Selection, Service \& Quality Solutions Sanborn NY Battery \& Welding Cable

## Toll Free 1-800-701-0975 <br> Fax 1-800-892-6360



PVC Jacketed Battery Cable - Red


PVC Jacketed Battery Cable - Black


Rubber Jacketed Battery Cable - Black


Neoprene Jacketed Welding Cable - Black

## PVC Jacketed Battery Cable

- SAE specification J1127 - 50V rating
- PVC insulation
- Oil resistant
- $100 \%$ copper conductor
- Excellent flame retardant characteristics
- Finely stranded
- Temperature rating: $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$


## Red

| Gauge | Outside <br> Diameter | Stranding | $\mathbf{2 5}^{\prime} \mathbf{( 7 . 6 m )}$ | $\mathbf{1 0 0}^{\prime} \mathbf{( 3 0 . 5 m )}$ | Bulk Spool $^{\text {* }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | $.272^{\prime \prime}$ | $7 \times 18 \times .0142^{\prime \prime}$ | $\mathbf{7 6 9 2 3 3}$ | $\mathbf{7 6 9 2 4 2}$ | $\mathbf{7 6 9 2 4 2 B}$ |
| 4 | $.350^{\prime \prime}$ | $7 \times 27 \times .0142^{\prime \prime}$ | $\mathbf{7 6 9 2 3 4}$ | $\mathbf{7 6 9 2 4 3}$ | $\mathbf{7 6 9 2 4 3 B}$ |
| 2 | $.460^{\prime \prime}$ | $19 \times 16 \times .0142^{\prime \prime}$ | $\mathbf{7 6 9 2 3 5}$ | $\mathbf{7 6 9 2 4 4}$ | $\mathbf{7 6 9 2 4 4 B}$ |
| 1 | $.460^{\prime \prime}$ | $19 \times 21 \times .0142^{\prime \prime}$ | $\mathbf{7 6 9 2 3 6}$ | $\mathbf{7 6 9 2 4 5}$ | $\mathbf{7 6 9 2 4 5 B}$ |
| $1 / 0$ | $.510^{\prime \prime}$ | $19 \times 26 \times .0142^{\prime \prime}$ | $\mathbf{7 6 9 2 3 7}$ | $\mathbf{7 6 9 2 4 6}$ | $\mathbf{7 6 9 2 4 6 B}$ |
| $2 / 0$ | $.570^{\prime \prime}$ | $19 \times 22 \times .0179^{\prime \prime}$ | $\mathbf{7 6 9 2 3 8}$ | $\mathbf{7 6 9 2 4 7}$ | $\mathbf{7 6 9 2 4 7 B}$ |

* Call elecDirect.com for exact spool lengths on cost saving bulk spools. Customers will be billed by the foot for the exact amount that is on the spool.

Black

| Gauge | Outside Diameter | Stranding | 25' (7.6m) | 100' (30.5m) | Bulk Spool* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | .350" | $7 \times 27 \times .0142^{\prime \prime}$ | *669226 | *769226 | *769226B |
| 2/0 | .570" | $19 \times 22 \times .0179$ | *669230 | *769230 | *769230B |

* Call elecDirect.com for exact spool lengths on cost saving bulk spools. Customers will be billed by the foot for the exact amount that is on the spool.
*NEW


## Rubber Jacketed Battery Cable

- SAE specification J1127
- 50V rating
- Black SGR Rubber insulation
- Oil and acid resistant
- 100\% copper conductor
- Excellent flame retardant characteristics
- Finely stranded
- Temperature rating: $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$


## Black

| Gauge | Outside Diameter | Stranding | 25' (7.6m) | $100{ }^{\prime}$ (30.5m) | Bulk Spool* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | .272" | $7 \times 18 \times .0142^{\prime \prime}$ | 769256 | 769266 | 769266B |
| 4 | .350" | $7 \times 27 \times .0142^{\prime \prime}$ | 769255 | 769265 | 769265B |
| 2 | .460" | $19 \times 16 \times .0142^{\prime \prime}$ | 769252 | 769262 | 769262B |
| 1 | .460" | $19 \times 21 \times .0142^{\prime \prime}$ | 769250 | 769260 | 769260B |
| 1/0 | .510" | $19 \times 26 \times .0142^{\prime \prime}$ | 769251 | 769261 | 769261B |
| 2/0 | .570" | $19 \times 22 \times .0179^{\prime \prime}$ | 769253 | 769263 | 769263B |
| 3/0 | .640" | $19 \times 35 \times .0159{ }^{\prime \prime}$ | 769284 | 769267 | 769267B |
| 4/0 | .699" | $19 \times 44 \times .0159$ | 769286 | 769287 | 769287B |
| Approximate Bulk Spool Quantities |  |  |  |  |  |
| 76926 |  | '-3600' | 769261B | 1000'-1250' |  |
| 76926 |  | '-1750' | 769263B | $750{ }^{\prime}-1000{ }^{\prime}$ |  |
| 76926 |  | '-1500' | 769267B | $500 '-750 '$ |  |
| 76926 |  | '-1500' | 769287B | 400'-600' |  |

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## Neoprene Jacketed Welding Cable

- SAE specification J1127
- 50 V rating
- Black Neoprene insulation
- Oil and acid resistant
- Extra flexible multi-stranded copper conductor
- Excellent flame retardant characteristics
- Temperature rating: $-40^{\circ} \mathrm{C}$ to $90^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.194^{\circ} \mathrm{F}\right)$

Black

| Gauge | Outside Diameter | Stranding | 25' (7.6m) | 100' (30.5m) |
| :---: | :---: | :---: | :---: | :---: |
| 2 | .496" | $672 \times .010{ }^{\prime \prime}$ | 769296 | *769298 |
| 1 | .583" | $840 \times .010^{\prime \prime}$ | 769295 | *769297 |
| 1/0 | .640" | 1083 x .010" | 769293 | *769292 |
| 2/0 | .700" | 1274 x .010" | 769294 | *769291 |
| *NEW |  |  |  |  |

Selection, Service \& Quality Solutions Sanborn NY
Wire \& Cable


The gauge of cable, number of conductors and type of insulation is determined by its application (i.e., the operating conditions and electrical load to be carried). Wiring cable, especially when applying to automobiles or heavy, off road equipment must have flexible characteristics to withstand constant vibrations and adverse operating conditions; it should not become stiff and brittle when subjected to heat or cold. Corrosion, oil, gasoline, battery acids, etc must not damage it.

## Selecting the Correct Cable Gauge Size

Considerable voltage drop will be encountered should the load, e.g. lamps, starter, etc. not be in proper relation to the chosen gauge size. For instance, a $10 \%$ drop in battery voltage to the lamps will result in a $30 \%$ loss in candlepower output. These might seem like academic figures, however, in practice the effects of voltage drop are very evident in an inefficient electrical system.

## Measure Cable Length Required

Determine the length of cable needed to reach from the battery to the most distant electrical unit of the circuit. (Return circuit has been allowed for in the chart, which applies to chassis grounded returns. For two-wire circuits, use total length of both cables, or the double length to most distant electrical unit.)

Total Amperes or Candlepower
Total Candlepower - Total the maximum candlepower to be used in the circuit. Locate the closest corresponding figure in the candlepower column of the chart.

Total Amperes - If the approximate total amperes load in a circuit is known, locate the corresponding amperes (approx.)

## Determining Gauge of Cable

Read across on the line representing the candlepower or the amperes of the circuit to the correct foot-length column. This figure indicates the proper gauge of cable to be used throughout the circuit.

## Recommended Cable Sizes for Replacement or Additional Electrical Unit Installations

Original equipment cable sizes on some vehicles may vary slightly from recommendations due to special electrical system design. This chart applies to chassis grounded return systems. For two-wire circuits, use total length of both cables, or double length to most distant electrical unit.

## Wire \& Cable Guide

12-Volt System

| Amperes (approx.) | Candle Power | $\begin{gathered} { }^{*} 10^{\prime} \\ (3 \mathrm{~m}) \end{gathered}$ | $\begin{aligned} & * 20^{\prime} \\ & (6 \mathrm{~m}) \end{aligned}$ | $\begin{aligned} & * 30^{\prime} \\ & (9 \mathrm{~m}) \end{aligned}$ | $\begin{gathered} * 40^{\prime} \\ (12 \mathrm{~m}) \end{gathered}$ | $\begin{aligned} & * 50^{1} \\ & (15 \mathrm{~m}) \end{aligned}$ | $\begin{gathered} * 60^{\prime} \\ (18 \mathrm{~m}) \end{gathered}$ | $\begin{gathered} { }^{* 701} \\ (21 \mathrm{~m}) \end{gathered}$ | $\begin{aligned} & * 80 ' \\ & (24 \mathrm{~m}) \end{aligned}$ | $\begin{gathered} * 90^{\prime} \\ (27 \mathrm{~m}) \end{gathered}$ | $\begin{aligned} & { }^{*} 100^{\prime} \\ & (30 \mathrm{~m}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.0 | 6 | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga |
| 1.5 | 10 | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga |
| 2 | 16 | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 16 ga | 16 ga | 16 ga |
| 3 | 24 | 18 ga | 18 ga | 18 ga | 18 ga | 18 ga | 16 ga | 16 ga | 16 ga | 14 ga | 14 ga |
| 4 | 30 | 18 ga | 18 ga | 18 ga | 16 ga | 16 ga | 16 ga | 14 ga | 14 ga | 14 ga | 12 ga |
| 5 | 40 | 18 ga | 18 ga | 18 ga | 16 ga | 14 ga | 14 ga | 14 ga | 12 ga | 12 ga | 12 ga |
| 6 | 50 | 18 ga | 18 ga | 16 ga | 16 ga | 14 ga | 14 ga | 12 ga | 12 ga | 12 ga | 12 ga |
| 7 | 60 | 18 ga | 18 ga | 16 ga | 14 ga | 14 ga | 12 ga | 12 ga | 12 ga | 10 ga | 10 ga |
| 8 | 70 | 18 ga | 16 ga | 16 ga | 14 ga | 12 ga | 12 ga | 12 ga | 10 ga | 10 ga | 10 ga |
| 10 | 80 | 18 ga | 16 ga | 14 ga | 12 ga | 12 ga | 12 ga | 10 ga | 10 ga | 10 ga | 10 ga |
| 11 | 90 | 18 ga | 16 ga | 14 ga | 12 ga | 12 ga | 10 ga | 10 ga | 10 ga | 10 ga | 8 ga |
| 12 | 100 | 18 ga | 16 ga | 14 ga | 12 ga | 12 ga | 10 ga | 10 ga | 10 ga | 8 ga | 8 ga |
| 15 | 120 | 18 ga | 14 ga | 12 ga | 12 ga | 10 ga | 10 ga | 10 ga | 8 ga | 8 ga | 8 ga |
| 18 | 140 | 16 ga | 14 ga | 12 ga | 10 ga | 10 ga | 8 ga | 8 ga | 8 ga | 8 ga | 8 ga |
| 20 | 160 | 16 ga | 12 ga | 12 ga | 10 ga | 10 ga | 8 ga | 8 ga | 8 ga | 8 ga | 6 ga |
| 22 | 180 | 16 ga | 12 ga | 10 ga | 10 ga | 8 ga | 8 ga | 8 ga | 8 ga | 6 ga | 6 ga |
| 24 | 200 | 16 ga | 12 ga | 10 ga | 10 ga | 8 ga | 8 ga | 8 ga | 6 ga | 6 ga | 6 ga |
| 36 | - | 14 ga | 10 ga | 8 ga | 8 ga | 8 ga | 6 ga | 6 ga | 6 ga | 4 ga | 4 ga |
| 50 | - | 12 ga | 10 ga | 8 ga | 6 ga | 6 ga | 4 ga | 4 ga | 4 ga | 2 ga | 2 ga |
| 100 | - | 10 ga | 6 ga | 4 ga | 4 ga | 2 ga | 2 ga | 1 ga | 1 ga | 1/0 ga | $1 / 0 \mathrm{ga}$ |
| 150 | - | 8 ga | 4 ga | 2 ga | 2 ga | 1 ga | $1 / 0 \mathrm{ga}$ | $1 / 0 \mathrm{ga}$ | 2/0 ga | 2/0 ga | 2/0 ga |
| 200 | - | 6 ga | 4 ga | 2 ga | 1 ga | $1 / 0 \mathrm{ga}$ | $2 / 0 \mathrm{ga}$ | $3 / 0 \mathrm{ga}$ | $3 / 0 \mathrm{ga}$ | $3 / 0 \mathrm{ga}$ | 4/0 ga |

