

WIRE SIZING CHARTS 12 Volt Systems

Maximum one-way distance for 5% voltage loss in 12 volt systems

Current Amps	Wire Size (AWG)											
	14	12	10	8	6	4	2	1	0	00	000	0000
1	106	169	269	427	679	1080	1717	2166	2730	3444	4342	5475
2	53	85	134	214	340	540	859	1083	1365	1722	2171	2738
3	35	56	90	142	226	360	572	722	910	1148	1447	1825
4	27	42	67	107	170	270	429	542	682	861	1086	1369
5	21	34	54	85	136	216	343	433	546	689	868	1095
6	18	28	45	71	113	180	286	361	455	574	724	913
7	15	24	38	61	97	154	245	309	390	492	620	782
8	13	21	34	53	85	135	215	271	341	430	543	684
9	12	19	30	47	75	120	191	241	303	383	482	608
10	11	17	27	43	68	108	172	217	273	344	434	548
15	7	11	18	28	45	72	114	144	182	230	289	365
20	-	8	13	21	34	54	86	108	136	172	217	274
25	-	-	11	17	27	43	69	87	109	138	174	219
30	-	-	9	14	23	36	57	72	91	115	145	183
35	-	-	-	12	19	31	49	62	78	98	124	156
40	-	-	-	-	17	27	43	54	68	86	109	137
45	-	-	-	-	15	24	38	48	61	77	96	122
50	-	-	-	-	14	22	34	43	55	69	87	110

WIRE SIZING CHARTS 24 Volt Systems

Maximum one-way distance for 5% voltage loss in 24 volt systems

Current Amps	Wire Size (AWG)											
	14	12	10	8	6	4	2	1	0	00	000	0000
1	213	338	537	854	1359	2160	3434	4332	5460	6887	8684	10951
2	106	169	269	427	679	1080	1717	2166	2730	3444	4342	5475
3	71	113	179	285	453	720	1145	1444	1820	2296	2895	3650
4	53	85	134	214	340	540	859	1083	1365	1722	2171	2738
5	43	68	107	171	272	432	687	866	1092	1377	1737	2190
6	35	56	90	142	226	360	572	722	910	1148	1447	1825
7	30	48	77	122	194	309	491	619	780	984	1241	1564
8	27	42	67	107	170	270	429	542	682	861	1086	1369
9	24	38	60	95	151	240	382	481	607	765	965	1217
10	21	34	54	85	136	216	343	433	546	689	868	1095
15	14	23	36	57	91	144	229	289	364	459	579	730
20	-	17	27	43	68	108	172	217	273	344	434	548
25	-	-	21	34	54	86	137	173	218	275	347	438
30	-	-	18	28	45	72	114	144	182	230	289	365
35	-	-	-	24	39	62	98	124	156	197	248	313
40	-	-	-	-	34	54	86	108	136	172	217	274
45	-	-	-	-	30	48	76	96	121	153	193	243
50	-	-	-	-	27	43	69	87	109	138	174	219

- Indicates that current exceeds ampacity rating. 1 - on left locate current you will be dealing with either array or load current; 2 - move across to locate distance to be traveled
 3 - Move up to locate size of cable to be used.