



TABLE 4D2A - Multicore 70 °C thermoplastic insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS)

CURRENT-CARRYING CAPACITY (amperes):

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

Conductor cross-sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)	
	1 two-core cable*, single-phase AC or DC	1 three-core cable* or 1 four-core cable, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three-core cable* or 1 four-core cable, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three-core cable* or 1 four-core cable, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three-core cable* or 1 four-core cable, three-phase AC
I (mm ²)	2 (A)	3 (A)	4 (A)	5 (A)	6 (A)	7 (A)	8 (A)	9 (A)
1	11	10	13	11.5	15	13.5	17	14.5
1.5	14	13	16.5	15	19.5	17.5	22	18.5
2.5	18.5	17.5	23	20	27	24	30	25
4	25	23	30	27	36	32	40	34
6	32	29	38	34	46	41	51	43
10	43	39	52	46	63	57	70	60
16	57	52	69	62	85	76	94	80
25	75	68	90	80	112	96	119	101
35	92	83	111	99	138	119	148	126
50	110	99	133	118	168	144	180	153
70	139	125	168	149	213	184	232	196
95	167	150	201	179	258	223	282	238
120	192	172	232	206	299	259	328	276
150	219	196	258	225	344	299	379	319
185	248	223	294	255	392	341	434	364
240	291	261	344	297	461	403	514	430
300	334	298	394	339	530	464	593	497
400			470	402	634	557	715	597

* with or without a protective conductor

NOTE: For cables having flexible conductors, see section 2.4 of this Appendix for adjustment factors for current-carrying capacity and voltage drop.

Whilst BATT CABLES plc endeavours to ensure the information on the website, specification sheets and all other technical information is accurate, the information is for guidance only and it is subject to change without notice or liability. Batt Cables Plc is not responsible for the consequences of any inadequacies, inaccuracies or other deficiencies contained therein. When selecting cable accessories, please note that the actual cable dimensions may vary due to manufacturing tolerances.

All tables are reproduced by kind permission of The Institute of Engineering & Technology from IEEE Regs, 18th Edition. However, it should be noted that in order to apply these tables correctly, reference is required to appendix 4 of the 18th edition of the wiring regulations, which may be obtained from Institution of Engineering & Technology.



TABLE 4D2B

Conductor operating temperature: 70 °C
 VOLTAGE DROP (per ampere per metre):

Conductor cross-sectional area	Two-core cable, DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
1	2	3			4		
(mm ²)	(mV/A/m)	(mV/A/m)			(mV/A/m)		
		r	X	z	r	X	z
1	44						
1.5	29						
2.5	18						
4	11						
6	7.3						
10	4.4						
16	2.8						
25	1.75	1.75	0.170	1.75	1.50	0.145	1.50
35	1.25	1.25	0.165	1.25	1.10	0.145	1.10
50	0.93	0.93	0.165	0.94	0.80	0.140	0.81
70	0.63	0.63	0.160	0.65	0.55	0.140	0.57
95	0.46	0.47	0.155	0.50	0.41	0.135	0.43
120	0.36	0.38	0.155	0.41	0.33	0.135	0.35
150	0.29	0.30	0.155	0.34	0.26	0.130	0.29
185	0.23	0.25	0.150	0.29	0.21	0.130	0.25
240	0.180	0.190	0.150	0.24	0.165	0.130	0.21
300	0.145	0.155	0.145	0.21	0.135	0.130	0.185
400	0.105	0.115	0.145	0.185	0.100	0.125	0.160

Whilst BATT CABLES plc endeavours to ensure the information on the website, specification sheets and all other technical information is accurate, the information is for guidance only and it is subject to change without notice or liability. Batt Cables Plc is not responsible for the consequences of any inadequacies, inaccuracies or other deficiencies contained therein. When selecting cable accessories, please note that the actual cable dimensions may vary due to manufacturing tolerances.

All tables are reproduced by kind permission of The Institute of Engineering & Technology from IEEE Regs, 18th Edition. However, it should be noted that in order to apply these tables correctly, reference is required to appendix 4 of the 18th edition of the wiring regulations, which may be obtained from Institution of Engineering & Technology.

www.batt.co.uk

battindustrial.sales@batt.co.uk