



• Application

The AS/NZS 1531 Standard Bare All Aluminum Alloy 1120 Conductors (AAAC) find extensive use in construction applications, offering unmatched performance and reliability. Crafted from high-quality aluminum alloy, these conductors adhere to stringent standards, making them a top choice for various construction projects. From power lines and transmission cables to telecommunications and data transfer networks, AAAC proves indispensable across a wide array of applications.

• Advantages

One of the key advantages is its high strength and durability. The use of high-quality aluminum alloy ensures that it is able to withstand the stresses and strains of heavy use while maintaining its structural integrity.

Another advantage of this conductor is its excellent electrical conductivity. The use of high-quality aluminum alloy allows it to conduct electrical current with very little resistance or loss, making it ideal for use in a variety of electrical applications.

• Construction

The construction of AAAC involves multiple strands of aluminum alloy twisted together to form a solid conductor. This unique construction provides AAAC with distinct characteristics, enhancing its suitability for various applications. Its robust design ensures reliability and efficiency, making it a preferred choice for construction projects requiring superior performance.

• Specifications

-AS/NZS 1531 Standard Aluminum Alloy Conductors

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction. CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

Code Name	No./Dia.of Stranding Wires	Nominal Overall Diameter	Calculated Cross Section Area	Nominal Weight	Breaking Load	Final Modulus of Elasticity	Coefficient of Linear Expansion	D.C. Resistance at 20°C	A.C. Resistance at 50Hz at 75°C	Inductive Reactance to 0.3m at 50Hz
-	No./mm	mm	mm ²	kg/km	kN	GPa	×10 ⁻⁶ /°C	Ω/km	Ω/km	Ω/km
Chlorine	7/2.50	7.50	34.4	94.3	8.18	65	23.0	0.864	1.05	0.295
Chromium	7/2.75	8.25	41.6	113	9.91	65	23.0	0.713	0.866	0.289
Fluorine	7/3.00	9.00	49.5	135	11.8	65	23.0	0.599	0.728	0.284
Helium	7/3.75	11.3	77.3	211	17.6	65	23.0	0.383	0.465	0.270
Hydrogen	7/4.50	13.5	111	304	24.3	65	23.0	0.266	0.323	0.259
Iodine	7/4.75	14.3	124	339	27.1	65	23.0	0.239	0.291	0.255
Krypton	19/3.25	16.3	158	433	37.4	65	23.0	0.189	0.230	0.244
Lutetium	19/3.50	17.5	183	503	41.7	65	23.0	0.163	0.198	0.240
Neon	19/3.75	18.8	210	576	47.8	65	23.0	0.142	0.173	0.235
Nitrogen	37/3.00	21.0	262	721	62.2	64	23.0	0.114	0.139	0.227
Nobelium	37/3.25	22.8	307	845	72.8	64	23.0	0.0973	0.119	0.222
Oxygen	19/4.75	23.8	337	924	73.6	65	23.0	0.0884	0.108	0.220
Phosphorus	37/3.75	26.3	409	1120	93.1	64	23.0	0.0731	0.0897	0.213
Selenium	61/3.25	29.3	506	1400	114	64	23.0	0.0592	0.0730	0.206
Silicon	61/3.50	31.5	587	1620	127	64	23.0	0.0511	0.0634	0.201
Sulfur	61/3.75	33.8	673	1860	145	64	23.0	0.0444	0.0554	0.197
Walnut	4/3.75	11.3	77.3	380	43.9	119	15.2	0.573	0.770	0.288

● Technical Parameters

Code Name	Continuous Current Carrying Capacity											
	Rural Weather						Industrial Weather					
	at night in winter			at noon in summer			at night in winter			at noon in summer		
	still air	1m/s wind	2m/s wind	still air	1m/s wind	2m/s wind	still air	1m/s wind	2m/s wind	still air	1m/s wind	2m/s wind
-	A	A	A	A	A	A	A	A	A	A	A	A
Chlorine	121	207	241	94	187	221	130	212	246	87	183	219
Chromium	137	234	272	106	210	249	148	240	277	98	206	246
Fluorine	154	261	303	118	234	277	166	268	309	108	229	273
Helium	208	345	401	155	307	364	225	356	410	141	300	358
Hydrogen	265	434	504	194	383	455	288	448	517	74	373	447
Iodine	285	464	539	207	409	486	310	480	553	185	398	477
Krypton	338	540	627	240	473	562	368	560	644	213	459	551
Lutetium	375	593	688	265	517	615	409	615	707	234	502	603
Neon	413	647	750	290	562	669	451	672	771	256	545	655
Nitrogen	482	743	861	336	642	765	528	774	887	295	621	748
Nobelium	539	821	961	373	706	842	590	856	990	326	682	822
Oxygen	575	871	1025	397	747	891	630	908	1057	346	721	870
Phosphorus	658	982	1172	451	837	1013	722	1026	1209	391	807	988
Selenium	762	1120	1357	518	949	1172	838	1173	1401	446	912	1142
Silicon	843	1227	1501	569	1034	1295	928	1287	1550	488	992	1262
Sulfur	927	1336	1650	623	1122	1423	1021	1403	1705	532	1074	1386

Note:

Current ratings are based on the following conditions:

-Conductor temperature rise above ambient of 40°C

-Ambient air temp. of 35°C for summer noon or 10°C for winter night

-Direct solar radiation intensity of 1000 W/m² for summer noon or zero for winter night

-Diffuse solar radiation intensity of 100 W/m² for summer noon or zero for winter night

-Ground reflectance of 0.2

-Emissivity of 0.5 for rural weathered conductor or 0.85 for industrial weathered conductor

-Solar absorption coefficient of 0.5 for rural weathered conductor or 0.85 for industrial weathered conductor.