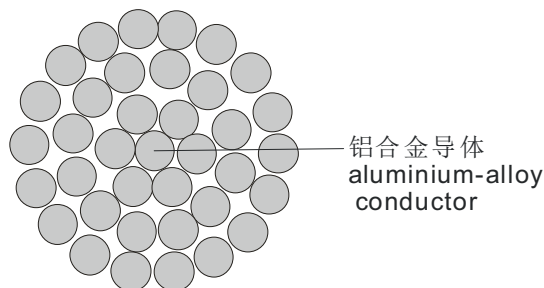


铝合金绞线

All Aluminium Alloy Conductors(AAAC)



使用范围及主要特性

可代替部分铝绞线或钢芯铝绞线用于架空输电线路；连续使用温度可达90℃，耐热铝合金绞线的使用温度可达150℃及以上，载流能力高；防腐性能好。

Usage scope and main characteristics

It can replace part of aluminum conductors or ACSR for overhead distribution lines. Temperature for continuous use is up to 90 °C. Temperature of heat-resistant aluminum alloy strands is up to 150 °C and above. It has high current carrying capacity and good corrosion performance.

生产执行标准

GB/T1179-2008
IEC 61089-1991
ASTM B 399-81
BS3242-1970
DIN 48201-6-1981

Executive standard

GB/T1179-2008
IEC 61089-1991
ASTM B 399-81
BS3242-1970
DIN 48201-6-1981

JLHA2铝合金绞线

All Aluminium Alloy Conductors(AAAC) (GB/T 1179-2008 Eqv. IEC61089-1991)

标称截面 Nominal Area 铝合金 Aluminium Alloy	规格号 Code	面积 Area (mm ²)	根数/单丝直径 No. of wires/ Diameter (Nos/ mm)	外径 Outer Diameter (mm)	重量 Weight (kg/km)	额定抗拉力 Rated Tensile Strength (KN)	20℃直流电阻 D.C Resistance at 20℃ (Ω/km)
20	16	18.4	7/1.83	5.49	50.40	5.430	1.7896
30	25	28.8	7/2.29	6.86	78.70	8.490	1.1453
45	40	46	7/2.89	8.68	125.90	13.580	0.7158
75	63	72.5	7/3.63	10.90	198.30	21.390	0.4545
120	100	115	19/2.78	13.90	316.30	33.950	0.2877
145	125	144	19/3.10	15.50	395.40	42.440	0.2302
185	160	184	19/3.51	17.60	506.10	54.320	0.1798
230	200	230	19/3.93	19.60	632.700	67.910	0.1439
300	250	288	19/4.39	22.00	790.80	84.880	0.1151
360	315	363	37/3.53	24.70	998.90	106.950	0.0916
465	400	460	37/3.98	27.90	1268.40	135.810	0.0721
520	450	518	37/4.22	29.60	1426.90	152.790	0.0641
580	500	575	37/4.45	31.20	1585.50	169.760	0.0577
650	560	645	61/3.67	33.00	1778.40	190.140	0.0516
720	630	725	61/3.89	35.00	2000.70	213.900	0.0458
825	710	817	61/4.13	37.20	2254.80	241.070	0.0407
930	800	921	61/4.38	39.50	2540.60	271.620	0.0361
1050	900	1036	91/3.81	41.80	2861.10	305.580	0.0321
1150	1000	1151	91/4.01	44.10	3179.00	339.530	0.0289
1300	1120	1289	91/4.25	46.70	3560.50	380.270	0.0258
1450	1250	1439	91/4.49	49.40	3973.70	424.410	0.0231

JLHA1铝合金绞线**All Aluminium Alloy Conductors(AAAC) (GB/T 1179-2008 Eqv. IEC61089-1991)**

标称截面 Nominal Area 铝合金 Aluminium Alloy	规格号 Code	面积 Area (mm ²)	根数/单丝直径 No. of wires/ Diameter (Nos/ mm)	外径 Outer Diameter (mm)	重量 Weight (kg/km)	额定抗拉力 Rated Tensile Strength (KN)	20℃直流电阻 D.C Resistance at 20℃ (Ω/ km)
20	16	18.6	7/1.84	5.52	50.80	6.04	1.7896
30	25	29	7/2.30	6.90	79.50	9.44	1.1453
45	40	46.5	7/2.91	8.72	127.10	15.10	0.7158
75	63	73.2	7/3.65	10.90	200.20	23.06	0.4545
120	100	116	19/2.79	14.00	319.30	37.76	0.2877
145	125	145	19/3.12	15.60	399.20	47.20	0.2302
185	160	186	19/3.53	17.60	511.00	58.56	0.1798
230	200	232	19/3.95	19.70	638.70	73.20	0.1439
300	250	290	19/4.41	22.10	798.40	91.50	0.1151
360	315	366	37/3.55	24.80	1008.40	115.30	0.0916
465	400	465	37/4.00	28.00	1280.50	146.40	0.0721
520	450	523	37/4.24	29.70	1440.50	164.70	0.0641
580	500	581	37/4.47	31.30	1600.60	183.00	0.0577
650	560	651	61/3.69	33.20	1795.30	204.96	0.0516
720	630	732	61/3.91	35.20	2019.80	230.58	0.0458
825	710	825	61/4.15	37.30	2276.20	259.86	0.0407
930	800	930	61/4.40	39.60	2564.80	292.80	0.0361
1050	900	1046	91/3.83	42.10	2888.30	329.40	0.0321
1150	1000	1162	91/1.03	44.40	3209.30	366.00	0.0289
1300	1120	1301	91/4.27	46.90	3594.40	409.90	0.0258

国内常用规格 Domestic Common Specifications**JLHA2铝合金绞线****All Aluminium Alloy Conductors(AAAC) (GB/T 1179-2008 Eqv. IEC61089-1991)**

标称截面 Nominal Area 铝合金 Aluminium Alloy	面积 Area (mm ²)	根数/单丝直径 No. of wires/ Diameter (Nos/mm)	外径Outer Diameter (mm)	重量Weight (kg/km)	额定抗拉力 Rated Tensile Strength (KN)	20℃直流电阻 D.C Resistance at 20℃ (Ω/ km)
10	10.02	7/1.35	4.05	27.4	2.96	3.2891
16	16.08	7/1.71	5.13	44.0	4.74	2.0500
25	24.94	7/2.13	6.39	68.2	7.36	1.3213
35	34.91	7/2.52	7.56	95.5	10.30	0.9439
50	50.14	7/3.02	9.06	137.2	14.79	0.6573
70	70.07	7/3.57	10.7	191.7	20.67	0.4703
95	95.14	7/4.16	12.5	261.5	28.07	0.3481
120	120.36	19/2.84	14.2	330.8	35.51	0.2751
150	149.96	19/3.17	15.9	412.2	44.24	0.2208
210	209.85	19/3.75	18.8	576.8	61.91	0.1578
240	239.96	19/4.01	20.1	661.1	70.79	0.1383
300	299.43	37/3.21	22.5	825.0	88.33	0.1109
400	399.98	37/3.71	26.0	1102.1	117.99	0.0830
500	500.48	37/4.15	29.1	1380.9	147.64	0.0664
630	631.30	61/3.63	32.7	1741.8	186.23	0.0527
800	801.43	61/4.09	36.8	2211.3	236.42	0.0415
1000	1000.58	61/4.57	41.1	2760.7	295.17	0.0332

JLHA1铝合金绞线**All Aluminium Alloy Conductors(AAAC) (GB/T 1179-2008 Eqv. IEC61089-1991)**

标称截面 Nominal Area 铝合金 Aluminium Alloy	面积 Area (mm ²)	根数/单丝直径 No. of wires/ Diameter (Nos/ mm)	外径Outer Diameter (mm)	重量 Weight (kg/km)	额定抗拉力 Rated Tensile Strength (kN)	20℃直流电阻 D.C Resistance at 20℃ (Ω/km)
10	10.02	7/1.35	4.05	27.4	3.26	3.3205
16	16.08	7/1.71	5.13	44.0	5.22	2.0695
25	24.94	7/2.13	6.39	68.2	8.11	1.3339
35	34.91	7/2.52	7.56	95.5	11.35	0.9529
50	50.14	7/3.02	9.06	137.2	16.30	0.6635
70	70.07	7/3.57	10.7	191.7	22.07	0.4748
95	95.14	7/4.16	12.5	261.5	29.97	0.3514
150	149.96	19/3.17	15.9	412.2	48.74	0.2229
210	209.85	19/3.75	18.8	576.8	66.10	0.1593
240	239.96	19/4.01	20.1	661.1	75.59	0.1397
300	299.43	37/3.21	22.5	825.0	97.32	0.1119
400	399.98	37/3.71	26.0	1102.1	125.99	0.0838
500	500.48	37/4.15	29.1	1380.9	157.65	0.0671
630	631.30	61/3.63	32.7	1741.8	198.86	0.0532
800	801.43	61/4.09	36.8	2211.3	252.45	0.0419
1000	1000.58	61/4.57	41.1	2760.7	315.18	0.0335

铝合金绞线**All Aluminium Alloy Conductors(AAAC) (DIN 48201-6)**

Nominal Aluminium Area(mm ²) 标称铝截面积(mm ²)	Number and diameter of wire 单线根数/直 径(mm)	Cross-sectional Area 截面积 (mm ²)	Overall diameter外径 (mm)	Weight 重量 (kg/km)	Calculated Breaking load 计算破断力		Calculated D.C. resistance At 20℃ 20℃直流电阻 (ohm/km)
					kgf	kN	
16	7/1.70	15.89	5.10	43	453	4.44	2.0908
25	7/2.10	24.25	6.30	66	690	6.77	1.3700
35	7/2.50	34.36	7.50	94	979	9.60	0.9669
50	7/3.00	49.48	9.00	135	1406	13.82	0.6713
50	19/1.80	48.35	9.00	133	1377	13.50	0.6903
70	19/2.10	65.81	10.50	181	1874	18.38	0.5072
95	19/2.50	93.27	12.50	256	2666	26.05	0.3579
120	19/2.80	117.0	14.00	322	3332	32.68	0.2853
150	19/2.80	147.1	15.75	405	4190	41.09	0.2275
185	37/2.25	181.6	17.50	500	5172	50.73	0.1842
240	37/2.50	242.5	20.25	669	6906	67.74	0.1383
300	61/2.25	299.4	22.50	826	8527	83.63	0.1120
400	61/2.50	400.1	26.01	1104	11390	111.7	0.08381
500	61/2.89	499.8	29.07	1379	14235	139.6	0.06709
625	61/3.23	626.2	32.56	1733	17835	174.9	0.05367
800	91/3.35	802.1	36.85	2219	22852	224.0	0.04190
1000	91/3.74	999.7	41.14	2766	28470	279.2	0.03362

铝合金绞线

All Aluminium Alloy Conductors(AAAC)(ASTM B 399-81)

Conductor size 导体大小 (mcm)	Number and diameter of wire单线根数/ 直径 (mm)	Cross-sectional Area 截面积 (mm ²)	Overall diameter外 径 (mm)	Weight重量 (kg/km)	Calculated Breaking load 计算破断力		Calculated D.C. resistance At 20℃ 20℃直流电阻 (ohm/km)
					kgf	kN	
66.36	7/2.47	33.54	7.41	92	1087	10.66	0.9987
77.47	7/2.67	39.19	8.01	108	1270	12.45	0.8547
105.60	7/3.12	53.52	9.36	148	1734	17.00	0.6259
123.30	7/3.37	62.44	10.01	172	2023	19.84	0.5364
133.10	7/3.50	67.35	10.50	186	2091	20.51	0.4973
155.40	7/3.78	78.55	11.34	217	2439	23.92	0.4264
167.80	7/3.93	84.91	11.79	234	2636	25.85	0.3945
195.70	7/4.25	99.30	12.75	274	3083	30.23	0.3373
211.60	7/4.42	107.4	13.26	296	3335	32.71	0.3119
246.90	7/4.77	125.1	14.31	345	3884	38.09	0.2678
394.50	19/3.66	199.9	18.30	551	6012	58.96	0.1676
400.00	19/3.69	203.2	18.45	560	6112	59.94	0.1648
450.00	19/3.91	228.1	19.55	629	6861	67.28	0.1468
465.40	19/3.98	236.4	19.90	652	7110	69.73	0.1417
500.00	19/4.12	253.3	20.60	698	9619	74.72	0.1322
550.00	37/3.10	279.3	21.70	770	8577	84.11	0.1189
559.00	19/4.36	283.7	21.80	782	8533	83.64	0.1181
600.00	37/3.23	303.2	22.61	836	9311	91.31	0.1105
650.00	37/3.37	330.0	23.59	910	10134	99.38	0.1015
652.40	19/4.71	331.0	23.55	913	9956	97.64	0.1012
700.00	37/3.49	354.0	24.43	976	10418	102.2	0.09462
740.00	37/3.59	374.5	25.13	1033	11022	108.1	0.08944
750.00	37/3.62	380.8	25.34	1050	11207	109.9	0.08796
800.00	37/3.73	404.3	26.11	1115	11899	116.7	0.08285
900.00	37/3.96	455.7	27.72	1256	13411	131.5	0.07350
927.20	37/4.02	469.6	28.14	1295	13821	135.5	0.07133
1000.00	37/4.18	507.7	29.26	1400	14942	146.5	0.06598

铝合金绞线

All Aluminium Alloy Conductors(AAAC)(BS3242-1970)

Code Name 代码	Nominal Aluminium Area 标称铝截面积 (mm ²)	Number and diameter of wire电线根数 /直径 (mm)	Cross-sectional area截面积 (mm ²)	Overall diameter 外径 (mm)	Weight 重量 (kg/km)	Calculated Breaking load 计算破断力		Calculated D.C. resistance At 20℃ 20℃直流电阻 (ohm/km)
						kgf	kN	
-	10	7/1.47	11.8	4.41	32	340	3.33	2.771
Box	15	7/1.85	18.82	5.55	51	537	5.27	1.749
Acacia	20	7/2.08	23.79	6.24	65	680	6.67	1.384
Almond	25	7/2.34	30.10	7.02	82	861	8.44	1.093
Cedar	30	7/2.54	35.47	7.62	97	1014	9.94	0.9281
-	35	7/2.77	42.18	8.31	115	1205	11.82	0.7804
Fir	40	7/2.95	47.84	8.85	131	1367	13.41	0.6861
Hazel	50	7/3.30	59.87	9.90	164	1711	16.78	0.5498
Pine	60	7/3.61	71.65	10.83	196	2408	20.08	0.4594
-	70	7/3.91	84.05	11.73	230	2402	23.56	0.3917
Willow	75	7/4.04	89.73	12.12	245	2565	25.15	0.3669
-	80	7/4.19	96.52	12.57	264	2758	27.05	0.3411
-	90	7/4.45	108.9	13.35	298	3112	30.52	0.3023
Oak	100	7/4.65	118.9	13.95	325	3398	33.32	0.2769
-	100	19/2.82	118.7	14.1	326	3393	33.27	0.2787
Mulberry	125	19/3.18	150.9	15.9	415	4312	42.29	0.2192
Ash	150	19/3.48	180.7	17.4	497	5164	50.64	0.1831
Elm	175	19/3.76	211.0	18.8	580	6030	59.13	0.1568
Poplar	200	37/2.87	239.4	20.09	659	6841	67.09	0.1385
-	225	37/3.05	270.3	21.35	744	7724	75.75	0.1227
Sycamore	250	37/3.23	303.2	22.61	835	8664	84.97	0.1093
Upas	300	37/3.53	362.1	24.71	997	10350	101.5	0.09156
Walnut	350	37/3.81	421.8	26.67	1162	12053	118.2	0.07860
Yew	400	37/4.06	479.0	28.43	1319	13685	134.2	0.06921
Totara	425	37/4.14	498.1	28.98	1372	14233	139.6	0.06656
Araucaria	800	61/4.14	821.1	37.26	2266	23450	230.0	0.04047