

MOOS Cable Diameter vs Operating Voltage

System Length	1100	meters
Delivered Power	3500	Watts
Transmission Efficiency	0.625	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	0.001218	4.246219	5.7	4.883152	5.224558	0.170703	285.0427	237.88
250	0.001902	3.396975	7.7	3.906522	4.341587	0.217533	185.2885	152.72
300	0.002739	2.830813	9.2	3.255435	3.79005	0.267308	131.3154	106.4961
350	0.003729	2.426411	10.6	2.790373	3.431978	0.320803	99.01644	78.66531
400	0.00487	2.12311	11.7	2.441576	3.199393	0.378908	78.33531	60.6491
450	0.006164	1.887209	12.7	2.17029	3.055615	0.442663	64.48421	48.35188
500	0.00761	1.698488	13.6	1.953261	2.979844	0.513291	54.96219	39.62002
550	0.009208	1.54408	14.5	1.775692	2.960205	0.592257	48.37665	33.23605
600	0.010958	1.415406	15.2	1.627717	2.990356	0.681319	43.92377	28.47317
650	0.01286	1.306529	15.9	1.502508	3.067744	0.782618	41.14094	24.88029
700	0.014915	1.213205	16.5	1.395186	3.192724	0.898769	39.78384	22.17128
750	0.017122	1.132325	17.1	1.302174	3.368168	1.032997	39.76684	20.16543
800	0.019481	1.061555	17.7	1.220788	3.599394	1.189303	41.14005	18.75498
850	0.021992	0.99911	18.2	1.148977	3.894335	1.372679	44.09233	17.88839
900	0.024655	0.943604	18.7	1.085145	4.263943	1.589399	48.9781	17.56414
950	0.027471	0.893941	19.2	1.028032	4.722811	1.84739	56.37195	17.8329
1000	0.030438	0.849244	19.6	0.97663	5.290091	2.15673	67.16185	18.80856

