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**Minimum Breakdown Voltages / Dielectric Strengths**

The data listed herein fall within a normal range but should not be used to establish a specification limits or used alone as the basis of design.

AWG Sizes	Nominal Conductor Diameter mm	Minimum breakdown voltage (r.m.s. value)					
		Grade 1 and Grade 1B		Grade 2 and Grade 2B		Grade 3	
		Room Temperature	Elevated Temperature	Room Temperature	Elevated Temperature	Room Temperature	Elevated Temperature
53	0.018	110		225			
52	0.020	120		250			
51	0.022	130		275			
50	0.025	150		300			
49	0.028	170		325			
48	0.032	190		375			
47	0.036	225		425			
46	0.040	250		475			
45	0.045	275		550			
44	0.050	300		600			
43	0.056	325		650			
42	0.063	375		700			
41	0.071	425		800		1,100	
40	0.080	425		850		1,200	
39	0.090	500		900		1,300	
38	0.100	500		950		1,400	
37	0.112	1,300	1,000	2,700	2,000	3,900	2,900
36	0.125	1,500	1,100	2,800	2,100	4,100	3,100
35	0.140	1,600	1,200	3,000	2,300	4,200	3,200
34	0.160	1,700	1,300	3,200	2,400	4,400	3,300
33	0.180	1,700	1,300	3,300	2,500	4,700	3,500
32	0.200	1,800	1,400	3,500	2,600	5,100	3,800
31	0.224	1,900	1,400	3,700	2,800	5,200	3,900
30	0.250	2,100	1,600	3,900	2,900	5,500	4,100
29	0.280	2,200	1,700	4,000	3,000	5,800	4,400
28	0.315	2,200	1,700	4,100	3,100	6,100	4,600
27	0.355	2,300	1,700	4,300	3,200	6,400	4,800
26	0.400	2,300	1,700	4,400	3,300	6,600	5,000
25	0.450	2,300	1,700	4,400	3,500	6,800	5,100
24	0.500	2,400	1,800	4,600	3,500	7,000	5,300
23	0.560	2,500	1,900	4,600	3,600	7,100	5,300
22	0.630	2,600	2,000	4,800	3,600	7,100	5,300
21	0.710	2,600	2,000	4,800	3,700	7,200	5,400
20	0.800	2,600	2,000	4,900	3,800	7,400	5,600
19	0.900	2,700	2,000	5,000	3,800	7,600	5,700
18	1						
up to and including 10	up to and including 2.5	2,700	2,000	5,000	3,800	7,600	5,700
Over 10	Over 2.500	1,300	1,000	2,500	1,900	3,800	2,900

INFORMATION TO BE USED AS A GUIDE ONLY.

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