

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 Leo 228 by having the correct conductor resistance.

Cross-Section mm ²	Strands VDE 0295 BS 6360 class 2 (1)	Multi-wire Strands (2)	Fine wire strands VDE 0295 8S 6360 class 5 (3)	Extra fine wire strands VDE 0295 85 6360 class 6 (4)	Super fine Wire Strands (5)	Super fine Wire Strands (6)	Super fine Wire Strands (7)
0.05							25 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 0.16	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 0.16	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 0.16	96 x 0.1	195 x 0.07	384 x 0.05
1.00	7 x 0.43	7 x 0.43	32 x 0.21	56 x 0.16	128 x 0.1	260 x 0.07	512 x 0.05
1.50	7 x 0.52	7 x 0.52	30 x 0.26	84 x 0.16	192 x 0.1	392 x 0.07	768 x 0.05
2.50	7 x 0.67	19 x 0.41	50 x 0.26	140 x 0.16	320 x 0.1	651 x 0.07	1280 x 0.05
4.0	7 x 0.85	19 x 0.52	56 x 0.31	224 x 0.16	512 x 0.1	1040 x 0.07	
6.0	7 x 1.05	19 x 0.64	84 x 0.31	192 x 0.21	768 x 0.1	1560 x 0.07	
10	7 x 1.35	49 x 0.51	80 x 0.41	320 x 0.21	1280 x 0.1	2600 x 0.07	
16	7 x 1.70	49 x 0.65	128 x 0.41	512 x 0.21	2048 x 0.1		
25	7 x 2.13	84 x 0.62	200 x 0.41	800 x 0.21	3200 x 0.1		
35	7 x 2.52	133 x 0.58	280 x 0.41	1120 x 0.21			
50	19 x 1.83	133 x 0.69	400 x 0.41	705 x 0.31			
70	19 x 2.17	189 x 0.69	356 x 0.51	990 x 0.31			
95	19 x 2.52	259 x 0.69	485 x 0.51	1340 x 0.31			
120	37 x 2.03	336 x 0.67	614 x 0.51	1690 x 0.31			
150	37 x 2.27	392 x 0.69	765 x 0.51	2123 x 0.31			
185	37 x 2.52	494 x 0.69	944 x 0.51	1470 x 0.41			
240	61 x 2.24	627 x 0.70	1225 x 0.51	1905 x 0.41			
300	61 x 2.50	790 x 0.70	1530 x 0.51	2385 x 0.41			
400	61 x 2.89		2035 x 0.51				
500	61 x 3.23		1768 x 0.61				

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.