

## SPECIFICATIONS AND STANDARDS

AAAC bare conductors meets or exceeds the following IEC61089 Standard:

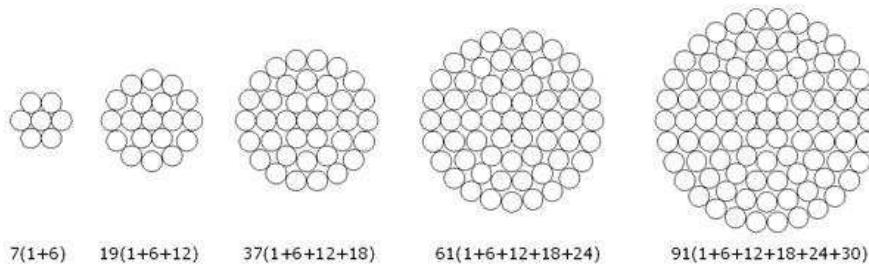
## APPLICATIONS

All-Aluminum Alloy Conductors (AAAC) is recommended for use as bare overhead conductor for primary and secondary distribution and in cases where high strength-to-weight ratio is required. It has a good corrosion resistance due to being composed out of aluminum alloy wires only, minimum conductivity of 52% IACS, high breaking strength per weight and normal creep values. AAAC has the highest strength per weight among all bare overhead conductors.



### Note:

- Resistance is calculated using ASTM standard increments of stranding and metal conductivity of 52% IACS, AC resistance at 60Hz.
- Current ratings are based on 80 °C conductor temperature, 50 °C ambient, 0.6meter/second wind, 1200watts/sq.meter solar heat radiation, 0.5 coefficients of emissivity and absorption.



This catalogue shows the most common sizes of conductor but other sizes, to any recognized standards or customer specification can also be supplied. AAAC insulated with XLPE or PVC can also be supplied as per customer's requirements.

## AAAC conductors manufactured to IEC61089 Standard.

Code Number	A2 Conductor					A3 Conductor					Max.D.C. Resistance of Conductor at 20°C
	Number of Wires	Diameter of Wires	Diameter of Conductor	Approx. Weight	Rated Strength	Number of Wires	Diameter of Wires	Diameter of Conductor	Approx. Weight	Rated Strength	
mm <sup>2</sup>	-	mm	mm	kg/km	daN	-	mm	mm	kg/km	daN	Ω/km
16	7	1.83	5.49	50.4	5.43	7	1.84	5.52	50.8	6.04	1.7896
25	7	2.29	6.87	78.7	8.49	7	2.30	6.9	79.5	9.44	1.1453
40	7	2.89	8.67	125.9	13.58	7	2.91	8.73	127.1	15.1	0.7158
63	7	3.63	10.8	198.3	21.39	7	3.65	10.95	200.2	23.06	0.4545
100	19	2.78	13.9	316.3	33.95	19	2.79	13.95	319.3	37.76	0.2877
125	19	3.10	15.5	395.4	42.44	19	3.12	15.6	399.2	47.20	0.2302
160	19	3.51	17.55	506.1	54.32	19	3.53	17.65	511.0	58.56	0.1798
200	19	3.93	19.65	623.7	67.91	19	3.95	19.75	638.7	73.20	0.1439
250	19	4.39	21.95	790.8	84.68	19	4.41	22.05	798.4	91.50	0.1151
315	37	3.53	24.71	998.9	106.95	37	3.55	24.85	1008.4	115.29	0.0916
400	37	3.98	27.86	1268.4	135.81	37	4.0	28	1280.5	146.40	0.0721
450	37	4.22	29.54	1426.9	152.79	37	4.24	29.68	1440.5	164.70	0.0641
500	37	4.45	31.15	1585.5	169.76	37	4.47	31.29	1600.6	183.00	0.0577
560	61	3.67	33.03	1778.4	190.14	61	3.69	33.21	1795.3	204.95	0.0516
630	61	3.89	35.01	2000.7	213.90	61	3.91	35.19	2019.8	230.58	0.0458
710	61	4.13	37.17	2254.8	241.07	61	4.15	37.35	2276.2	259.86	0.0407
800	61	4.38	39.42	2540.6	271.62	61	4.4	39.6	2564.8	282.80	0.0361
900	91	3.81	41.91	2861.1	305.58	91	3.83	42.13	2888.3	329.40	0.0321
1000	91	4.01	44.11	3179.0	339.53	91	4.03	44.33	3209.3	366.00	0.0289
1120	91	4.25	46.75	3560.5	380.27	91	4.27	46.97	3594.4	409.92	0.0258
1250	91	4.49	49.39	3973.7	424.41			-	-	-	-