PRIMARY CONSTANTS OF NON-LOADED CABLE (AT 68° F.)

16 GAUGE NH, TH

Primary Distributed Constants — Per Mile		
L = .987 Millihenries C = .066 Microfarads		
Frequency Cycles/Sec.	R Ohms	G Micromhos
50	42.0	0.05
100	42.0	0.10
200	42.0	0.17
300	42.0	0.23
500	42.1	0.37
1,000	42.2	0.96
2,000	42.5	2.6
3,000	42.8	4.8
5,000	43.5	9.3
8,000	44.8	18.0
10,000	45.9	24.3
15,000	48.4	39.4

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PRIMARY CONSTANTS OF NON-LOADED CABLE (AT 55° F.)
THROUGH CARRIER FREQUENCIES
16 GAUGE NH, TH

Freq. Kc/Sec.	Per Mile				Resistance Temperature Coefficient A_R**
	R* Ohms	L* Hen. x10^{-3}	G* Mhos x10^{-6}	C* Far. x10^{-6}	
0	41.6	.995	—	.0665	.0022
0.1	41.6	.994	0.10	.0663	.0022
0.2	41.6	.993	0.17	.0662	.0022
0.5	41.7	.992	0.37	.0661	.0022
1	41.8	.987	0.96	.0660	.0022
2	42.2	.983	2.6	.0659	.0022
5	43.1	.979	9.3	.0658	.0022
10	45.5	.975	24.3	.0657	.0021
15	48.0	.970	39.4	.0656	.0020
20	51.0	.965	61	.0655	.0019
50	69.0	.940	202	.0652	.0014
100	92.0	.881	485	.0650	.0012
200	126	.822	1,130	.0649	.0011
250	140	.809	1,470	.0649	.0011
500	198	.777	3,360	.0648	.0011
1,000	280	.746	7,140	.0648	.0011
2,000	396	.725	14,500	.0648	.0011
4,000	558	.712	28,800	.0648	.0011
5,000	625	.707	35,000	.0648	.0011
10,000	884	.698	62,900	.0648	.0011

* Estimates based on extrapolations of available data on primary constants of toll and experimental cables, and measurements of insertion loss and phase delay of exchange cable circuits.

** R_t (Resistance at temperature t) $= R_{55} [1 + A_R (t - 55)]$