

TABLE I.—OHMIC RESISTANCE AND APPROXIMATE RATIOS OF REACTANCE TO RESISTANCE.

SIZE OF WIRE	Resistance.		Ratio of Reactance to Resistance for the distance between wires of								Ratio of Reactance to Resistance
	per mile of line.	per 1000 ft. of line.	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.	60 in.		
60 CYCLES.											
300 000 C. M.	0.365	0.069	2.10	2.40	2.60	2.90	3.05	3.30	3.65	0.1	
No. 0000	0.518	0.098	1.65	1.82	2.00	2.15	2.30	2.50	2.70	0.2	
000	0.653	0.124	1.35	1.50	1.60	1.75	1.86	2.00	2.20	0.3	
00	0.824	0.156	1.10	1.22	1.32	1.44	1.50	1.65	1.80	0.4	
0	1.04	0.197	0.91	1.00	1.06	1.15	1.22	1.34	1.45	0.5	
1	1.31	0.248	0.74	0.81	0.86	0.94	0.98	1.08	1.15	0.6	
2	1.65	0.313	0.60	0.65	0.70	0.75	0.80	0.86	0.94	0.7	
3	2.08	0.394	0.50	0.53	0.57	0.62	0.65	0.70	0.75	0.8	
4	2.63	0.497	0.41	0.43	0.46	0.50	0.53	0.57	0.62	0.9	
5	3.31	0.627	0.31	0.35	0.38	0.41	0.43	0.46	0.50	1.0	
6	4.18	0.791	0.26	0.29	0.31	0.33	0.35	0.37	0.40	1.1	
40 CYCLES.											
400 000 C. M.	0.275	0.052	1.80	2.00	2.15	2.48	2.65	2.90	3.20	1.2	
300 000 "	0.365	0.069	1.42	1.60	1.74	1.91	2.03	2.20	2.44	1.3	
No. 0000	0.518	0.098	1.10	1.22	1.32	1.45	1.53	1.66	1.82	1.4	
000	0.653	0.124	0.91	1.00	1.07	1.17	1.25	1.34	1.47	1.5	
00	0.824	0.156	0.74	0.82	0.88	0.95	1.01	1.09	1.20	1.6	
0	1.04	0.197	0.61	0.67	0.71	0.77	0.82	0.90	0.96	1.7	
1	1.31	0.248	0.50	0.54	0.58	0.63	0.66	0.72	0.78	1.8	
2	1.65	0.313	0.40	0.43	0.47	0.50	0.53	0.57	0.63	1.9	
3	2.08	0.394	0.34	0.36	0.38	0.42	0.43	0.46	0.50	2.0	
4	2.63	0.497	0.27	0.29	0.31	0.33	0.35	0.38	0.41	2.1	
5	3.31	0.627	0.21	0.23	0.25	0.27	0.29	0.31	0.33	2.2	
6	4.18	0.791	0.18	0.19	0.21	0.22	0.24	0.26	0.27	2.3	
25 CYCLES.											
500 000 C. M.	0.211	0.040	1.40	1.60	1.75	1.95	2.05	2.30	2.50	2.4	
400 000 "	0.275	0.052	1.15	1.25	1.35	1.55	1.65	1.80	1.98	2.5	
300 000 "	0.365	0.069	0.89	1.00	1.08	1.20	1.27	1.38	1.52	2.6	
No. 0000	0.518	0.098	0.69	0.76	0.84	0.90	0.96	1.04	1.12	2.7	
000	0.653	0.124	0.56	0.63	0.67	0.73	0.78	0.84	0.92	2.8	
00	0.824	0.156	0.46	0.51	0.55	0.60	0.63	0.68	0.75	2.9	
0	1.04	0.197	0.38	0.42	0.44	0.48	0.51	0.56	0.60	3.0	
1	1.31	0.248	0.31	0.34	0.36	0.39	0.41	0.45	0.48	3.1	
2	1.65	0.313	0.25	0.27	0.29	0.31	0.33	0.36	0.39	3.2	
3	2.08	0.394	0.21	0.22	0.24	0.26	0.27	0.29	0.31	3.3	
4	2.63	0.497	0.17	0.18	0.19	0.21	0.22	0.24	0.26	3.4	
5	3.31	0.627	0.13	0.15	0.16	0.17	0.18	0.19	0.21	3.5	
6	4.18	0.791	0.11	0.12	0.13	0.14	0.15	0.16	0.17	3.6	
										3.7	

NOTE.—The resistance in the table is given per mile and per 1000 feet of line; the length of wire is two miles and 2000 ft. respectively.