

Specification: SANS 182-3

Voltage Rating: N/A

Type: ACSR

Size Code	Unit	Squirrel	Gopher	Weasel	Fox	Ferret	Rabbit	Mink	Beaver	Racoon	Otter	Cat	Hare
Stranding & Wire Diameter	mm	6/1x2.11	6/1x2.36	6/1x2.59	6/1x2.79	6/1x3.00	6/1x3.35	6/1x3.66	6/1x3.99	6/1x4.09	6/1x4.22	6/1x4.50	6/1x4.72
Steel Diameter	mm	2.11	2.36	2.59	2.79	3.00	3.35	3.66	3.99	4.09	4.22	4.50	4.72
Conductor Diameter	mm	6.33	7.08	7.77	8.37	9.00	10.05	10.98	11.97	12.27	12.66	13.50	14.16
Aluminium Area	mm ²	20.98	26.25	31.61	36.68	42.41	52.88	63.13	75.02	78.83	83.92	95.43	104.98
Steel Area	mm ²	3.50	4.37	5.27	6.11	7.07	8.81	10.52	1.50	13.14	13.99	15.90	17.50
Total Area	mm ²	24.48	30.62	36.88	42.80	49.48	61.70	73.65	87.53	91.97	97.91	111.33	122.48
Aluminium Mass	Kg/km	57.70	72.20	87.00	101	117	145	174	206	217	231	263	289
Steel Mass	Kg/km	27.50	34.40	41.50	48.10	55.60	69.40	82.80	98.40	103	110	125	138
Total Mass	Kg/km	85.20	107	129	149	173	214	257	304	320	341	388	427
Ultimate Tensile Strength	Newton	8020	9610	11450	13100	15200	18500	21900	25900	27200	28900	32800	36000
Coefficient of Linear Expansion	/°Cx10 ⁻⁶	19.31	19.31	19.31	19.31	19.31	19.31	19.31	19.31	19.31	19.31	19.31	19.31
Initial Modules of Elasticity	MPa	54600	52700	51500	50700	50200	49500	49100	48800	48700	48700	48500	48500
Final Modules of Elasticity	MPa	80400	80400	80400	80400	80400	80400	80400	80400	80400	80400	80400	80400
DC Resistance @ 20°C	Ω/km	1.3677	1.0933	0.9077	0.7822	0.6766	0.5426	0.4546	0.3825	0.3640	0.3419	0.3007	0.2733
Current Rating	Amp	130	150	170	190	210	240	260	290	300	310	340	360
Short Circuit Current Rating	kA.1s	2.87	3.23	3.57	3.86	4.17	4.68	5.14	5.63	5.78	5.98	6.40	6.73



Size Code	Unit	Dog	Hyena	Leopard	Skunk	Horse	Merlin	Chicadee	Pelican	Kingbird	Coyote	Tiger	Wolf
Stranding & Wire Diameter	mm	6/4.72+7/1.57	7/4.39+7/1.93	6/5.28+7/1.75	12/7x2.59	12/7/2.79	18/1/3.47	18/1/3.77	18/1/4.14	18/1/4.78	26/2.54+7/1.91	30/7/2.36	30/7/2.59
Steel Diameter	mm	4.77.081	5.79	5.25	7.77	8.37	3.47	3.77	4.14	4.78	5.78	7.08	7.77
Conductor Diameter	mm	14.15	14.57	15.81	12.95	13.95	17.37	18.87	20.70	23.90	15.89	16.52	18.13
Aluminium Area	mm ²	104.98	105.95	131.37	63.22	73.36	170.22	200.93	242.31	323.01	131.74	131.23	158.06
Steel Area	mm ²	12.70	20.48	16.84	36.88	42.80	9.46	11.16	13.46	17.96	20.06	30.62	36.88
Total Area	mm ²	117.69	126.43	148.21	100.10	116.16	179.68	212.09	255.77	340.96	15180	161.85	194.94
Aluminium Mass	Kg/km	289	291	361	175	203	470	555	569	889.1	365	364	438
Steel Mass	Kg/km	100	162	133	292	338	74.40	87.90	106	141.2	159	242	292
Total Mass	Kg/km	389	453	494	467	541	544	643	775	1030.3	524	606	730
Ultimate Tensile Strength	Newton	34700	41900	42200	52900	60700	38300	44900	53800	71320	47300	58700	68200
Coefficient of Linear Expansion	1/°C x 10 ⁻⁶	19.92	18.93	19.54	15.84	15.84	21.44	21.44	21.44	21.69	19.54	18.43	18.43
Initial Modulus of Elasticity	MPa	48800	52400	47800	71900	71000	41300	41000	40700	40400	51900	56900	55700
Final Modulus of Elasticity	MPa	76400	82200	76300	108000	108000	66200	66200	66200	66200	76000	83400	83400
DC Resistance @ 20°C	Ω/km	0.2733	0.2697	0.2184	0.4571	0.3939	0.1686	0.1427	0.1189	0.0891	0.3035	0.2202	0.1828
Current Rating	Amp	360	360	410	270	300	480	530	600	760	420	420	470
Short Circuit Current Rating	kA.1s	6.73	6.76	7.57	5.14	5.82	8.02	9.47	10.45	12.16	7.63	7.56	8.02



Size Code	Unit	Lynx	Lark	Panther	Lion	Bear	Goat	Sheep	Deer	Elk	Tern	Rail
Stranding & Wire Diameter	mm	30/7/2.79	30/7/2.92	30/7/3.00	30/7/3.18	30/7/3.35	30/7/3.71	30/7/3.99	30/7/4.27	30/7/4.50	45/3.38+7/2.25	45/3.70+7/2.47
Steel Diameter	mm	8.37	8.76	9.00	9.54	10.05	11.13	11.97	12.81	13.50	6.75	7.41
Conductor Diameter	mm	19.53	20.44	21.0	22.26	23.45	25.97	27.93	29.89	31.50	27.0	29.59
Aluminium Area	mm ²	183.41	200.90	212.06	238.27	264.42	324.31	375.11	429.60	477.13	431.60	483.84
Steel Area	mm ²	42.80	46.88	49.48	55.60	61.70	75.67	87.53	100.24	111.33	27.83	33.54
Total Area	mm ²	226.20	247.77	261.54	293.86	326.12	399.98	462.63	529.84	588.46	431.60	517.39
Aluminium Mass	Kg/km	508	557	588	680	733	899	1040	1190	1320	1120	1340
Steel Mass	Kg/km	330	371	391	440	488	598	692	792	880	220	265
Total Mass	Kg/km	846	928	970	1100	1220	1500	1730	1980	2200	1340	1610
Ultimate Tensile Strength	Newton	79300	86300	90800	101000	112000	136000	157000	179000	199000	98700	117000
Coefficient of Linear Expansion	/°Cx10 ⁻⁶	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	21.12	21.11
Initial Modules of Elasticity	MPa	54900	54500	54300	53900	53600	53100	52900	52800	52700	42900	42400
Final Modules of Elasticity	MPa	83400	83400	83400	83400	83400	83400	83400	83400	83400	66600	66700
DC Resistance @ 20°C	Ω/km	0.1576	0.1438	0.1363	0.1213	0.1093	0.0891	0.0770	0.0673	0.0606	0.0718	0.0598
Current Rating	Amp	520	550	560	610	650	730	800	870	930	830	920
Short Circuit Current Rating	kA.1s	9.03	9.70	9.74	10.36	10.94	12.18	13.15	14.13	14.93	13.81	15.19



Size Code	Unit	Lapwing	Bersford	Antelope	Bison	Zebra	Camel	Moose	Dinosaur
Stranding & Wire Diameter	mm	30/7/2.79	48/4.27+7/3.32	54/7/2.97	54/7/3.00	54/7/3.18	54/7/3.35	54/7/3.53	54/3.95+19/2.37
Steel Diameter	mm	8.37	9.96	8.91	9.00	9.54	10.05	10.59	11.80
Conductor Diameter	mm	19.53	35.58	26.73	27.00	28.62	30.15	31.77	35.50
Aluminium Area	mm ²	183.41	687.36	374.11	381.70	428.88	475.96	528.49	661.73
Steel Area	mm ²	42.80	6.60	48.50	49.48	55.60	61.70	68.51	83.11
Total Area	mm ²	226.20	747.96	422.60	431.18	484.48	537.66	596.9	744.84
Aluminium Mass	Kg/km	508	1906	1040	1060	1190	1320	1460	1835
Steel Mass	Kg/km	330	480	383	391	440	488	542	658
Total Mass	Kg/km	846	2386	1420	1450	1630	1810	2000	2493
Ultimate Tensile Strength	Newton	79300	177650	117000	119000	133000	147000	162000	202920
Coefficient of Linear Expansion	/°Cx10 ⁻⁶	18.43	20.68	19.91	19.91	19.91	19.91	19.91	19.91
Initial Modules of Elasticity	MPa	54900	43200	47700	47600	47300	47000	46700	46700
Final Modules of Elasticity	MPa	83400	68800	73200	73200	73200	73200	73200	72200
DC Resistance @ 20°C	Ω/km	0.1576	0.0420	0.0773	0.0757	0.0674	0.0607	0.0547	0.0437
Current Rating	Amp	520	1132	790	800	860	920	980	1110
Short Circuit Current Rating	kA.1s	9.03	18.27	13.14	13.23	14.11	14.93	15.75	17.73

