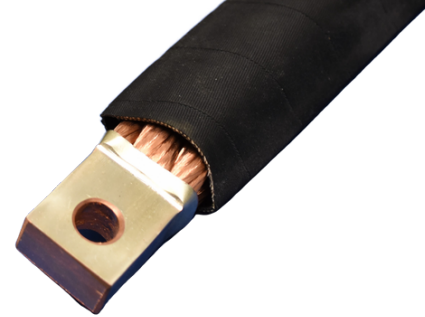


AIR COOLED JUMPER CABLES

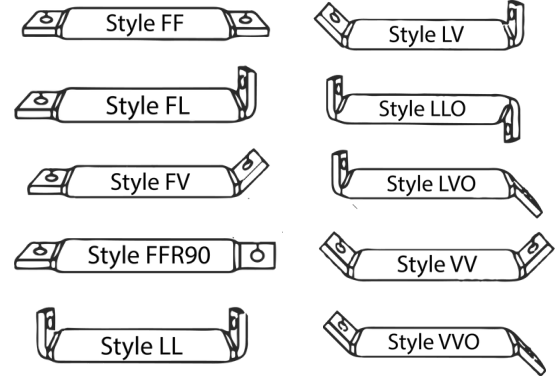


1 Terminal Ends



Each air cooled cable is manufactured with copper terminals, which can be manufactured up to 3-7/8" long for special applications.

A chart for sizing the correct gauge cable is on the next page, as well as guidelines for installation.



2 Taking Measurements

- Length of the Cable = L
- Terminal Face Width = B



Terminal Thickness

MCM	1.250" Wide	1.375" Wide	1.500" Wide
400	0.405"	0.370"	N/A
500	0.510"	0.465"	0.425"
600	0.540"	0.490"	0.450"
750	0.650"	0.590"	0.545"
1000	0.825"	0.750"	0.690"
1200	0.965"	0.880"	0.805"
1500	1.165"	1.060"	0.975"
2000	N/A	1.575"	1.440"

3 More Cable Options

Stabilizer Collar

Increased strand life at the cable terminal is the advantage of a stabilizing collar. It slightly increases the minimum flex radius for the jumper, reducing over flexing.



Extra Flexible

Copper rope stranding and an extra flexible protective cover are used to create an extra flexible jumper.



4 Part Number

500MCMX36 AFV



500 - WIRE SIZE

36 - LENGTH IN INCHES

A - AIR

F - END 1

V - END 2

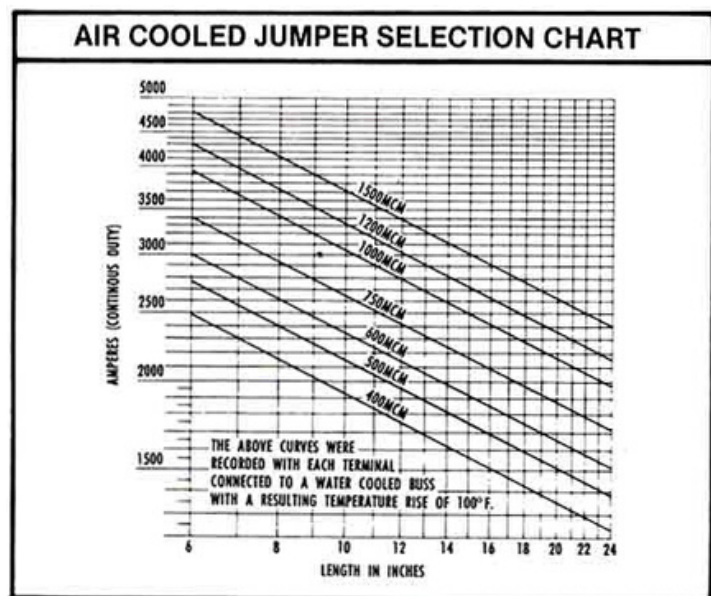
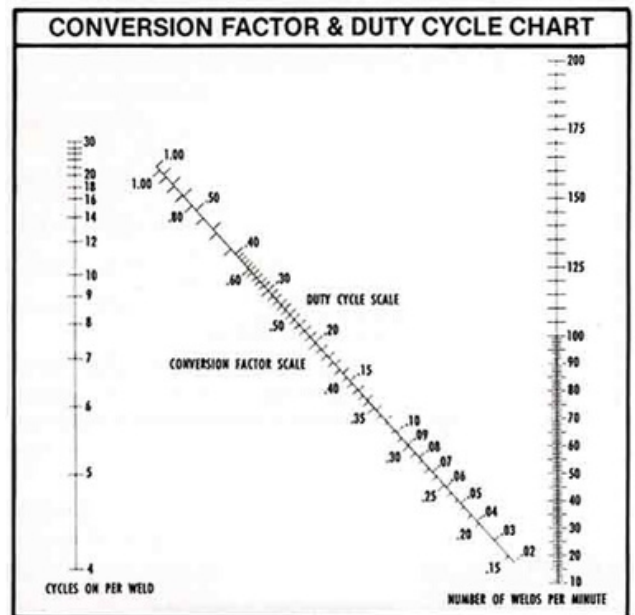
ADDITIONAL OPTIONS AT THE END

T.J. Snow stocks a wide selection of air and water cooled cables as well as shunts for your resistance welder. If you have questions, please contact our customer service team.

AIR COOLED JUMPER SIZING

Use the following method to determine what size cable should be used for your application. First, use the Conversion Factor chart to determine your "Continuous Duty Current." Then, read the correct size cable on the second chart. An example is worked out below.

- 1 Lay one side of a straight edge across the graph at the six cycles of current "one time" point (the left hand vertical scale of the Conversion Factor Chart).
- 2 Pivot the other end of the straight edge across the line up with the "60 welds per minute" on the far right vertical scale.
- 3 At the intersection of your straight edge with the diagonal conversion factor scale line, you should be able to read a conversion factor of .32 off the lower half of the line.
- 4 Multiply the required current (10,000 amps) by the conversion factor (.32) to get the "continuous duty current" of 3,200 amps. Now, proceed to the Air Cooled Jumper Selection Chart.
- 5 Line up your straight edge on the 3,200 continuous duty amp mark, and find the intersection with your desired length line (from below).
- 6 Any cable whose line is above this point may be safely used, since the load it would carry will be within its thermal capacity. In this example, a 1,200 MCM cable can be used and stay within design tolerances.



For questions regarding cable sizing, contact our customer service team.



INSTALLATION GUIDELINES

How To Install Air Cooled Cables

Air cooled jumpers should be installed in such a manner that the mechanical stresses at the terminals will be reduced to a minimum. This may be accomplished by installing the jumper with a little slack, which will allow the jumper to flex freely.

Bend radii should not be sharp, and should be distributed throughout as much of the jumper as possible, in order to distribute the frictional wear over the greatest possible area. See the below charts for suggested minimum bend radii.

Recommended Minimum Bend Radii:

500 MCM and Below: 2"
600 MCM - 1500 MCM: 3"

Minimum Distance from the end of the hose to the point where the bend radii should start is:

350 MCM - 600 MCM: 2"
750 MCM: 2-1/2"
1000 MCM: 3"
1200 MCM: 3-1/2"
1500 MCM: 4"



Questions?
Contact our customer service team.

D.C Resistance of Single Conductor Air Cooled Cable

<u>MCM</u>	<u>D.C. Resistance (Ohms per foot at 70°C)</u>
350	.0000376
400	.0000322
500	.0000263
600	.0000217
750	.0000172
1000	.0000130

<u>MCM</u>	<u>D.C. Resistance</u>
1200	.0000110
1500	.0000088
2000	.0000066