

**APPLICATION**

Used as bare overhead transmission conductor and as primary and secondary distribution conductor and messenger support. ACSR conductors where the aluminum wires are replaced with the high strength aluminum alloy material. These super high strength conductors are used in river crossings or for long span applications where the traditional ACSR conductor will not work.

**DESCRIPTION**

AACSR is a concentrically stranded conductor composed of one or more layers of Aluminium -Magnesium -Silicon Alloy wire stranded around a high strength coated steel core. The core can be of either single wire or stranded multi wire. Additional corrosion protection is available through the application of grease to the core or infusion of the complete cable with grease.

**SPECIFICATIONS**

- IEC 61089 Round wire concentric lay overhead electrical stranded conductors
- ASTM B711-2018 Round wire concentric lay overhead electrical stranded conductors
- GB/T 1179 Round wire concentric lay overhead electrical stranded conductors

**Construction Parameters**

Code Number	Area			Number of Wires		Wire Dia.		Diameter		Linear Mass	A1/S1 A Conductor	A1/S2 A Conductor	A1/S3 A Conductor	Max.D.C. Resistance at 20°C
	Alum.	Steel	Total	Al.	St.	Alum.	Steel	Core	Cond.	Rated Strength	Rated Strength	Rated Strength		
mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>			mm	mm	mm	mm	kg/km	kN			Ω/km
16	16	2.67	18.7	6	1	1.84	1.84	1.64	5.53	64.6	6.08	6.45	6.83	1.7934
25	25	4.17	29.2	6	1	2.3	2.3	2.3	6.91	100.9	9.13	9.71	10.25	1.1478
40	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	14.4	15.33	16.2	0.7174
63	63	10.5	73.5	6	1	3.66	3.66	3.66	11	254.4	21.63	22.37	24.15	0.4555
100	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	34.33	35.5	38.33	0.2869
125	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	29.17	30.14	31.04	0.2304
125	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	45.69	48.54	51.39	0.231
160	160	8.89	169	18	1	3.36	3.36	3.36	16.8	509.3	36.18	37.42	38.67	0.18
160	160	26.1	186	26	7	2.8	2.18	6.53	17.7	644.9	57.69	61.34	64.99	0.1805
200	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	44.22	45	46.89	0.144
200	200	32.6	233	26	7	3.13	2.43	7.3	19.8	806.2	70.13	74.69	78.93	0.1444
250	250	24.6	275	22	7	3.8	2.11	6.34	21.6	880.6	68.72	72.16	75.6	0.1154
250	250	40.7	291	26	7	3.5	2.72	8.16	22.2	1007.7	87.67	93.37	98.66	0.1155
315	315	21.8	337	45	7	2.99	1.99	5.97	23.9	1039.3	79.03	82.08	85.13	0.0917
315	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	106.83	114.02	121.2	0.0917
400	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	98.36	102.23	106.1	0.0722
400	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	123.04	130.3	137.56	0.0723
450	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	107.47	111.82	115.87	0.0642
450	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	138.42	146.58	154.75	0.0643
500	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	199.41	124.25	128.74	0.0578
500	500	64.8	565	54	7	3.43	3.43	10.3	30.9	1887.9	153.8	162.87	171.94	0.0578

560	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	133.74	139.16	144.19	0.0516
560	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	172.59	182.52	192.45	0.0516
630	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	150.45	156.55	162.21	0.0459
630	630	79.8	710	54	19	3.85	2.31	11.6	34.7	2366.3	191.77	202.94	213.31	0.0459
710	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	169.56	176.43	182.81	0.0407
710	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	216.12	228.71	240.41	0.0407
800	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	167.41	172.25	176.74	0.0361
800	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	205.33	214.67	224	0.0362
800	800	101	901	54	19	4.44	2.61	13	39.1	3004.9	243.52	257.71	270.88	0.0362
900	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	188.33	193.78	198.83	0.0321
900	900	75	975	84	7	3.69	3.69	11.1	40.6	3074.2	226.5	231.75	244.5	0.0322
1000	1000	43.2	1043	72	7	4.21	2.8	8.41	42.1	3100.3	209.26	215.31	220.93	0.0289
1120	1120	47.3	1167	72	19	4.45	1.78	8.9	44.5	3464.9	234.53	241.15	247.77	0.0258
1120	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	283.17	295.94	307.79	0.0258
1250	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	316.04	269.14	276.53	0.0232
1250	1250	52.8	1303	72	19	4.7	1.88	9.4	47	3867.1	261.75	330.29	343.52	0.0231