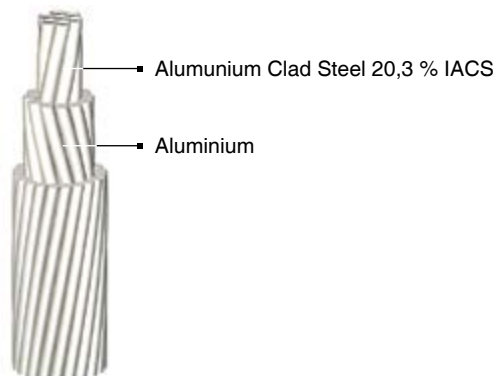


ACSR / AS

Aluminium Conductor Aluminium Clad Steel Reinforced

Standard Specification : IEC 61089 : 1991



Technical Properties

Size	Number / Diameter of Wire		Calculated Cross Section Area		Approx. Overall Diameter	Approx. Weight of Conductor	Calculated Breaking Load	DC Resistance at 20 °C Max.	Current Carrying Capacity *	Standard Length per Reel
	Al	AS	Al	AS						
mm ²	No. / mm	No. / mm	mm ²	mm ²	mm	kg/km	kN	Ohm/km	A	m
16	6 / 1.81	1 / 1.81	15.4	2.6	5.43	59	5.91	1.7923	148	2,000
25	6 / 2.26	1 / 2.26	24.1	4.0	6.78	92	9.00	1.1471	197	2,000
40	6 / 2.85	1 / 2.85	38.3	6.4	8.55	147	12.41	0.7169	266	2,000
63	6 / 3.58	1 / 3.58	60.4	10.1	10.74	232	21.17	0.4552	356	2,000
100	6 / 4.51	1 / 4.51	95.9	16.0	13.53	368	31.84	0.2868	479	2,000
125	18 / 2.95	1 / 2.95	123.0	6.8	14.75	384	29.18	0.2304	548	2,000
125	26 / 2.43	7 / 1.89	120.6	19.6	15.39	464	44.49	0.2308	554	2,000
160	18 / 3.34	1 / 3.34	157.7	8.8	16.70	492	36.38	0.1800	642	2,000
160	26 / 2.74	7 / 2.13	153.3	24.9	17.35	589	56.18	0.1803	649	2,000
200	18 / 3.74	1 / 3.74	197.7	11.0	18.70	617	43.62	0.1440	742	2,000
200	26 / 3.07	7 / 2.39	192.5	31.4	19.45	740	69.27	0.1443	749	2,000
250	22 / 3.76	7 / 2.09	244.3	24.0	21.31	818	67.80	0.1153	860	2,000
250	26 / 3.43	7 / 2.67	240.2	39.2	21.73	924	86.58	0.1154	865	2,000
315	45 / 2.96	7 / 1.97	309.7	21.3	23.67	998	78.33	0.0917	994	2,000
315	26 / 3.85	7 / 2.99	302.7	49.2	24.37	1,163	107.58	0.0916	1,003	2,000
400	45 / 3.34	7 / 2.22	394.3	27.1	26.70	1,270	97.50	0.0722	1,158	2,000
400	54 / 3.02	7 / 3.02	386.8	50.1	27.18	1,402	124.20	0.0723	1,163	2,000
450	45 / 3.54	7 / 2.36	442.9	30.6	28.32	1,428	107.48	0.0642	1,247	2,000
450	54 / 3.21	7 / 3.21	437.0	56.6	28.89	1,584	139.72	0.0642	1,255	2,000
500	45 / 3.73	7 / 2.49	491.7	34.1	29.85	1,586	119.42	0.0578	1,333	2,000
500	54 / 3.38	7 / 3.38	484.5	62.8	30.42	1,756	153.99	0.0578	1,341	2,000
560	45 / 3.95	7 / 2.63	551.4	38.0	31.59	1,778	133.75	0.0516	1,431	2,000
560	54 / 3.58	19 / 2.15	543.6	69.0	32.23	1,969	169.36	0.0516	1,440	2,000
630	45 / 4.19	7 / 2.79	620.5	42.8	33.51	2,000	150.47	0.0458	1,541	2,000
630	54 / 3.79	19 / 2.28	609.2	77.6	34.14	2,208	190.52	0.0459	1,548	2,000
710	45 / 4.44	7 / 2.96	696.7	48.2	35.52	2,247	169.57	0.0407	1,657	2,000
710	54 / 4.03	19 / 2.42	688.8	87.4	36.28	2,495	214.72	0.0407	1,667	1,000
800	72 / 3.74	7 / 2.49	791.0	34.1	29.91	2,425	167.67	0.0361	1,777	2,000

* Note :

Ambient temperature : 20° C
Wind velocity : 1 m/sec
Continuous operating temperature of conductor : 80° C

Conductivity of Al : 61% IACS
Solar absorbtion coefficient : 0.5
Emissivity with respect to black body : 0.6

Technical Properties

Size	Number / Diameter of Wire		Calculated Cross Section Area		Approx. Overall Diameter	Approx. Weight of Conductor	Calculated Breaking Load	DC Resistance at 20 °C Max.	Current Carrying Capacity *	Standard Length per Reel
	AI	AS	AI	AS						
mm²	No. / mm	No. / mm	mm²	mm²	mm	kg/km	kN	Ohm/km	A	m
800	84 / 3.45	7 / 3.45	785.2	65.4	37.95	2,553	206.37	0.0362	1,783	1,000
800	54 / 4.28	19 / 2.57	776.9	98.6	38.53	2,814	241.94	0.0361	1,793	1,000
900	72 / 3.97	7 / 2.65	891.3	38.6	31.77	2,734	188.63	0.0321	1,907	2,000
900	84 / 3.66	7 / 3.66	883.8	73.6	40.26	2,873	224.82	0.0321	1,915	1,000
1000	72 / 4.18	7 / 2.79	988.0	42.8	33.45	3,031	209.59	0.0289	2,027	2,000
1120	72 / 4.43	19 / 1.77	1109.8	46.8	35.43	3,306	233.48	0.0258	2,164	2,000
1120	84 / 4.08	19 / 2.45	1098.2	89.6	44.89	3,648	282.88	0.0258	2,173	1,000
1250	72 / 4.68	19 / 1.87	1238.6	52.2	37.43	3,690	260.58	0.0231	2,301	1,000
1250	84 / 4.31	19 / 2.59	1225.5	100.1	47.43	4,072	315.72	0.0231	2,311	1,000

* Note :	Ambient temperature	: 20° C	Conductivity of Al	: 61% IACS
	Wind velocity	: 1 m/sec	Solar absorption coefficient	: 0.5
	Continuous operating temperature of conductor	: 80° C	Emissivity with respect to black body	: 0.6