

MOOS Cable Diameter vs Operating Voltage

System Length	1100	meters
Delivered Power	3500	Watts
Transmission Efficiency	0.75	per unit
Conductor Resistivity	1.72E-06	ohm-cm
Conductor Density	8.92	
Insulation Density	1.2	
Stress, V/mm	2000	V/mm
Voltage Safety Factor	1.5	
Stranding Factor	1.1	
Stranded/Solid ratio	1.15	

Sys Volt V	Cdr R ohm/m	cdr dia, solid mm	cdr AWG	***** Single Conductor *****			***** Two Conductors *****	
				cdr dia, stranded mm	Dia Over Insulation mm	Insul Wall Thickness mm	mass kg	wgt in wate kg
200	0.000974	4.747417	4.8	5.45953	5.799707	0.170089	355.3011	297.1829
250	0.001522	3.797934	6.7	4.367624	4.800231	0.216304	230.5334	190.7205
300	0.002192	3.164945	8.3	3.639687	4.169926	0.26512	162.9679	132.924
350	0.002983	2.71281	9.6	3.119731	3.754139	0.317204	122.4653	98.11409
400	0.003896	2.373709	10.7	2.729765	3.476391	0.373313	96.44734	75.56607
450	0.004931	2.109963	11.8	2.426458	3.295092	0.434317	78.91888	60.15879
500	0.006088	1.898967	12.7	2.183812	3.186273	0.50123	66.73923	49.19778
550	0.007366	1.726334	13.5	1.985284	3.135772	0.575244	58.14768	41.15787
600	0.008766	1.582472	14.2	1.819843	3.135389	0.657773	52.11161	35.12594
650	0.010288	1.460744	14.9	1.679855	3.180872	0.750509	48.01365	30.53161
700	0.011932	1.356405	15.6	1.559866	3.270844	0.855489	45.49296	27.00796
750	0.013697	1.265978	16.2	1.455875	3.406248	0.975187	44.363	24.31586
800	0.015584	1.186854	16.7	1.364883	3.590116	1.112617	44.57124	22.30142
850	0.017593	1.117039	17.2	1.284595	3.827559	1.271482	46.1851	20.87211
900	0.019724	1.054982	17.7	1.213229	4.125931	1.456351	49.39765	19.98435
950	0.021976	0.999456	18.2	1.149375	4.495168	1.672897	54.5524	19.63904
1000	0.024351	0.949483	18.6	1.091906	4.948299	1.928196	62.1907	19.88376

