

B3 INTERNATIONAL

General Technical Information Conductors

American Wire Gauge (AWM) Conductors (of bare or tinned copper)

Flexible Conductors	AWG	24	22	20	18	16	14	12
Number of strands		7	7	7	7	19	19	19
Gauge single strand	AWG	32	30	28	26	29	27	25
Diameter single strand	mm	0.2	0.25	0.32	0.40	0.28	0.36	0.45
Solid Conductors	AWG	24	22	20	18	16	14	12
Diameter	mm	0.51	0.64	0.81	1.02	1.29	1.63	2.05
All Conductors	AWG	24	22	20	18	16	14	12
Cross section	mm ²	0.20	0.32	0.52	0.82	1.37	2.08	3.31
Max. DC resistance	Ω/km	88	57.4	32.16	22.7	15.47	9.36	5.61
Max. Recommended current 2 or 3 core cable	Amps	2.7	2.8	3.75	5	6.25	8	12
Max. Recommended current 4 or 5 core cable	Amps	2.2	2.25	3	4	5	6.4	9.6
Max. Recommended current 6 to 19 core cable	Amps	1.9	1.95	2.6	3.5	4.35	5.6	8.4
Max. Recommended current 20 to 36 core cable	Amps	1.35	1.4	1.65	2.5	3.12	4	6

Metric Conductors (of bare copper according to IEC 60228)

Conductor	mm ²	0.75	1.0	1.5	2.5	4.0
Max. Recommended current 2 or 3 core cable	Amps	≤ 5	≤ 5.70	≤ 6.25	≤ 8	≤ 12

Flexible Conductors, class 2	mm ²	0.055	0.22	0.50	0.75	1.0	1.5	2.5	4.0	6.0
Number of strands		7	7	7	7	7	7	7	7	7
Diameter single strand	mm	0.1	0.2				0.53			
Max. DC resistance	Ω/km	345	86.2	36.0	24.5	18.1	12.1	7.41	4.61	3.08
Flexible Conductors, class 5	mm ²	0.055	0.22	0.50	0.75	1.0	1.5	2.5	4.0	6.0
Number of strands				16	24	32	30	50	56	84
Diameter single strand	mm			0.2	0.2	0.2	0.24	0.24	0.29	0.29
Max. DC resistance	Ω/km			39.0	26.0	19.5	13.3	7.98	4.95	3.30
Max. Recommended current 2 or 3 core cable	Amps	2.7	2.8	3.75	5	6.25	8			12
Max. Recommended current 4 or 5 core cable	Amps	2.2	2.25	3	4	5	6.4			9.6
Max. Recommended current 6 to 19 core cable	Amps	1.9	1.95	2.6	3.5	4.35	5.6			8.4
Max. Recommended current 20 to 36 core cable	Amps	1.35	1.4	1.65	2.5	3.12	4			6

All conductors in B3 cables are in accordance with above mentioned tables, unless otherwise stated in the respective datasheet.