

## 钢芯铝绞线(ACSR)



**结构:** 钢芯铝绞线由铝线以及中间用于加强的镀锌钢丝同心式绞合而成。



**用途:** 钢芯铝绞线适用于中压、高压和超高压架空线，长距离输配电。如果对其表面用特殊工艺进行亚光处理，使阳光或其它光源的反射光呈散射光，不影响飞机驾驶员在起降时的视觉，该产品也可用于机场附近。



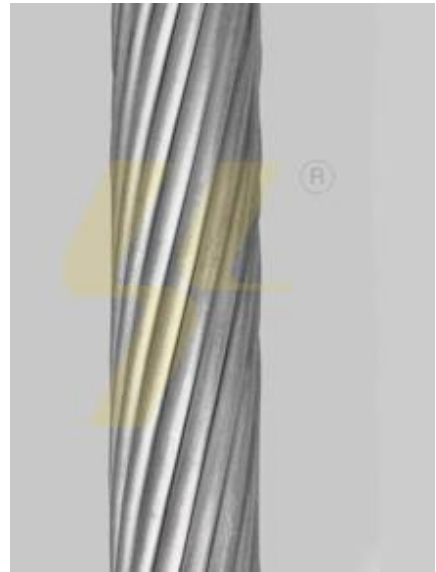
**工作温度:** 导体的最大允许连续工作温度不应超过 90°C。



**标准:** ASTM B232, BS215, DIN48204, IEC1089, GB1179 - 83, 或者用户要求的其它标准。



**包装:** 成圈，铁木盘，木盘或铁盘。



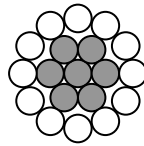
### 钢芯铝绞线机械性能

结构组成	最终弹性模量 Mpa	线性膨胀系数 /°C	结构组成	最终弹性模量 Mpa	线性膨胀系数 /°C
6+1	79000	19.1X10 <sup>-6</sup>	30+7	75500	18.0X10 <sup>-6</sup>
9+3	88000	17.1X10 <sup>-6</sup>	54+7	69000	19.3X10 <sup>-6</sup>
12+7	103500	15.4X10 <sup>-6</sup>	72+19	61000	21.5X10 <sup>-6</sup>
18+1	66000	21.2X10 <sup>-6</sup>	84+7	66000	20.4X10 <sup>-6</sup>

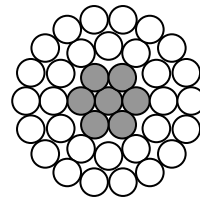
### 钢芯铝绞线的结构



6Al/1ST



12Al/7ST



30Al/7ST

钢芯铝绞线 美国标准 ASTM B232

规格代码	规格(铝)		绞线结构 根数/直径		规格代码	规格(铝)		绞线结构 根数/直径			
	AWG or kcmil	铝		钢		AWG or kcmil	铝		钢		
		No./mm	No./mm	No./mm			No./mm	No./mm	No./mm		
Wren	8	6/1.33	1/1.33	Redwing	715.5	30/3.92	19/2.35				
Turkey	6	6/1.68	1/1.68	Tern	795	45/3.38	7/2.25				
Swan	4	6/2.12	1/2.12	Condor	795	54/3.08	7/3.08				
Swanate	4	7/1.96	1/2.61	Cuckoo	795	24/4.62	7/3.08				
Swallow	3	6/2.38	1/2.38	Drake	795	26/4.44	7/3.45				
Sparrow	2	6/2.67	1/2.67	Coot	795	36/3.77	1/3.77				
Sparate	2	7/2.47	1/3.30	Mallard	795	30/4.14	19/2.48				
Robin	1	6/3.00	1/3.00	Ruddy	900	45/3.59	7/2.40				
Raven	0	6/3.37	1/3.37	Canary	900	54/3.28	7/3.28				
Quail	2/0	6/3.78	1/3.78	Rail	954	45/3.70	7/2.47				
Pigeon	3/0	6/4.25	1/4.25	Catbird	954	36/4.14	1/4.14				
Penguin	4/0	6/4.77	1/4.77	Cardinal	954	54/3.38	7/3.38				
Waxwing	266.8	18/3.09	1/3.09	Ortolan	1033.5	45/3.85	7/2.57				
Partridge	266.8	26/2.57	7/2.00	Tanager	1033.5	36/4.30	1/4.30				
Ostrich	300	26/2.73	7/2.12	Curlew	1033.5	54/3.52	7/3.52				
Merlin	336.4	18/3.47	1/3.47	Bluejay	1113	45/4.00	7/2.66				
Linnet	336.4	26/2.89	7/2.25	Finch	1113	54/3.65	19/2.19				
Oriole	336.4	30/2.69	7/2.69	Bunting	1192.5	45/4.14	7/2.76				
Chickadee	397.5	18/3.77	1/3.77	Grackle	1192.5	54/3.77	19/2.27				
Brant	397.5	24/3.27	7/2.18	Bittern	1272	45/4.27	7/2.85				
Ibis	397.5	26/3.14	7/2.44	Pheasant	1272	54/3.90	19/2.34				
Lark	397.5	30/2.92	7/2.92	Skylark	1272	36/4.78	1/4.78				
Pelican	477	18/4.14	1/4.14	Dipper	1351.5	45/4.40	7/2.92				
Flicker	477	24/3.58	7/2.39	Martin	1351.5	54/4.02	19/2.41				
Hawk	477	26/3.44	7/2.67	Bobolink	1431	45/4.53	7/3.02				
Hen	477	30/3.20	7/3.20	Plover	1431	54/4.14	19/2.48				
Osprey	556.5	18/4.47	1/4.47	Nuthatch	1510.5	45/4.65	7/3.10				
Parakeet	556.5	24/3.87	7/2.58	Parrot	1510.5	54/4.25	19/2.55				
Dove	556.5	26/3.72	7/2.89	Lapwing	1590	45/4.77	7/3.18				
Eagle	556.5	30/3.46	7/3.46	Falcon	1590	54/4.36	19/2.62				
Peacock	605	24/4.03	7/2.69	Chukar	1780	84/3.70	19/2.22				
Squab	605	26/3.87	7/3.01	Bluebird	2156	84/4.07	19/2.44				
Wood duck	605	30/3.61	7/3.61	Kiwi	2167	72/4.41	7/2.94				
Teal	605	30/3.61	19/2.16	Thrasher	2312	76/4.43	19/2.09				
Kingbird	636	18/4.78	1/4.78	Grouse	80	8/2.54	1/4.24				
Rook	636	24/4.14	7/2.76	Petrel	101.8	12/2.34	7/2.34				
Grosbeak	636	26/3.97	7/3.09	Minorca	110.8	12/2.44	7/2.44				
Scoter	636	30/3.70	7/3.70	Leghorn	134.6	12/2.69	7/2.69				
Egret	636	30/3.70	19/2.22	Guinea	159	12/2.92	7/2.92				
Swift	636	36/3.38	1/3.38	Dotterel	176.9	12/3.08	7/3.08				
Flamingo	666.6	24/4.23	7/2.82	Dorking	190.8	12/3.20	7/3.20				
Gannet	666.6	26/4.07	7/3.16	Brahma	203.2	16/2.86	19/2.48				
Stilt	715.5	24/4.39	7/2.92	Cochin	211.3	12/3.37	7/3.37				
Starling	715.5	26/4.21	7/3.28								

钢芯铝绞线 英国标准 BS215 - 第 2 部分

规格代码	规格	绞线结构 根数/直径		规格代码	规格	绞线结构 根数/直径	
	AWG or kcmil	铝	钢		AWG or kcmil	铝	钢
		No./mm	No./mm			No./mm	No./mm
Mole	10	6/1.50	1/1.50	Tiger	125	30/2.36	7/2.36
Squirrel	20	6/2.11	1/2.11	Dingo	150	18/3.35	1/3.35
Gopher	25	6/2.36	1/2.36	Wolf	150	30/2.59	7/2.59
Weasel	30	6/2.59	1/2.59	Caracal	175	18/3.61	1/3.61
Fox	35	6/2.79	1/2.79	Lynx	175	30/2.79	7/2.79
Ferret	40	6/3.00	1/3.00	Jaguar	200	18/3.86	1/3.86
Rabbit	50	6/3.35	1/3.35	Panther	200	30/3.00	7/3.00
Mink	60	6/3.66	1/3.66	Lion	225	30/3.18	7/3.18
Skunk	60	12/2.59	7/2.59	Bear	250	30/3.35	7/3.35
Beaver	70	6/3.99	1/3.99	Goat	300	30/3.71	7/3.71
Horse	70	12/2.79	7/2.79	Sheep	350	30/3.99	7/3.99
Raccoon	75	6/4.10	1/4.10	Antilope	350	54/2.97	7/2.97
Otter	80	6/4.22	1/4.22	Bizon	350	54/3.00	7.3.00
Cat	90	6/4.50	1/4.50	Deer	400	30/4.27	7/4.27
Hare	100	6/4.72	1/4.72	Zebra	400	54/3.18	7/3.18
Dog	100	6/4.72	7/1.57	Elk	450	30/4.50	7/4.50
Hyena	100	7/4.39	7/1.93	Camel	450	54/3.35	7/3.35
Leopard	125	8/5.28	7/1.75	Moose	500	54.3.53	7/3.53
Coyote	125	26/2.54	7/1.91	Finch	500	54/3.65	19/2.29
Congar	125	18/3.05	1/3.05				

钢芯铝绞线 德国标准 DIN48204

规格	绞线结构 根数/直径		规格	绞线结构 根数/直径		规格	绞线结构 根数/直径	
铝/钢	铝	钢	铝/钢	铝	钢	铝/钢	铝	钢
sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm
16/2.5	6/1.80	1/1.80	150/25	26/2.70	7/2.10	435/55	54/3.20	7/3.20
25/4.0	6/2.25	1/2.25	170/40	30/2.70	7/2.70	450/40	48/3.45	7/2.68
35/6.0	6/2.70	1/2.70	185/30	26/3.00	7/2.33	490/65	54/3.40	7/3.40
44/32.0	14/2.00	7/2.40	210/35	26/3.20	7/2.49	495/35	45/3.74	7/2.49
50/8.0	6/3.20	1/3.20	210/50	30/3.00	7/3.00	510/45	48/3.68	7/2.87
50/30	12/2.33	7/2.33	230/30	24/3.50	7/2.33	550/70	54/3.60	7/3.60
70/12	26/1.85	7/1.44	240/40	26/3.45	7/2.68	560/50	48/3.86	7/3.00
95/15	26/2.15	7/1.67	265/35	24/3.74	7/2.49	570/40	45/4.00	7/2.68
95/55	12/3.20	7/3.20	300/50	26/3.86	7/3.00	650/45	45/4.30	7/2.87
105/75	14/3.10	9/2.25	305/40	54/2.68	7/2.68	680/85	54/5.00	19/2.40
120/20	26/2.44	7/1.90	340/30	48/3.00	7/2.33	1045/45	72/4.30	7/2.87
120/70	12/3.60	7/3.60	380/50	54/3.00	7/3.00			
125/30	30/2.33	7/2.33	385/35	48/3.20	7/2.49			

**钢芯铝绞线(A1/S1A) 国际标准 IEC1089**

规格(铝)	绞线结构 根数/直径		规格(铝)	绞线结构 根数/直径		规格(铝)	绞线结构 根数/直径	
	铝	钢		铝	钢		铝	钢
sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm
16	6/1.84	1/1.84	315	45/2.99	7/1.99	710	54/4.09	7/2.45
25	6/2.30	1/2.30	315	26/3.93	7/3.05	800	72/3.76	7/2.51
40	6/2.91	1/2.91	400	45/3.36	7/2.24	800	84/3.48	7/3.48
63	6/3.66	1/3.66	400	54/3.07	7/3.07	800	54/4.34	7/2.61
100	6/4.61	1/4.61	450	45/3.57	7/2.38	900	72/3.99	7/2.66
125	18/2.97	1/2.97	450	54/3.26	7/3.26	900	84/3.69	7/3.69
125	26/2.47	7/1.92	500	45/3.76	7/2.51	1000	72/4.21	7/2.80
160	18/3.36	1/3.36	500	54/3.43	7/3.43	1120	72/4.45	19/1.78
160	26/2.80	7/2.18	560	45/3.98	7/2.65	1120	84/4.12	19/2.47
200	18/3.76	1/3.76	560	54/3.63	19/2.18	1250	84/4.35	19/2.61
200	26/3.13	7/2.43	630	45/4.22	7/2.81	1250	72/4.70	19/1.88
250	22/3.80	7/2.11	630	54/3.85	19/2.31			
250	26/3.50	7/2.72	710	45/4.48	7/2.99			

**钢芯铝绞线 中国标准 GB1179-83**

规格	绞线结构 根数/直径		规格	绞线结构 根数/直径		规格	绞线结构 根数/直径	
	铝/钢	铝		钢	铝/钢		铝	钢
sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm	sq. mm	No./mm	No./mm
10/2	6/1.50	1/1.50	150/25	26/2.70	7/2.10	300/50	26/3.83	7/2.98
16/3	6/1.85	1/1.85	150/35	30/2.50	7/2.50	300/70	30/3.60	7/3.60
25/4	6/2.32	1/2.32	185/10	18/3.60	1/3.60	400/20	42/3.51	7/1.95
35/6	6/2.72	1/2.72	185/25	24/3.15	7/2.10	400/25	45/3.33	7/2.22
50/8	6/3.20	1/3.20	185/30	26/2.98	7/2.32	400/35	48/3.22	7/2.50
50/30	12/2.32	7/2.32	185/45	30/2.80	7/2.80	400/50	54/3.07	7/3.07
70/10	6/3.80	1/3.80	210/10	18/3.80	1/3.80	400/65	26/4.42	7/3.44
70/40	12/2.72	7/2.72	210/25	24/3.33	7/2.22	400/95	30/4.16	19/2.50
95/15	26/2.15	7/1.67	210/35	26/3.22	7/2.50	500/35	45/3.75	7/2.50
95/20	7/4.16	1/1.85	210/50	30/2.98	7/2.98	500/45	48/3.60	7/2.80
95/55	12/3.20	7/3.20	240/30	24/3.60	7/2.40	500/65	54/3.44	7/3.44
120/7	18/2.90	1/2.90	240/40	26/3.42	7/2.66	630/45	45/4.20	7/2.80
120/20	26/2.38	7/1.85	240/55	30/3.20	7/3.20	630/55	48/4.12	7/3.20
120/25	7/4.72	7/2.10	300/15	42/3.00	7/1.67	630/80	54/3.87	19/2.32
120/70	12/3.60	7/3.60	300/20	45/2.93	7/1.95	800/55	45/4.80	7/3.20
150/8	18/3.20	1/3.20	300/25	48/2.85	7/2.22	800/70	48/4.63	7/3.60
150/20	24/2.78	7/1.85	300/40	24/3.99	7/2.66	800/100	54/4.33	19/2.60