



Current Ratings – Table 4D5 70°C thermoplastic insulated and sheathed flat cable with protective conductor (copper conductors)

Current – Carrying Capacity (amperes) and Voltage Drop (per ampere per metre)

Ambient temperature: 30°C, Conductor operating temperature: 70°C

Conductor cross-sectional area	Reference method 100 (above a plasterboard ceiling covered by thermal insulation not exceeding 100mm in thickness)	Reference method 101 (above a plasterboard ceiling covered by thermal insulation exceeding 100mm in thickness)	Reference method 102 (in a stud wall with thermal insulation with cable touching the inner wall surface)	Reference method 103 (in a stud wall with thermal insulation with cable not touching the inner wall surface)	Reference method C* (clipped direct)	Reference method A* (enclosed in conduit in an insulated wall)	Voltage drop (per ampere per metre)
1	2	3	4	5	6	7	8
(mm ²)	(A)	(A)	(A)	(A)	(A)	(A)	(mV/A/m)
1	13	10.5	13	8	16	11.5	44
1.5	16	13	16	10	20	14.5	29
2.5	21	17	21	13.5	27	20	18
4	27	22	27	17.5	37	26	11
6	34	27	35	23.5	47	32	7.3
10	45	36	47	32	64	44	4.4
16	57	46	63	42.5	85	57	2.8

- A* For full installation method refer to Table 4A2 Installation method 2 but for flat twin and earth cable
- C* For full installation method refer to Table 4A2 Installation method 20 but for flat twin and earth cable
- 100 For full installation method refer to Table 4A2 Installation method 100
- 101 For full installation method refer to Table 4A2 Installation method 101
- 102 For full installation method refer to Table 4A2 Installation method 102
- 103 For full installation method refer to Table 4A2 Installation method 103

Wherever practicable a cable is to be fixed in a position such that it will not be covered with thermal insulation

Regulation 523.7, BS5803-5; Appendix C: Avoidance of overheating of electric cables

Building Regulations Approved document B and Thermal insulation; avoiding risks, BT 262, BRE, 2001

All tables are reproduced by kind permission of The Institution of Engineering & Technology from IEE Regs, 17th Edition. However, it should be noted that in order to apply these tables correctly, reference is required to appendix 4 of the 17th edition of the wiring regulations which may be obtained from: Institution of Engineering & Technology, Michael Faraday House, Six Hills Way, Stevenage, Hertfordshire, England, SG1 2AY