Solid sector shaped Aluminium conductor

180°: 2 core, 120°: 3 core and 90°: 4 core

Specification(s):	SANS 1411-1

Material properties

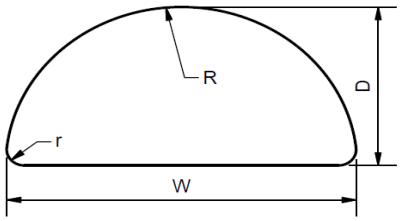
Aluminium		
Grade		**99.7 EC**
Density / Specific gravity (nominal)	g/cm^3	2.7
Tensile strength (maximum)	Mpa	95
Conductivity	Min.	62.3
Volume resistivity @ 20°C	Ω.m	2.826x10^{-8}
Specific heat	KJ/kg/K	0.904
Melt point	°C	658

Chemical properties

	Min. %	Nom. %	Max. %
Al	99.650	99.700	-
Si	-	-	0.100
Fe	0.160	0.220	0.280
B	0.003	0.005	0.020
Other	-	-	0.013

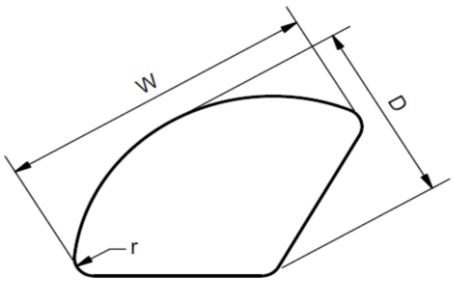
180° 2 core

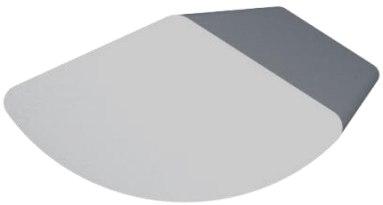
Conductor size mm²	Depth (D)		Width (W)		Radii nominal		Conductor resistance Ω/km at 20°C
	Minimum mm	Maximum mm	Minimum mm	Maximum mm	Back (R) mm	Corner (r) mm	
25	3.56	3.74	8.36	8.66	4.50	0.50	0.795
35	4.20	4.44	9.74	10.12	5.20	0.52	0.565
50	4.95	5.21	11.24	11.66	5.96	0.59	0.393
70	6.03	6.31	13.40	13.88	7.05	0.70	0.277
95	7.16	7.47	15.68	16.21	8.20	0.82	0.210
120	8.10	8.44	17.65	18.13	9.16	0.91	0.164
150	8.95	9.31	15.57	20.20	10.22	1.02	0.132
185	10.08	10.47	21.83	22.51	11.37	1.13	0.108
240	11.59	12.02	25.00	25.77	13.00	1.30	0.0817
300	13.04	13.50	27.88	28.72	14.47	1.44	0.0654



120° 3 core

Conductor size mm²	Depth (D)		Width (W)		Radii nominal		Conductor resistance Ω/km at 20°C
	Minimum mm	Maximum mm	Minimum mm	Maximum mm	Back (R) mm	Corner (r) mm	
25	4.51	4.71	8.02	8.30	5.67	0.56	0.795
35	5.29	5.56	9.39	9.76	6.53	0.65	0.565
50	6.19	6.48	10.90	11.31	7.47	0.74	0.393
70	7.46	7.82	13.09	13.55	8.81	0.88	0.277
95	8.87	9.23	15.39	15.92	10.24	1.02	0.210
120	10.02	10.40	17.29	17.87	11.41	1.14	0.164
150	11.10	11.51	19.22	19.84	12.76	1.27	0.132
185	12.46	12.91	21.51	22.19	14.17	1.41	0.108
240	14.31	14.81	24.66	25.42	16.20	1.62	0.0817
300	16.06	16.60	27.59	28.42	18.01	1.80	0.0654





90° 4 core

Conductor size mm²	Depth (D)		Width (W)		Radii nominal		Conductor resistance Ω/km at 20°C
	Minimum mm	Maximum mm	Minimum mm	Maximum mm	Back (R) mm	Corner (r) mm	
25	5.12	5.33	7.26	7.52	6.71	0.67	0.795
35	6.02	6.30	8.52	8.87	7.71	0.77	0.565
50	7.04	7.35	9.93	10.31	8.79	0.87	0.393
70	8.51	8.86	11.95	12.38	10.35	1.03	0.277
95	10.06	10.45	14.08	14.57	12.00	1.20	0.210
120	11.35	11.77	15.85	16.38	13.36	1.33	0.164
150	12.58	13.03	17.59	18.17	14.95	1.49	0.132
185	14.11	14.60	19.71	20.34	16.59	1.65	0.108
240	16.21	16.76	22.60	23.31	18.96	1.89	0.0817
300	18.18	18.78	25.31	26.09	21.06	2.10	0.0654