

Specification: SANS 182-2
Voltage Rating: N/A
Type: AAC

Size Code	Unit	Gnat	Mosquito	Ladybird	Ant	Fly	Bluebottle	Grasshopper	Clegg	Wasp	Bee
Stranding & Wire Diameter	mm	7/2.21	7/2.59	7/2.79	7/3.010	7/3.40	7/3.66	7/3.91	7/4.17	7/4.39	7/4.90
Conductor Diameter	mm	6.63	7.77	8.37	9.30	10.20	10.98	11.73	12.51	13.17	14.70
Aluminium Area	mm ²	26.85	36.88	42.80	52.83	63.55	73.65	84.05	95.60	105.95	132.00
Aluminium Mass	Kg/km	73.70	101	117	145	174	202	231	262	291	362
Ultimate Tensile Strength	Newton	4860	6360	7250	8770	10400	12000	13600	15400	17000	21000
Coefficient of Linear Expansion	1/°Cx10 ⁻⁶	23	23	23	23	23	23	23	23	23	23
Initial Modules of Elasticity	MPa	52400	52400	52400	52400	52400	52400	52400	52400	52400	52400
Final Modules of Elasticity	MPa	61000	61000	61000	61000	61000	61000	61000	61000	61000	61000
DC Resistance @ 20°C	Ω/km	1.0662	0.7763	0.6690	0.5419	0.4505	0.3887	0.3406	0.2995	0.2702	0.2169
Current Rating	Amp	152	185	203	231	259	284	308	334	356	408
Short Circuit Current Rating	kA.1s	3.30	3.64	4.22	4.72	5.61	5.61	5.98	6.35	6.82	7.65



Size Code	Unit	Cricket	Beetle	Hornet	Caterpillar	Chafer	Spider	Cockroach	Butterfly	Moth	Locust
Stranding & Wire Diameter	mm	7/5.36	19/2.67	19/3.25	19/3.53	19/3.78	19/3.99	19/4.22	19/4.65	19/5.00	19/5.36
Conductor Diameter	mm	16.08	13.35	16.25	17.65	18.90	19.95	21.10	23.25	25.00	26.80
Aluminium Area	mm ²	157.95	106.38	157.62	185.95	213.22	237.57	265.75	322.66	373.06	428.72
Aluminium Mass	Kg/km	434	293	435	513	588	655	733	890	1030	1180
Ultimate Tensile Strength	Newton	25100	18200	26000	30300	34500	38300	42700	51500	59400	68200
Coefficient of Linear Expansion	/°Cx10 ⁻⁶	23	23	23	23	23	23	23	23	23	23
Initial Modules of Elasticity	MPa	52400	49650	49650	49650	49650	49650	49650	48650	49650	40650
Final Modules of Elasticity	MPa	61000	59650	59650	59650	59650	59650	59650	59650	59650	59650
DC Resistance @ 20°C	Ω/km	0.1813	0.2704	0.1825	0.1547	0.1349	0.1211	0.1083	0.0892	0.0771	0.0671
Current Rating	Amp	456	358	457	506	551	589	632	713	779	849
Short Circuit Current Rating	kA.1s	8.42	6.93	8.42	9.17	9.56	9.90	11.07	12.20	12.62	14.24



Size Code	Unit	Drone	Centipede	Maybug	Scorpion	Cicada	Tarantula	Bull
Stranding & Wire Diameter	mm	37/3.58	37/3.78	37/4.09	37/4.27	37/4.65	37/5.23	61/2.26
Conductor Diameter	mm	25.06	26.46	28.63	29.89	32.55	36.61	38.34
Aluminium Area	mm ²	372.44	415.22	486.11	529.84	628.34	794.87	869.44
Aluminium Mass	Kg/km	1030	1150	1340	1460	1740	2200	2400
Ultimate Tensile Strength	Newton	60600	67200	78200	85000	100000	126000	139000
Coefficient of Linear Expansion	/°Cx10 ⁻⁶	23	23	23	23	23	23	23
Initial Modules of Elasticity	MPa	48250	48250	48250	48250	48250	48250	46200
Final Modules of Elasticity	MPa	58600	58600	58600	58600	58600	58600	57570
DC Resistance @ 20°C	Ω/km	0.0774	0.0694	0.0593	0.0544	0.0459	0.0363	0.0334
Current Rating	Amp	779	883	918	967	1070	1230	1300
Short Circuit Current Rating	kA.1s	12.59	14.05	15.21	15.93	17.41	18.98	20.67

