

624-B TWIN & EARTH BS7211



Introducing our versatile domestic wiring cable, engineered for fixed installations in both dry and damp premises. Whether clipped directly to surfaces, placed on trays, or installed in free air, this cable ensures reliable power distribution. For added protection, it can be laid in conduit or trunking, providing peace of mind in any installation scenario, whether mechanical protection is required or not.

CONDUCTOR	Plain Copper
STRANDING	Class 1 and Class 2
INSULATION	XLPE
OUTERSHEATH	LSZH
OUTERSHEATH COLOUR	White
RATED VOLTAGE	300/500V
CORE IDENTIFICATION	Brown, Blue and Bare (earth)
MINIMUM BENDING RADIUS	Diameter up to 10mm 3 x overall diameter Diameter 10mm to 25mm 4 x overall diameter
OPERATING TEMPERATURE	Maximum 90°C, Minimum bending -15°C
STANDARDS	BS 7211:2012+A1:2020 "Electric cables. Thermosetting insulated and thermoplastic sheathed cables for voltages up to and including 450/750 V for electric power and lighting and having low emission of smoke and corrosive gases when affected by fire. BS EN 60754-1:2014 "Test on gases evolved during combustion of materials from cables " Determination of the halogen acid has content. BS EN 60754-2:2014 "Test on gases evolved during combustion of materials from cables " Determination of acidity (by pH measurement) and conductivity. BS EN 60332-1-2:2004+A12:2020 "Tests on electric and optical fibre cables under fire conditions " Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame

SPECIFICATION DATA

BATT Part No	Copper Class	No. cores	Nominal cross sectional area of conductor	Nominal thickness of insulation	Nominal thickness of sheath	Approx overall diameter	Weight
16611 (Blue)	Class 1	1	1.5	0.7	0.9	4.4 x 5.4	85
16610 (Brown)	Class 1	1	1.5	0.7	0.9	4.4 x 5.4	85
16519	Class 1	2	1	0.6	0.9	4.8 x 8.4	68
16520	Class 1	2	1.5	0.7	0.9	4.8 x 9.2	87
16689 (2 x Brown)	Class 1	2	1.5	0.7	0.9	4.8 x 9.2	87
16521	Class 1	2	2.5	0.8	1	5.7 x 10.5	120
16522	Class 2	2	4	0.8	1	6.1 x 11.7	172
16523	Class 2	2	6	0.8	1.1	6.9 x 11.7	235
16524	Class 2	2	10	1	1.2	8.1 x 16.2	373
16525	Class 2	2	16	1	1.3	8.4 x 17	530
16863	Class 1	3	1	0.6	0.9	4.7 x 11	91
16526	Class 1	3	1.5	0.7	0.9	4.9 x 11.8	115
16527	Class 1	3	2.5	0.8	1.1	5.6 x 13.3	170

RATING TABLES

TABLE 4D5 – 70 °C thermoplastic insulated and sheathed flat cable with protective conductor (COPPER CONDUCTORS)

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	Method 100# (above a plasterboard ceiling covered by thermal insulation <u>not exceeding 100 mm</u> in thickness)	Method 101# (above a plasterboard ceiling covered by thermal insulation <u>exceeding 100 mm</u> in thickness)	Method 102# (in a stud wall with thermal insulation with cable <u>touching</u> the inner wall surface)	Method 103# (in a stud wall with thermal insulation with cable <u>not touching</u> 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	18.5	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 523.9, 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.

The information in this datasheet is for guidance only and subject to change without liability. Images provided are representations; actual cable dimensions may vary due to manufacturing tolerances.

