Aluminum stranded conductor & aluminum conductor steel–reinfored



Brief introduction

The product is used in aluminium stranded wire and steel core stranded wire for overhead power line.
The standard is in accordance with the international electrotechincal commission (IEC61089–1991),
《round wire concentric overhead electric stranded conductors》 issued by IEC.



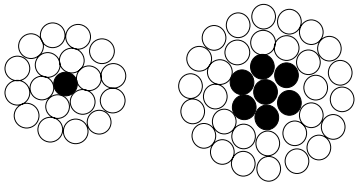
Type of cable

Type	Desicription
LJ	Aluminium stranded wire
LGJ	Aluminium conductor steel reinforced
LGJF	Anti–corrosive aluminium conductor steel reinforce



Specifications

◦
Specifications are shown by normal section.
The specification of aluminium strand cable should meet the requirement of table 2.
The specification of aluminium conductor steel reinforced and anti–corrosive aluminium conductor steel reinforced should meet the requirements of tabe 4.



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Table 2

标称截面 m m²	结构根数 /直径 m m	计算截面 m m²	外径 m m	直流电阻不大于 Ω/km	计算拉断力 N	计算重量 kg/km	交货长度不小于 m
16	7/1.70	15.89	5.10	1.802	2810	13.5	4000
25	7/2.15	25.41	6.45	1.127	4355	69.6	3000
35	7/2.50	34.36	7.50	0.8332	5760	94.1	2000
50	7/3.00	49.48	9.00	0.5786	7930	135.5	1500
70	7/3.60	71.25	10.80	0.4018	10950	195.1	1250
95	7/4.16	95.14	12.48	0.3009	14450	260.5	1000
120	19/2.85	121.21	14.25	0.2373	19420	333.5	1500
150	19/3.15	148.07	15.75	0.1943	23310	407.4	1250
185	19/3.50	182.80	17.50	0.1574	28440	503.0	1000
210	19/3.75	209.85	18.75	0.1371	32260	577.4	1000
240	19/4.00	238.76	20.00	0.1205	36260	656.9	1000
300	37/3.20	297.57	22.40	0.09689	46850	820.4	1000
400	37/3.70	397.83	25.90	0.07247	61150	1097	1000
500	37/4.16	502.90	29.12	0.05733	76370	1387	1000
630	61/3.63	631.30	32.67	0.04577	91940	1744	800
800	61/4.10	805.36	36.90	0.03588	11590	2225	800

表 3 Table 3

标称截面 铝 /钢 m m²	结构，根数 /直径 mm		计算截面 mm²		
	A1	G	A1	G	Total
10/2	6/1.50	1/1.50	10.60	1.77	12.37
16/3	6/1.85	1/1.85	16.13	2.69	18.82
25/4	6/2.32	1/2.32	26.36	4.23	29.59
35/6	6/2.72	1/2.72	34.86	5.81	40.67
50/8	6/3.20	1/3.20	18.25	8.01	26.26
50/30	12/2.32	7/2.32	50.73	29.59	80.32
70/10	6/3.80	1/3.80	68.05	11.34	79.39
70/40	12/2.72	7/2.72	69.73	40.67	110.40
95/15	26/2.15	7/1.67	94.39	15.33	109.72
95/20	7/4.16	7/1.85	95.14	18.82	113.96

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标称截面 铝 /钢 m m^2	结构，根数 /直径 mm		计算截面 mm^2		
	A1	G	A1	G	Total
95/55	12/3.20	7/3.20	96.51	56.30	152.81
120/7	18/2.90	1/2.90	118.89	6.61	125.50
120/20	26/2.38	7/1.85	115.67	18.82	134.49
120/25	7/4.72	7/2.10	122.48	24.25	146.73
120/70	12/3.60	7/3.60	122.15	71.25	193.40
150/8	18/3.20	1/3.20	144.76	8.04	152.80
150/20	24/2.78	7/1.85	145.68	18.82	164.50
150/25	26/2.70	7/2.10	148.86	24.25	173.11
150/35	30/2.50	7/2.50	147.26	34.36	181.62
185/10	18/3.60	1/3.60	183.22	10.18	193.40
185/25	24/3.15	7/2.10	187.04	24.25	211.29
185/30	26/2.98	7/2.32	181.34	29.59	210.93
185/45	30/2.80	7/2.80	184.73	43.10	227.83
210/10	18/3.80	1/3.80	204.14	11.34	215.48
210/25	24/3.33	7/2.22	209.02	27.10	236.12
210/35	26/3.22	7/2.50	211.73	34.36	246.09
210/50	30/2.98	7/2.98	209.24	48.82	258.06
240/30	24/3.60	7/2.40	244.29	31.67	275.96
240/40	26/3.42	7/2.66	238.82	38.90	277.72
240/55	30/3.20	7/3.20	241.27	56.30	297.57
300/15	42/3.00	7/1.67	296.88	15.33	312.21
300/20	45/2.93	7/1.95	303.42	20.91	324.33
300/25	48/2.85	7/2.22	306.21	27.10	333.31
300/40	24/3.99	7/2.66	300.09	38.90	338.99
300/50	26/3.83	7/2.98	299.54	48.82	348.36
300/70	30/3.60	7/3.60	305.36	71.25	376.61
400/20	42/3.51	7/1.95	406.40	20.91	427.31
400/25	45/3.33	7/2.22	391.91	27.10	419.01
400/35	48/3.22	7/2.50	390.88	34.36	425.24
400/50	54/3.07	7/3.07	399.73	51.82	451.55
400/65	26/4.42	7/3.44	398.94	65.06	464.00
400/95	30/4.16	19/2.50	407.75	93.27	501.02
500/35	45/3.75	7/2.50	497.01	34.36	531.37
500/45	48/3.60	7/2.80	488.58	43.10	531.68
500/65	54/3.44	7/3.44	501.88	65.06	566.94
630/45	45/4.20	7/2.80	623.45	43.10	666.55
630/55	48/4.12	7/3.20	639.92	56.30	696.22
630/80	54/3.87	19/2.32	635.19	80.32	715.51
800/55	45/4.80	7/3.20	814.30	56.30	870.60
800/70	48/4.63	7/3.60	808.15	71.25	879.40
800/100	54/4.33	19/2.60	795.17	100.88	896.05

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Table 4

标称截面铝 /钢mm ^{2}	外径 mm	直流电阻不大于 Ω/km	计算拉断力 N	计算重量 kg/km	交货长度不小于 m
10/2	4.50	2.706	1120	42.9	3000
16/3	5.55	1.779	6130	65.2	3000
25/4	6.96	1.131	9290	102.6	3000
35/6	8.16	0.8230	12630	141.0	3000
50/8	9.60	0.5946	16870	195.1	2000
50/30	11.60	0.5692	42620	372.0	3000
70/10	11.40	0.4217	23390	275.2	2000
70/40	13.60	0.4141	58300	511.3	2000
95/15	13.61	0.3058	35000	380.8	2000
95/20	13.87	0.3019	37200	408.9	2000
95/55	16.00	0.2992	78110	707.7	2000
120/7	14.50	0.2422	27570	379.0	2000
120/20	15.07	0.2496	41000	466.8	2000
120/25	15.74	0.2345	47880	526.6	2000
120/70	18.00	0.2364	98370	895.6	2000
150/8	16.00	0.1989	32860	461.4	2000
150/20	16.67	0.1980	46630	549.4	2000
150/25	17.10	0.1939	54110	601.0	2000
150/35	17.50	0.1962	65020	676.2	2000
185/10	18.00	0.1572	40880	584.0	2000
185/25	18.90	0.1542	59420	706.1	2000
185/30	18.88	0.1592	64320	732.6	2000
185/45	19.60	0.1564	80190	848.2	2000
210/10	19.00	0.1411	45140	650.7	2000
210/25	19.98	0.1380	65990	789.1	2000
210/35	20.38	0.1363	74250	853.9	2000
210/50	20.86	0.1381	90830	960.8	2000
240/30	21.60	0.1181	75620	922.2	2000
240/40	21.66	0.1209	83370	964.3	2000
240/55	22.40	0.1198	102100	1108.0	2000
300/15	23.01	0.09724	68060	939.8	2000
300/20	23.43	0.09520	75680	1002	2000
300/25	23.76	0.09433	83410	1058	2000
300/40	23.94	0.09614	92220	1133	2000
300/50	24.26	0.09636	103400	1210	2000
300/70	25.20	0.09463	128000	1402	2000
400/20	26.91	0.07104	88850	1286	1500
400/25	26.64	0.07370	95940	1295	1500
400/35	26.82	0.07389	103900	1349	1500
400/50	27.63	0.07232	123400	1511	1500
400/65	28.00	0.07236	135200	1611	1500
400/95	29.14	0.07087	171300	1860	1500
500/35	30.00	0.05812	119500	1642	1500
500/45	30.00	0.05912	128100	1688	1500
500/65	30.96	0.05760	154000	1897	1500
630/45	33.60	0.04633	148700	2060	1200
630/55	35.32	0.04514	164400	2209	1200
630/80	34.82	0.04551	192900	2388	1200
800/55	38.40	0.03547	191500	2690	1000
800/70	38.58	0.03571	207000	2791	1000
800/100	38.98	0.03635	241100	2991	1000

The calculated weight of LGJF type shall be equal to the value of the normal plus the weight of anti–corrosvie material, the increase should be added 20% on copper core anti–corrosive paint; added 5% for anti–corrosive material painted layers inside Al steel.

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