Metric Cable Size and Resistance Table (IEC 60228)

Basis: IEC 60228 Table 2, maximum DC resistance at 20 °C for class 2 plain copper and aluminium conductors (aluminium from 10 mm²).

instrumentationblog.in/downloads/engineering-reference-tables/metric-cable-size-resistance-table/

Conductor resistance at 20 °C

Size mm²	Copper Ω/km	Aluminium Ω/km	Cu loop Ω per 100 m	Nearest AWG
0.5	36.0		7.200	20
0.75	24.5		4.900	18
1	18.1		3.620	17
1.5	12.1		2.420	15
2.5	7.41		1.482	13
4	4.61		0.922	11
6	3.08		0.616	9
10	1.83	3.080	0.366	7
16	1.15	1.910	0.230	5
25	0.727	1.200	0.145	3
35	0.524	0.868	0.105	2
50	0.387	0.641	0.0774	1/0
70	0.268	0.443	0.0536	2/0
95	0.193	0.320	0.0386	3/0
120	0.153	0.253	0.0306	4/0
150	0.124	0.206	0.0248	> 4/0
185	0.0991	0.164	0.0198	> 4/0
240	0.0754	0.125	0.0151	> 4/0
300	0.0601	0.100	0.0120	> 4/0

Notes

- Values are maximum limits; real cables are usually a little lower.
- Instrument loops: check the transmitter minimum voltage with the loop resistance.

Free download from instrumentationblog.in. Check values against the current edition of the standard for design work.