

**Maximum spark length [cm] between spherical electrodes in dry air at normal conditions.**

$U_{\text{peak}}$ [kV]	diameter [cm]					$U_{\text{peak}}$ [kV]	diameter [cm]		
	2.5	5	10	25	needle		50	75	100
5	0.13	0.15	0.15	0.16	0.42	140	5.15		
10	0.27	0.29	0.30	0.32	0.85	160	5.95		
15	0.42	0.44	0.46	0.48	1.30	200	7.60	7.50	7.50
20	0.58	0.60	0.62	0.64	1.75	240	9.20	9.10	
25	0.76	0.77	0.78	0.81	2.20	250			9.55
30	0.95	0.94	0.95	0.98	2.69	260	10.0	9.95	
35	1.17	1.12	1.12	1.15	2.69	300	11.8	11.6	11.5
40	1.41	1.30	1.29	1.32	3.81	340	13.7	13.2	
45	1.68	1.50	1.47	1.49	4.49	350			13.5
50	2.00	1.71	1.65	1.66	5.20	360	14.7	14.1	
60	2.82	2.17	2.02	2.01	6.81	400	16.8	15.9	15.5
70	4.05	2.68	2.42	2.37	8.81	440	19.2	17.9	
80		3.26	2.84	2.74	11.1	450			17.7
90		3.94	3.28	3.11	13.3	460	20.6	18.9	
100		4.77	3.75	3.49	15.5	500	23.6	20.9	19.9
110		5.79	4.25	3.88	17.7	540	26.8	23.1	
120		7.07	4.78	4.28	19.8	550			22.2
130			5.35	4.69	22.0	560	28.5	24.2	
140			5.97	5.10	24.1	600	33.0	26.7	24.7
150			6.64	5.52	26.1	640		29.3	
160			7.37	5.95	28.1	650			27.3
170			8.16	6.39	30.1	660		30.5	
180			9.03	6.84	32.0	700		33.4	30.0
190			10.0	7.30	33.9	740		36.8	
200			11.1	7.76	35.7	750			32.8
210			12.3	8.24	37.6	760		38.5	
220			13.7	8.73	39.5	800		42.2	36.0
230			15.3	9.24	41.4	840		46.5	
240				9.76	43.4	850			39.3
250				10.3	45.2	860		49.0	
300				13.3	54.7	900		53.7	43.0