

TABLE 4D5 70°C thermoplastic insulated & 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, BR 262, BRE, 2001 refer

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.

battindustrial.sales@batt.co.uk