

導體線號尺寸與股數關係表

Approx. OD	Lbs / Ft.	Circular MILS	Size AWG/CM	Class AA	Class A	Class B	Class C	Class D	Class G	Rope Strand (Flexible)		
										Class H	Class K	Class M
											30 AWG (.010")	34 AWG (.0063")
.0050	.0757	25.00	36	.50	.57	25	36	36	.0050	.0757	25.00	36
.0056	.0954	31.52	35									
.0063	.1203	39.75	34									
.0071	.1517	50.13	33									
.0080	.1913	63.21	32									
.0089	.2413	79.70	31									
.0100	.3042	100.5	30									
.0113	.3836	126.7	29									
.0126	.4837	159.8	28									
.0142	.6100	201.5	27									
.0159	.7692	254.1	26									
.0179	.9699	320.4	25									
.0201	1.223	404.0	24									
.0226	1.542	509.5	23									
.0254	1.945	642.4	22									
.0285	2.452	810.1	21									
0.0363	3.154	1,020	20			7	19				10	26
0.0456	5.015	1,620	18			7	19				16	41
0.0576	7.974	2,580	16			7	19				26	65
0.0726	12.68	4,110	14			7	19	37	49		41	104
0.0915	20.16	5,530	12			7	19	37	49		65	168
0.116	32.06	10,380	10			7	19	37	49		104	259
0.130	40.42	13,090	9			7	19	37	49	133		
0.146	51.0	16,510	8			7	19	37	49	133	168	420
0.184	80.9	26,240	6			7	19	37	49	133	266	665
0.232	129	41,740	4	3	7	7	19	37	49	133	420	1064
0.260	162	52,620	3	3	7	7	19	37	49	133	532	1323
0.292	205	66,630	2	3	7	7	19	37	49	133	665	1666
0.332	259	83,690	1	3	7	19	37	61	133	259	836	2107
0.373	326	105,600	1/0	7	7	19	37	61	133	259	1064	2646
0.419	411	133,100	2/0	7	7	19	37	61	133	259	1323	3325



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0.470	518	167,800	3/0	7	7	19	37	61	133	259	1666	4256
0.528	653	211,600	4/0	7	7	19	37	61	133	259	2107	5320
0.575	772	250,000	250,000	12	19	37	61	91	259	427	2499	6384
0.630	925	300,000	300,000	12	19	37	61	91	259	427	2989	7581
0.681	1080	350,000	350,000	12	19	37	61	91	259	427	3456	8806
0.728	1236	400,000	400,000		19	37	61	91	259	427	3990	10,101
0.813	1542	500,000	500,000		37	37	61	91	259	427	5054	12,691
0.893	1850	600,000	600,000		37	61	91	127	427	703	5985	14,945
0.998	2316	750,000	750,000		61	61	91	127	427	703	7581	16,788
1.152	3086	1,000,000	1,000,000		61	61	91	127	427	703	10,101	25,193

Methods of Stranding Vs. Gauge												Copper						
Size AWG MCM	Approx.. Overall Diam. In.	Number of Individual Wire Strands										49 (7x7)	133 (19x7)	259 (37x7)	427 (61x7)	703 (37x19)		
		3	7	10	19	37	61	91	127	169	217							
24	.024	-	.0060	.0063	.0050													
22	.030	-	.0100	-	.0063													
20	.038	-	.0126	.0100	.0080													
18	.046	-	.0152	-	.0100													
16	.058	.0293	.0192		.0119	.0084	.0065	.0045	.0039	.0035	.0073	.0044						
14	.073	.0370	.0242		.0147	.0105	.0082	.0067	.0057	.0049	.0044	.0092	.0056					
12	.092	.0467	.0305		.0185	.0133	.0103	.0085	.0072	.0062	.0055	.0155	.0070	.0060				
10	.115	.0589	.0385		.0234	.0167	.0131	.0107	.0090	.0078	.0069	.0145	.0088	.0063				
8	.146	.0742	.486		.0295	.0211	.0165	.0135	.0114	.0099	.0087	.0184	.0111	.0080	.0062			
6	.184	.0935	.0612		.0372	.0266	.0207	.0170	.0144	.0125	.0110	.0231	.0140	.0101	.0078	.0061		
5	.206	.1050	.0688		.0417	.0299	.0233	.0191	.0161	.0140	.0124	.0260	.0158	.0113	.0088	.0069		
4	.232	.1180	.0772		.0469	.0336	.0262	.0214	.0181	.0157	.0139	.0292	.0177	.0127	.0099	.0077		
3	.260	.1325	.0667		.0526	.0377	.0294	.0241	.0204	.0176	.0156	.0328	.0199	.0143	.0111	.0087		
2	.292	.1487	.0974		.0591	.0424	.0330	.0270	.0229	.0198	.0175	.0368	.0223	.0160	.0125	.0098		
1	.328	.1670	.1093		.0664	.0476	.0370	.0303	.0257	.0223	.0196	.0413	.0251	.0180	.0140	.0109		
0	.368	.1875	.1228		.0745	.0534	.0416	.0341	.0288	.0250	.0220	.0464	.0282	.0202	.0157	.0123		
00	.414	.2106	.1379		.837	.0600	.0467	.0382	.0323	.0281	.0248	.0621	.0316	.0227	.0177	.0139		
000	.464	.2365	.1548		.0940	.0673	.0525	.0429	.0364	.0315	.0278	.0585	.0355	.0255	.0198	.0154		
0000	.522	.2666	.1739		.1055	.0756	.0589	.0482	.0408	.0354	.0312	.0657	.0399	.0266	.0223	.0173		



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250,000	.574		.1890		.1147	.0822	.0640	.0524	.0444	.0385	.0339	.0714	.0434	.0311	.0242	.0189
300,000	.629		.2070		.1257	.0900	.0701	.0574	.0486	.0421	.0372	.0762	.0475	.0340	.0265	.0207
350,000	.679		.2236		.0973	.0973	.0757	.0620	.0525	.0465	.0402	.0845	.0513	.0368	.0286	.0223
400,000	.726		.2390		.1451	.1040	.0810	.0663	.0561	.0487	.0429	.0904	.0548	.0393	.0306	.0239
450,000	.772		.2533		.1539	.1103	.0859	.0703	.0595	.0516	.0455	.0958	.0582	.0417	.0325	.0253
500,000	.813		.2673		.1622	.1162	.0905	.0741	.0627	.0644	.0480	.1010	.0613	.0439	.0342	.0267
600,000	.819		.2928		.1777	.1275	.0992	.0812	.0687	.0596	.0526	.1107	.0672	.0481	.0375	.0292
700,000	.964		.3162		.1919	.1375	.1071	.0877	.0742	.0644	.0566	.1195	.0726	.0520	.0405	.0316
750,000	.998		.3275		.1987	.1324	.1109	.0908	.0768	.0666	.0588	.1237	.0751	.0538	.0419	.0327
800,000	1.031		.3381		.2052	.1470	.1145	.0938	.0794	.0688	.0608	.1278	.0776	.0556	.0433	.0337
900,000	1.094		.3686		.2176	.1560	.1215	.0994	.0842	.0730	.0644	.1355	.0823	.0589	.0459	.0358
1,000,000	1.152		.3780		.2294	.1644	.1280	.1048	.0667	.0769	.0679	.1429	.0867	.0621	.0484	
1,250,000	1.288		.4226		.2565	.1838	.1431	.1172	.0992	.0860	.0759	.1597	.0969		.0541	
1,500,000	1.411		.4629		.2810	.2013	.1565	.1284	.1087	.0942	.0831	.1750	.1062		.0593	
1,750,000	1.526		.5000		.3035	.2175	.1694	.1387	.1174	.1018	.0898	.1890	.1147		.0640	
2,000,000	1.630		.5346		.3244	.2325	.1811	.1462	.1255	.1088	.0960	.2020	.1226		.0684	

Size of wire is in line with gauge of individual strand against number of strands

*請注意: 導體組合之股數多寡將影響導體之外徑尺寸, 本表中所列外徑尺寸為近似值。

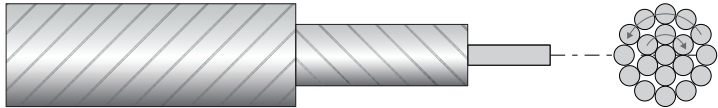


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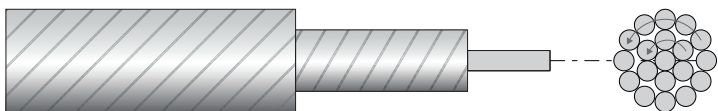
Conductor configurations

TRUE CONCENTRIC



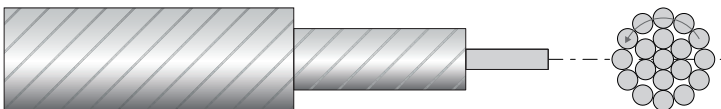
True concentric wire is a counterdirectional non equi lay concentric configuration where successive layers have a longer lay length in a reverse direction. The outer layer is to the left.

UNIDIRECTIONAL CONCENTRIC



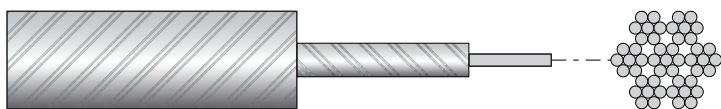
Unidirectional concentric wire is a unidirectional non equi lay concentric configuration where successive layers have a longer lay length but in the same direction. The layers are laid to the left.

UNILAY CONCENTRIC



Unilay concentric wire is a unidirectional equi lay concentric configuration where successive layers have the same lay length and are laid in the same direction.

ROPELAY CONFIGURATION



The conductor is of concentric construction and is composed of several of the above configurations laid either counter or unidirectionally.

BUNCH CONFIGURATION

A unidirectional configuration with random positioning of the strands. Semi or non concentric.

SPECIAL CONSTRUCTIONS

We will evaluate all types of constructions and assemblies to meet the most demanding specifications: special compositions, metal materials or not, different diameter strands, ultra flexible constructions.

FURTHER INFORMATION > Our sales team is at your disposal for any advice you may require.

Conductor dimensions

Cross reference of AWG, diameters and sections.

AWG	CONSTRUCTION OF THE CONDUCTOR		NOMINAL DIAMETER OF THE CONDUCTOR (mm)	CONDUCTOR AREA (mm ²)
	NUMBER OF STRANDS x AWG	NUMBER OF STRANDS x Ø MM		
54	1 x 54	1 x 0.015	0.015	0.00017
52	1 x 52	1 x 0.020	0.020	0.00031
50	1 x 50	1 x 0.025	0.025	0.00049
48	1 x 48	1 x 0.031	0.031	0.00075
46	1 x 46	1 x 0.040	0.040	0.00126
	7 x 54	7 x 0.015	0.045	0.00124
44	1 x 44	1 x 0.050	0.050	0.00203
	7 x 52	7 x 0.020	0.060	0.00220
42	1 x 42	1 x 0.063	0.063	0.00316
	7 x 50	7 x 0.025	0.075	0.00343
41	1 x 41	1 x 0.071	0.071	0.00396
40	1 x 40	1 x 0.079	0.079	0.00490
	7 x 48	7 x 0.031	0.093	0.00528
38	1 x 38	1 x 0.102	0.102	0.0081
	7 x 46	7 x 0.040	0.120	0.0088
36	1 x 36	1 x 0.127	0.127	0.0127
	7 x 44	7 x 0.050	0.150	0.0137
34	1 x 34	1 x 0.160	0.160	0.020
	7 x 42	7 x 0.063	0.189	0.022
32	1 x 32	1 x 0.203	0.203	0.032
	7 x 40	7 x 0.079	0.237	0.034
	19 x 44	19 x 0.050	0.250	0.037
30	1 x 30	1 x 0.254	0.254	0.051
	7 x 38	7 x 0.102	0.304	0.057
	19 x 42	19 x 0.063	0.315	0.059
28	1 x 28	1 x 0.320	0.320	0.080
	7 x 36	7 x 0.127	0.381	0.089
	19 x 40	19 x 0.079	0.395	0.093
26	1 x 26	1 x 0.404	0.404	0.128
	7 x 34	7 x 0.160	0.480	0.141
	19 x 38	19 x 0.102	0.504	0.155
24	1 x 24	1 x 0.511	0.511	0.205
	7 x 32	7 x 0.203	0.609	0.227
	19 x 36	19 x 0.127	0.634	0.241
22	1 x 22	1 x 0.643	0.643	0.324
	7 x 30	7 x 0.254	0.762	0.355
	19 x 34	19 x 0.160	0.800	0.382
20	1 x 20	1 x 0.813	0.813	0.518
	7 x 28	7 x 0.320	0.960	0.563
	19 x 32	19 x 0.203	1.01	0.616
18	19 x 30	19 x 0.254	1.27	0.962
16	19 x 29	19 x 0.287	1.43	1.23
		19 x 0.300	1.50	1.34
14	19 x 27	19 x 0.361	1.80	1.94
		27 x 0.300	1.80	1.91
12	19 x 25	19 x 0.455	2.27	3.09
	37 x 28	37 x 0.320	2.22	2.98
		45 x 0.300	2.45	3.18
10	37 x 26	37 x 0.404	2.80	4.77
8	133 x 29	133 x 0.287	4.09	8.60
6	133 x 27	133 x 0.361	5.14	13.61
4	133 x 25	133 x 0.455	6.48	21.62
2	665 x 30	665 x 0.254	8.30	33.70
1	817 x 30	817 x 0.254	9.40	41.40
0	1045 x 30	1045 x 0.254	10.55	52.95
00	1330 x 30	1330 x 0.254	11.75	67.40