

**TABLE 4G2B Mineral insulated cables bare and neither exposed to touch nor in contact with combustible materials (copper conductors & sheath)**

VOLTAGE DROP (per ampere per metre) for single-phase a.c. or d.c. Sheath operating temperature: 105°C

Conductor cross-sectional area 1	Two single-core cables, touching 2			One two-core cable 3		
(mm <sup>2</sup> )	(mV/A/m)			(mV/A/m)		
1	47			47		
1.5	31			31		
2.5	19			19		
4	12			12		
6	7.8			7.8		
10	4.7			4.7		
16	3.0			3.0		
	r	x	z	r	x	z
25	1.85	0.180	1.85	1.85	0.145	1.85
35	1.35	0.175	1.35	-	-	-
50	1.00	0.170	1.00	-	-	-
70	0.69	0.165	0.71	-	-	-
95	0.51	0.160	0.54	-	-	-
120	0.41	0.160	0.44	-	-	-
150	0.33	0.155	0.36	-	-	-
185	0.27	0.150	0.31	-	-	-
240	0.21	0.150	0.26	-	-	-

VOLTAGE DROP (per ampere per metre) for three-phase operation

Sheath operating temperature: 105°C

NOTE \* Spacings larger than one cable diameter will result in a larger volt drop

Conductor cross-sectional area 1	1 three-core or four-core cable 4			3 single-core cables in trefoil formation 5			3 single-core cables flat & t touching 6			3 single-core cables flat & spaced by one cable diameter* 7		
(mm <sup>2</sup> )	(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)		
1	40			40			40			40		
1.5	27			27			27			27		
2.5	16			16			16			16		
4	10			10			10			10		
6	6.8			6.8			6.8			6.8		
10	4.1			4.1			4.1			4.1		
16	2.6			2.6			2.6			2.6		
	r	x	z	r	x	z	r	x	z	r	x	z
25	1.60	0.125	1.60	1.60	0.160	1.65	1.60	0.23	1.65	1.60	0.31	1.65
35	-	-	-	1.15	0.155	1.20	1.15	0.23	1.20	1.20	0.30	1.25
50	-	-	-	0.87	0.150	0.88	0.88	0.22	0.91	0.90	0.29	0.95
70	-	-	-	0.60	0.145	0.62	0.61	0.21	0.65	0.63	0.29	0.70
95	-	-	-	0.45	0.140	0.47	0.46	0.21	0.50	0.48	0.28	0.56
120	-	-	-	0.36	0.135	0.38	0.37	0.21	0.42	0.39	0.28	0.48
150	-	-	-	0.29	0.135	0.32	0.31	0.20	0.37	0.34	0.27	0.43
185	-	-	-	0.23	0.130	0.27	0.26	0.20	0.33	0.29	0.26	0.39
240	-	-	-	0.180	0.1130	0.22	0.22	0.195	0.29	0.26	0.25	0.36

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