

## Aluminium Conductors Steel Reinforced (ACSR)



For transmission and distribution in electrical networks over long spans

Standard : DIN 48204 / ASTM B232 / BS 215 / EN50182

Conductor : A center galvanized steel wire(s) and Hard drawn stranded aluminium wires

### TECHNICAL INFORMATION A -ACCORDING TO ASTM - B232

Code Name	Nominal Cross mm <sup>2</sup>	Number & nominal wire diameter NR X mm		Approx. Overall mm	Approx. Conductor weight kg/km		Max DC Resistance ohm/km	Calculated Breaking KN
		Al	Steel		Al	Steel		
TURKEY	15.52	6*1.68	1*1.68	5.04	37	17	2.1045	5.28
THRUSH	19.64	6*1.89	1*1.89	5.67	46	22	1.6628	6.68
SWAN	24.71	6*2.12	1*2.12	6.36	58	27	1.3216	8.31
SWALLOW	31.14	6*2.38	1*2.38	7.14	73	35	1.0486	10.21
SPARROW	39.19	6*2.67	1*2.67	8.01	92	44	0.8332	12.69
ROBIN	49.48	6*3.00	1*3.00	9.00	116	55	0.6599	15.82
RAVEN	62.44	6*3.37	1*3.37	10.11	147	69	0.5230	19.36
QUAIL	78.55	6*3.78	1*3.78	11.34	185	185	0.4157	23.27
PIGEON	99.3	6*4.25	1*4.25	12.75	234	234	0.3288	29.42
PENGUIN	125.09	6*4.77	1*4.77	14.31	294	294	0.2610	37.06
WAXWING	142.48	18*3.09	1*3.09	15.45	372	372	0.2118	30.27
OWL	153	6*5.36	1*1.79	16.09	372	372	0.2078	42.95
PARTRIDGE	156.86	26*2.57	7*2.00	16.28	374	374	0.2096	50.24
OSTRICH	176.89	26*2.73	7*2.12	17.28	422	422	0.1858	56.56
MERLIN	179.68	18*3.47	1*3.47	17.35	470	74	0.1679	38.18
LINNET	198.38	26*2.89	7*2.25	18.31	473	217	0.1658	62.77
ORIOLE	210.27	30*2.69	7*2.69	18.83	474	311	0.1645	77.44
CHICKADEE	212.09	18*3.77	1*3.77	18.85	554	87	0.1423	43.37
BRANT	227.68	24*3.27	7*2.18	19.61	559	204	0.1409	64.73
IBIS	234.06	26*3.14	7*2.44	19.88	558	256	0.1404	72.07
LARK	247.77	30*2.92	7*2.92	20.44	557	366	0.1393	90.31
PELICAN	255.76	18*4.14	1*4.14	20.70	669	105	0.1180	52.31
FLICKER	272.98	24*3.58	7*2.39	21.49	670	245	0.1176	75.68
HAWK	281.12	26*3.44	7*2.68	21.80	670	308	0.1170	86.74
HEN	297.56	30*3.20	7*3.20	22.40	671	440	0.1162	105.18
OSPREY	298.16	18*4.47	1*4.47	22.35	779	122	0.1012	60.98

Code Name	Nominal Cross mm <sup>2</sup>	Number & nominal wire diameter		Approx. Overall mm	Approx. Conductor weight kg/km		Max DC Resistance ohm/km	Calculated Breaking KN
		Al	Steel		Al	Steel		
PARAKEET	318.89	24*3.87	7*2.58	23.22	783	286	0.1006	88.30
DOVE	328.49	26*3.72	7*2.89	23.55	783	359	0.1000	101.12
EAGLE	347.88	30*3.46	7*3.46	24.21	784	514	0.0994	122.97
PEACOCK	345.91	24*4.03	7*2.69	24.20	849	311	0.0928	95.88
SQUAB	355.62	26*3.87	7*3.01	24.51	848	389	0.9024	108.16
WOOD DUCK	378.7	30*3.61	7*3.61	25.25	853	560	0.0913	129.05
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TEAL	376.67	30*3.61	19*2.16	25.24	853	545	0.0914	133.39
KINGBIRD	340.95	18*4.78	1*4.78	23.88	891	140	0.0885	69.74
ROOK	364.94	24*4.14	7*2.76	24.84	896	327	0.0879	101.06
GROSBEAK	374.33	26*3.97	7*3.09	25.15	892	410	0.0878	111.89
SCOTER	397.82	30*3.70	7*3.09	25.88	897	588	0.0869	135.56
EGRET	396.1	30*3.70	19*2.22	25.90	897	576	0.0870	140.62
FLAMINGO	380.98	24*4.23	7*2.82	25.40	935	341	0.0842	105.50
GANNET	393.15	26*4.07	7*3.16	28.30	938	429	0.0836	117.28
CROW	408.48	54*2.92	7*2.92	26.28	1003	366	0.0785	115.21
STILT	410.12	24*4.39	7*2.92	26.31	1007	366	0.0782	113.36
STARLING	421.07	26*4.21	7*3.28	26.68	1003	462	0.0781	125.97

TECHNICAL INFORMATION B-ACCORDING TO DIN 48204 / EN50182

Nominal Cross Section mm <sup>2</sup>		Number & nominal wire diameter		Approx. Overall mm	Approx. Conductor weight kg/km		Max DC Resistance ohm/km	Calculated Breaking KN
Al	Steel	Al	Steel		Al	Steel		
16	2.5	6*1.80	1*1.80	5.40	42	20	1.8332	5.58
25	4	6*2.25	1*2.25	6.80	65	31	1.1732	8.56
35	6	6*2.70	1*2.70	8.10	94	45	0.8147	12.06
44	32	14*2.00	7*2.40	11.20	121	248	0.5932	43.20
50	8	6*3.20	1*3.20	9.60	132	63	0.5800	16.32
50	30	12*2.33	7*2.33	11.70	141	234	0.5189	42.27
70	12	26*2.85	7*1.44	11.70	193	89	0.4032	25.26
95	15	26*2.15	7*1.67	13.60	260	120	0.2986	33.42
95	55	12*3.20	7*3.20	16.00	266	441	0.2751	76.21
105	75	14*3.10	19*2.25	17.50	292	594	0.2471	101.67
120	20	26*2.44	7*1.90	15.50	335	156	0.2318	42.70
120	70	12*3.60	7*3.60	18.00	337	558	0.2174	93.51
125	30	30*2.33	7*2.33	16.10	353	234	0.2182	55.47
150	25	26*2.70	7*2.10	17.10	411	190	0.1893	51.65
170	40	30*2.70	7*2.70	18.90	474	314	0.1625	73.17

Nominal Cross Section mm <sup>2</sup>		Number & nominal wire diameter		Approx. Overall mm	Approx. Conductor weight kg/km		Max DC Resistance ohm/km	Calculated Breaking KN
Al	Steel	Al	Steel		Al	Steel		
185	30	26*3.00	7*2.33	19.00	507	234	0.1533	62.98
210	35	26*3.20	7*2.49	20.30	577	267	0.1347	71.20
210	50	30*3.00	7*3.00	21.00	585	388	0.1316	87.65
230	30	24*3.50	7*2.33	21.00	636	234	0.1225	69.44
240	40	26*3.45	7*2.68	21.90	670	309	0.1159	82.15
265	35	24*3.74	7*2.49	22.40	727	267	0.1073	78.81
300	50	26*3.86	7*3.00	24.50	839	388	0.0926	100.43
305	40	54*2.68	7*2.68	24.10	841	309	0.0930	94.35
340	30	48*3.00	7*2.33	25.00	936	234	0.0840	87.95
380	50	54*3.00	7*3.00	27.00	1054	388	0.0742	114.88
385	35	48*3.20	7*2.49	26.70	1065	267	0.0738	99.11
435	55	54*3.20	7*3.20	28.80	1199	441	0.0652	129.48
450	40	48*3.45	7*2.68	28.70	1238	309	0.0635	114.20
490	65	54*3.40	7*3.40	30.60	1354	498	0.0578	145.24
550	70	54*3.60	7*3.60	32.40	1518	558	0.0515	160.12
560	50	48*3.86	7*3.00	32.20	1550	388	0.0507	140.06
680	85	54*4.00	19*2.40	36.00	1874	676	0.0418	199.54

#### TECHNICAL INFORMATION C-ACCORDING TO ASTM B232

Code Name	Nominal Cross Section mm <sup>2</sup>	Number & nominal wire diameter N*d(mm)		Approx. Overall diameter mm	Approx. Conductor weight Kg/km		Max DC Resistance at 20°C ohm/km	Calculated Breaking Load KN
		Al	Steel		Al	Steel		
REDWING	444.46	30*3.92	19*2.35	27.43	1006	645	0.0775	153.69
TERN	431.59	45*3.38	7*2.25	27.03	1119	217	0.0710	97.48
CONDOR	454.47	54*3.08	7*3.08	27.72	1115	407	0.0706	124.35
CUCKOO	454.47	24*4.62	7*3.08	27.74	1115	407	0.0706	123.85
DRAKE	467.98	26*4.44	7*3.45	28.11	1116	511	0.0702	139.70
MALLARD	495.61	30*4.14	19*2.48	28.96	1122	718	0.0695	171.25
CRANE	499.82	54*3.23	7*3.23	29.07	1227	448	0.0642	136.75
RUDDY	487.16	45*3.59	7*2.40	28.73	1263	247	0.0629	109.39
CANARY	515.41	54*3.28	7*3.28	29.52	1265	462	0.0622	141.02
RAIL	517.37	45*3.70	7*2.47	29.61	1341	262	0.0592	116.09
CARDINAL	547.32	54*3.38	7*3.38	30.42	1343	491	0.0586	149.75
ORTLAN	560.17	45*3.85	7*2.57	30.81	1452	284	0.0547	123.30
CURLEW	493.6	54*3.52	7*3.52	31.68	1457	532	0.0540	162.41
BLUEJAY	604.37	45*4.00	7*2.66	31.98	1568	304	0.0507	132.73

Code Name	Nominal Cross Section mm <sup>2</sup>	Number & nominal wire diameter N*d(mm)		Approx. Overall diameter mm	Approx. Conductor weight Kg/km		Max DC Resistance at 20°C ohm/km	Calculated Breaking Load KN
		Al	Steel		Al	Steel		
FINCH	637.58	54*3.65	19*2.19	32.85	1574	560	0.0505	174.64
BUNTING	647.62	45*4.14	7*2.76	33.12	1680	327	0.0473	142.44
GRACKLE	679.66	54*3.77	19*2.27	33.97	1679	602	0.0473	184.22
BITTERN	689.04	45*4.27	7*2.85	34.17	1787	349	0.0445	151.66
PHEASANT	726.77	54*3.90	19*2.34	35.10	1797	639	0.0442	194.16
DIPPER	731.09	45*4.40	7*2.92	35.16	1897	366	0.0419	160.37
MARTIN	772.04	54*4.02	19*2.41	36.17	1910	678	0.0416	206.12
BOBOLINK	775.39	45*4.53	7*3.02	36.24	2011	392	0.0395	170.55
PLOVER	818.67	54*4.14	19*2.48	37.24	2025	718	0.0393	218.44
NUTHATCH	817.01	45*4.65	7*3.10	37.20	2119	413	0.0375	177.67
PARROT	863.07	54*4.25	19*2.55	38.25	2134	759	0.0372	230.57
LEPWING	859.72	45*4.77	7*3.18	38.16	2230	434	0.0356	186.95
FALCON	908.63	54*4.36	19*2.62	39.26	2246	802	0.0354	243.04
CKUKAR	976.69	84*3.70	19*2.22	40.70	2516	576	0.0318	227.83

#### TECHNICAL INFORMATION D-ACCORDING TO ASTM B232

Code Name	Nominal Cross Section mm <sup>2</sup>	Number & nominal wire diameter N*d(mm)		Approx. Overall diameter mm	Approx. Conductor weight Kg/km		Max DC Resistance at 20°C ohm/km	Calculated Breaking Load KN
		Al	Steel		Al	Steel		
GROUSE	54.65	8*2.54	1*4.24	9.32	112	110	0.6758	22.87
PETREL	81.71	12*2.34	7*2.34	11.71	143	236	0.5544	46.16
MINORCA	88.84	12*2.44	7*2.44	12.22	156	256	0.5099	50.19
LEGHORN	107.98	12*2.69	7*2.69	13.46	189	312	0.4195	60.68
GUINEA	127.23	12*2.92	7*2.92	14.63	223	367	0.3560	71.12
DOTTEREL	141.56	12*3.08	7*3.08	15.42	248	408	0.3200	76.69
DORKING	152.8	12*3.20	7*3.20	16.03	268	441	0.2964	82.78
COCHIN	169.47	12*3.37	7*3.37	16.84	297	489	0.2673	91.81
BRAHMA	194.56	16*2.86	19*2.48	18.14	285	720	0.2798	126.55

#### TECHNICAL INFORMATION D-ACCORDING TO BS 215 / EN 50182

Code Name	Nominal Cross Section mm <sup>2</sup>	Number & nominal wire diameter N*d(mm)		Approx. Overall diameter mm	Approx. Conductor weight Kg/km		Max DC Resistance at 20°C ohm/km	Calculated Breaking Load KN
		Al	Steel		Al	Steel		
MOLE	12.37	6*1.50	1*1.50	4.50	29	14	2.6398	4.13
AQUIRREL	24.48	6*2.11	1*2.11	6.33	58	27	1.3341	7.90
GOHPER	30.62	6*2.36	1*2.36	7.08	72	34	1.0664	9.61

Code Name	Nominal Cross Section mm <sup>2</sup>	Number & nominal wire diameter N*d(mm)		Approx. Overall diameter mm	Approx. Conductor weight Kg/km		Max DC Resistance at 20°C ohm/km	Calculated Breaking Load KN
		Al	Steel		Al	Steel		
WEASEL	36.88	6*2.59	1*2.59	7.77	87	41	0.8854	11.35
FOX	42.79	6*2.79	1*2.79	8.37	101	48	0.7630	13.17
FERRET	49.48	6*3.00	1*3.00	9.00	116	55	0.6599	15.23
RABBIT	61.7	6*3.35	1*3.35	10.05	145	69	0.5292	18.37
MINK	73.64	6*3.66	1*3.66	10.98	173	82	0.4434	21.80
SHUNK	100.1	12*2.59	7*2.59	12.95	175	288	0.4200	52.74
BEAVER	87.52	6*3.99	1*3.99	11.97	206	97	0.3730	25.76
HORSE	116.16	12*2.79	7*2.79	13.95	203	334	0.3619	61.19
RACCOON	92.42	6*4.10	1*4.10	12.30	217	103	0.3533	27.20
OTTER	97.9	6*4.22	1*4.22	12.66	230	109	0.3335	28.82
CAT	111.33	6*4.50	1*4.50	13.50	262	124	0.2933	32.76
HARE	122.48	6*4.72	1*4.72	14.16	288	136	0.2666	35.94
DOG	118.53	6*4.72	7*1.57	14.15	288	106	0.2681	32.69
HYENA	126.43	7*4.39	7*1.93	14.57	291	160	0.2631	41.13
LEOPARD	148.21	6*5.28	7*1.75	15.81	360	132	0.2143	40.77
COYOTE	151.8	26*2.54	7*1.91	15.89	364		0.2144	45.93
COUGAR	138.81	18*3.05	1*3.05	15.25	362		0.2171	30.56
TIGER	161.85	30*2.36	7*2.36	16.52	363	239	0.2127	58.02
WOLF	194.93	30*2.59	7*2.59	18.13	437	288	0.1766	69.24
	167.46	18*3.35	1*3.35	16.75	437	69	0.1800	33.93
LYNX	226.2	30*2.79	7*2.79	19.53	507	334	0.1522	79.80
	194.47	18*3.61	1*3.61	18.05	508	80	0.1550	39.06
PANTHER	261.53	30*2.00	7*3.00	21.00	586	387	0.1316	92.26
LION	293.85	30*3.18	7*3.18	22.26	658	435	0.1171	100.49
BEAR	326.11	30*3.35	7*3.35	23.45	731	482	0.1055	111.26
GOAT	399.97	30*3.71	7*3.71	25.97	896	591	0.0861	135.80
SHEEP	462.62	30*3.99	7*3.99	27.93	1036	684	0.0744	156.32
ANTELOPE	422.59	54*2.97	7*2.97	26.73	1015	379	0.0744	118.53
BISON	431.17	54*3.00	7*3.00	27.00	1036	387	0.0729	118.95
	222.33	18*3.86	1*3.86	19.30	580	91	0.1355	44.26
DEER	529.83	30*4.27	7*4.27	29.89	1187	783	0.0649	178.60
ZEBRA	484.46	54*3.18	7*3.18	28.62	1164	435	0.0649	131.94
ELK	588.44	30*4.50	7*4.50	31.50	1318	870	0.0585	198.36
CAMEL	537.65	54*3.35	7*3.35	30.15	1292	482	0.0585	145.95
MOOSE	596.98	54*3.53	7*3.53	31.77	1434	535	0.0527	161.00