Complete Electronic Solutions

AirBorn is an employee owned company whose core business is engineering & manufacturing specialized connectors & electronic components for OEMs worldwide. We serve customers across many industries including: Commercial Air, Industrial, Medical, Military/Defense, & Space Exploration. Companies today are looking for more than a supplier, they're looking for a strategic partner to collaborate & grow with. AirBorn products are trusted to perform in extreme conditions, where mission-critical reliability is vital to success. Customers trust AirBorn products, and have for over 60 years.

AirBorn Engineering = Problem Solved®

AirBorn's engineering group specializes in new product design and development for OEMs across the globe. Our team of 50+ degreed engineers are the most innovative and committed to solving our customer's challenges, but that's only the beginning of where we can help! Leverage our design and manufacturing expertise throughout the entire product development process. From conceptual design, prototyping, pilot-runs through to mass production, our teams work efficiently to cut down your program's time to market.

Solution Engineering

AirBorn has a dedicated team of experienced and degreed solution engineers on staff to help solve your most pressing electronic challenges.

Cable vs. Flex Assemblies

We manufacture cable and flex assemblies and can provide an impartial recommendation of which solution is best for your distinct application.

Signal Integrity Expertise

Whether a new design retrofit, or a field issue, let us help you design and end-to-end interconnect solution to support your high-speed signal integrity design.

Lab & Test Services

We'll test against the highest standards imaginable to ensure your products stand up to the rigors of space, military, commercial air, and industrial applications.
AirBorn Solutions Are "In-Action" Inside Many Important & Famous Applications

AirBorn Connectors, Inc. was founded in 1958 to manufacture electronic connectors for aviation applications, hence our company name. By 1960, our 12 employees engaged with customers including Motorola Inc., Texas Instruments (now Raytheon), Lockheed Aircraft, Boeing and Burroughs. In the time since our founding, we’ve managed to be a part of many famous and important projects in human history. The Voyager I & II program, launched in 1977 and still traveling interstellar space today, is emblematic of how customers view AirBorn parts: rugged, reliable and long lasting.

We’re proud to be a part of America’s, and our allies’, vast military and defense initiatives too. AirBorn parts were designed into the Apache & Blackhawk Helicopters, F-16 & F-35 Jets, Abram’s & Bradley Tanks and Ohio-Class Attack Subs just to name a few. Our solutions are also part of Patriot, Javelin, Hellfire, Tomahawk and THAAD missile programs. We excel at providing unfailing quality to mission-critical applications.

While military/defense and aviation applications are our specialty, we by no means stop there. AirBorn parts are an integral part of commercial aircraft, MRI machines, defibrillators as well as pain management systems. From deep sea to deep space, AirBorn connectors are ready for any challenge.
Mars Rovers

Commercial Airliners

Military Communications & Rifle Scopes

Pain Management Systems

Space Shuttle Program
RocKet Series

Overview

RocKet Macro D — Obsoleting D38999

AirBorn’s RocKet Macro D connectors can take your product to the next level with a robust design that withstands all the rigours on Earth and in space. With its rugged form, three 150-position RocKets can utilize the same space as one, 151-position D38999 circular connector.

That will save you space, weight (especially crucial in space exploration applications), and overall cost. Utilizing AirBorn’s RocKet Macro Ds is your first step towards obsoleting 38999s forever.

Key Features & Benefits:
- 2-, 3-, 4-, & 6-row models available
- 8, 25, 50, 74, 100, & 150 pin/socket positions
- Fit 3, 150 position RocKets in the space of a single, 151 position D38999 — shell size 23
- RocKets are crimp removable & customer terminated
- Install and remove wiring multiple times
- Panel-mount capability
- RocKet delivers both signal and power
- A full complement of backshells available including straight, Straight, 45°, 90°, and Lace-Wiring
Rectangular Means Cost, Weight, and Footprint Savings — Especially in Space Applications

When establishing your desired pin count, comparing circular to rectangular connectors often reveals a staggering amount of savings in terms of footprint, weight, — and ultimately cost. Efficiencies discovered in the beginning stages always equate to more economical designs on the back end.

Often, circular connectors are required for gloved-hand installations, as used by astronauts in space applications. When that requirement is lifted however, AirBorn’s rectangular RocKet connectors become the preferred solution for space, weight, and cost savings. In the example above, we are able to fit 750, 24 awg I/O contacts in the same space as 450 I/O contacts, when housed in a circular D38999 body.
Ruggedness & Reliability: Keys To Surviving Harsh Environments

When it comes to durability in the face of unforgiving conditions, they don't come any tougher than AirBorn's RocKet Series connectors. Whether it's enduring the extreme shock and vibration of a rocket launch, the unrelenting repetition of factory robotics, or the intense temperature fluctuations inherent with oil and gas drilling, RocKet connectors are designed to withstand all of that and much more.

Looking for a rugged and reliable replacement for a D38999 circular, look no further than AirBorn's RocKet family of connectors. With the quality that AirBorn's customers can count on and space-flight heritage, RocKet Series connectors set the standard for Macro D reliability.

Applications
- Satellite Systems
- Launch Systems
- Panel I/O
- High-Speed Rail
- Mass Transit
- Commercial Aircraft
- Heavy Equipment
- Robotic Systems
- Oil & Gas
RocKets Are Designed Into:

Rockets

Rail

Rigs

Robotics

Radar

And More...
### 2-Row, Power I/O Connector

RK2 is an 8 awg., crimp-removable contact system available in an 8 position body. Available options include panel mount or I/O, keying hardware, and a full line of backshells.

#### Crimp-Removable Plug

<table>
<thead>
<tr>
<th>RK</th>
<th>2</th>
<th>3</th>
<th>2</th>
<th>008</th>
<th>80</th>
<th>1</th>
<th>59</th>
<th>015</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES</td>
<td>8 Awg power connector</td>
<td>ROWS</td>
<td>2 – 2-Row</td>
<td>STYLE</td>
<td>3 – Plug, straight</td>
<td>BODY MATERIAL</td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td>SIZE</td>
</tr>
<tr>
<td>TERMINATION</td>
<td>80 – Socket, straight, crimp removable, wire barrel 8 awg*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLARIZATION</td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td>37 – Universal, non polarized, factory installed</td>
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<td></td>
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#### Crimp-Removable, Panel-Mount Receptacle

<table>
<thead>
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<th>2</th>
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<th>1</th>
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<th>015</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES</td>
<td>8 Awg power connector</td>
<td>ROWS</td>
<td>2 – 2-Row</td>
<td>STYLE</td>
<td>2 – Receptacle, straight, panel mount</td>
<td>BODY MATERIAL</td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td>SIZE</td>
</tr>
<tr>
<td>TERMINATION</td>
<td>90 – Pin, straight, crimp removable, wire barrel 8 awg*</td>
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**Notes:**

1. Crimp tool - AirBorn part number: CDG14569
2. Crimp positioner - AirBorn part number: CDG14570 (Pin & socket contacts)
3. Insertion tool - AirBorn part number: CDGS417
4. Removal tool - AirBorn part number: CDGS418
5. Crimp instructions - see page 30

* Full compliment of crimp removable contacts packaged with connectors

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NOTE: Please consult airborn.com to configure your part number and for the latest revision controlled drawing and technical data.
2-Row, Power I/O Connector

RK2 is an 8 awg, crimp-removable contact system available in an 8 position body. Available options include panel mount or I/O, keying hardware, and a full line of backshells.

### Crimp-Removable, Panel-Mount Plug

<table>
<thead>
<tr>
<th>RK</th>
<th>2</th>
<th>1</th>
<th>2</th>
<th>008</th>
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<th>1</th>
<th>29</th>
<th>015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>8 Awg power connector</td>
<td><strong>ROWS</strong></td>
<td>2 – 2-Row</td>
<td><strong>STYLE</strong></td>
<td>1 – Plug, straight, panel mount</td>
<td><strong>BODY MATERIAL</strong></td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td><strong>SIZE</strong></td>
</tr>
<tr>
<td><strong>PLATING</strong></td>
<td>1 – Gold</td>
<td><strong>HARDWARE</strong></td>
<td>29 – Turning jackscrews</td>
<td><strong>OPTIONS</strong></td>
<td>015 – Hood, 180° exit, uninstalled, contact factory for details</td>
<td></td>
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<td></td>
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<tr>
<td><strong>TERMINATION</strong></td>
<td>80 – Socket, straight, crimp removable, wire barrel 8 awg*</td>
<td><strong>POLARIZATION</strong></td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
<td>37 – Universal, non polarized, factory installed</td>
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* Crimp tool - AirBorn part number: CDG14569
1. Crimp tool - AirBorn part number: CDG14569
2. Crimp positioner - AirBorn part number: CDG14570 (Pin & socket contacts)
3. Insertion tool - AirBorn part number: CDGS417
4. Removal tool - AirBorn part number: CDGS418
5. Crimp instructions - see page 30

### Crimp-Removable Receptacle

<table>
<thead>
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<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>8 Awg power connector</td>
<td><strong>ROWS</strong></td>
<td>2 – 2-Row</td>
<td><strong>STYLE</strong></td>
<td>4 – Receptacle, straight</td>
<td><strong>BODY MATERIAL</strong></td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td><strong>SIZE</strong></td>
</tr>
<tr>
<td><strong>PLATING</strong></td>
<td>1 – Gold</td>
<td><strong>HARDWARE</strong></td>
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<td><strong>OPTIONS</strong></td>
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<td><strong>TERMINATION</strong></td>
<td>90 – Pin, straight, crimp removable, wire barrel 8 awg*</td>
<td><strong>POLARIZATION</strong></td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
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</tbody>
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2. Crimp positioner - AirBorn part number: CDG14570 (Pin & socket contacts)
3. Insertion tool - AirBorn part number: CDGS417
4. Removal tool - AirBorn part number: CDGS418
5. Crimp instructions - see page 30

* Full compliment of crimp removable contacts packaged with connectors

NOTE: Please consult airborn.com to configure your part number and for the latest revision controlled drawing and technical data.
Dimensional Data (In Inches)

AirBorn’s RocKet Macro D Connectors

**RK212-DIM-3A**

[CTR089, REV. 1]

**CONTACT ARRANGEMENT MATING FACE VIEW**

<table>
<thead>
<tr>
<th>PLUG</th>
<th>RECEPTACLE</th>
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<tbody>
<tr>
<td>8 7 6 5</td>
<td>5 6 7 8</td>
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<tr>
<td>4 3 2 1</td>
<td>1 2 3 4</td>
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</tbody>
</table>

PLUG

RECEPTACLE
3-Row, Power I/O Connector

RK3 is a 16 awg., crimp-removable contact system available in 25 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

### Crimp-Removable Plug

<table>
<thead>
<tr>
<th>RK</th>
<th>3</th>
<th>3</th>
<th>2</th>
<th>025</th>
<th>60</th>
<th>1</th>
<th>59</th>
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</thead>
<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>16 Awg power connector</td>
<td><strong>ROWS</strong></td>
<td>3 – 3-Row</td>
<td><strong>STYLE</strong></td>
<td>3 – Plug, straight</td>
<td><strong>BODY MATERIAL</strong></td>
<td>2 – Polypthylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
</tr>
<tr>
<td><strong>TERMINATION</strong></td>
<td>60 – Socket, straight, crimp removable, wire barrel 16 awg*</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

* Full compliment of crimp removable contacts packaged with connectors

### Crimp-Removable, Panel-Mount Receptacle

<table>
<thead>
<tr>
<th>RK</th>
<th>3</th>
<th>2</th>
<th>2</th>
<th>025</th>
<th>70</th>
<th>1</th>
<th>29</th>
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</thead>
<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>16 Awg power connector</td>
<td><strong>ROWS</strong></td>
<td>3 – 3-Row</td>
<td><strong>STYLE</strong></td>
<td>2 – Receptacle, straight, panel mount</td>
<td><strong>BODY MATERIAL</strong></td>
<td>2 – Polypthylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
</tr>
<tr>
<td><strong>TERMINATION</strong></td>
<td>70 – Pin, straight, crimp removable, wire barrel 16 awg*</td>
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**Notes:**

1. Crimp tool - AirBorn part number: CDG14569
2. Crimp positioner - AirBorn part number: CDG14570 (Pin & socket contacts)
3. Insertion tool - AirBorn part number: CDGS417
4. Removal tool - AirBorn part number: CDGS418
5. Crimp instructions - see page 32

* Full compliment of crimp removable contacts packaged with connectors
3-Row, Power I/O Connector

RK3 is a 16 awg., crimp-removable contact system available in 25 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

### Crimp-Removable, Panel-Mount Plug

<table>
<thead>
<tr>
<th>RK</th>
<th>SERIES</th>
<th>ROWS</th>
<th>STYLE</th>
<th>BODY MATERIAL</th>
<th>SIZE</th>
<th>TERMINATION</th>
<th>PLATING</th>
<th>HARDWARE</th>
<th>OPTIONS</th>
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<tr>
<td>3</td>
<td>16 Awg power connector</td>
<td>3 – 3-Row</td>
<td>1 – Plug, straight, panel mount</td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td>025 – 25 contacts</td>
<td>60 – Socket, straight, crimp removable, wire barrel 16 awg*</td>
<td>1 – Gold</td>
<td>29 – Fixed jacksockets</td>
<td>015 – Hood, 180° exit, unplugged, contact factory for details</td>
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### Crimp-Removable Receptacle

<table>
<thead>
<tr>
<th>RK</th>
<th>SERIES</th>
<th>ROWS</th>
<th>STYLE</th>
<th>BODY MATERIAL</th>
<th>SIZE</th>
<th>TERMINATION</th>
<th>PLATING</th>
<th>HARDWARE</th>
<th>OPTIONS</th>
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<td>3 – 3-Row</td>
<td>4 – Receptacle, straight</td>
<td>2 – Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating</td>
<td>025 – 25 contacts</td>
<td>70 – Pin, straight, crimp removable, wire barrel 16 awg*</td>
<td>1 – Gold</td>
<td>59 – Turning jack screws</td>
<td>015 – Hood, 180° exit, unplugged, contact factory for details</td>
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### Sample Part Number — RK312-025-601-2901

<table>
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<tbody>
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### Sample Part Number — RK342-025-701-5901

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**Notes:**

1. Crimp tool - AirBorn part number: CDG14569
2. Crimp positioner - AirBorn part number: CDG14570 (Pin & socket contacts)
3. Insertion tool - AirBorn part number: CDGS517
4. Removal tool - AirBorn part number: CDGS418
5. Crimp instructions - see page 32

* Full compliment of crimp removable contacts packaged with connectors
4-Row, Power I/O Connector

RK4 is a 20 awg, crimp-removable contact system available in 50 or 74 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

Crimp-Removable Plug

Sample Part Number — RK432-050-201-5901

<table>
<thead>
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<th>RK</th>
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<th>3</th>
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<td>SERIES</td>
<td>20 Awg power connector</td>
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<tr>
<td>ROWS</td>
<td>4 – 4-Row</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>STYLE</td>
<td>3 – Plug, straight</td>
<td></td>
<td></td>
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<tr>
<td>BODY MATERIAL</td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
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</tr>
<tr>
<td>SIZE</td>
<td>050 – 50 contacts 074 – 74 contacts</td>
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<td></td>
</tr>
<tr>
<td>PLATING</td>
<td>1 – Gold</td>
<td></td>
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<td></td>
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<tr>
<td>HARDWARE</td>
<td>59 – Turning jackscrews</td>
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<tr>
<td>TERMINATION</td>
<td>20 – Socket, straight, crimp removable, wire barrel 20-22 awg*</td>
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<tr>
<td>POLARIZATION</td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
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<tr>
<td>PLATING</td>
<td>37 – Universal, non polarized, factory installed</td>
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<td></td>
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</tr>
<tr>
<td>STYLE</td>
<td>3 – Plug, straight</td>
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Crimp-Removable, Panel-Mount Receptacle

Sample Part Number — RK422-050-301-2901

<table>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>ROWS</td>
<td>4 – 4-Row</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STYLE</td>
<td>2 – Receptacle, straight, panel mount</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>BODY MATERIAL</td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>050 – 50 contacts 074 – 74 contacts</td>
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<tr>
<td>PLATING</td>
<td>1 – Gold</td>
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</tr>
<tr>
<td>HARDWARE</td>
<td>29 – Fixed jacksockets</td>
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<tr>
<td>TERMINATION</td>
<td>30 – Pin, straight, crimp removable, wire barrel 20-22 awg*</td>
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<tr>
<td>POLARIZATION</td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
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<tr>
<td>STYLE</td>
<td>2 – Receptacle, straight, panel mount</td>
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Notes:

1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number MIL-C-22520/2-01
2. Crimp positioner - AirBorn part number: CDG7936 (Pin contacts) CDG7935 (Socket contacts)
3. Removal tool - AirBorn part number: CDG7932
4. Crimp instructions - see page 35

* Full compliment of crimp removable contacts packaged with connectors

RK431-PNB-1A (CTR095, REV. 1)
### Dimensional Data

**In Inches**

<table>
<thead>
<tr>
<th>CONTACT ARRANGEMENT</th>
<th>MATING FACE VIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLUG</strong></td>
<td><strong>RECEPTACLE</strong></td>
</tr>
<tr>
<td>24/22/26</td>
<td>24/22/24</td>
</tr>
<tr>
<td>25/23/22</td>
<td>20/22/24</td>
</tr>
<tr>
<td>48/47/46</td>
<td>48/47/48</td>
</tr>
<tr>
<td>55/49/46</td>
<td>45/48/52</td>
</tr>
<tr>
<td><strong>50 POSITION</strong></td>
<td><strong>50 POSITION</strong></td>
</tr>
<tr>
<td>36/34/32</td>
<td>24/24/24</td>
</tr>
<tr>
<td>37/35/33</td>
<td>36/34/36</td>
</tr>
<tr>
<td>73/71/68</td>
<td>59/41/43</td>
</tr>
<tr>
<td>76/72/70</td>
<td>43/40/43</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>PLUG</th>
<th>ROPT</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>2.152</td>
<td>1.666</td>
<td>1.488</td>
<td>1.500</td>
<td>1.200</td>
</tr>
<tr>
<td>74</td>
<td>2.784</td>
<td>2.500</td>
<td>2.122</td>
<td>2.134</td>
<td>1.875</td>
</tr>
</tbody>
</table>

**RK431-DIM-1A**

(CTR095, REV. 1)
4-Row, Power I/O Connector

RK4 is a 20 awg., crimp-removable contact system available in 50 or 74 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

Crimp-Removable, Panel-Mount Plug

Sample Part Number — RK412-050-201-2901

<table>
<thead>
<tr>
<th>RK</th>
<th>4</th>
<th>1</th>
<th>-</th>
<th>20</th>
<th>1</th>
<th>29</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES</td>
<td>20 Awg power connector</td>
<td>ROWS</td>
<td>4 – 4-Row</td>
<td>STYLE</td>
<td>1 – Plug, straight, panel mount</td>
<td>BODY MATERIAL</td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SIZE</td>
<td>050 – 50 contacts 074 – 74 contacts</td>
</tr>
<tr>
<td>PLATING</td>
<td>1 – Gold</td>
<td>HARDWARE</td>
<td>29 – Fixed jackscrews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERMINATION</td>
<td>20 – Socket, straight, crimp removable, wire barrel 20-22 awg*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLARIZATION</td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>37 – Universal, non polarized, factory installed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>015 – Hood, 180° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>016 – Hood, 90° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>017 – Hood, 45° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crimp-Removable Receptacle

Sample Part Number — RK442-050-301-5901

<table>
<thead>
<tr>
<th>RK</th>
<th>4</th>
<th>4</th>
<th>-</th>
<th>30</th>
<th>1</th>
<th>59</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES</td>
<td>20 Awg power connector</td>
<td>ROWS</td>
<td>4 – 4-Row</td>
<td>STYLE</td>
<td>4 – Receptacle, straight</td>
<td>BODY MATERIAL</td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SIZE</td>
<td>050 – 50 contacts 074 – 74 contacts</td>
</tr>
<tr>
<td>PLATING</td>
<td>1 – Gold</td>
<td>HARDWARE</td>
<td>59 – Turning jackscrews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERMINATION</td>
<td>30 – Pin, straight, crimp removable, wire barrel 20-22 awg*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLARIZATION</td>
<td>01-36 – Polarization position, see page 28, factory installed, for keying hardware options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>37 – Universal, non polarized, factory installed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>015 – Hood, 180° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>016 – Hood, 90° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>017 – Hood, 45° exit, uninstalled, contact factory for details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number MIL-C-22520/2-01
2. Crimp positioner - AirBorn part number: CDG7936 (Pin contacts)  CDG7933 (Socket contacts)
3. Removal tool - AirBorn part number: CDG7932
4. Crimp instructions - see page 28

* Full compliment of crimp removable contacts packaged with connectors

4-Row  
Crimp Removable  
I/O Cable
6-Row, Signal I/O Connector

RK6 is a 24 awg, crimp-removable contact system available in 50, 100 or 150 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

<table>
<thead>
<tr>
<th>Crimp-Removable Plug</th>
<th>Sample Part Number — RK632-100-581-5901</th>
</tr>
</thead>
<tbody>
<tr>
<td>[RK] 6 3</td>
<td>1 - 59</td>
</tr>
<tr>
<td>SERIES</td>
<td>PLATING</td>
</tr>
<tr>
<td>24 Awg power connector</td>
<td>1 - Gold</td>
</tr>
<tr>
<td>ROWS</td>
<td>HARDWARE</td>
</tr>
<tr>
<td>6 – 6-Row</td>
<td>59 – Turning jackscrews</td>
</tr>
<tr>
<td>STYLE</td>
<td>OPTIONS</td>
</tr>
<tr>
<td>3 – Plug, straight</td>
<td>015 – Hood, 180° exit, uninstalled,</td>
</tr>
<tr>
<td>BODY MATERIAL</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
<td>016 – Hood, 90° exit, uninstalled,</td>
</tr>
<tr>
<td>1 – No shell plating; bare aluminum</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>2 – Electroless nickel shell plating</td>
<td>017 – Hood, 45° exit, uninstalled,</td>
</tr>
<tr>
<td>3 – Cadmium shell plating</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>SIZE</td>
<td>TERMINATION</td>
</tr>
<tr>
<td>050 – 50 contacts</td>
<td>58 – Socket, straight, crimp removable,</td>
</tr>
<tr>
<td>100 – 100 contacts</td>
<td>wire barrel 24-26 awg*</td>
</tr>
<tr>
<td>150 – 150 contacts</td>
<td>59 – Socket, straight, crimp removable,</td>
</tr>
<tr>
<td>28-30 awg*</td>
<td>wire barrel 28-30 awg*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crimp-Removable, Panel-Mount Receptacle</th>
<th>Sample Part Number — RK622-100-181-2901</th>
</tr>
</thead>
<tbody>
<tr>
<td>[RK] 6 2</td>
<td>1 - 29</td>
</tr>
<tr>
<td>SERIES</td>
<td>PLATING</td>
</tr>
<tr>
<td>24 Awg power connector</td>
<td>1 - Gold</td>
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<tr>
<td>ROWS</td>
<td>HARDWARE</td>
</tr>
<tr>
<td>6 – 6-Row</td>
<td>29 – Turning jackscrews</td>
</tr>
<tr>
<td>STYLE</td>
<td>OPTIONS</td>
</tr>
<tr>
<td>2 – Receptacle, straight, panel mount</td>
<td>015 – Hood, 180° exit, uninstalled,</td>
</tr>
<tr>
<td>BODY MATERIAL</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
<td>016 – Hood, 90° exit, uninstalled,</td>
</tr>
<tr>
<td>1 – No shell plating; bare aluminum</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>2 – Electroless nickel shell plating</td>
<td>017 – Hood, 45° exit, uninstalled,</td>
</tr>
<tr>
<td>3 – Cadmium shell plating</td>
<td>contact factory for details</td>
</tr>
<tr>
<td>SIZE</td>
<td>TERMINATION</td>
</tr>
<tr>
<td>050 – 50 contacts</td>
<td>18 – Pin, straight, crimp removable,</td>
</tr>
<tr>
<td>100 – 100 contacts</td>
<td>wire barrel 24-26 awg*</td>
</tr>
<tr>
<td>150 – 150 contacts</td>
<td>19 – Pin, straight, crimp removable,</td>
</tr>
<tr>
<td>28-30 awg*</td>
<td>wire barrel 28-30 awg*</td>
</tr>
<tr>
<td>37 – Universal, non polarized, factory installed</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number MIL-C-22520/2-01
2. Crimp positioner - AirBorn part number: CDG5598 (Pin contacts) CDG4602 (Socket contacts)
3. Removal tool - AirBorn part number: CDG8161
4. Crimp instructions - see page 38

* Full compliment of crimp removable contacts packaged with connectors

RK632-PNB-1A
CTR099, REV. 1
AirBorn's RocKet Macro D Connectors
Dimensional Data (In Inches)

For contact arrangement, see page 29.
### 6-Row, Signal I/O Connector

RK6 is a 24 awg., crimp-removable contact system available in 50, 100 or 150 position body. Available options include panel-mount or I/O, keying hardware, and a full line of backshells.

---

#### Crimp-Removable, Panel-Mount Plug

<table>
<thead>
<tr>
<th>RK</th>
<th>6</th>
<th>1</th>
<th>-</th>
<th>-</th>
<th>1</th>
<th>29</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>24 Awg signal connector</td>
<td><strong>ROWS</strong></td>
<td>6 – 6-Row</td>
<td><strong>STYLE</strong></td>
<td>1 – Plug, straight, panel mount</td>
<td><strong>BODY MATERIAL</strong></td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
<td><strong>SIZE</strong></td>
</tr>
</tbody>
</table>

**TERMINATION**
- 58 – Socket, straight, crimp removable, wire barrel 24-26 awg*
- 59 – Socket, straight, crimp removable, wire barrel 28-30 awg*

**POLARIZATION**
- 01-36 – Polarization position, see page 28, factory installed, for keying hardware options
- 37 – Universal, non polarized, factory installed

**NOTES:**
- Please consult airborn.com to configure your part number and for the latest revision controlled drawing and technical data.

---

#### Crimp-Removable Receptacle

<table>
<thead>
<tr>
<th>RK</th>
<th>6</th>
<th>4</th>
<th>-</th>
<th>-</th>
<th>1</th>
<th>59</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERIES</strong></td>
<td>24 Awg signal connector</td>
<td><strong>ROWS</strong></td>
<td>6 – 6-Row</td>
<td><strong>STYLE</strong></td>
<td>4 – Receptacle, straight, panel mount</td>
<td><strong>BODY MATERIAL</strong></td>
<td>Polyphenylene sulfide (PPS) with aluminum shell</td>
<td><strong>SIZE</strong></td>
</tr>
</tbody>
</table>

**TERMINATION**
- 18 – Pin, straight, crimp removable, wire barrel 24-26 awg*
- 19 – Pin, straight, crimp removable, wire barrel 28-30 awg*

**POLARIZATION**
- 01-36 – Polarization position, see page 28, factory installed, for keying hardware options
- 37 – Universal, non polarized, factory installed

**NOTES:**
- Please consult airborn.com to configure your part number and for the latest revision controlled drawing and technical data.

---

**Notes:**
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number MIL-C-22520/2-01
2. Crimp positioner - AirBorn part number: CDG5598 (Pin contacts) CDG4602 (Socket contacts)
3. Removal tool - AirBorn part number: CDG8161
4. Crimp instructions - see page 38

* Full compliment of crimp removable contacts packaged with connectors

---

![6 Row I/O Cable](Crimp Removable)
Dimensional Data
(In Inches)

For contact arrangement, see page 29.
<table>
<thead>
<tr>
<th>RocKet Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contacts</strong></td>
</tr>
<tr>
<td><strong>Contact Finish</strong></td>
</tr>
<tr>
<td><strong>Shells/Hoods</strong></td>
</tr>
<tr>
<td><strong>Aluminum Shell Finish</strong></td>
</tr>
<tr>
<td><strong>Molded Insulators</strong></td>
</tr>
<tr>
<td><strong>Embedment</strong></td>
</tr>
<tr>
<td><strong>Hardware</strong></td>
</tr>
<tr>
<td><strong>Connector Markings</strong></td>
</tr>
<tr>
<td><strong>Tolerances</strong></td>
</tr>
</tbody>
</table>
## RocKet Performance (Reference MIL-C-55302)

| Contact Rating       | RK2-8 AWG (42 amperes)  
|                      | RK3-16 AWG (13 amperes)   
|                      | RK4-20 AWG (5 amperes)    
<table>
<thead>
<tr>
<th></th>
<th>RK6-24 AWG (3 amperes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp.</td>
<td>-65° to +125° C or -85° to +257° F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
<th>Test Method Per: SAE AS 13441</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Voltage</td>
<td>750 V, RMS, 60 Hz @ sea level</td>
<td>#3001</td>
</tr>
<tr>
<td></td>
<td>250 V, RMS, 60 Hz @ 70,000 feet</td>
<td></td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>5,000 megohms minimum @ 500 VDC per</td>
<td>#3003</td>
</tr>
<tr>
<td>Durability</td>
<td>500 connector mating cycles</td>
<td></td>
</tr>
<tr>
<td>Vibration</td>
<td>Mated connectors, Test Condition III</td>
<td>#2005</td>
</tr>
<tr>
<td>Shock</td>
<td>Mated connectors, Test Condition B</td>
<td>#2004</td>
</tr>
<tr>
<td>Salt Spray</td>
<td>Mated connectors, Test Condition G</td>
<td>#1001</td>
</tr>
<tr>
<td>Humidity</td>
<td>Test type II, except steps 7A and 7B not required</td>
<td>#1002</td>
</tr>
<tr>
<td>Temperature Cycling</td>
<td>Mated connectors, Test condition A</td>
<td>#1003</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>.015 ohms max (interface measurement) @ 3 amperes</td>
<td>#3004</td>
</tr>
</tbody>
</table>
| Contact Engagement/ Separation | RK2-8 AWG  160 oz. max. engagement, 4 oz. min. separation  
|                                      | RK3-16 AWG  30 oz. max. engagement, 3 oz. min. separation  
|                                      | RK4-20 AWG  18 oz. max. engagement, 0.7 oz. min. separation  
|                                      | RK6-24 AWG  6 oz. max. engagement, 0.5 oz. min. separation  |
| Outgassing             | The entire connector assembly shall have maximum total mass loss (TML) of 1.0 percent of the original specimen mass and shall have a maximum volatile condensable material (VCM) content of 0.1 percent of the original specimen mass. |

Please consult the AirBorn website for the latest revision of this document prior to beginning any design work.
RocKet Polarization

Please consult the AirBorn website for the latest revision of this document prior to beginning any design work.

Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number.

Example:
Plug       RK412-050-201-5901
Receptacle RK424-050-301-2901
CRIMPING INSTRUCTIONS CONT’D
8 AWG CONTACT WITH
8 AWG WIRE BARREL

INSTALLING CONTACTS
1. CHOOSE CRIMPED WIRE TO BE INSTALLED.
2. HOLD CONTACT BETWEEN THUMB AND INDEX FINGER AT THE BACK
   OF THE CONTACT BARREL.
3. INSERT CONTACT INTO CONTACT CAVITY FROM THE REAR OF CONNECTOR.
4. PUSH CONTACT INTO CAVITY UNTIL RETAINER IS ENGAGED.
   GENTLY PULL BACK ON THE WIRE TO ENSURE SEATING.
   IF CONTACT IS PROPERLY SEATED, IT WILL NOT COME OUT OF
   CONNECTOR WITHOUT THE AID OF THE REMOVAL TOOL.

REMOVING CONTACTS
1. IN THE EVENT THAT A WIRE MUST BE EXTRACTED FROM THE
   CONTACT CAVITY, THE REMOVAL TOOL IS REQUIRED.
2. IN THE FRONT OF THE CONNECTOR(MATING FACE), INSERT REMOVAL TOOL
   INTO THE CONTACT CAVITY.

   3. PRESS THE REMOVAL TOOL DOWN UNTIL THE RETAINER IS RELEASED.

   4. PRESS CAP OF TOOL TO DISLODGE CONTACT FROM CAVITY.

   5. PULL WIRE AND CONTACT FREE FROM BACK OF CONNECTOR.
CRIMPING INSTRUCTIONS
8 AWG CONTACT WITH
8 AWG WIRE BARREL

TOOLS REQUIRED
1. AIRBORN PN CDG14569–CRIMP TOOL
2. AIRBORN PN CDG14570–POSITIONER FOR PIN AND SOCKET CONTACTS
3. AIRBORN PN CDG5418–REMOVAL TOOL

CRIMPING PROCESS
1. INSTALL POSITIONER ONTO CRIMP TOOL.
2. STRIP INSULATION OF WIRE .510±.010
3. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT IN THE POSITIONER.

4. INSERT STRIPPED END OF WIRE INTO CRIMP BARREL OF CONTACT. INSULATION SHOULD EXTEND INTO INSULATION CUP.
5. CRIMP CONTACT BY DEPRESSING FOOT PEDAL
6. VISUALLY INSPECT CRIMP:
   A. WIRE INSULATION SHOULD EXTEND INTO INSULATION CUP. THERE SHOULD NOT BE A GAP BETWEEN INSULATION AND INSULATION CUP.
   B. THERE SHOULD BE STRANDS OF WIRE VISIBLE THRU THE INSPECTION HOLE IN THE BARREL OF THE CONTACT.
Crimping Instructions

16 AWG contact with
16 AWG wire barrel

Tools Required
1. Airborn part number CDG14571-Crimp Tool (MIL-C-22520/1-01)
2. Airborn part number CDG14572-Turret for Pins and Sockets (MIL-C-22520/1-03)
3. Airborn part number CDG4492—Insertion Tool
4. Airborn part number CDG4493—Removal Tool

Crimping Process
1. Strip insulation of wire .200±.010.
2. Install turret onto crimp tool.
3. Select the blue/red button on the turret.
4. Turn dial on back of crimp tool to setting 7.
   This is a baseline setting. See “Guidelines for establishing tensile value for crimp”.
5. Drop contact into the nest of the crimp tool, making sure that it bottoms out in the turret.
6. Insert stripped end of wire into crimp barrel of contact. Insulation should extend into insulation cup.
7. Crimp contact by squeezing handles together. Crimp is complete when handles release to original position.
8. Visually inspect crimp:
   A. There should be no gap between insulation and crimp barrel.
   B. There should be strands of wire visible thru the inspection hole in the crimp barrel.
   C. There should be no strands of wire outside the crimp barrel.
GUIDELINES FOR ESTABLISHING
TENSILE VALUE FOR CRIMP

EQUIPMENT REQUIRED:
FORCE GAGE
WIRE—FROM LOT TO BE USED FOR PRODUCT
CONTACT—FROM LOT TO BE USED FOR PRODUCT
CRIMP TOOL
TURRET

PROCEDURE TO ESTABLISH TENSILE VALUE OF WIRE:
1. CUT 10 PIECES OF WIRE (ABOUT 2–3 INCHES LONG)
2. REMOVE INSULATOR FROM ENTIRE LENGTH OF WIRE
3. TIN APPROXIMATELY 1.00” ON BOTH ENDS
4. PERFORM TENSILE TEST ON FORCE GAGE
5. DETERMINE AVERAGE TENSILE VALUE OF WIRE

PROCEDURE TO ESTABLISH TENSILE VALUE OF CRIMP
1. CUT 10 PIECES OF WIRE (ABOUT 2–3 INCHES LONG)
2. STRIP WIRE .200±.010” ON ONE END AND 1.00” ON OTHER END
3. TIN END OF WIRE THAT IS STRIPPED 1.00”
4. TURN DIAL ON BACK OF CRIMP TOOL TO SETTING 7
5. CRIMP CONTACT ON .200” STRIPPED END
6. PERFORM TENSILE TEST ON FORCE GAGE
7. RECORD ALL 10 READINGS.
8. DETERMINE AVERAGE TENSILE VALUE OF CRIMP
9. TENSILE VALUE OF CRIMP SHOULD BE 75% OF TENSILE VALUE OF WIRE
10. UNDER MAGNIFICATION, EXAMINE CRIMP.
    PREFERRED CRIMP FAILURE IS BREAKAGE OF THE WIRE STRANDS OUTSIDE THE CRIMP
    BARREL.
    A CRIMP IS CONSIDERED UNACCEPTABLE IF THE WIRE PULLS OUT OF THE
    WIRE BARREL WITHOUT BREAKING THE WIRE STRANDS.
11. IF WIRE PULLS OUT OF THE WIRE BARREL WITHOUT BREAKING THE WIRE STRANDS,
    SELECT THE NEXT LOWER SETTING NUMBER ON THE CRIMP TOOL AND REPEAT
    PROCEDURE TO ESTABLISH TENSILE VALUE OF CRIMP.
    THE LOWER THE SETTING NUMBER ON THE CRIMP TOOL, THE TIGHTER THE CRIMP.
CRIMPING INSTRUCTIONS
24 AWG CONTACT WITH
24, 26, 28 AND 30 AWG WIRE BARREL

TOOLS REQUIRED
1. AIRBORN PN CDG4601—CRIMP TOOL
2. AIRBORN PN CDG4602—POSITIONER FOR SOCKET CONTACTS
3. AIRBORN PN CDG5598—POSITIONER FOR PIN CONTACTS
4. AIRBORN PN CDG8161—REMOVAL TOOL

CRIMPING PROCESS
1. SELECT CORRECT POSITIONER FOR THE PIN OR SOCKET CONTACT.
2. INSTALL POSITIONER ONTO BACK OF CRIMP TOOL.
3. CHOOSE "SELECTION NUMBER" FROM POSITIONER FOR THE WIRE AWG THAT HAS BEEN SELECTED FOR YOUR APPLICATION. SET CRIMP TOOL TO THAT SELECTION NUMBER.
4. STRIP INSULATION OF WIRE .145±.005
5. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT ON THE POSITIONER.

<table>
<thead>
<tr>
<th>CRIMP BARREL</th>
<th>SOCKET</th>
<th>INSPECTION HOLE</th>
<th>PIN</th>
<th>CRIMP BARREL</th>
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</thead>
<tbody>
<tr>
<td>INTO CRIMP TOOL</td>
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<td></td>
<td>INTO CRIMP TOOL</td>
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</tbody>
</table>

6. INSERT STRIPPED END OF WIRE INTO BARREL OF CONTACT. INSULATION SHOULD BE FLUSH WITH BACK OF CONTACT BARREL.
7. CRIMP CONTACT BY SQUEEZING HANDLES TOGETHER. CRIMP IS COMPLETE WHEN THE HANDLES RELEASE TO ORIGINAL POSITION.
8. VISUALLY INSPECT CRIMP:
   THERE SHOULD BE NO GAP MIN./ONE WIRE DIA MAX. BETWEEN INSULATION AND BARREL OF CONTACT.
   THERE SHOULD BE STRANDS OF WIRE VISIBLE THRU THE INSPECTION HOLE IN THE BARREL OF THE CONTACT.

Please consult the AirBorn website for the latest revision of this document prior to beginning any design work.
CRIMPING INSTRUCTIONS
20 AWG CONTACT WITH
20, 24–26 OR 28–30 AWG BARREL

TOOLS REQUIRED
1. AIRBORN PN CDG4601—CRIMP TOOL
2. AIRBORN PN CDG7935—POSITIONER FOR SOCKET CONTACTS
3. AIRBORN PN CDG7936—POSITIONER FOR PIN CONTACTS
4. AIRBORN PN CDG7932—REMOVAL TOOL

CRIMPING PROCESS
1. SELECT CORRECT POSITIONER FOR THE PIN OR SOCKET CONTACT.
2. INSTALL POSITIONER ONTO BACK OF CRIMP TOOL.
3. TO DETERMINE WHICH "SELECTION NUMBER" TO CHOOSE ON THE CRIMP TOOL, BEGIN BY DETERMINING THE TENSILE STRENGTH OF THE WIRE TO BE USED.

FOR EXAMPLE, IF USING 20 AWG WIRE BEGIN BY TURNING "SELECTION NUMBER" TO 6. CRIMP TEST CONTACTS (3–5 PIECES). PERFORM TENSILE TEST. TENSILE TEST RESULTS ARE INVALID IF (1) ANY STRANDS OF WIRE ARE NOT CAPTURED IN BARREL, (2) STRANDS ARE NICKED OR CUT BEFORE TEST, (3) WIRE BROKE AT SHARP EDGE OF TEST FIXTURE, OR (4) WIRE PULLED OUT OF BARREL WITHOUT BREAKING STRANDS.

IF TENSILE STRENGTH VALUES ARE NOT 75% (MINIMUM) OF TENSILE STRENGTH OF WIRE, CHANGE "SELECTION NUMBER". CRIMP ANOTHER GROUP OF TEST CONTACTS (3–5 PIECES) AND PERFORM TENSILE TEST AGAIN.
CONTINUE THIS PROCESS UNTIL TENSILE STRENGTH OF CRIMP MEETS OR EXCEEDS 75% OF TENSILE STRENGTH OF WIRE.
CRIMPING INSTRUCTIONS CONT’D

20 AWG CONTACT WITH
20, 24–26 OR 28–30 AWG BARREL

4. STRIP LENGTH OF INSULATION:
   24–26 AND 28–30 AWG: .145±.005
   20 AWG: .190±.005

5. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE
   THAT IT BOTTOMS OUT ON THE POSITIONER.

   CRIMP BARREL  SOCKET  INSPECTION HOLE  PIN  CRIMP BARREL

   INTO CRIMP TOOL  INTO CRIMP TOOL

6. INSERT STRIPPED END OF WIRE INTO BARREL OF CONTACT.
   INSULATION SHOULD BE FLUSH WITH BACK OF CONTACT BARREL.

7. CRIMP CONTACT BY SQUEEZING HANDLES TOGETHER. CRIMP IS
   COMPLETE WHEN THE HANDLES RELEASE TO ORIGINAL POSITION.

8. VISUALLY INSPECT CRIMP:
   THERE SHOULD BE NO GAP MIN./ONE WIRE DIA MAX. BETWEEN
   INSULATION AND BARREL OF CONTACT.
   THERE SHOULD BE STRANDS OF WIRE VISIBLE THRU THE INSPECTION
   HOLE IN THE BARREL OF THE CONTACT.
CRIMPING INSTRUCTIONS CONT’D
20 AWG CONTACT WITH 20,24–26 OR 28–30 AWG BARREL

INSTALLING CONTACTS
1. CHOOSE CRIMPED WIRE TO BE INSTALLED.
2. HOLD CONTACT BETWEEN THUMB AND INDEX FINGER AT THE BACK OF THE CONTACT BARREL.
3. INSERT CONTACT INTO CONNECTOR UNTIL A DEFINITE “CLICK” IS HEARD. GENTLY PULL BACK ON THE WIRE TO CONFIRM SEATING.
   IF CONTACT IS PROPERLY SEATED, IT WILL NOT COME OUT OF CONNECTOR WITHOUT THE AID OF THE REMOVAL TOOL.

REMOVING CONTACTS
1. IN THE EVENT THAT A WIRE MUST BE EXTRACTED FROM THE CONTACT CAVITY, THE REMOVAL TOOL IS REQUIRED.
2. OPEN REMOVAL TOOL AND PLACE TIP AROUND THE WIRE INSULATION.
3. MOVE THE TOOL SO THAT THE TIP GOES DOWN INTO THE CONTACT CAVITY.
4. WHILE PRESSING THE TOOL DOWN, ROTATE THE HANDLE BACK AND FORTH.
5. WHEN THE TIP OF THE HANDLE IS DOWN AS FAR AS IT WILL GO, THE CONTACT IS READY TO BE REMOVED.
6. MAKING SURE TO KEEP THE TIP OF THE TOOL PERPENDICULAR TO THE CONNECTOR, PULL TOOL FREE OF THE CONTACT CAVITY.
7. OPEN REMOVAL TOOL AND REMOVE THE EXTRACTED WIRE.
CRIMPING INSTRUCTIONS
24 AWG CONTACT WITH
24, 26, 28 AND 30 AWG WIRE BARREL

TOOLS REQUIRED
1. AIRBORN PN CDG4601—CRIMP TOOL
2. AIRBORN PN CDG4602—POSITIONER FOR SOCKET CONTACTS
3. AIRBORN PN CDG5598—POSITIONER FOR PIN CONTACTS
4. AIRBORN PN CDG8161—REMOVAL TOOL

CRIMPING PROCESS
1. SELECT CORRECT POSITIONER FOR THE PIN OR SOCKET CONTACT.
2. INSTALL POSITIONER ONTO BACK OF CRIMP TOOL.
3. CHOOSE "SELECTION NUMBER" FROM POSITIONER FOR THE WIRE AWG THAT HAS BEEN SELECTED FOR YOUR APPLICATION. SET CRIMP TOOL TO THAT SELECTION NUMBER.
4. STRIP INSULATION OF WIRE .145±.005
5. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT ON THE POSITIONER.

6. INSERT STRIPPED END OF WIRE INTO BARREL OF CONTACT. INSULATION SHOULD BE FLUSH WITH BACK OF CONTACT BARREL.
7. CRIMP CONTACT BY SQUEEZING HANDLES TOGETHER. CRIMP IS COMPLETE WHEN THE HANDLES RELEASE TO ORIGINAL POSITION.
8. VISUALLY INSPECT CRIMP:
   THERE SHOULD BE NO GAP MIN./ONE WIRE DIA MAX. BETWEEN INSULATION AND BARREL OF CONTACT.
   THERE SHOULD BE STRANDS OF WIRE VISIBLE THRU THE INSPECTION HOLE IN THE BARREL OF THE CONTACT.
CRIMPING INSTRUCTIONS CONT’D

24 AWG CONTACT WITH
24, 26, 28 AND 30 AWG WIRE BARREL

INSTALLING CONTACTS

1. CHOOSE CRIMPED WIRE TO BE INSTALLED.
2. HOLD CONTACT BETWEEN THUMB AND INDEX FINGER AT THE BACK OF THE CONTACT BARREL.
3. INSERT CONTACT INTO CONNECTOR UNTIL A DEFINITE “CLICK” IS HEARD. GENTLY PULL BACK ON THE WIRE TO INSURE SEATING.

IF CONTACT IS PROPERLY SEATED, IT WILL NOT COME OUT OF CONNECTOR WITHOUT THE AID OF THE REMOVAL TOOL.

REMOVING CONTACTS

1. IN THE EVENT THAT A WIRE MUST BE EXTRACTED FROM THE CONTACT CAVITY, THE REMOVAL TOOL IS REQUIRED.
2. OPEN REMOVAL TOOL AND PLACE TIP AROUND THE WIRE INSULATION.
3. MOVE THE TOOL SO THAT THE TIP GOES DOWN INTO THE CONTACT CAVITY.
4. WHILE PRESSING THE TOOL DOWN, ROTATE THE HANDLE BACK AND FORTH.
5. WHEN THE TIP OF THE HANDLE IS DOWN AS FAR AS IT WILL GO, THE CONTACT IS READY TO BE REMOVED.
6. MAKING SURE TO KEEP THE TIP OF THE TOOL PERPENDICULAR TO THE CONNECTOR, PULL TOOL FREE OF THE CONTACT CAVITY.
7. OPEN REMOVAL TOOL AND REMOVE THE EXTRACTED WIRE.
CRIMPING INSTRUCTIONS
24 AWG CONTACT WITH
22 AND 20 AWG WIRE BARREL

TOOLS REQUIRED
1. AIRBORN PN CDG4601—CRIMP TOOL
2. AIRBORN PN CDG4603—POSITIONER FOR SOCKET CONTACTS
3. AIRBORN PN CDG8161—REMOVAL TOOL

CRIMPING PROCESS
1. INSTALL POSITIONER ONTO BACK OF CRIMP TOOL.
2. CHOOSE "SELECTION NUMBER" FROM POSITIONER FOR THE WIRE AWG THAT HAS BEEN SELECTED FOR YOUR APPLICATION. SET CRIMP TOOL TO THAT SELECTION NUMBER.
3. STRIP INSULATION OF WIRE .145±.005
4. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT ON THE POSITIONER.

CRIMP BARREL
INSPECTION HOLE

5. INSERT STRIPPED END OF WIRE INTO BARREL OF CONTACT. INSULATION SHOULD BE FLUSH WITH BACK OF CONTACT BARREL.
6. CRIMP CONTACT BY SQUEEZING HANDLES TOGETHER. CRIMP IS COMPLETE WHEN THE HANDLES RELEASE TO ORIGINAL POSITION.
7. VISUALLY INSPECT CRIMP: THERE SHOULD BE NO GAP MIN./ONE WIRE DIA MAX. BETWEEN INSULATION AND BARREL OF CONTACT. THERE SHOULD BE STRANDS OF WIRE VISIBLE THRU THE INSPECTION HOLE IN THE BARREL OF THE CONTACT.

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Crimping Instructions Cont’d
24 AWG Contact with 22 and 20 AWG Wire Barrel

Installing Contacts
1. Choose crimped wire to be installed.
2. Hold contact between thumb and index finger at the back of the contact barrel.
3. Insert contact into connector until a definite "click" is heard. Gently pull back on the wire to insure seating.
   If contact is properly seated, it will not come out of connector without the aid of the removal tool.

Removing Contacts
1. In the event that a wire must be extracted from the contact cavity, the removal tool is required.
2. The wire barrel must be cut off before using removal tool.
3. Open removal tool and place tip around the wire insulation.
4. Move the tool so that the tip goes down into the contact cavity.
5. Continue to lightly press down. If resistance is met, rotate forth and back if tool meets any resistance.
6. When the tip of the handle is down as far as it will go, the contact is ready to be removed.
7. Making sure to keep the tip of the tool perpendicular to the connector, pull tool free of the contact cavity.
8. Open removal tool and remove the extracted wire.
The AirBorn Advantage

Rugged Power Systems

Photonics/Optoelectronics

Flexible Circuit Assemblies

Cable Assemblies

FUZE Assemblies

Active Optical Assemblies

Rectangular W Series

Rectangular R Series

Micro D M Series

Nano D N Series

Rectangular 25Gbps verSI

Z Axis Interposer Z Series

Hybrid-Keyed Micro D microQUAD

High-Speed Micro D microSI

Stackable RC & RCII Series

Circular Series 360

Strip Connector AirStrip

Macro D RocKet

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