Application

ACSS (Aluminum Conductor Steel Supported) conductors are specifically designed for use in overhead distribution and transmission lines, offering unparalleled performance even in challenging environments. These conductors are engineered to operate continuously at elevated temperatures of up to 250℃ without compromising strength, making them ideal for demanding applications.

Advantages

ACSS is ideal for reconductoring and new line projects, emphasizing reliability, efficiency, and performance. It minimizes sagging under both regular and emergency electrical loads, outperforming traditional ACSR conductors. Its ability to carry higher current while maintaining existing clearances is crucial for reconductoring with increased capacity needs. ACSS's reduced sag also allows for more cost-effective support structures, saving money in new line installations. Moreover, it excels in handling emergency situations, ensuring dependable power transmission. Additionally, ACSS effectively reduces aeolian vibration, enhancing system stability across diverse environments, making it a key component of modern electrical infrastructure.

Construction

ACSS conductors feature a composite concentric-lay stranded construction, combining the strength of steel with the conductivity of aluminum. The central core comprises steel strands, which bear the mechanical load of the conductor. Surrounding this core are one or more layers of aluminum 1350-0 wire, providing excellent conductivity. The steel core is protected from corrosion through galvanizing, aluminizing, or mischmetal alloy coating, with options available to suit different environmental conditions. Additionally, high-strength steel core variants are offered to meet specific application requirements.

Specifications

-B500 Metallic Coated Stranded Steel Core for Use in Overhead Electrical Conductors -B502/B502M (optional) Standard Specification for Aluminum-Clad Steel Core Wire for Use in Overhead Electrical Aluminum Conductors
-B609 Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes
-B802 Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum Conductors Steel Reinforced (ACSR)
-B803 High-Strength Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Use in Overhead Electrical Conductors
-B856 Concentric-Lay-Stranded Aluminum Conductors, Coated Steel Supported (ACSS)
-B958 Extra-High-Strength and Ultra-High-Strength Class A Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Use in Overhead Electrical Conductors

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TUV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Code Name	Size	No. of Wires	Dia.of Individual Wire		Dia.of Steel Core	Dia.of Complete Cable
			Alum.	Steel		
-	kcmil	-	Inch	Inch	Inch	Inch
Partridge ACSS	266.8	26/7	0.1013	0.0788	0.2364	0.642
Junco ACSS	266.8	30/7	0.0943	0.0943	0.2829	0.66
Ostrich ACSS	300	26/7	0.1074	0.0835	0.2505	0.68
Woodcock ACSS	336.4	22/7	0.1237	0.0687	0.2061	0.701
Linnet ACSS	336.4	26/7	0.1137	0.0884	0.2652	0.72
Oriole ACSS	336.4	30/7	0.1059	0.1059	0.3177	0.741
Ptarmigan ACSS	397.5	20//7	0.141	0.0627	0.1881	0.752
Brant ACSS	397.5	24/7	0.1287	0.0858	0.2574	0.772
Ibis ACSS	397.5	26/7	0.1236	0.0961	0.2883	0.783
Lark ACSS	397.5	30/7	0.1151	0.1151	0.3453	0.806
Tailorbird ACSS	477	20/7	0.1544	0.0686	0.2058	0.823
Flicker ACSS	477	24/7	0.141	0.094	0.282	0.846
Hawk ACSS	477	26/7	0.1354	0.1053	0.3159	0.858
Hen ACSS	477	30/7	0.1261	0.1261	0.3783	0.883
Sapsucker ACSS	556.5	22/7	0.159	0.0883	0.2649	0.901
Parakeet ACSS	556.5	24/7	0.1523	0.1015	0.3045	0.914
Dove ACSS	556.5	26/7	0.1463	0.1138	0.3414	0.927
Eagle ACSS	556.5	30/7	0.1362	0.1362	0.4068	0.953
Peacock ACSS	605	24/7	0.1588	0.1059	0.3177	0.953
Squab ACSS	605	26/7	0.1525	0.1186	0.3558	0.966
Wood Duck ACSS	605	30/7	0.142	0.142	0.426	0.994
Teal ACSS	605	30/19	0.142	0.0852	0.426	0.994
Goldfinch ACSS	636	22/7	0.17	0.0944	0.2832	0.963
Rook ACSS	636	24/7	0.1628	0.1085	0.3255	0.977

Technical Parameters

Code Name	Nominal Weight per 1000ft			Rated Strength	Resistance D.C. at 20℃	Resistance D.C. at 75℃	Ampacity
	Alum.	Steel	Total				
-	lb	lb	lb	lb	Ω/MFT	Ω/MFT	A
Partridge ACSS	251.3	115.6	366.9	8,880	0.0619	0.0761	812
Junco ACSS	251.3	165.5	416.8	11,700	0.0615	0.0756	822
Ostrich ACSS	282.5	129.8	412.3	10,000	0.0551	0.0677	877
Woodcock ACSS	317.1	84.8	401.9	7,610	0.0495	0.0609	933
Linnet ACSS	316.6	145.5	462.1	11,200	0.0491	0.0604	945
Oriole ACSS	317.7	208.7	526.4	14,800	0.0488	0.06	957
Ptarmigan ACSS	374.5	73.2	447.7	7,090	0.0421	0.0518	1034
Brant ACSS	374.4	137	511.4	11,000	0.0417	0.0514	1047
Ibis ACSS	374.1	171.9	546	13,000	0.0416	0.0512	1054
Lark ACSS	375.3	246.6	621.9	17,500	0.0413	0.0508	1068
Tailorbird ACSS	449.1	87.6	536.7	8,490	0.0351	0.0433	1165
Flicker ACSS	449.4	164.5	613.9	13,000	0.0348	0.0429	1180
Hawk ACSS	449	206.4	655.4	15,600	0.0346	0.0427	1188
Hen ACSS	450.4	296	746.4	21,000	0.0344	0.0424	1204
Sapsucker ACSS	523.9	145.1	669	12,600	0.0299	0.037	1297
Parakeet ACSS	524.3	191.8	716.1	15,200	0.0298	0.0368	1306
Dove ACSS	524.2	241	765.2	18,200	0.0297	0.0366	1315
Eagle ACSS	525.5	345.3	870.8	24,500	0.0295	0.0363	1331
Peacock ACSS	570	208.7	778.7	16,500	0.0274	0.0339	1379
Squab ACSS	569.5	261.8	831.3	19,700	0.0273	0.0337	1389
Wood Duck ACSS	571.2	375.3	946.5	26,100	0.0271	0.0334	1407
Teal ACSS	571.2	367.5	938.7	26,600	0.0272	0.0335	1406
Goldfinch ACSS	598.9	165.9	764.8	14,100	0.0262	0.0324	1415
Rook ACSS	599.1	219.1	818.2	17,300	0.0261	0.0322	1425

Technical Parameters

Code Name	Size	No. of Wires	Dia.of Individual Wire		Dia.of Steel Core	Dia.of Complete Cable
			Alum.	Steel		
-	kcmil	-	Inch	Inch	Inch	Inch
Grosbeak ACSS	636	26/7	0.1564	0.1216	0.3648	0.99
Scoter ACSS	636	30/7	0.1456	0.1456	0.4368	1.019
Egret ACSS	636	30/19	0.1456	0.0874	0.437	1.019
Flamingo ACSS	666.6	24/7	0.1667	0.1111	0.3333	1
Gannet ACSS	666.6	26/7	0.1601	0.1245	0.3735	1.014
Stilt ACSS	715.5	24/7	0.1727	0.1151	0.3453	1.036
Starling ACSS	715.5	26/7	0.1659	0.129	0.387	1.051
Redwing ACSS	715.5	30/19	0.1544	0.0926	0.463	1.081
Cuckoo ACSS	795	24/7	0.182	0.1213	0.3639	1.092
Drake ACSS	795	26/7	0.1749	0.136	0.408	1.108
Macaw ACSS	795	1/6	0.1376	0.0764	0.2292	1.055
Tern ACSS	795	45/7	0.1329	0.0886	0.2658	1.063
Condor ACSS	795	54/7	0.1213	0.1213	0.3639	1.092
Mallard ACSS	795	30/19	0.0628	0.0977	0.4885	1.14
Ruddy ACSS	900	45/7	0.1414	0.0943	0.2829	1.131
Canary ACSS	900	54/7	0.1291	0.1291	0.3873	1.162
Corncrake ACSS	954	20/7	0.2184	0.0971	0.2913	1.165
Redbird ACSS	954	24/7	0.1994	0.1329	0.3987	1.196
Rail ACSS	954	45/7	0.1456	0.0971	0.2913	1.165
Cardinal ACSS	954	54/7	0.1329	0.1329	0.3987	1.196
Canvasback ACSS	954	30/19	0.1783	0.107	0.535	1.248
Dipper ACSS	1351.5	45/7	0.1733	0.1155	0.3465	1.386
Martin ACSS	1351.5	54/19	0.1582	0.0949	0.4745	1.424
Falcon ACSS	1590	54/19	0.1716	0.103	0.5148	1.545

Technical Parameters

Code Name	Nominal Weight per 1000ft			Rated Strength	Resistance D.C. at 20℃	Resistance D.C. at 75℃	Ampacity
	Alum.	Steel	Total				
-	lb	lb	lb	lb	Ω/MFT	Ω/MFT	A
Grosbeak ACSS	599	275.2	874.2	20,700	0.026	0.0321	1435
Scoter ACSS	600.5	394.6	995.1	27,400	0.0258	0.0318	1454
Egret ACSS	600.5	386.7	987.2	28000	0.0258	0.0319	1453
Flamingo ACSS	628.2	229.7	857.9	18,200	0.0249	0.0308	1470
Gannet ACSS	627.7	288.5	916.2	21,700	0.0248	0.0306	1480
Stilt ACSS	674.2	246.6	920.8	19,500	0.0232	0.0287	1540
Starling ACSS	674	309.7	983.7	23,300	0.0231	0.0286	1550
Redwing ACSS	675.3	434.1	1109.4	30,800	0.023	0.0284	1570
Cuckoo ACSS	748.8	273.9	1022.7	21,700	0.0209	0.0259	1650
Drake ACSS	749.1	344.3	1093.4	25,900	0.0209	0.0257	1662
Macaw ACSS	749	108.6	857.6	11,800	0.0211	0.0262	1621
Tern ACSS	748.6	146.1	894.7	14,200	0.021	0.0263	1618
Condor ACSS	748.4	273.9	1022.3	21,700	0.0209	0.0026	1618
Mallard ACSS	750.7	483.2	1233.9	34,300	0.0207	0.0255	1683
Ruddy ACSS	847.4	165.5	1012.9	15,800	0.0186	0.0233	1755
Canary ACSS	847.7	310.2	1157.9	24,600	0.0184	0.0236	1756
Corncrake ACSS	898.5	175.5	1074	16,700	0.0175	0.0219	1834
Redbird ACSS	898.8	328.7	1227.5	26,000	0.0174	0.0217	1859
Rail ACSS	898.5	175.5	1074	16,700	0.0175	0.022	1824
Cardinal ACSS	899	329	1227	28000	0.0174	0.0225	1800
Canvasback ACSS	901	580	1480	41100	0.0172	0.0214	1900
Dipper ACSS	1273	248	1521	23700	0.0124	0.0163	2235
Martin ACSS	1279	456	1735	36200	0.0123	0.0161	2260
Falcon ACSS	1505	537	2042	42600	0.0105	0.0138	2520