



硬銅/軟銅絞線 (IEC 228)

Stranded conductors for single-core and multi-core cables Class 2

1	2	3	4	5	6	7	8	9	10
Nominal Cross-Sectional area	Minimum number of wires in the conductor						Maximum resistance of conductor at 20°C		
	Circular conductor (non-compacted)		Circular compacted conductor		Shaped conductor		Copper conductor		Aluminum conductor, plain metal-coated or metal-clad wires
	Cu	Al	Cu	Al	Cu	Al	Plain wires	Metal-coated wire	
mm ²	Cu	Al	Cu	Al	Cu	Al	Ω/km	Ω/km	Ω/km
0.5	7	—	—	—	—	—	36.0	36.7	—
0.75	7	—	—	—	—	—	24.5	24.8	—
1	7	—	—	—	—	—	18.1	18.2	—
1.5	7	—	6	—	—	—	12.1	12.2	—
2.5	7	—	6	—	—	—	7.41	7.56	—
4	7	7	6	—	—	—	4.61	4.70	7.41
6	7	7	6	—	—	—	3.08	3.11	4.61
10	7	7	6	—	—	—	1.83	1.84	3.08
16	7	7	6	6	—	—	1.15	1.16	1.91
25	7	7	6	6	6	6	0.727	0.734	1.20
35	7	7	6	6	6	6	0.524	0.529	0.868
50	19	19	6	6	6	6	0.387	0.391	0.641
70	19	19	12	12	12	12	0.268	0.270	0.443
95	19	19	15	15	15	15	0.193	0.195	0.320
120	37	37	18	15	18	15	0.153	0.154	0.253
150	37	37	18	15	18	15	0.124	0.126	0.206
185	37	37	30	30	30	30	0.0991	0.100	0.164
240	61	61	34	30	34	30	0.0754	0.0762	0.125
300	61	61	34	30	34	30	0.0601	0.0607	0.100
400	61	61	53	53	53	53	0.0470	0.0475	0.0778
500	61	61	53	53	53	53	0.0366	0.0369	0.0605



硬銅/軟銅絞線 (美國標準 ASTM B8)

線號 AWG 或 MCM	構成 No./mm				截面積 mm ²	絞合外徑 mm				標準 重量 kg/km	最大直流電阻 20°C (%)		
	Class A	Class B	Class C	Class D		Class A	Class B	Class C	Class D		硬銅線	軟銅線	
AWG	22	—	7/0.244	—	—	0.324	—	0.737	0.927	—	2.941	—	54.23
	20	—	7/0.307	19/0.185	—	0.519	—	0.914	—	—	4.705	—	34.58
	19	—	7/0.345	—	—	0.653	—	1.04	1.17	—	5.922	—	26.90
	18	—	7/0.386	19/0.234	—	0.823	—	1.17	—	—	7.462	—	21.83
	17	—	7/0.437	—	—	1.04	—	1.32	—	—	9.429	—	16.93
	16	—	7/0.488	19/0.297	—	1.31	—	1.47	1.49	—	11.86	—	13.67
	15	—	7/0.549	—	—	1.65	—	1.65	—	—	14.98	—	10.65
	14	—	7/0.615	19/0.373	37/0.267	2.08	—	1.85	1.87	1.87	18.88	—	8.619
	13	—	7/0.691	19/0.419	37/0.300	2.63	—	2.08	2.10	2.10	23.82	—	6.824
	12	—	7/0.775	19/0.470	37/0.338	3.31	—	2.34	2.35	2.37	30.00	—	5.426
	11	—	7/0.871	19/0.528	37/0.378	4.17	—	2.62	2.64	2.65	37.80	—	4.304
	10	—	7/0.978	19/0.594	37/0.424	5.261	—	2.95	2.97	2.97	47.71	—	3.409
	9	—	7/1.10	19/0.665	37/0.478	6.631	—	3.30	3.33	3.35	60.14	2.813	2.705
	8	—	7/1.23	19/0.749	37/0.536	8.367	—	3.70	3.75	3.75	75.90	2.230	2.144
	7	—	7/1.39	19/0.841	37/0.602	10.55	—	4.16	4.21	4.21	95.70	1.768	1.700
	6	—	7/1.56	19/0.945	37/0.676	13.30	—	4.67	4.73	4.73	121.0	1.402	1.348
	5	—	7/1.75	19/1.060	37/0.759	16.77	—	5.24	5.30	5.31	152.0	1.113	1.070
	4	7/1.96	7/1.96	19/1.190	37/0.853	21.15	5.88	5.88	5.95	5.97	192.0	0.8820	0.8481
	3	7/2.20	7/2.20	19/1.340	37/0.958	26.67	6.61	6.61	6.70	6.71	242.0	0.6996	0.6727
	2	7/2.47	7/2.47	19/1.500	37/1.08	33.62	7.42	7.42	7.50	7.56	305.0	0.5548	0.5335
1	7/2.78	19/1.69	37/1.21	61/0.94	42.41	8.33	8.43	8.47	8.46	385.0	0.4399	0.4230	
1/0	7/3.12	19/1.89	37/1.36	61/1.06	53.49	9.36	9.46	9.52	9.54	485.0	0.3488	0.3354	
2/0	7/3.50	19/2.13	37/1.52	61/1.19	67.43	10.5	10.6	10.6	10.7	611.0	0.2766	0.2660	
3/0	7/3.93	19/2.39	37/1.71	61/1.33	85.01	11.8	11.9	12.0	12.0	771.0	0.2194	0.2110	
4/0	7/4.42	19/2.68	37/1.92	61/1.50	107.2	13.4	13.4	13.4	13.5	972.0	0.1740	0.1673	
MCM	250	19/2.91	37/2.09	61/1.63	91/1.33	127.0	14.6	14.6	14.7	14.6	1,150.0	0.14730	0.1416
	300	19/3.19	37/2.29	61/1.78	91/1.46	152.0	16.0	16.0	16.0	16.1	1,380.0	0.12270	0.1180
	350	19/3.45	37/2.47	61/1.92	91/1.57	177.0	17.2	17.3	17.3	17.3	1,610.0	0.10510	0.1011
	400	19/3.69	37/2.64	61/2.06	91/1.68	203.0	18.4	18.5	18.5	18.5	1,840.0	0.09204	0.08851
	450	37/2.80	37/2.80	61/2.18	91/1.79	228.0	19.6	19.6	19.6	19.6	2,070.0	0.08181	0.07867
	500	37/2.95	37/2.95	61/2.30	91/1.88	253.0	20.7	20.7	20.7	20.7	2,298.0	0.07363	0.07080
	550	37/3.10	61/2.41	—	—	279.0	21.7	21.7	—	—	2,527.0	0.06693	0.06436
	600	37/3.23	61/2.52	—	—	304.0	22.6	22.7	—	—	2,758.0	0.06136	0.05900
	650	61/2.62	61/2.62	—	—	329.0	23.6	23.6	—	—	2,987.0	0.05665	0.05447
	700	61/2.72	61/2.72	—	—	355.0	24.5	24.5	—	—	3,216.0	0.05259	0.05057
	750	61/2.82	61/2.82	—	—	380.0	25.4	25.4	—	—	3,447.0	0.04910	0.04721
	800	61/2.91	61/2.91	—	—	405.0	26.2	26.2	—	—	3,676.0	0.04602	0.04425
	900	61/3.09	61/3.09	—	—	456.0	27.8	27.8	—	—	4,136.0	0.04090	0.03933
1,000	61/3.25	61/3.25	—	—	507.0	29.3	29.3	—	—	4,596.0	0.03681	0.03540	