

Quick Reference Series

Air Carbon-Arc Welding Leads Chart

RECOMMENDED NUMBER AND SIZE OF WELDING LEADS FOR VARIOUS CURRENTS (1,2) AND LENGTHS (3,4)

Current Amps	25ft. (7M)		50ft. (15M)		100ft. (30M)		150ft. (46M)		200ft. (61M)		250ft. (76M)	
	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size
100	1	4	1	3	1	2	1	1/0	1	2/0	1	4/0
200	1	3	1	2	1	1/0	1	3/0	1	3/0	3	3/0
300	1	2	1	2	1	3/0	2	2/0	2	4/0	4	4/0
400	1	2	1	1/0	1	4/0	2	4/0	3	4/0	5	4/0
500	1	1	1	2/0	2	2/0	2	4/0	4	4/0		
600	1	1	1	3/0	2	3/0	2	4/0	5	4/0		
800	1	1/0	2	2/0	2	4/0	4	4/0				
1000	1	2/0	1	4/0	3	3/0	5	4/0				
1200	1	3/0	2	4/0	3	4/0						
1400	1	4/0	2	4/0	4	3/0						
1600(5)	2	3/0	4	3/0	4	4/0						
1800	2	4/0	4	4/0								
2000(6)	3	4/0	5	4/0								

1. Recommendations are based on 4V, DC drop per 100 ft.
2. For AC use next heavier size.
3. The length given is one half the sum of the electrode and ground leads.
4. Inadequate grounding causes cable overheating; at least 1 in.² (645mm²) of contact per 1000 amps.
5. Over 1600 amps, a heavy-duty, air-cooled swivel cable should be used.
6. Over 2000 amps, a heavy-duty, water-cooled cable should be used.