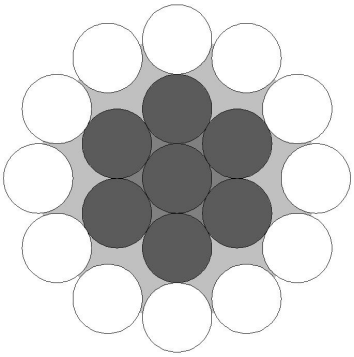
Aluminium Conductor Steel Reinforced(ACSR)

APPLICATION:

Aluminum Conductor Steel Reinforced consist of a solid or stranded steel core surrounded by outer layers of aluminum strands. High-strength ACSR conductors are frequently used for river crossings, overhead ground wires, and extra-long span transmission projects. ACSR conductors with varying tensile strengths can be manufactured to meet specific requirements while maintaining constant electrical resistance. Furthermore, the larger diameter of ACSR conductors results in a higher corona inception voltage, offering significant advantages for high-voltage and ultra-high-voltage overhead transmission lines.



STANDARDS:

- ASTM B-232
- ASTM B-231
- BS 215
- IEC 61089/EN 50182

Qualification Certificate:

For more information, please visit our website:

https://www.huilicablegroup.com/acsr-aluminum-conductor-steel-reinforced-3.html

CONSTRUCTION:

- 1350-H19 Aluminum wires.
- Galvanized Steel Core.
- Anti-Corrosion Grease

TECHNICAL PARAMETERS:

ALL ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR)-ASTM B 232

Code Name	Conductor size	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
			No.of Wires		Wire Diameter						75℃	85℃
			Al	St	Al	St						
	kcmil	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
Thrasher	2312.0	1235.1	76	19	4.43	2.07	45.77	3754	252.30	0.02477	937	1245
Kiwi	2167.0	1145.7	72	7	4.41	2.94	44.07	3424	221.60	0.02642	907	1200
Bluebird	2156.0	1181.3	84	19	4.07	2.44	44.75	3732	268.32	0.02656	910	1205
Chukar	1780.0	975.9	84	19	3.70	2.22	40.69	3083	226.94	0.03216	827	1084
Falcon	1590.0	907.9	54	19	4.36	2.62	39.24	3038	242.51	0.03601	774	1010
Lapwing	1590.0	861.6	45	7	4.78	3.18	38.20	2664	187.78	0.03583	772	1005
Parrot	1510.5	861.8	54	19	4.25	2.55	38.23	2884	230.06	0.03793	753	980
Nuthatch	1510.5	818.2	45	7	4.65	3.10	37.24	2530	178.44	0.03773	752	976
Plover	1431.0	817.1	54	19	4.14	2.48	37.21	2735	218.49	0.04001	732	950
Bobolink	1431.0	775.0	45	7	4.53	3.02	36.25	2397	170.43	0.03984	730	946
Martin	1351.5	771.5	54	19	4.02	2.41	36.17	2582	206.03	0.04237	710	919
Dipper	1351.5	732.1	45	7	4.40	2.93	35.20	2582	161.08	0.04217	709	916
Pheasant	1272.0	726.4	54	19	3.90	2.34	35.10	2431	194.01	0.04501	687	888
Bittern	1272.0	688.9	45	7	4.27	2.85	34.16	2131	151.74	0.04482	686	884
Skylark	1272.0	662.6	36	1	4.78	4.78	33.43	1914	117.48	0.04457	694	892
Grackle	1192.5	680.8	54	19	3.77	2.27	33.99	2278	186.45	0.04802	664	855
Bunting	1192.5	646.1	45	7	4.14	2.76	33.07	1997	142.39	0.04778	663	852
Finch	1113.0	635.8	54	19	3.65	2.19	32.84	2128	173.99	0.05143	640	821
Bluejay	1113.0	603.2	45	7	4.00	2.66	31.98	1866	132.60	0.05118	639	819
Curlew	1033.5	591.2	54	7	3.51	3.51	31.62	1978	162.86	0.05518	615	788
Ortolan	1033.5	559.5	45	7	3.85	2.57	30.78	1731	123.26	0.05518	613	783
Tanager	1033.5	538.0	36	1	4.30	4.30	30.12	1553	95.23	0.05489	620	791
Cardinal	954.0	545.9	54	7	3.38	3.38	30.38	1826	150.40	0.05975	589	751
Rail	954.0	516.8	45	7	3.70	2.47	29.59	1598	115.25	0.05974	587	748
Catbird	954.0	496.9	36	1	4.14	4.14	28.96	1434	88.11	0.05944	594	755
Canary	900.0	515.2	54	7	3.28	3.28	29.51	1723	141.95	0.06332	571	726
Ruddy	900.0	487.4	45	7	3.59	2.40	28.73	1507	108.58	0.06334	568	722
Mallard	795	494.8	30	19	4.14	2.48	28.96	1836	170.87	0.07185	542	689
Condor	795	454.8	54	7	3.08	3.08	27.74	1521	125.48	0.07172	532	674

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR) ASTM B232

Code Name	Conductor size	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
			No.of Wires		Wire Diameter						75℃	85℃
			Al	St	Al	St						
	kcmil	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
Tern	795.0	430.6	45	7	3.38	2.25	27.00	1332	98.34	0.07170	531	671
Drake	795.0	468.6	26	7	4.44	3.45	28.14	1626	140.17	0.07165	541	686
Cuckoo	795.0	455.0	24	7	4.62	3.08	27.74	1522	124.15	0.07169	540	684
Coot	795.0	414.0	36	1	3.77	3.77	26.42	1196	74.76	0.07134	537	678
Redwing	715.5	444.9	30	19	3.92	2.35	27.46	1651	153.96	0.07988	511	647
Starling	715.5	421.6	26	7	4.21	3.28	26.70	1464	126.37	0.07964	510	644
Stilt	715.5	409.7	24	7	4.39	2.92	26.31	1370	113.47	0.07961	509	642
Gannet	666.6	392.7	26	7	4.07	3.16	25.76	1363	117.48	0.08551	490	617
Flamingo	666.6	381.7	24	7	4.23	2.82	25.40	1277	105.46	0.08545	489	616
Egret	636.0	395.8	30	19	3.70	2.22	25.88	1469	140.17	0.08982	479	603
Scoter	636.0	397.5	30	7	3.70	3.70	25.88	1481	135.27	0.09004	478	602
Grosbeak	636.0	374.7	26	7	3.97	3.09	25.15	1301	112.14	0.09004	476	599
Rook	636.0	364.1	24	7	4.14	2.76	24.82	1217	100.57	0.08959	476	599
Swift	636.0	331.1	36	1	3.38	3.38	23.62	956	61.41	0.08919	474	593
Kingbird	636.0	340.3	18	1	4.78	4.78	23.88	1027	69.86	0.08914	474	595
Teal	605.0	376.4	30	19	3.61	2.16	25.25	1397	133.49	0.09444	465	585
Wood Duck	605.0	378.0	30	7	3.61	3.61	25.25	1408	128.60	0.09444	465	585
Squab	605.0	356.3	26	7	3.87	3.01	24.54	1237	108.13	0.09425	464	582
Peacock	605.0	346.4	24	7	4.03	2.69	24.21	1159	96.12	0.09416	463	581
Eagle	556.5	347.8	30	7	3.46	3.46	24.21	1296	123.70	0.10265	444	557
Dove	556.5	327.9	26	7	3.72	2.89	23.55	1139	100.57	0.10241	442	554
Parakeet	556.5	318.6	24	7	3.87	2.58	23.22	1066	88.11	0.10237	442	553
Osprey	556.5	297.5	18	1	4.47	4.47	22.33	898	60.96	0.10194	440	549
Hen	477.0	298.1	30	7	3.20	3.20	22.43	1111	105.91	0.11975	407	508
Hawk	477.0	280.9	26	7	3.44	2.67	21.79	975	86.77	0.11956	405	505
Flicker	477.0	273.1	24	7	3.58	2.39	21.49	913	76.54	0.11944	404	504
Pelican	477.0	255.2	18	1	4.14	4.14	20.68	770	52.51	0.11887	403	501
Lark	397.5	248.4	30	7	2.92	2.92	20.47	925	90.33	0.14374	366	455
Ibis	397.5	234	26	7	3.14	2.44	19.89	812	72.53	0.14347	365	452

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR) ASTM B232

Code Name	Conductor size	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
			No.of Wires		Wire Diameter						75℃	85℃
			Al	St	Al	St						
	kcmil	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
Oriole	336.4	210.3	30	7	2.69	2.69	18.82	783	76.98	0.16980	333	411
Linnet	336.4	198.0	26	7	2.89	2.25	18.29	687	62.74	0.16955	331	409
Merlin	336.4	179.9	18	1	3.47	3.47	17.37	543	38.62	0.16860	330	406
Ostrich	300.0	176.7	26	7	2.73	2.12	17.27	613	56.51	0.19002	310	382
Partridge	266.8	157.2	26	7	2.57	2.00	16.31	546	50.28	0.21359	290	356
Waxwing	266.8	142.6	18	1	3.09	3.09	15.47	430	30.61	0.21272	288	352
Penguin	211.6	125.1	6	1	4.77	4.77	14.30	433	37.16	0.26668	237	289
Cochin	211.3	169.5	12	7	3.37	3.37	16.87	784	92.11	0.26969	242	298
Brahma	203.2	194.9	16	19	2.86	2.48	18.14	1004	126.37	0.28042	240	297
Dorking	190.8	153.1	12	7	3.20	3.20	16.03	708	83.21	0.29866	228	280
Dotterel	176.9	141.9	12	7	3.08	3.08	15.42	656	76.98	0.32223	218	267
Pigeon	167.8	99.2	6	1	4.25	4.25	12.75	343	29.46	0.33644	207	251
Guinea	159.0	127.5	12	7	2.92	2.92	14.63	590	71.20	0.35847	205	251
Leghorn	134.6	108.0	12	7	2.69	2.69	13.46	499	60.52	0.42346	186	227
Quail	133.1	78.6	6	1	3.78	3.78	11.35	272	23.58	0.42421	180	218
Minorca	110.8	88.9	12	7	2.44	2.44	12.22	411	50.28	0.51423	166	201
Raven	105.6	62.5	6	1	3.37	3.37	10.11	216	19.49	0.53411	157	190
Petrel	101.8	81.7	12	7	2.34	2.34	11.71	378	46.28	0.55986	158	191
Robin	83.7	49.5	6	1	3.00	3.00	8.99	171	15.80	0.67433	137	164
Grouse	80.0	54.7	8	1	2.54	4.24	9.32	221	23.14	0.70887	135	162
Sparate	66.4	42.2	7	1	2.47	3.30	8.26	159	16.20	0.84979	120	144
Sparrow	66.4	39.3	6	1	2.67	2.67	8.03	136	12.68	0.84985	120	143
Swanate	41.7	26.5	7	1	1.96	2.61	6.53	100	10.50	1.35267	91	108
Swan	41.7	24.7	6	1	2.12	2.12	6.35	85	8.28	1.35220	91	107
Turkey	26.2	15.5	6	1	1.68	1.68	5.03	54	5.30	2.15264	68	81
Brant	397.5	227.5	24	7	3.27	2.18	19.61	761	64.97	0.14336	364	451
Chickadee	397.5	212.6	18	1	3.77	3.77	18.87	641	44.23	0.14268	363	449

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR) EN 50182

Code Name	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Wires		Wire Diameter						75℃	85℃
		Al	St	Al	St						
	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
34-AL1/6-ST1A	40.1	6	1	2.70	2.70	8.10	138.7	12.37	0.83420	121	144
48-AL1/6-ST1A	56.3	6	1	3.20	3.20	9.60	194.8	16.81	0.59390	148	178
70-AL1/11-ST1A	81.3	26	7	1.85	1.44	11.70	282.2	26.27	0.41320	197	238
94-AL1/22-ST1A	116.2	30	7	2.00	2.00	14.00	432.5	43.17	0.30670	236	287
94-AL1/15-ST1A	109.7	26	7	2.15	1.67	13.60	380.6	34.93	0.30600	235	286
97-AL1/34-ST1A	131.1	36	7	1.85	2.50	14.90	536.5	57.07	0.29900	241	295
122-AL1/20-ST1A	141.4	26	7	2.44	1.90	15.50	491.0	44.50	0.23760	273	334
119-AL1/42-ST1A	160.4	36	7	2.05	2.75	16.50	653.9	68.79	0.24350	272	334
128-AL1/30-ST1A	157.8	30	7	2.33	2.33	16.30	587.0	56.41	0.22600	282	346
149-AL1/24-ST1A	173.1	26	7	2.70	2.10	17.10	600.8	53.67	0.19400	307	377
150-AL1/53-ST1 A	202.4	36	7	2.30	3.10	18.50	827.1	84.29	0.19340	311	384
172-AL1/40-ST1A	211.8	30	7	2.70	2.70	18.90	788.2	74.89	0.16830	334	413
184-AL1/30-ST1A	213.6	26	7	3.00	2.33	19.00	741.0	65.27	0.15710	346	428
209-AL1/34-ST1 A	243.2	26	7	3.20	2.49	20.30	844.1	73.36	0.13810	373	463
212-AL1/49-ST1A	261.5	30	7	3.00	3.00	21.00	973.1	92.46	0.13630	377	470
243-AL1/39-ST1A	282.5	26	7	3.45	2.68	21.80	980.1	85.12	0.11880	406	507
238-AL1/82-ST1A	320.2	36	19	2.90	2.35	23.40	1305.3	134.37	0.12180	406	508
257-AL1/60-ST1A	316.5	30	7	3.30	3.30	23.10	1177.5	108.20	0.11260	421	527
304-AL1/49-ST1A	353.7	26	7	3.86	3.00	24.40	1227.3	105.09	0.09490	462	580
341-AL1/109-ST1A	450.0	78	19	2.36	2.70	27.70	1797.4	183.73	0.08480	497	629
382-AL1/49-ST1A	431.2	54	7	3.00	3.00	27.00	1442.5	121.30	0.07580	516	653
449-AL1/39-S T1 A	488.2	48	7	3.45	2.68	28.70	1549.1	119.05	0.06440	564	716
562-AL1/49-ST1A	611.2	48	7	3.86	3.00	32.20	1939.5	146.28	0.05150	637	817
679-AL1/86-ST1 A	764.5	54	19	4.00	2.40	36.00	2549.7	206.56	0.04260	708	916
1288-AL1/183-ST1A	1471.1	100	19	4.05	3.50	49.90	5002	407.20	0.02250	991	1331

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR) IEC 61089

Code Name	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
		No.of Wires		Wire Diameter						75℃	85℃
		Al	St	Al	St						
	mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
16	18.7	6	1	1.84	1.84	5.53	65.0	6.08	1.79340	76	90
25	29.2	6	7	2.30	2.30	6.91	101.0	9.13	1.14780	100	119
40	46.7	6	1	2.91	2.91	8.74	162.0	14.40	0.71740	132	158
63	73.5	6	1	3.66	3.66	11.00	254.0	21.63	0.45550	173	209
100	117.0	6	7	4.61	4.61	13.80	404.0	34.33	0.28690	227	277
125	132.0	18	1	2.97	2.97	14.90	398.0	29.17	0.23040	275	336
160	169.0	18	1	3.36	3.36	16.80	509.0	36.18	0.18000	317	390
200	211.0	18	1	3.76	3.76	18.80	637.0	44.22	0.14400	361	446
250	275.0	22	7	3.80	2.11	21.60	881.0	68.72	0.11540	412	513
315	337.0	45	7	2.99	1.99	23.90	1040.0	79.03	0.09170	462	580
400	428.0	45	7	3.36	2.24	26.90	1320.0	98.36	0.07220	529	668
450	481.0	45	7	3.57	2.38	28.50	1485.0	107.47	0.06420	564	716
500	535.0	45	7	3.76	2.51	30.10	1650.0	119.41	0.05780	598	762
560	599.0	45	7	3.98	2.65	31.80	1848.0	133.74	0.05160	636	814
630	674.0	45	7	4.22	2.81	33.80	2079.0	150.45	0.04590	678	872
710	759	45	7	4.48	2.99	35.9	2343	169.56	0.0407	722	935
800	835	72	7	3.76	2.51	37.6	2480	167.41	0.0361	776	1010
900	939	72	7	3.99	2.66	39.9	2790	188.33	0.0321	824	1079
1000	1043	72	7	4.21	2.8	42.1	3100	209.26	0.0289	869	1143
1120	1167	72	19	4.45	1.78	44.5	3465	234.53	0.0258	917	1215
1250	1352	84	19	4.35	2.61	47.9	4254	316.04	0.0232	970	1296

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.

ALUMINUM CONDUCTOR STEEL REINFORCED(ACSR) BS 215

Code Name	Nominal Area	Sectional Area	Stranding				Diameter of Complete Conductor	Weight	Rated Strength	DC Resistance @20℃	Current Capacity	
			No.of Wires		Wire Diameter						75℃	85℃
			Al	St	Al	St						
		mm²	No.	No.	mm	mm	mm	Kg/Km	KN	Ω/Km	A	A
GOPHER	25	30.6	6	1	2.36	2.36	7.08	106	9.61	1.09300	103	122
WEASEL	30	36.9	6	1	2.59	2.59	7.77	128	11.45	0.90770	115	137
FERRET	40	49.5	6	1	3.00	3.00	9.00	172	15.20	0.67660	137	164
RABBIT	50	61.7	6	1	3.35	3.35	10.05	214	18.35	0.54260	156	188
HORSE	70	116.2	12	7	2.79	2.79	13.95	538	61.20	0.39360	194	237
DOG	100	118.5	6	7	4.72	1.57	14.15	394	32.70	0.27330	234	285
WOLF	150	194.9	30	7	2.59	2.59	18.13	726	69.20	0.18280	319	393
DINGO	150	167.5	18	1	3.35	3.35	16.75	506	35.70	0.18150	316	388
LYNX	175	226.2	30	7	2.79	2.79	19.53	842	79.80	0.15760	347	430
CARACAL	175	194.5	18	1	3.61	3.61	18.05	587	41.10	0.15630	344	425
PANTHER	200	261.5	30	7	3.00	3.00	21.00	974	92.25	0.13630	377	470
JAGUAR	200	222.3	18	1	3.86	3.86	19.30	671	46.55	0.13670	372	460
ZEBRA	400	484.5	54	7	3.18	3.18	28.62	1621	131.90	0.06740	551	700

NOTE :Current capacity based on conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmisivity, 0.80 absorptivity, 45°C Ambient temperature, 1045 W/m² Solar radiation.