

ALL ALUMINIUM CONDUCTOR (AAC)



APPLICATION

AAC conductor is also known as aluminium stranded conductor. It is manufactured from electrolytically refined aluminium, with a minimum purity of 99.7%. AAC is used mainly in urban areas where the spacing is short and the supports are close. All aluminium conductors are made up of one or more strands of aluminium wire depending on the end usage. AAC is also used extensively in coastal regions because it has a high degree of corrosion resistance.

CONSTRUCTION

Conductor

Hard drawn aluminium conductor as per EN 60889 Type AL1

STANDARDS

DIN 48201, BS 215, UNE 21.018



METSEC



Scan QR Code

DIN 48201

CODE	SECTION	STRANDING		OVERALL DIAMETER	RATED STRENGTH N	ELECTRICAL RESISTANCE	CABLE WEIGHT	CURRENT CARRYING CAPACITY
	mm ²	No	Q mm	mm		ohms/km	kg/km	(1) Amps
16	15.89	7	1.7	5.1	2840	1.8018	44	110
25	24.25	7	2.1	6.3	4170	1.1808	67	145
35	34.46	7	2.5	7.5	5740	0.8332	94	180
50	49.48	7	3	9	7950	0.5786	135	225
50	48.36	19	1.8	9	8440	0.595	133	225
70	65.82	19	2.1	10.5	11250	0.4371	181	270
95	93.27	19	2.5	12.5	15650	0.3085	256	340
120	117	19	2.8	14	18750	0.2459	322	390
150	147.1	37	2.25	15.7	25250	0.1961	406	455
185	181.6	37	2.5	17.5	30450	0.1587	501	520
240	242.5	61	2.25	20.2	39350	0.1192	670	625
300	299.4	61	2.5	22.5	47550	0.0965	827	710
400	400.1	61	2.89	26	60700	0.0722	1105	855
500	499.8	61	3.23	29.1	74500	0.0578	1381	990
625	626.3	91	2.96	32.6	95000	0.0462	1733	1140
800	802.1	91	3.35	36.8	118200	0.0361	2219	1340
1000	999.7	91	3.74	41.1	145500	0.029	2766	1540

BS 215

CODE	SECTION		STRANDING		OVERALL DIAMETER	RATED STRENGTH N	ELECTRICAL RESISTANCE	CONDUCTOR WEIGHT
	mm ²		No	Q mm	mm		ohms/km	kg/km
	Nominal	Theoretical						
MIDGE	22	23.33	7	2.06	6.18	3990	1.227	64
ANT	50	52.83	7	3.1	9.3	8280	0.5419	145
FLY	60	63.55	7	3.4	10.2	9900	0.4505	174
WASP	100	106	7	4.39	13.17	16000	0.2702	290
HORNET	150	157.6	19	3.25	16.25	25700	0.1825	434
CHARFER	200	213.2	19	3.78	18.9	35400	0.1349	587
COCKROACH	250	265.7	19	4.22	21.1	40400	0.1083	731
BUTTERFLY	300	322.7	19	4.65	23.25	48750	0.08916	888
CENTIPEDE	400	415.2	37	3.78	26.46	63100	0.06944	1145



Scan QR Code

Basic Technical Data of Stranded Conductors

NO. OF WIRES	FINAL MODULES OF ELASTICITY		COEFFICIENT OF LINEAR EXPANSION	
	Nominal	Theoretical	1/°C	1/F°
AL				
7	6000	8.5 x 10 ⁶	23 x 10 ⁻⁶	12.8 x 10 ⁻⁶
19	5700	8.1 x 10 ⁶		
37	5700	8.1 x 10 ⁶		
61	5500	7.8 x 10 ⁶		
91	5500	7.8 x 10 ⁶		



All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for products set forth our standard terms and conditions of sale



Scan QR Code