



## ANNEALED COPPER STRANDED WIRE

The annealed copper stranded wire is a kind of annealed conductors for electric apparatuses (such as transformer, furnace, etc.) of transmission and distribution, electronic equipments and the components of silicon controlled rectifier as well.

### SPECIFICATION OF ANNEALED COPPER STRANDED WIRE TYPE TJR,TJRX

1. The annealed copper stranded wires are made of high quality copper round wires or tinned annealed copper round wires. During processing, the products have been flexible by annealed and having a tidy and nice appearance.

2. DC resistivity of annealed copper stranded wire(20°C) is not more than 0.0182Ωmm<sup>2</sup>/m,and the tinned wire is not more than 0.0193Ωmm<sup>2</sup>/m.

TJR1 Table One

标称截面 standard section mm <sup>2</sup>	计算截面 calculating section mm <sup>2</sup>	结 构 structure		计算外径 calculating external diameter mm	20 直流电阻 /km 不大于 20 direct current resistance / km no more than		计算重量 calculating weight kg/km
		单线总数 fotal	股数×根数/ 单线标称直径 number of skeins× threads/diameter of a single thread mm		TJR1	TJRX1	
0.1	0.102	9	9/0.12	0.44	176	179	0.94
(0.12)	0.124	7	7/0.15	0.45	145	147	1.15
0.16	0.159	9	9/0.15	0.56	113	115.00	1.47
(0.20)	0.194	11	11/0.15	0.60	92.9	94.4	1.80
0.25	0.247	14	14/0.15	0.68	72.9	74.1	2.29
(0.30)	0.300	17	17/0.15	0.74	60.3	61.30	2.80
0.4	0.408	13	13/0.20	0.86	44.2	44.90	3.79
(0.50)	0.503	16	16/0.20	0.96	36.0	36.60	4.70
0.63	0.628	20	20/0.20	1.05	28.8	29.30	5.86
(0.75)	0.754	24	24/0.20	1.14	24.0	24.40	7.04
1.00	1.01	32	32/0.20	1.30	17.9	18.2	9.43

(2.00)	1.96	40	40/0.25	1.82	9.24	9.39	18.3
2.5	2.41	49	7 × 7/0.25	2.25	7.58	7.92	22.7
4.0	3.94	49	7 × 7/0.32	2.88	4.64	-	37.1
6.3	6.16	49	7 × 7/0.40	3.60	2.97	-	58.0
10	10.01	49	7 × 7/0.51	4.59	1.83	-	94.3
16	15.84	84	7 × 12/0.49	6.17	1.16	-	150
25	25.08	133	19 × 7/0.49	7.35	0.736	-	239
(35)	35.14	133	19 × 7/0.58	8.70	0.525	-	334
40	40.15	133	19 × 7/0.62	9.30	0.459	-	382
(50)	48.30	133	19 × 7/0.68	10.20	0.382	-	459
63	62.72	183	27 × 7/0.65	12.00	0.294	-	597
(70)	68.64	189	27*7/0.68	12.53	0.269	-	653
80	78.20	259	37 × 7/0.62	13.02	0.236	-	744
(95)	94.06	259	37 × 7/0.68	14.28	0.196	-	895
100	99.68	259	37 × 7/0.70	14.70	0.185	-	948
(120)	117.67	324	27 × 12/0.68	17.39	0.157	-	1119
125	124.69	324	27 × 12/0.70	17.90	0.148	-	1186
160	162.86	324	27 × 12/0.80	20.20	0.113	-	1549
(185)	183.85	324	27 × 12/0.85	21.47	0.100	-	1749
200	196.15	444	37 × 12/0.75	21.80	0.0940	-	1866
250	251.95	444	37 × 12/0.85	24.72	0.0732	-	2397
315	310.58	703	37 × 19/0.75	26.25	0.0594	-	2954
400	398.92	703	37 × 19/0.85	29.75	0.0462	-	3795
500	498.3	703	37 × 19/0.95	33.25	0.0370	-	4740
630	627.1	1159	61 × 19/0.83	37.35	0.0294	-	5965
800	804.3	1159	61 × 19/0.94	42.30	0.0229	-	7651

TJR2 Table Two

standard section mm <sup>2</sup>	calculating section mm <sup>2</sup>	structure		calculating external diameter mm	direct current resistance /km no more than		calculating weight kg/km
		Total	number of skeins × threads/ diameter of a single threadmm		TJR1	TJR1	

2.5	2.47	140	7 × 20/0.15	2.36	7.40	7.73	23.3
4.0	3.96	126	7 × 18/0.20	3.00	4.62	4.82	37.3
6.3	6.16	196	7 × 28/0.20	3.72	2.97	3.10	58.0
10	9.90	315	7 × 45/0.20	4.62	1.85	1.93	93.9
16	15.83	504	12 × 42/0.20	6.18	1.16	1.23	150
25	25.07	798	19 × 42/0.20	7.45	0.736	0.781	238
(35)	35.41	1127	7 × 7 × 23/0.20	10.57	0.521	0.545	337
40	40.02	1274	7 × 7 × 26/0.20	10.62	0.461	0.482	381
(50)	49.26	1568	7 × 7 × 32/0.20	11.70	0.375	0.392	469
63	63.11	2009	7 × 7 × 41/0.20	13.32	0.292	0.305	600

## TJR3 Table Tree

标称截面 standard section mm <sup>2</sup>	计算截面 calculating section mm <sup>2</sup>	结 构 structure		计算外径 calculating external diameter mm	20 直流电阻 /km 不大于 20 direct current resistance /km no more than		计算重量 calculating weight kg/km
		单线总数 fotal	股数 × 根数/ 单线标称直径 number of skeins × threads/diameter of a single thread mm		TJR3	TJR3X3	
0.025	0.0255	13	13/0.05	0.22	707	759	0.24
0.04	0.0385	10	10/0.07	0.27	466	500	0.36
0.063	0.0616	16	16/0.07	0.34	294	316	0.58
0.10	0.100	26	26/0.07	0.42	181	194	0.93
0.16	0.158	41	41/0.07	0.52	115	123	1.47
0.25	0.250	65	65/0.07	0.65	72.4	77.7	2.33
(0.30)	0.296	77	7 × 11/0.07	0.84	61.7	64.5	2.79
0.40	0.404	105	7 × 15/0.07	0.97	45.2	48.5	3.81
(0.50)	0.512	133	7 × 19/0.07	1.05	35.7	38.3	4.82
0.63	0.620	161	7 × 23/0.07	1.18	29.5	31.7	5.84
(0.75)	0.754	196	7 × 28/0.07	1.28	24.2	26.0	7.11
1.0	0.997	259	7 × 37/0.07	1.47	18.3	19.6	9.40
1.5	1.57	408	12 × 34/0.07	1.97	11.70	12.6	14.8

2.5	2.49	646	19 × 34/0.07	2.35	7.41	7.96	23.7
4	4.03	513	19 × 27/0.10	3.08	4.58	4.79	38.3
6.3	6.27	798	19 × 42/0.10	3.73	2.94	3.07	59.6
10	10.00	1273	19 × 67/0.10	4.73	1.85	1.93	95.1
16	15.83	2016	12 × 7 × 24/0.10	7.18	1.16	1.21	150
25	25.07	3192	19 × 7 × 24/0.10	8.55	0.736	0.769	238
(35)	34.47	4389	19 × 7 × 33/0.10	9.90	0.535	0.559	328
40	39.96	2261	19 × 7 × 17/0.15	11.03	0.462	0.483	380
(50)	49.36	2793	19 × 7 × 21/0.15	12.15	0.374	0.391	470
63	63.46	3591	19 × 7 × 27/0.15	13.50	0.291	0.304	604
(70)	70.51	3990	19 × 7 × 30/0.15	14.18	0.252	0.274	671
80	79.91	4522	19 × 7 × 34/0.15	15.08	0.231	0.241	760
(95)	94.01	5320	19 × 7 × 40/0.15	16.43	0.195	0.205	894
100	100.73	5700	19 × 12 × 25/0.15	18.27	0.183	0.191	958
(120)	120.87	6840	19 × 12 × 30/0.15	20.24	0.153	0.160	1150
125	127.59	7220	19 × 19 × 20/0.15	20.29	0.145	0.152	1214
160	159.49	9025	19 × 19 × 25/0.15	21.75	0.116	0.121	1517
(185)	185.00	10469	19 × 19 × 29/0.15	23.25	0.0997	0.104	1760
200	196.15	11100	37 × 12 × 25/0.15	25.58	0.0940	0.0982	1866
250	251.08	14208	37 × 12 × 32/0.15	28.57	0.0735	0.0768	2388
315	310.58	17575	37 × 19 × 25/0.15	30.45	0.0594	0.0621	2954
400	397.54	22496	37 × 19 × 32/0.15	34.13	0.0464	0.0485	3782
500	496.92	28120	37 × 19 × 40/0.15	38.06	0.0371	0.0388	4727

>TJR4 Table Four

标称截面 standard section mm <sup>2</sup>	计算截面 calculating section mm <sup>2</sup>	结 构 structure	计算外径 calculating external diameter mm	20 直流电阻 /km 不大于 20 direct current resistance /km no more	计算重量 calculating weight kg/km
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		单线 总数 total	股数×根数/ 单线标称直径 number of skeins× threads/diameter of a single threadmm		TJR	TJRX	
0.3	0.301	60	3*20/0.08	0.89	60.3	64	2.78
0.3	0.30	153	3×5/0.05	0.9	60.3	64	2.78
0.4	0.407	81	3×27/0.08	1.06	44.5	47.2	3.8
0.5	0.498	99	3×33/0.08	1.16	36.3	38.6	4.6
0.5	0.495	252	7×3×12/0.05	1.3	36.6	38.8	4.58
0.75	0.754	150	3×50/0.08	1.44	24	25.5	7
0.75	0.742	378	7×3×18/0.05	1.62	24.4	25.9	6.9
1	0.97	252	7×3×12/0.07	1.88	18.6	19.8	9
1	0.99	504	7×3×24/0.05	1.93	18.3	19.4	9.17
1.5	1.46	378	7×3×18/0.07	2.25	12.5	13.2	13.4
1.5	1.48	756	7×3×36/0.05	2.26	12.2	13	13.7
2	1.94	504	7×3×24/0.07	2.7	9.3	10	17.9
2	1.98	1008	7×3×48/0.05	2.6	9.1	9.7	18.3
2.5	2.31	1176	7×3×56/0.05	2.81	7.8	8.3	21.4
2.5	2.49	646	19×34/0.07	2.45	7.27	7.7	23
3	2.97	1512	7×3×72/0.05	3.14	6.1	6.5	27.4
3	3	777	7×3×37/0.07	3.15	6	6.4	27.6
3.5	3.61	720	12×60/0.08	3	5	5.3	33.3
3.5	3.5	1785	7×3×85/0.05	3.42	5.17	5.49	32.4
4	3.96	2016	12×3×56/0.05	3.89	4.6	4.8	36.6
4	4.04	1050	7×3×50/0.07	3.8	4.5	4.7	2.89
5	5.05	2502	12×3×70/0.05	4.28	3.66	3.88	45.7
5	5.05	4018	7×7×82/0.04	3.74	3.58	3.8	46.7
6	6.26	3192	19×3×56/0.05	4.7	2.80	3.06	57.9
6	5.94	756	7×3×36/0.10	4.52	3.05	3.23	54.6
8	7.92	1008	7×3×48/0.10	5.27	2.29	2.43	73
10	9.9	1260	7×3×60/0.10	5.8	1.83	1.94	92
12	12.03	1533	7×3×73/0.10	6.3	1.51	1.60	112
16	16.2	2064	12×4×43/0.10	7.93	1.12	1.19	150
25	24.73	3150	7×3×3×50/0.10	11.7	0.73	0.78	229
35	32.97	4200	7×4×3×50/0.10	13.11	0.55	0.58	305
50	49.46	6300	14×3×3×50/0.10	17.21	0.37	0.39	458
70	74.21	4200	12×7×50/0.15	15.70	0.24	0.26	687

95	95.42	5400	$27 \times 4 \times 50 / 0.15$	18.71	0.19	0.20	884
120	117.51	6650	$19 \times 7 \times 50 / 0.15$	18.90	0.155	0.164	1088
150	143.13	8100	$27 \times 6 \times 50 / 0.15$	23.26	0.13	0.14	1325
185	173.17	9800	$14 \times 14 \times 50 / 0.15$	24.54	0.105	0.11	1603
240	228.83	12950	$37 \times 7 \times 50 / 0.15$	26.46	0.079	0.084	2119
300	296.9	9450	$27 \times 7 \times 50 / 0.20$	31.01	0.061	0.065	2749
400	394.1	8029	$37 \times 7 \times 31 / 0.25$	35.2	0.046	0.049	3649
500	483	9842	$37 \times 19 \times 14 / 0.25$	38.6	0.038	0.039	4472
610	610.2	3108	$37 \times 7 \times 12 / 0.50$	43.4	0.03	0.031	5644

