

European Cable Stranding

Guidelines have been established for measuring conductor sizes within the European Cable industry. In the past, conductors were normally measured by either their cross sectional area, number and diameter of individual strands, or both. The new system for flexible conductors (column

3 & 4 below) centers around the maximum strand diameter and the conductor resistance. In view of this, some cables may have less strands and a smaller diameter than listed below but still conform to BS 6360, VDE 0295, and IEC 228 by meeting conductor resistance requirements.

Cross Section mm ²	Strands VDE 0295 BS 6360 Class 2 (1)	Multi-wire Strands (2)	Fine-Wire Strands VDE 0295 BS 6360 Class 5 (3)	Fine-Wire Strands VDE 0295 BS 6360 Class 6 (4)	Super Fine Wire Strands (5)	Super Fine Wire Strands (6)	Super Fine Wire Strands (7)
0.05							24 x 0.05
0.08							41 x 0.05
0.14				18 x 0.10	18 x 0.1	36 x 0.07	72 x 0.05
0.25			14 x 0.16	32 x 0.10	32 x 0.1	65 x 0.07	128 x 0.05
0.34		7 x 0.25	19 x 0.16	42 x 0.10	42 x 0.1	88 x 0.07	174 x 0.05
0.38		7 x 0.27	12 x 0.21	21 x 0.15	48 x 0.1	100 x 0.07	194 x 0.05
0.50	7 x 0.30	7 x 0.30	16 x 0.21	28 x 0.15	64 x 0.1	131 x 0.07	256 x 0.05
0.75	7 x 0.37	7 x 0.37	24 x 0.21	42 x 0.15	96 x 0.1	195 x 0.07	384 x 0.05
1.0	7 x 0.43	7 x 0.43	32 x 0.21	56 x 0.15	128 x 0.1	260 x 0.07	512 x 0.05
1.5	7 x 0.52	7 x 0.52	30 x 0.26	84 x 0.15	192 x 0.1	392 x 0.07	768 x 0.05
2.5	7 x 0.67	19 x 0.41	50 x 0.26	140 x 0.15	320 x 0.1	651 x 0.07	1280 x 0.05
4	7 x 0.85	19 x 0.52	56 x 0.31	224 x 0.15	512 x 0.1	1040 x 0.07	
6	7 x 1.05	19 x 0.64	84 x 0.31	192 x 0.20	768 x 0.1	1560 x 0.07	
10	7 x 1.35	49 x 0.51	80 x 0.41	320 x 0.20	1280 x 0.1	2600 x 0.07	
16	7 x 1.70	49 x 0.65	128 x 0.41	512 x 0.20	2048 x 0.1		
25	7 x 2.13	84 x 0.62	200 x 0.41	800 x 0.20	3200 x 0.1		
35	7 x 2.52	133 x 0.58	280 x 0.41	1120 x 0.20			
50	19 x 1.83	133 x 0.69	400 x 0.41	705 x 0.30			
70	19 x 2.17	189 x 0.69	356 x 0.51	990 x 0.30			
95	19 x 2.52	259 x 0.69	485 x 0.51	1340 x 0.30			
120	37 x 2.03	336 x 0.67	614 x 0.51	1690 x 0.30			
150	37 x 2.27	392 x 0.69	765 x 0.51	2123 x 0.30			
185	37 x 2.52	494 x 0.69	944 x 0.51	1470 x 0.40			
240	61 x 2.24	627 x 0.70	1225 x 0.51	1905 x 0.40			
300	61 x 2.50	790 x 0.70	1530 x 0.51	2385 x 0.40			
400	61 x 2.89		2035 x 0.51				
500	61 x 3.23		1768 x 0.51				

NOTE: The number of wires in columns (3) - (7) is optional. VDE 0295 specifies only the maximum diameter of the individual wires and the maximum resistance assigned to the cross-section.

AWG	Strand	mm ²	CLASS 5	mm ²	DCR	CLASS 6	Strand	mm ²
26				.14	42.0	18 / .10	7/34	0.14
24			14 / .15	.25	24.0	32 / .10	10/34	0.20
22	7/30	0.35	19 / .15	.34	17.3	42 / .10	19/34	0.38
20	10/30	0.51	16 / .21	.50	11.88	28 / .15	26/34	0.52
18	19/30	1.00	24 / .21	.75	7.92	42 / .15	41/34	0.83
			32 / .21	1.0	5.94	56 / .15		
16	26/30	1.32	30 / .26	1.5	4.05	84 / .15	65/34	1.31
14	41/30	2.08	50 / .26	2.5	2.43	140 / .15	105/34	2.11
12	65/30	3.30	56 / .31	4	1.50	224 / .15	168/34	3.38
10	105/30	5.32	84 / .31	6	1.00	192 / .20	259/34	5.21
8	168/30	8.52	80 / .41	10	.582	320 / .20	413/34	8.31
6	266/30	13.5	128 / .41	16	.368	512 / .20	665/34	13.40
4	413/30	21.0	200 / .41	25	.237	800 / .20	1064/34	21.40
2	665/30	33.7	280 / .41	35	.168	1120 / .20	1666/34	33.50
1	836/30	43.0	400 / .41	50	.117	705 / .30	2109/34	42.0
2/0	1330/30	67.0	356 / .50	70	.082	990 / .30		
3/0			485 / .50	95	.062	1340 / .30		
4/0	2107/30	106	614 / .50	120	.049	1690 / .30		
300 KCMIL			765 / .50	150	.039	2123 / .30		
350 KCMIL			944 / .50	185	.032	1470 / .40		
500 KCMIL			1225 / .50	240	.024	1905 / .40		
600 KCMIL			1530 / .50	300	.019	2385 / .40		
750 KCMIL			2035 / .50	400	.014			
1000 KCMIL			1768 / .60	500	.011			