

Description: IEC & BS EN 60228 Conductor  
Stranding for Insulated Cables



Below shows the number of strands and strand size for each conductor size according to IEC/BS EN 60228.

It is important to note the following;

- For Classes 1 & 2 the number of strands is obligatory according to IEC/BS EN 60228.
- Classes 5 & 6 gives the maximum strand diameter, it is acceptable to have fewer strands so long as the conductor resistance does not exceed the maximum shown below.
- Standard IEC/BS EN 60228 gives the maximum resistance in  $\Omega/\text{km}$  that is permissible for bare/plain copper conductors.

mm <sup>2</sup>	Class 1	Class 2	Resistance $\Omega/\text{km}$ of Class 1 & 2	Class 5	Class 6	Resistance $\Omega/\text{km}$ of Class 5 & 6	Approximate Weight kg/km
0.14	N/A	N/A	N/A	N/A	18/0.10	138	1.35
0.25	N/A	N/A	N/A	14/0.16	32/0.10	79.0	2.4
0.34	N/A	N/A	N/A	19/0.16	42/0.10	57.0	3.3
0.50	1/0.80	7/0.30	36.0	16/0.21	28/0.16	38.0	4.8
0.75	1/0.97	7/0.37	24.5	24/0.21	42/0.16	26.0	7.2
1.0	1/1.13	7/0.43	18.1	32/0.21	56/0.16	19.5	9.6
1.5	1/1.38	7/0.53	12.1	30/0.26	84/0.16	13.3	14.4
2.5	1/1.78	7/0.67	7.41	50/0.26	140/0.16	7.98	24
4.0	1/2.26	7/0.85	4.61	56/0.31	244/0.16	4.95	38
6.0	1/2.76	7/1.04	3.08	84/0.31	192/0.21	3.30	58
10	1/3.57	7/1.35	1.83	80/0.41	320/0.21	1.91	96
16	1/4.5	7/1.70	1.15	128/0.41	512/0.21	1.21	154
25	N/A	7/2.14	0.72	200/0.41	800/0.21	0.78	240
35	N/A	7/2.52	0.52	280/0.41	1120/0.21	0.55	336
50	N/A	19/1.78	0.39	400/0.41	705/0.31	0.39	480
70	N/A	19/2.14	0.27	356/0.51	990/0.31	0.27	672
95	N/A	19/2.52	0.19	485/0.51	1340/0.31	0.21	912
120	N/A	37/2.03	0.15	614/0.51	1690/0.31	0.16	1152
150	N/A	37/2.25	0.12	765/0.51	2123/0.31	0.13	1440
185	N/A	37/2.52	0.10	944/0.51	1470/0.41	0.11	1776
240	N/A	61/2.25	0.07	1225/0.51	1905/0.41	0.08	2304

Publication Date: 13/11/2023

Revision Number: 2.0

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