.0805	0.5174
Heron	500.0	30x0.1291	7x0.1291	0.4843	0.3927	0.904	0.0335	0.0343	0.0410	690	780	0.0308	0.0800	0.5137
Osprey	556.5	18x0.1758	1x0.1758	0.4612	0.4369	0.879	0.0308	0.0317	0.0378	710	805	0.0283	0.0819	0.5180
Tody	556.5	20x0.1668	7x0.0741	0.4672	0.4370	0.890	0.0308	0.0316	0.0378	715	810	0.0290	0.0814	0.5162
Sapsucker	556.5	22x0.1590	7x0.0883	0.4797	0.4368	0.901	0.0306	0.0315	0.0376	720	815	0.0297	0.0808	0.5142
Parakeet	556.5	24x0.1523	7x0.1015	0.4939	0.4372	0.914	0.0305	0.0313	0.0374	725	820	0.0304	0.0803	0.5119
Dove	556.5	26x0.1463	7x0.1138	0.5083	0.4371	0.927	0.0304	0.0312	0.0372	725	825	0.0311	0.0798	0.5098
Eagle	556.5	30x0.1362	7x0.1362	0.5391	0.4371	0.953	0.0301	0.0309	0.0369	735	835	0.0325	0.0787	0.5053
Peacock	605.0	24x0.1588	7x0.1059	0.5370	0.4753	0.953	0.0280	0.0288	0.0344	760	865	0.0317	0.0793	0.5054
Squab	605.0	26x0.1525	7x0.1186	0.5522	0.4749	0.966	0.0280	0.0287	0.0343	765	870	0.0324	0.0788	0.5033
Wood Duck	605.0	30x0.1420	7x0.1420	0.5860	0.4751	0.994	0.0277	0.0284	0.0339	775	885	0.0339	0.0778	0.4988
Teal	605.0	30x0.1420	19x0.0852	0.5834	0.4751	0.994	0.0277	0.0284	0.0340	775	885	0.0339	0.0778	0.4988
Swift	636.0	36x0.1329	1x0.1329	0.5133	0.4994	0.930	0.0271	0.0282	0.0349	750	850	0.0301	0.0805	0.5091
Kingbird	636.0	18x0.1880	1x0.1880	0.5274	0.4997	0.940	0.0269	0.0278	0.0331	775	880	0.0303	0.0804	0.5075
Turacos	636.0	20x0.1783	7x0.0792	0.5339	0.4994	0.951	0.0269	0.0278	0.0331	775	880	0.0310	0.0798	0.5057
Goldfinch	636.0	22x0.1700	7x0.0944	0.5483	0.4994	0.963	0.0268	0.0276	0.0330	780	890	0.0317	0.0793	0.5037
Rook	636.0	24x0.1628	7x0.1085	0.5643	0.4996	0.977	0.0267	0.0275	0.0328	785	895	0.0325	0.0787	0.5015
Grosbeak	636.0	26x0.1564	7x0.1216	0.5808	0.4995	0.990	0.0266	0.0273	0.0326	790	900	0.0333	0.0782	0.4993
Scoter	636.0	30x0.1456	7x0.1456	0.6160	0.4995	1.019	0.0263	0.0270	0.0323	800	915	0.0348	0.0772	0.4948
Egret	636.0	30x0.1456	19x0.0874	0.6135	0.4995	1.019	0.0264	0.0271	0.0323	800	915	0.0348	0.0772	0.4948
Flamingo	666.6	24x0.1667	7x0.1111	0.5917	0.5238	1.000	0.0254	0.0262	0.0313	810	925	0.0333	0.0782	0.4978
Gannet	666.6	26x0.1601	7x0.1245	0.6086	0.5234	1.014	0.0254	0.0261	0.0312	815	930	0.0340	0.0777	0.4956
Stilt	715.5	24x0.1727	7x0.1151	0.6350	0.5622	1.036	0.0237	0.0245	0.0292	845	965	0.0345	0.0774	0.4923
Starling	715.5	26x0.1659	7x0.1290	0.6535	0.5620	1.051	0.0236	0.0243	0.0290	850	975	0.0353	0.0768	0.4901
Redwing	715.5	30x0.1544	19x0.0926	0.6897	0.5617	1.081	0.0234	0.0241	0.0288	860	985	0.0369	0.0758	0.4857
Coot	795.0	36x0.1486	1x0.1486	0.6417	0.6244	1.040	0.0217	0.0227	0.0280	865	985	0.0337	0.0779	0.4916
Macaw	795.0	42x0.1376	7x0.0764	0.6567	0.6246	1.055	0.0217	0.0226	0.0279	870	990	0.0345	0.0774	0.4895
Turbit	795.0	20x0.1994	7x0.0886	0.6677	0.6246	1.063	0.0215	0.0223	0.0266	890	1020	0.0347	0.0772	0.4882
Tern	795.0	45x0.1329	7x0.0886	0.6674	0.6242	1.063	0.0216	0.0226	0.0278	870	995	0.0350	0.0770	0.4882
Puffin	795.0	22x0.1901	7x0.1056	0.6857	0.6244	1.077	0.0214	0.0222	0.0265	900	1030	0.0355	0.0767	0.4862
Cuckoo	795.0	24x0.1820	7x0.1213	0.7053	0.6244	1.092	0.0214	0.0221	0.0263	905	1035	0.0363	0.0762	0.4840
Condor	795.0	54x0.1213	7x0.1213	0.7049	0.6240	1.092	0.0215	0.0224	0.0276	880	1010	0.0366	0.0760	0.4841
Drake	795.0	26x0.1749	7x0.1360	0.7263	0.6247	1.108	0.0213	0.0219	0.0262	910	1040	0.0372	0.0756	0.4818
Mallard	795.0	30x0.1628	19x0.0977	0.7669	0.6245	1.140	0.0211	0.0217	0.0259	920	1055	0.0389	0.0746	0.4773

(1) Code words shown denote ACSR with regular-strength Class A Galvanized steel core (/GA2). See the Options section to find the appropriate code word modifier designation for alternative design options.
(3) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C for aluminum and 8% IACS at 20°C for the steel core. AC resistance for single-layer and three-layer designs approximates the effects of core magnetization. To convert to ohms/mile, multiply by 5.28. To convert of ohms/km, multiply by 3.281.
(4) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity for a standard conductor and 0.9 for a E3X coated conductor, 0.5 coefficient of absorptivity for a standard conductor and 0.2 for a E3X coated conductor, 30° northern latitude, sea level elevation, 90° azimuth of line (East-West), clear atmosphere, and a date and time of noon on July 1 (resulting in 96.0 W/ft^2 of solar and radiated heat). Actual ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.
(5) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.

General Cable

TransPowr® ACSR Bare Overhead Conductor

Aluminum Conductor Steel-Reinforced Concentric-Lay-Stranded

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED (MECHANICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	APPROX. WEIGHT LB/KFT (2)			PERCENT BY WEIGHT		RATED STRENGTH LBS		
		AL	STEEL	TOTAL	AL		TOTAL	AL	STEEL	AL	STEEL	GA2	GA3 (HS)	GA5 (UHS)
Ruddy	900.0	45x0.1414	7x0.0943	0.7555	0.7066	1.131	1013	847.9	165.6	83.70%	16.35%	24400	25400	26300
Canary	900.0	54x0.1291	7x0.1291	0.7985	0.7069	1.162	1160	849.4	310.4	73.22%	26.76%	31900	33700	35400
Catbird	954.0	36x0.1628	1x0.1628	0.7702	0.7494	1.140	966	895.4	70.2	92.73%	7.27%	19800	20300	20700
Phoenix	954.0	42x0.1507	7x0.0837	0.7877	0.7491	1.155	1029	898.5	130.5	87.32%	12.68%	23400	24100	24900
Corncrake	954.0	20x0.2184	7x0.0971	0.8011	0.7492	1.165	1070	894.6	175.6	83.61%	16.41%	25600	26600	27600
Rail	954.0	45x0.1456	7x0.0971	0.8011	0.7492	1.165	1075	899.0	175.6	83.63%	16.33%	25900	26900	27900
Towhee	954.0	48x0.1410	7x0.1097	0.8157	0.7495	1.175	1124	899.7	224.1	80.04%	19.94%	28500	29700	31000
Redbird	954.0	24x0.1994	7x0.1329	0.8466	0.7495	1.196	1224	895.3	328.9	73.15%	26.87%	33500	35400	37200
Cardinal	954.0	54x0.1329	7x0.1329	0.8462	0.7491	1.196	1229	900.1	328.9	73.24%	26.76%	33800	35700	37600
Canvasback	954.0	30x0.1783	19x0.1070	0.9199	0.7491	1.248	1478	896.7	581.0	60.67%	39.31%	46100	49300	52500
Snowbird	1033.5	42x0.1569	7x0.0872	0.8539	0.8121	1.203	1116	973.9	141.6	87.27%	12.69%	25400	26200	27000
Ortolan	1033.5	45x0.1515	7x0.1010	0.8673	0.8112	1.212	1163	973.3	190.0	83.69%	16.34%	27700	28800	29800
Whooper	1033.5	48x0.1467	7x0.1141	0.8829	0.8113	1.223	1216	974.0	242.4	80.10%	19.93%	30800	32200	33500
Curlew	1033.5	54x0.1383	7x0.1383	0.9164	0.8112	1.245	1331	974.7	356.2	73.23%	26.76%	36600	38600	40700
Avocet	1113.0	42x0.1628	7x0.0904	0.9192	0.8743	1.248	1201	1049	152.2	87.34%	12.67%	27100	27900	28800
Bluejay	1113.0	45x0.1573	7x0.1049	0.9350	0.8745	1.259	1254	1049	204.9	83.65%	16.34%	29800	31000	32200
Bullfinch	1113.0	48x0.1523	7x0.1185	0.9516	0.8744	1.269	1311	1050	261.5	80.09%	19.95%	32800	34300	35800
Finch	1113.0	54x0.1436	19x0.0862	0.9854	0.8746	1.293	1428	1051	377.1	73.60%	26.41%	39100	41200	43200
Oxbird	1192.5	42x0.1685	7x0.0936	0.9847	0.9366	1.292	1286	1123	163.2	87.33%	12.69%	29000	29900	30900
Bunting	1192.5	45x0.1628	7x0.1085	1.0010	0.9367	1.302	1343	1124	219.2	83.69%	16.32%	32000	33200	34400
Cormorant	1192.5	48x0.1576	7x0.1226	1.0190	0.9364	1.313	1404	1124	279.9	80.06%	19.94%	34700	36300	37900
Grackle	1192.5	54x0.1486	19x0.0892	1.0550	0.9365	1.338	1529	1125	403.8	73.58%	26.41%	41900	44100	46300
Skylark	1272.0	36x0.1880	1x0.1880	1.0270	0.9993	1.316	1288	1194	93.6	92.70%	7.27%	26400	27000	27600
Scissortail	1272.0	42x0.1740	7x0.0967	1.0500	0.9987	1.334	1372	1198	174.1	87.32%	12.69%	30900	31900	32900
Bittern	1272.0	45x0.1681	7x0.1121	1.0680	0.9987	1.345	1432	1198	234.0	83.66%	16.34%	34100	35400	36700
Diver	1272.0	48x0.1628	7x0.1266	1.0870	0.9992	1.357	1498	1199	298.5	80.04%	19.93%	37000	38700	40400
Pheasant	1272.0	54x0.1535	19x0.0921	1.1260	0.9993	1.382	1631	1201	430.5	73.64%	26.39%	43600	46000	48300
Ringdove	1351.5	42x0.1794	7x0.0997	1.1160	1.0620	1.376	1458	1273	185.1	87.31%	12.70%	32900	33900	35000
Dipper	1351.5	45x0.1733	7x0.1155	1.1350	1.0610	1.386	1522	1274	248.4	83.71%	16.32%	36200	37600	39000
-None-	1351.5	48x0.1678	7x0.1305	1.1550	1.0610	1.398	1591	1274	317.2	80.08%	19.94%	39400	41200	43000
Martin	1351.5	54x0.1582	19x0.0949	1.1960	1.0610	1.424	1732	1275	457.0	73.61%	26.39%	46300	48800	51300
Popinjay	1431.0	42x0.1846	7x0.1026	1.1820	1.1240	1.415	1544	1348	196.0	87.31%	12.69%	34800	35900	37100
Bobolink	1431.0	45x0.1783	7x0.1189	1.2010	1.1240	1.427	1611	1348	263.3	83.67%	16.34%	38300	39800	41300
Wagtail	1431.0	48x0.1727	7x0.1343	1.2240	1.1240	1.439	1686	1350	335.9	80.07%	19.92%	41700	43600	45500
Plover	1431.0	54x0.1628	19x0.0977	1.2670	1.1240	1.465	1835	1351	484.4	73.62%	26.40%	49100	51700	54400
Nuthatch	1510.5	45x0.1832	7x0.1221	1.2680	1.1860	1.466	1701	1423	277.6	83.66%	16.32%	40100	41600	43200
Parrot	1510.5	54x0.1672	19x0.1003	1.3360	1.1860	1.505	1935	1425	510.5	73.64%	26.38%	51700	54500	57300
Ratite	1590.0	42x0.1946	7x0.1081	1.3130	1.2490	1.492	1716	1498	217.6	87.30%	12.68%	38700	39900	41200
Lapwing	1590.0	45x0.1880	7x0.1253	1.3350	1.2490	1.504	1791	1499	292.4	83.70%	16.33%	42200	43900	45500
Hornbill	1590.0	48x0.1820	7x0.1416	1.3590	1.2490	1.517	1872	1499	373.4	80.07%	19.95%	45300	47900	50000
Falcon	1590.0	54x0.1716	19x0.1030	1.4070	1.2490	1.545	2039	1501	538.4	73.61%	26.41%	54500	57500	60400
Chukar	1780.0	84x0.1456	19x0.0874	1.5130	1.3990	1.602	2074	1686	387.7	81.29%	18.69%	51000	53100	55200
Seahawk	1869.0	68x0.1658	7x0.0921	1.5150	1.4680	1.603	1925	1768	158.0	91.84%	8.21%	40000	40900	41800
Mockingbird	2034.5	72x0.1681	7x0.1121	1.6670	1.5980	1.681	2158	1924	234.0	89.16%	10.84%	46800	48100	49400
Roadrunner	2057.5	76x0.1645	19x0.0768	1.7030	1.6150	1.700	2245	1946	299.3	86.68%	13.33%	50400	52100	53700
Bluebird	2156.0	84x0.1602	19x0.0961	1.8310	1.6930	1.762	2510	2041	468.7	81.31%	18.67%	60300	62800	65400
Kiwi	2167.0	72x0.1735	7x0.1157	1.7760	1.7020	1.735	2299	2050	249.3	89.17%	10.84%	49800	51300	52700
Thrasher	2312.0	76x0.1744	19x0.0814	1.9140	1.8160	1.802	2523	2187	336.3	86.68%	13.33%	56700	58500	60400
Joree	2515.0	76x0.1819	19x0.0849	2.0830	1.9750	1.880	2745	2379	365.8	86.67%	13.33%	61700	63700	65700

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED, HIGH-STRENGTH-STRANDING (MECHANICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	APPROX. WEIGHT LB/KFT (2)			PERCENT BY WEIGHT		RATED STRENGTH LBS		
		AL	STEEL	TOTAL	AL		TOTAL	AL	STEEL	AL	STEEL	GA2	GA3 (HS)	GA5 (UHS)
Grouse	80.0	8x0.1000	1x0.1670	0.0847	0.0628	0.367	148.7	74.8	73.9	50.32%	49.67%	5200	5730	6150
Petrel	101.8	12x0.0921	7x0.0921	0.1266	0.0799	0.460	253.5	95.6	158.0	37.70%	62.33%	10400	11200	12100
Minorca	110.8	12x0.0961	7x0.0961	0.1378	0.0870	0.480	276.0	104.0	172.0	37.68%	62.32%	11300	12200	13200
Leghorn	134.6	12x0.1059	7x0.1059	0.1674	0.1057	0.530	335.2	126.3	208.9	37.68%	62.32%	13600	14800	16000
Guinea	159.0	12x0.1151	7x0.1151	0.1977	0.1249	0.576	396.0	149.3	246.7	37.70%	62.30%	16000	17400	18800
Dotterel	176.9	12x0.1214	7x0.1214	0.2199	0.1389	0.607	440.5	166.0	274.5	37.68%	62.32%	17300	18900	20400
Dorking	190.8	12x0.1261	7x0.1261	0.2373	0.1499	0.630	475.3	179.1	296.1	37.68%	62.30%	18700	20400	22100
Brahma	203.2	16x0.1127	19x0.0977	0.3020	0.1596	0.714	676.0	191.6	484.4	28.34%	71.66%	28400	31100	33700
Cochin	211.3	12x0.1327	7x0.1327	0.2628	0.1660	0.664	526.3	198.4	327.9	37.70%	62.30%	20700	22600	24400

(1) Code words shown denote ACSR with regular-strength Class A Galvanized steel core (/GA2). See the Options section to find the appropriate code word modifier designation for alternative design options.
(2) Due to rounding, total values may be slightly greater or slightly less than the sum of the component values.
Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

TransPowr® ACSR Bare Overhead Conductor

Aluminum Conductor Steel-Reinforced Concentric-Lay-Stranded

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED (ELECTRICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	RESISTANCE (3) OHMS/KFT			AMPACITY @75°C (4)		GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/KFT (5)	CAPACITIVE REACTANCE MEGAOHM/KFT (5)
		AL	STEEL	TOTAL	AL		DC @20°C	AC @25°C	AC @75°C	STD.	E3X®			
Ruddy	900.0	45x0.1414	7x0.0943	0.7555	0.7066	1.131	0.0191	0.0200	0.0246	940	1080	0.0373	0.0756	0.4785
Canary	900.0	54x0.1291	7x0.1291	0.7985	0.7069	1.162	0.0190	0.0198	0.0244	955	1095	0.0390	0.0746	0.4743
Catbird	954.0	36x0.1628	1x0.1628	0.7702	0.7494	1.140	0.0181	0.0191	0.0234	970	1110	0.0369	0.0758	0.4773
Phoenix	954.0	42x0.1507	7x0.0837	0.7877	0.7491	1.155	0.0181	0.0190	0.0233	975	1115	0.0378	0.0753	0.4752
Corncrake	954.0	20x0.2184	7x0.0971	0.8011	0.7492	1.165	0.0179	0.0187	0.0223	1000	1150	0.0380	0.0752	0.4739
Rail	954.0	45x0.1456	7x0.0971	0.8011	0.7492	1.165	0.0180	0.0189	0.0233	975	1120	0.0384	0.0749	0.4739
Towhee	954.0	48x0.1410	7x0.1097	0.8157	0.7495	1.175	0.0180	0.0189	0.0232	980	1125	0.0390	0.0746	0.4725
Redbird	954.0	24x0.1994	7x0.1329	0.8466	0.7495	1.196	0.0178	0.0185	0.0220	1010	1165	0.0398	0.0741	0.4697
Cardinal	954.0	54x0.1329	7x0.1329	0.8462	0.7491	1.196	0.0179	0.0187	0.0230	990	1135	0.0401	0.0739	0.4698
Canvasback	954.0	30x0.1783	19x0.1070	0.9199	0.7491	1.248	0.0176	0.0182	0.0217	1030	1190	0.0426	0.0725	0.4631
Snowbird	1033.5	42x0.1569	7x0.0872	0.8539	0.8121	1.203	0.0167	0.0176	0.0216	1025	1175	0.0394	0.0743	0.4689
Ortolan	1033.5	45x0.1515	7x0.1010	0.8673	0.8112	1.212	0.0167	0.0176	0.0215	1025	1180	0.0399	0.0740	0.4677
Whooper	1033.5	48x0.1467	7x0.1141	0.8829	0.8113	1.223	0.0166	0.0175	0.0214	1030	1185	0.0405	0.0737	0.4663
Curlew	1033.5	54x0.1383	7x0.1383	0.9164	0.8112	1.245	0.0165	0.0173	0.0213	1040	1195	0.0417	0.0730	0.4635
Avocet	1113.0	42x0.1628	7x0.0904	0.9192	0.8743	1.248	0.0155	0.0164	0.0201	1070	1235	0.0409	0.0735	0.4631
Bluejay	1113.0	45x0.1573	7x0.1049	0.9350	0.8745	1.259	0.0154	0.0164	0.0200	1075	1240	0.0415	0.0731	0.4618
Bullfinch	1113.0	48x0.1523	7x0.1185	0.9516	0.8744	1.269	0.0154	0.0163	0.0199	1080	1245	0.0421	0.0728	0.4605
Finch	1113.0	54x0.1436	19x0.0862	0.9854	0.8746	1.293	0.0153	0.0162	0.0198	1090	1255	0.0434	0.0721	0.4576
Oxbird	1192.5	42x0.1685	7x0.0936	0.9847	0.9366	1.292	0.0145	0.0154	0.0188	1115	1290	0.0423	0.0727	0.4577
Bunting	1192.5	45x0.1628	7x0.1085	1.0010	0.9367	1.302	0.0144	0.0153	0.0187	1120	1295	0.0429	0.0724	0.4564
Cormorant	1192.5	48x0.1576	7x0.1226	1.0190	0.9364	1.313	0.0144	0.0153	0.0187	1125	1300	0.0435	0.0720	0.4551
Grackle	1192.5	54x0.1486	19x0.0892	1.0550	0.9365	1.338	0.0143	0.0151	0.0185	1135	1315	0.0449	0.0713	0.4522
Skylark	1272.0	36x0.1880	1x0.1880	1.0270	0.9993	1.316	0.0135	0.0146	0.0177	1155	1335	0.0426	0.0725	0.4548
Scissortail	1272.0	42x0.1740	7x0.0967	1.0500	0.9987	1.334	0.0136	0.0145	0.0177	1160	1345	0.0437	0.0719	0.4527
Bittern	1272.0	45x0.1681	7x0.1121	1.0680	0.9987	1.345	0.0135	0.0145	0.0176	1165	1350	0.0443	0.0716	0.4514
Diver	1272.0	48x0.1628	7x0.1266	1.0870	0.9992	1.357	0.0135	0.0144	0.0175	1170	1355	0.0450	0.0713	0.4500
Pheasant	1272.0	54x0.1535	19x0.0921	1.1260	0.9993	1.382	0.0134	0.0142	0.0174	1180	1370	0.0463	0.0706	0.4472
Ringdove	1351.5	42x0.1794	7x0.0997	1.1160	1.0620	1.376	0.0128	0.0137	0.0167	1205	1395	0.0451	0.0712	0.4479
Dipper	1351.5	45x0.1733	7x0.1155	1.1350	1.0610	1.386	0.0127	0.0137	0.0166	1210	1405	0.0457	0.0709	0.4466
-None-	1351.5	48x0.1678	7x0.1305	1.1550	1.0610	1.398	0.0127	0.0136	0.0165	1215	1410	0.0464	0.0706	0.4453
Martin	1351.5	54x0.1582	19x0.0949	1.1960	1.0610	1.424	0.0126	0.0135	0.0164	1225	1425	0.0478	0.0699	0.4425
Popinjay	1431.0	42x0.1846	7x0.1026	1.1820	1.1240	1.415	0.0120	0.0130	0.0158	1250	1450	0.0464	0.0706	0.4434
Bobolink	1431.0	45x0.1783	7x0.1189	1.2010	1.1240	1.427	0.0120	0.0130	0.0157	1255	1455	0.0470	0.0703	0.4422
Wagtail	1431.0	48x0.1727	7x0.1343	1.2240	1.1240	1.439	0.0120	0.0129	0.0157	1260	1465	0.0477	0.0699	0.4408
Plover	1431.0	54x0.1628	19x0.0977	1.2670	1.1240	1.465	0.0119	0.0128	0.0155	1270	1480	0.0491	0.0693	0.4380
Nuthatch	1510.5	45x0.1832	7x0.1221	1.2680	1.1860	1.466	0.0114	0.0124	0.0150	1295	1505	0.0483	0.0696	0.4379
Parrot	1510.5	54x0.1672	19x0.1003	1.3360	1.1860	1.505	0.0113	0.0122	0.0148	1315	1530	0.0505	0.0686	0.4338
Ratite	1590.0	42x0.1946	7x0.1081	1.3130	1.2490	1.492	0.0108	0.0119	0.0143	1330	1550	0.0489	0.0694	0.4351
Lapwing	1590.0	45x0.1880	7x0.1253	1.3350	1.2490	1.504	0.0108	0.0118	0.0143	1335	1555	0.0496	0.0690	0.4339
Hornbill	1590.0	48x0.1820	7x0.1416	1.3590	1.2490	1.517	0.0108	0.0117	0.0142	1340	1565	0.0503	0.0687	0.4326
Falcon	1590.0	54x0.1716	19x0.1030	1.4070	1.2490	1.545	0.0107	0.0116	0.0141	1355	1580	0.0518	0.0680	0.4297
Chukar	1780.0	84x0.1456	19x0.0874	1.5130	1.3990	1.602	0.00969	0.0106	0.0125	1455	1705	0.0532	0.0674	0.4240
Seahawk	1869.0	68x0.1658	7x0.0921	1.5150	1.4680	1.603	0.00928	0.0104	0.0121	1470	1725	0.0523	0.0678	0.4239
Mockingbird	2034.5	72x0.1681	7x0.1121	1.6670	1.5980	1.681	0.00852	0.00964	0.0112	1550	1825	0.0551	0.0666	0.4164
Roadrunner	2057.5	76x0.1645	19x0.0768	1.7030	1.6150	1.700	0.00842	0.00950	0.0111	1565	1845	0.0560	0.0662	0.4147
Bluebird	2156.0	84x0.1602	19x0.0961	1.8310	1.6930	1.762	0.00800	0.00903	0.0105	1620	1915	0.0585	0.0652	0.4091
Kiwi	2167.0	72x0.1735	7x0.1157	1.7760	1.7020	1.735	0.00800	0.00915	0.0106	1605	1895	0.0569	0.0659	0.4115
Thrasher	2312.0	76x0.1744	19x0.0814	1.9140	1.8160	1.802	0.00749	0.00864	0.0100	1670	1975	0.0593	0.0649	0.4055
Joree	2515.0	76x0.1819	19x0.0849	2.0830	1.9750	1.880	0.00688	0.00810	0.00934	1750	2075	0.0619	0.0639	0.3990

ACSR, ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED, HIGH-STRENGTH-STRANDING (ELECTRICAL PROPERTIES)

CODE WORD (1)	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES		CROSS-SECTION SQ. INCHES		O.D. IN	RESISTANCE (3) OHMS/KFT			AMPACITY @75°C (4)		GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/KFT (5)	CAPACITIVE REACTANCE MEGAOHM/KFT (5)
		AL	STEEL	TOTAL	AL		DC @20°C	AC @25°C	AC @75°C	STANDARD	E3X®			
Grouse	80.0	8x0.1000	1x0.1670	0.0847	0.0628	0.367	0.205	0.211	0.291	205	225	0.0037	0.1284	0.6548
Petrel	101.8	12x0.0921	7x0.0921	0.1266	0.0799	0.460	0.156	0.162	0.240	240	265	0.0039	0.1275	0.6193
Minorca	110.8	12x0.0961	7x0.0961	0.1378	0.0870	0.480	0.144	0.149	0.224	250	275	0.0042	0.1256	0.6126
Leghorn	134.6	12x0.1059	7x0.1059	0.1674	0.1057	0.530	0.118	0.122	0.190	280	310	0.0051	0.1213	0.5974
Guinea	159.0	12x0.1151	7x0.1151	0.1977	0.1249	0.576	0.100	0.104	0.165	305	340	0.0059	0.1179	0.5844
Dotterel	176.9	12x0.1214	7x0.1214	0.2199	0.1389	0.607	0.0900	0.0931	0.151	325	360	0.0065	0.1158	0.5760
Dorking	190.8	12x0.1261	7x0.1261	0.2373	0.1499	0.630	0.0835	0.0863	0.143	335	375	0.0067	0.1149	0.5701
Brahma	203.2	16x0.1127	19x0.0977	0.3020	0.1596	0.714	0.0755	0.0781	0.132	360	400	0.0080	0.1110	0.5506
Cochin	211.3	12x0.1327	7x0.1327	0.2628	0.1660	0.664	0.0754	0.0779	0.130	360	400	0.0076	0.1121	0.5621

(1) Code words shown denote ACSR with regular-strength Class A Galvanized steel core (/GA2). See the Options section to find the appropriate code word modifier designation for alternative design options.
(3) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C for aluminum and 8% IACS at 20°C for the steel core. AC resistance for single-layer and three-layer designs approximates the effects of core magnetization. To convert to ohms/mile, multiply by 5.28. To convert of ohms/km, multiply by 3.281.
(4) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity for a standard conductor and 0.9 for a E3X coated conductor, 0.5 coefficient of absorptivity for a standard conductor and 0.2 for a E3X coated conductor, 30° northern latitude, sea level elevation, 90° azimuth of line (East-West), clear atmosphere, and a date and time of noon on July 1 (resulting in 96.0 W/ft^2 of solar and radiated heat). Actual ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.
(5) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.

General Cable