ELAND CABLES

TABLE 4D5

70°C thermoplastic insulated and sheathed flat cable with protective conductor (COPPER CONDUCTORS)

Reproduced from *BS7671:2018 Wiring Regulations*

CURRENT-CARRYING CAPACITY (amperes) and VOLTAGE DROP (per ampere per metre):

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

Conductor cross-sectional area	Method 100# (above a plasterboard ceiling covered by thermal insulation not exceeding 100mm in thickness)	Method 101 # (above a plasterboard ceiling covered by thermal insulation exceeding 100mm in thickness)	Method 102# (in a stud wall with thermal insulation with cable touching the inner wall surface)	Method 103# (in a stud wall with thermal insulation with cable not touching the inner wall surface)	Reference Method A* (enclosed in conduit in an insulated wall)	Reference Method B* (enclosed in conduit on a wall or in trunking etc	Reference Method C* (clipped direct)	Voltage drop (per ampere per metre)
1	2	3	4	5	6	7	8	8
(mm2)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(mV/A/m)
1	13	10.5	13	8	11.5	13	16	44
1.5	16	13	16	10	14.5	16.5	20	29
2.5	21	17	21	13.5	20	23	27	18
4	27	22	27	18.5	26	30	37	11
6	34	27	35	23.5	32	38	47	7.3
10	45	36	47	32	44	52	64	4.4
16	57	46	63	42.5	57	69	85	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 523.9, BS 5803-5: Appendix C: Avoidance of overheating of electric cables.
Building Regulations Approved Document B and Thermal insulation: avoiding risks, BR 262, BRE, 2001 refer.