

ACSR / AS

Aluminium Conductor Aluminium Clad Steel Reinforced

Standard Specification : ASTM B 549 : 2013



Technical Properties

Type	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						
	No. / mm	No. / mm	mm ²	mm ²						
Thraser	76 / 4.43	19 / 2.07	1171.4	63.9	45.79	3,682	246	0.02440	1,664	1,000
Kiwi	72 / 4.41	7 / 2.94	1099.8	47.5	44.10	3,373	218	0.02613	1,600	1,000
Bluebird	84 / 4.07	19 / 2.44	1092.8	88.8	44.76	3,628	262	0.02594	1,612	1,000
Chukar	84 / 3.70	19 / 2.22	903.2	73.5	40.70	2,999	220	0.03140	1,444	1,000
Falcon	54 / 4.36	19 / 2.62	806.2	102.4	39.26	2,921	236	0.03464	1,368	1,000
Lapwing	45 / 4.78	7 / 3.18	807.5	55.6	38.22	2,603	186	0.03513	1,348	1,000
Parrot	54 / 4.25	19 / 2.55	766.1	97.0	38.25	2,774	224	0.03649	1,326	1,000
Nuthatch	45 / 4.65	7 / 3.10	764.2	52.8	37.20	2,464	177	0.03700	1,306	1,000
Plover	54 / 4.14	19 / 2.48	726.9	91.8	37.24	2,630	212	0.03849	1,284	1,000
Bobolink	45 / 4.53	7 / 3.02	725.3	50.1	36.24	2,339	167	0.03905	1,265	1,000
Martin	54 / 4.02	19 / 2.41	685.4	86.7	36.17	2,481	201	0.04077	1,239	1,000
Dipper	45 / 4.40	7 / 2.93	684.2	47.2	35.19	2,206	158	0.04134	1,221	2,000
Pheasant	54 / 3.90	19 / 2.34	645.1	81.7	35.10	2,336	189	0.04329	1,195	2,000
Bittern	45 / 4.27	7 / 2.85	644.4	44.7	34.17	2,079	149	0.04393	1,177	2,000
Skylark	36 / 4.78	1 / 4.78	646.0	17.9	33.46	1,897	114	0.04431	1,165	2,000
Grackle	54 / 3.77	19 / 2.27	602.8	76.9	33.97	2,186	179	0.04620	1,148	2,000
Bunting	45 / 4.14	7 / 2.76	605.8	41.9	33.12	1,954	139	0.04685	1,132	2,000
Finch	54 / 3.65	19 / 2.19	565.0	71.6	32.85	2,046	167	0.04823	1,114	2,000
Bluejay	45 / 4.00	7 / 2.66	565.5	38.9	31.98	1,822	130	0.05019	1,084	2,000
Curlew	54 / 3.51	7 / 3.51	522.5	67.7	31.59	1,894	158	0.05302	1,053	2,000
Ortolan	45 / 3.85	7 / 2.57	523.9	36.3	30.81	1,690	121	0.05409	1,035	2,000
Tanager	36 / 4.30	1 / 4.30	522.8	14.5	30.10	1,535	94	0.05456	1,024	2,000
Cardinal	54 / 3.38	7 / 3.38	484.5	62.8	30.42	1,756	146	0.05741	1,002	2,000
Rail	45 / 3.70	7 / 2.47	483.8	33.5	29.61	1,561	113	0.05857	985	2,000
Catbird	36 / 4.14	1 / 4.14	484.6	13.5	28.98	1,423	87	0.05908	974	2,000
Canary	54 / 3.28	7 / 3.28	456.3	59.1	29.52	1,654	138	0.06086	966	2,000
Ruddy	45 / 3.59	7 / 2.40	455.5	31.7	28.74	1,470	107	0.06208	949	2,000
Mallard	30 / 4.14	19 / 2.48	403.8	91.8	28.96	1,729	165	0.06690	917	2,000

* Note : Ambient temperature : 35° C Conductivity of Al : 61% IACS
 wind velocity : 0.6 m/sec Solar absorbtion coefficient : 0.5
 Continuous operating temperature of conductor : 80° C Emissivity with respect to black body : 0.6

Technical Properties

Type	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						
	No. / mm	No. / mm	mm²	mm²						
Condor	54 / 3.08	7 / 3.08	402.3	52.2	27.72	1,459	124	0.06893	893	2,000
Tern	45 / 3.38	7 / 2.25	403.8	27.8	27.03	1,302	96	0.07028	878	2,000
Drake	26 / 4.44	7 / 3.45	402.6	65.4	28.11	1,547	136	0.06814	901	2,000
Cuckoo	24 / 4.62	7 / 3.08	402.3	52.2	27.72	1,459	122	0.06889	893	2,000
Coot	36 / 3.77	1 / 3.77	401.9	11.2	26.39	1,180	74	0.07093	868	2,000
Redwing	30 / 3.92	19 / 2.35	362.1	82.4	27.43	1,551	149	0.07438	858	2,000
Starling	26 / 4.21	7 / 3.28	361.9	59.1	26.68	1,393	122	0.07571	843	2,000
Stilt	24 / 4.39	7 / 2.92	363.3	46.9	26.32	1,316	110	0.07650	836	2,000
Gannet	26 / 4.07	7 / 3.16	338.3	54.9	25.8	1,299	116	0.08128	806	2,000
Flamingo	24 / 4.23	7 / 2.82	337.3	43.7	25.4	1,223	103	0.08213	799	2,000
Egret	30 / 3.70	19 / 2.22	322.6	73.5	25.9	1,382	133	0.08365	796	2,000
Scoter	30 / 3.70	7 / 3.70	322.6	75.3	25.9	1,393	130	0.08350	797	2,000
Grosbeak	26 / 3.97	7 / 3.09	321.8	52.5	25.2	1,238	110	0.08518	782	2,000
Rook	24 / 4.14	7 / 2.76	323.1	41.9	24.8	1,171	98	0.08623	775	2,000
Swift	36 / 3.38	1 / 3.38	323.0	9.0	23.7	949	61	0.08863	754	2,000
Kingbird	18 / 4.78	1 / 4.78	323.0	17.9	23.9	1,008	67	0.08779	759	2,000
Teal	30 / 3.61	19 / 2.16	307.1	69.6	25.2	1,313	127	0.08793	771	2,000
Wood Duck	30 / 3.61	7 / 3.61	307.1	71.6	25.3	1,326	126	0.08777	772	2,000
Squab	26 / 3.87	7 / 3.01	305.8	49.8	24.5	1,176	105	0.08958	757	2,000
Peacock	24 / 4.03	7 / 2.69	306.1	39.8	24.2	1,110	93	0.09047	751	2,000
Eagle	30 / 3.46	7 / 3.46	282.1	65.8	24.2	1,218	119	0.09545	732	2,000
Dove	26 / 3.72	7 / 2.89	282.6	45.9	23.6	1,086	97	0.09736	719	2,000
Parakeet	24 / 3.87	7 / 2.58	282.3	36.6	23.2	1,023	86	0.09840	712	2,000
Ospray	18 / 4.47	1 / 4.47	282.5	15.7	22.4	881	59	0.1004	697	2,000
Hen	30 / 3.20	7 / 3.20	241.3	56.3	22.4	1,042	104	0.1114	663	2,000
Hawk	26 / 3.44	7 / 2.68	241.6	39.5	21.8	930	84	0.1137	651	2,000
Flicker	24 / 3.58	7 / 2.39	241.6	31.4	21.5	876	74	0.1148	645	2,000
Pelican	18 / 4.14	1 / 4.14	242.3	13.5	20.7	756	51	0.1171	632	2,000
Lark	30 / 2.92	7 / 2.92	200.9	46.9	20.4	867	87	0.1336	590	2,000
Ibis	26 / 3.14	7 / 2.44	201.3	32.7	19.9	774	70	0.1365	579	2,000
Brant	24 / 3.27	7 / 2.18	201.6	26.1	19.6	731	63	0.1378	574	2,000
Chickadee	18 / 3.77	1 / 3.77	200.9	11.2	18.9	627	44	0.1405	562	2,000
Oriole	30 / 2.69	7 / 2.69	170.5	39.8	18.8	736	74	0.1579	530	2,000
Linnet	26 / 2.89	7 / 2.25	170.6	27.8	18.3	656	60	0.1612	520	2,000
Merlin	18 / 3.47	1 / 3.47	170.2	9.5	17.4	531	38	0.1661	505	2,000
Ostrich	26 / 2.73	7 / 2.12	152.2	24.7	17.3	585	54	0.1807	483	2,000
Partridge	26 / 2.57	7 / 2.00	134.9	22.0	16.3	519	48	0.2031	448	2,000
Waxwing	18 / 3.09	1 / 3.09	135.0	7.5	15.5	421	30	0.2095	435	2,000
Penguin	6 / 4.77	1 / 4.77	107.2	17.9	14.3	412	34	0.2534	387	2,000
Cochin	12 / 3.37	7 / 3.37	107.0	62.4	16.9	709	88	0.2259	429	2,000
Brahma	16 / 2.86	19 / 2.48	102.8	91.8	18.1	893	121	0.2162	448	2,000
Dorking	12 / 3.20	7 / 3.20	96.5	56.3	16.0	640	81	0.2502	402	2,000
Dotterel	12 / 3.08	7 / 3.08	89.4	52.2	15.4	593	75	0.2698	383	2,000
Pigeon	6 / 4.25	1 / 4.25	85.1	14.2	12.8	327	28	0.3196	334	2,000

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Technical Properties

Type	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						
	No. / mm	No. / mm	mm²	mm²						
Guinea	12 / 2.92	7 / 2.92	80.4	46.9	14.6	533	68	0.3002	358	2,000
Leghorn	12 / 2.69	7 / 2.69	68.2	39.8	13.5	452	58	0.3546	322	2,000
Quail	6 / 3.78	1 / 3.78	67.3	11.2	11.3	258	23	0.4030	287	2,000
Minorca	12 / 2.44	7 / 2.44	56.1	32.7	12.2	372	48	0.4307	284	2,000
Raven	6 / 3.37	1 / 3.37	53.5	8.9	10.1	205	19	0.5072	248	2,000
Patrel	12 / 2.34	7 / 2.34	51.6	30.1	11.7	342	44	0.4691	269	2,000
Robin	6 / 3.00	1 / 3.00	42.4	7.1	9.0	163	15	0.6404	214	2,000
Grouse	8 / 2.54	1 / 4.24	40.5	14.1	9.3	205	22	0.6360	217	2,000
Sparate	7 / 2.47	1 / 3.30	33.5	8.6	8.2	148	16	0.7852	189	2,000
Sparrow	6 / 2.67	1 / 2.67	33.6	5.6	8.0	129	12	0.8073	185	2,000
Swallow	6 / 2.38	1 / 2.38	26.7	4.4	7.1	102	10	1.034	158	2,000
Swanate	7 / 1.96	1 / 2.61	21.1	5.4	6.5	93	10	1.250	140	2,000
Swan	6 / 2.12	1 / 2.12	21.2	3.5	6.4	81	8	1.285	137	2,000

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