

Stranded Aluminium Clad Steel Conductor (ACS)



Description : Stranded aluminium-clad steel conductor is formed by round aluminium-clad steel wires, stranded in concentric layers.



Application : The products are widely used as earth wire of high-voltage overhead power line, long span transmission line, load-bearing rope in railway.



Operating Temperature: Max permissible continuous operating temperature of conductor shall not exceed 90°C.



Standard : ASTM B416-88, TB/T2937-1998, or other standards required by customers.



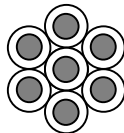
Packing: steel/wooden reel, wooden reel or steel reel.



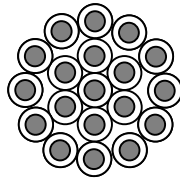
Construction of Stranded Aluminium Clad Steel Conductor



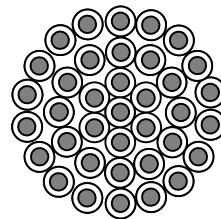
3Strand



7Strand



19Strand



37Strand

Stranded Aluminium Clad Steel Conductor**American Standard ASTM B416-88**

Size	Nominal Area	Wire Diameter	Overall Diameter	Breaking Strength	Mass	D.C. Resistance at 20°C
No./AWG	mm ²	mm	mm	kN	kg/km	Ω /km
37/5	620.6	4.620	32.36	634.75	4170	0.1394
37/6	492.2	4.115	28.70	534.30	3307	0.1758
37/7	390.3	3.665	25.65	447.57	2622	0.2216
37/8	309.5	3.264	22.83	374.26	2080	0.2794
37/9	245.5	2.906	20.35	296.45	1649	0.3524
37/10	194.6	2.588	18.11	235.30	1308	0.4443
19/5	318.7	4.620	23.11	326.05	2128	0.2699
19/6	252.7	4.114	20.57	274.20	1688	0.3403
19/7	200.4	3.665	18.31	229.91	1339	0.4292
19/8	159.0	3.264	16.31	192.18	1062	0.5411
19/9	126.1	2.906	14.53	152.39	842	0.6821
10/10	99.93	2.588	12.93	120.83	668	0.8603
7/5	117.4	4.620	13.87	120.15	781	0.7428
7/6	93.09	4.115	12.34	101.04	620	0.9197
7/7	73.87	3.665	11.00	84.72	491	1.1598
7/8	58.56	3.264	9.779	70.81	390	1.4627
7/9	46.44	2.906	8.712	56.13	309	1.8442
7/10	36.82	2.588	7.772	44.53	245	2.3255
7/11	29.18	2.304	6.909	35.31	194	2.9325
7/12	23.16	2.052	6.147	28.01	154	3.6976
3/5	50.32	4.620	9.957	54.36	334	1.6985
3/6	39.90	4.115	8.864	45.69	265	2.1418
3/7	31.64	3.665	7.899	38.32	211	2.1009
3/8	25.10	3.264	7.036	32.03	167	3.4057
3/9	19.90	2.907	6.274	25.04	132	4.2947
3/10	15.78	2.588	5.588	20.14	105	5.4168

Stranded Aluminium Clad Steel Conductor**Chinese Standard TB/T2937-1998 (used for electrical railway)**

Type		LBGJ70(19)	LBGJ90(19)	LBGJ50(7)	LBGJ70(7)	LBGJ90(7)
Stranding	No./mm	19/2.05	19/2.41	7/2.89	7/3.45	7/3.97
Calculated Breaking Load	kN	75.62	104.72	55.38	77.17	94.37
Coefficient of linear expansion	/°C	12.64×10 ⁻⁴	12.64×10 ⁻⁴	12.64×10 ⁻⁴	12.64×10 ⁻⁴	12.64×10 ⁻⁴