

## PRODUCT CATALOG – AACSR (Aluminum Alloy Conductor, Steel Reinforced)

ASTM CONDUCTOR SIZES										
Conductor Area mm <sup>2</sup>	Alloy Area mm <sup>2</sup>	Steel Area mm <sup>2</sup>	No. of Alloy Wires	Dia of Alloy Wire mm	No. of Steel Wires	Dia of Steel Wire mm	Dia of Conductor mm	Linear Weight Kg/km	Rated Strength * daN	Maximum DC Resistance at 20 °C ?/km
163	140	23	26	2.62	7	2.04	16.6	560	7500	0.240
173	140	33	30	2.44	7	2.44	17.1	650	8740	0.240
186	160	26	26	2.80	7	2.18	17.7	645	8560	0.210
198	160	38	30	2.61	7	2.61	18.3	740	10600	0.210
209	180	29	26	2.97	7	2.31	18.8	725	9510	0.187
222	180	42	30	2.76	7	2.76	19.3	825	11200	0.187
232	200	32	26	3.13	7	2.43	19.8	800	10600	0.168
247	200	47	30	2.91	7	2.91	20.4	920	12400	0.168
260	224	36	26	3.31	7	2.57	21.0	900	11800	0.150
276	224	52	30	3.08	7	3.08	21.6	1025	13900	0.150
291	250	41	26	3.50	7	2.72	22.2	1010	12900	0.135
308	250	58	30	3.26	7	3.26	22.8	1145	15600	0.135
326	280	46	26	3.70	7	2.88	23.4	1140	14400	0.120
345	280	65	30	3.45	7	3.45	24.2	1280	17100	0.120
367	315	52	26	3.93	7	3.06	24.9	1276	16300	0.107
387	315	72	30	3.66	19	2.20	25.6	1433	19000	0.107
413	355	58	26	4.17	7	3.24	26.4	1433	18300	0.0950
436	355	81	30	3.88	19	2.33	27.2	1614	21100	0.0950
465	400	65	26	4.43	7	3.45	28.1	1612	20700	0.0842
491	400	91	30	4.12	19	2.47	28.8	1816	23700	0.0842
509	450	59	54	3.26	19	1.96	29.5	1703	21500	0.0748
563	500	63	54	3.43	19	2.06	30.9	1873	22900	0.0673
631	560	71	54	3.63	19	2.18	32.7	2101	25700	0.0601
710	630	80	54	3.85	19	2.31	34.6	2365	28600	0.0534
800	710	90	54	4.09	19	2.45	36.8	2665	32200	0.0474
901	800	101	54	4.34	19	2.60	39.0	3000	36300	0.0420
973	900	73	84	3.69	19	2.21	40.6	3062	35500	0.0374
1081	1000	81	84	3.89	19	2.33	42.8	3395	39100	0.0337
1211	1120	91	84	4.12	19	2.47	45.3	3803	43900	0.0300
1352	1250	102	84	4.35	19	2.61	47.8	4250	49000	0.0270

\* For zinc coating Class A

FRENCH CONDUCTOR SIZES														
Equal steel and Aluminum wire diameter														
Code Name	Al Alloy Area mm <sup>2</sup>	Steel Wire Area mm <sup>2</sup>	No. Of Al Alloy Wires	No. Of St Wires	Dia of Wire mm	Overall Dia of Conductor mm	Tens		Rated Str of Conductor daN	Max DC Resist at 20 °C ? /km	Linear Weight Kg/km	Elasticity Mod * hbar	Coefficient Of Linear Expansion * / °C	
							Str of Al Alloy hbar	Str of Steel hbar						
PHLOX	37.7	28.27	9	3	2.00	8.3	32.4	156.8	2360	1.17	155	9300	17.0 x 10-1	
PHLOX	59.7	37.70	12	7	2.00	10.0	32.4	156.8	4560	0.880	276	10800	15.3 x 106	
PHLOX	75.5	47.71	12	7	2.25	11.25	32.4	156.8	5770	0.695	348	10800	15.3 X 10-6	
PHLOX	116.2	56.55	18	19	2.00	14.0	32.4	156.8	10815	0.580	636	12400	14.2 x 10-6	
PHLOX	147.1	71.57	18	19	2.25	15.75	32.4	156.8	13685	0.466	802	12400	14.2 X 10-6	
PASTEL	147.1	119.28	30	7	2.25	15.75	32.4	156.8	8185	0.279	547	8400	18.1 x 10-6	
PHLOX	181.6	88.36	18	19	2.50	17.5	32.4	156.8	16895	0.378	990	12400	14.2 x 10 6	
PASTEL	181.6	147.26	30	7	2.50	17.5	32.4	156.8	10120	0.227	675	8400	18.1 x 10-1	
PHLOX	228	110.83	18	19	2.80	19.6	32.4	156.8	21200	0.300	1244	12400	14.2 x 10-1	
PASTEL	228	184.72	30	7	2.80	19.6	32.4	156.8	12680	0.180	848	8400	18.1 x 101	
PHLOX	288	140.28	18	19	3.15	22.05	32.4	156.8	26800	0.237	1570	12400	14.2 x 101	
PASTEL	288	233.80	30	7	3.15	22.05	32.4	156.8	16050	0.142	1074	8400	18.0 x 101	
PASTEL	299	205.17	42	19	2.50	22.5	32.4	156.8	20875	0.162	1320	9650	16.3 x 10-1	
PHLOX	376	147.78	24	37	2.80	25.2	32.4	156.8	38960	0.225	2211	13000	13.5 x 10-1	

FRENCH CONDUCTOR SIZES													
Non-equal steel and aluminum wire diameter													
Code Name me	Al Alloy Area mm <sup>2</sup>	Steel Area mm <sup>2</sup>	No. & Dia Of Al Alloy Wires	No. & Dia of Steel Wires	Overall Dia of Conductor mm	Tens		Rated Str of Conductor daN	Max DC Resist at 20 °C ? /km	Linear Weig ht Kg/k m	Elast Mod * hbar	Coefficient Of Linear Expansion * / °C	
						Str of Al Alloy hbar	Str of Steel hbar						
PHLOX	94.1	51.95	15 x 2.10	19 x 1.68	12.8	32.4	156.8	8035	0.642	481	11200	14.7 x 10 1	
PASTEL	412	325.72	32 x 3.60	19 x 2.40	26.4	32.4	156.8	23830	0.103	1593	8200	17.8 x 10-1	
PETUNIA	612	507.80	66 x 3.13	19 x 2.65	32.1	32.4	156.8	32830	0.0657	2241	7750	18.6 x 101	
PETUNIA	865	717.33	66 x 3.72 5	19 x 3.1	38.1	32.4	156.8	46000	0.0465	3174	7750	18.5 x 101	
POLYGONUM	1185	956.66	54 x 2.80 66 x 3.47	37 x 2.80	44.7	32.4	156.8	66385	0.0349	4475	7750	18.1 x 101	

\* These values are given for information only

GERMAN CONDUCTOR SIZES										
Conductor Size Mm <sup>2</sup>	Alloy Area Mm <sup>2</sup>	Steel Area Mm <sup>2</sup>	No. of Alloy Wires	Diameter		Overall Diameter of Conductor mm	Linear Weight Kg/km	Rated Strength * daN	Max DO Resistance at 20 °C ?/km	
				of Alloy Wire mm	No. of Steel Wires					Diameter of Steel Wire mm
16/2.5	15.27	2.54	6	1.80	1	1.80	5.4	62	748	2.1800
25/4	23.86	3.98	6	2.25	1	2.25	6.8	97	1171	1.3952
35/6	34.35	5.73	6	2.70	4	2.70	8.1	140	1685	0.9689
44/32	43.98	31.67	14	2.00	7	2.40	11.2	373	5027	0.7625
50/8	48.25	8.04	6	3.20	1	3.20	9.6	196	2366	0.6898
50/30	51.17	29.85	12	2.33	7	2.33	11.7	378	5024	0.6547
70/12	69.89	11.40	26	1.85	7	1.44	11.7	284	3399	0.4791
95/15	94.39	15.33	26	2.15	7	1.67	13.6	383	4582	0.3547
95/55	96.51	56.30	12	3.20	7	3.20	16.0	714	9475	0.3471
105/75	105.67	75.55	14	3.10	19	2.25	17.5	899	12014	0.3174
120/20	121.57	19.85	26	2.44	7	1.90	15.5	494	5914	0.2754
120/170	122.15	71.25	12	3.60	7	3.60	18.0	904	11912	0.2742
125/30	127.92	29.85	30	2.33	7	2.33	16.3	590	7280	0.2621
150/25	148.86	24.25	26	2.70	7	2.10	17.1	604	7236	0.2249
170/40	171.77	40.08	30	2.70	7	2.70	18.9	794	9775	0.1952
185/30	183.78	29.85	26	3.00	7	2.33	19.0	744	8922	0.1822
210/35	209.10	34.09	26	3.20	7	2.49	20.3	848	10167	0.1601
210/50	212.06	49.48	30	3.00	7	3.00	21.0	979	12068	0.1581
230/30	230.91	29.85	24	3.50	7	2.33	21.0	874	10308	0.1449
240/40	243.05	39.49	26	3.45	7	2.68	21.8	985	11802	0.1378
265/35	263.66	34.09	24	3.74	7	2.49	22.4	998	11771	0.1269
300/50	304.26	49.48	26	3.86	7	3.00	24.5	1233	14779	0.1101
305/40	304.62	39.49	54	2.68	7	2.68	24.1	1155	13612	0.1101
340/30	339.29	29.85	48	3.00	7	2.33	25.0	1174	13494	0.0988
380/50	381.70	49.48	54	3.00	7	3.00	27.0	1448	17056	0.0879
385/35	386.04	34.09	48	3.20	7	2.49	26.7	1336	15369	0.0868
435/55	434.29	56.30	54	3.20	7	3.20	28.8	1647	19406	0.0772
450/40	448.71	39.49	48	3.45	7	2.68	28.7	1553	17848	0.0747
490/65	490.28	63.55	54	3.40	7	3.40	30.6	1860	21907	0.0684
550/70	549.65	71.25	54	3.60	7	3.60	32.4	2085	24560	0.0610
560/50	561.70	49.48	48	3.86	7	3.00	32.2	1943	22348	0.0597
680/85	678.58	85.95	54	4.00	19	2.40	36.0	2564	30084	0.0494

\* For stahl 111 (DIN 48200)