Corkscrew plugs and receptacles lock into compact, rugged connections

The connector
Corkscrew locking plugs and receptacles provide compact, weathertight connections for quick indoor or outdoor battery charging and numerous other electric vehicle, industrial and aircraft applications.

For maximum conductivity with minimum corrosion, all contacts are silverplated copper. Even after salt-spray exposure electrical resistance stays minimal.

The plug
Plug mechanisms are encased in a durable Hypalon insulation housing. Stainless steel garter springs reinforce the socket-type contacts to increase mating pressure and make each connection equally reliable. Internally designed gaskets seal the mated connector.

The plug models differ primarily by means of termination and current rating. Catalog number R121 is a convenient no crimp no solder setscrew termination. Catalog number R125 provides the precise fit and rugged connection of a conical lug termination, which is retained in the plug with an allen-type screw.

A screw-lock mates the connector tightly enough to withstand severe vibration and physical shocks. It is operated by a twist handle which positively connects and disconnects the plug. The handle also indicates the state of the connection by its position.

The receptacle
The receptacle is flanged for surface mounting. Pin-style contacts are molded into the glass-filled thermoset plastic housing. Hardware is plated to resist corrosion.

Applications
The corkscrew is a versatile, high performance connector, that may be used for weatherproof battery charger and intercomponent connections in electric vehicles; as a stand-by power connector in computer systems; or as a ground power connector in marine, air and rail transport. It is recommended for other similar applications, or wherever hydraulic fluids, oils, acids and other such potentially destructive elements could shorten the life of another connector.

data table

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>AMPERES, CONTINUOUS</th>
<th>VOLTS</th>
<th>CONNECT-DISCONNECTS</th>
<th>AWG CABLE SIZES</th>
<th>MAXIMUM CABLE O.D.</th>
<th>CABLE CONNECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>at least 5000 time (all)</td>
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<td>no load</td>
<td>6-3/0</td>
<td>3/4&quot;</td>
<td>set screw</td>
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<tr>
<td></td>
<td>for disconnect use only (all)</td>
<td></td>
<td>load</td>
<td>10-4/0</td>
<td>1&quot;</td>
<td>conical lug</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>threaded pin</td>
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</table>

<table>
<thead>
<tr>
<th>CONTACT TYPE</th>
<th>CONTACT MATERIAL</th>
<th>CONTACT RESISTANCE</th>
<th>CONTACT MATING FORCE</th>
<th>AUXILIARY CONTACT</th>
<th>TEMP. RISE ABOVE AMBIENT</th>
<th>ENVIRONMENTAL RESTRICTIONS</th>
<th>AMBIENT OPERATING TEMP.</th>
<th>OTHER TESTING</th>
<th>HOUSING COLOR</th>
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<td>plug</td>
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<td>plug</td>
<td>plug</td>
<td>plug</td>
<td>plug</td>
<td>plug</td>
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</table>

*crimp or solder contact  ** shrink tubing over connector sleeve-to-cable joint and potted set-screw holes required
Battery Connectors - Plugs and Receptacles

**DIMENSIONS**

- **CAT. NO. R121 PLUG**
  - Set screw termination
  - AWG Size ** (mm) ** Catalog Number
    - #6-3/0 (85) R121

- **CAT. NO. R125 PLUG**
  - Lug termination (lugs included)
    - AWG Size ** Metric mm Catalog Number
      - 10 -2 (5) R125G1
      - 8 -3 (8) R125G2
      - 6 -4 (13) R125G3
      - 5-4 -5 (17-21) R125G4
      - 3-2 -6 (27-34) R125G5
      - 1 -7 (42) R125G6
      - 1/0 -8 (53) R125G7
      - 2/0 -9 (67) R125G8
      - 3/0 -10 (85) R125G9
      - 4/0 -11 (107) R125G10

- **CAT. NO. 4657B RECEPTACLE**
  - Lug sets (replacement)
    - AWG Size ** Metric mm Catalog Number
      - 8-10 (8-5) 970
      - 12-10 (3-5) 971
      - 8 (8) 972
      - 6 (13) 973
      - 5-4 (17-21) 974
      - 3-2 (27-34) 975
      - 1 (42) 976
      - 1/0 (53) 977
      - 2/0 (67) 978
      - 3/0 (85) 979
      - 4/0 (107) 980

**ORDERING INFORMATION**

**set screw termination**

- AWG Size ** Metric mm Catalog Number
  - #6-3/0 (85) R121

**lug termination (lugs included)**

- AWG Size ** Metric mm Catalog Number
  - 10 -2 (5) R125G1
  - 8 -3 (8) R125G2
  - 6 -4 (13) R125G3
  - 5-4 -5 (17-21) R125G4
  - 3-2 -6 (27-34) R125G5
  - 1 -7 (42) R125G6
  - 1/0 -8 (53) R125G7
  - 2/0 -9 (67) R125G8
  - 3/0 -10 (85) R125G9
  - 4/0 -11 (107) R125G10

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- AWG Size ** Metric mm Catalog Number
  - 8-10 (8-5) 970
  - 12-10 (3-5) 971
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  - 5-4 (17-21) 974
  - 3-2 (27-34) 975
  - 1 (42) 976
  - 1/0 (53) 977
  - 2/0 (67) 978
  - 3/0 (85) 979
  - 4/0 (107) 980

**orderinng information Receptacle**

- Description*** Catalog Number
  - Black with threaded studs 4657B

**SUGGESTED CRIMP TOOLS FOR R125**

<table>
<thead>
<tr>
<th>AWG Size</th>
<th>Tool</th>
<th>Nest</th>
<th>Indentor</th>
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<tbody>
<tr>
<td>6</td>
<td>A6CD</td>
<td>Y34PL-1</td>
<td></td>
</tr>
<tr>
<td>5-4</td>
<td>Burndy</td>
<td>A2CD</td>
<td>Y34PLA</td>
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<tr>
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<td>Y34A</td>
<td>A1CD</td>
<td>Y34PLA</td>
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<tr>
<td>1</td>
<td>Hypress</td>
<td>A25D</td>
<td>Y34PA</td>
</tr>
<tr>
<td>1/0</td>
<td>or</td>
<td>A26D</td>
<td>Y34PA</td>
</tr>
<tr>
<td>2/0</td>
<td>equivalent</td>
<td>A27D</td>
<td>Y34PA</td>
</tr>
<tr>
<td>3/0</td>
<td>A28D</td>
<td>Y34PR-5</td>
<td></td>
</tr>
<tr>
<td>4/0</td>
<td>A29D</td>
<td>Y34PR-5</td>
<td></td>
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</tbody>
</table>

** The cat. no. R125 Plug is covered by the following patents:**
- U.S. Patent 2,917,722
- Canadian Patent 612,047

** Soldering is recommended for cable sizes 10 through 8 AWG. For Cable sizes 6 through 4/0 AWG, see suggested crimping tool.**
Electric Vehicle Charging Connectors

Charging Power Plugs and Cable Assemblies

Benefits:
- Silver-plated contacts for charging up to 450A
- Full line of integral molded plugs and receptacles
- Designed for low insertion force
- Multiple options include sensors and control mechanisms
- Excellent resistance to moisture/chemicals and severe wear and tear

Battery Connectors
- Versatile, secure, high current corkscrew connector suitable for:
  - Weatherproof battery charger and inter-component connections
  - Stand-by power connector in computer systems
  - Ground power connector in marine, air and rail transport
  - Wherever hydraulic fluids, oils, acids and other such potentially destructive elements could shorten the connector life

ORDER INFORMATION:
Battery Connector     R121 or R125G#  # - Cable Identifier
Battery Receptacle    4657BX

Fast Charge Power Cables and Receptacles
- High current 6 and 9 Pin plugs and receptacles
- Multiple cable configurations
- Capable of 80VDC/150A and 400VDC/450A

ORDER INFORMATION:
Fast Chrg Cable       R270 Gxx E - M  6 Pin  xx – Cable Config
Fast Chrg Cable       R80 G103         9 Pin
Receptacle w/ Shield  4630B           6 Pin
Receptacle w/ Shield  4635B           9 Pin