

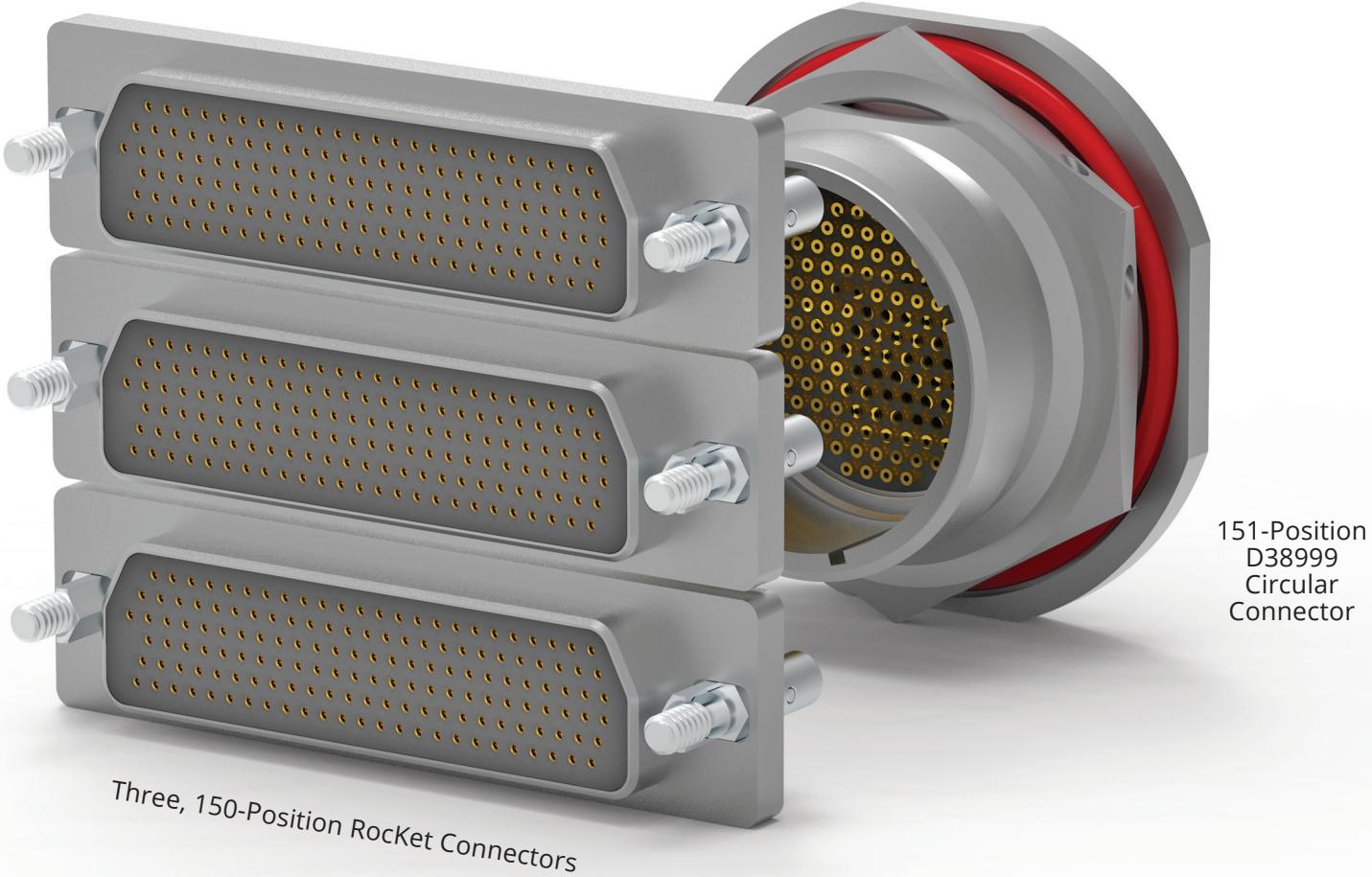
molex



AirBorn RockEt

Macro-D Connectors

AirBorn RockKet | Overview



Advancing Connector Technology: Obsoleting D38999

Molex AirBorn RockKet Macro-D Connectors can take your product to the next level with a robust design that withstands all the rigors of Earth and space. With its rugged form, three 150-position AirBorn RockKet connectors utilize the same space as a single 151-position D38999 circular connector.

This design delivers significant savings in space and weight—factors that are especially critical in space exploration applications—while also reducing overall cost. Employing AirBorn RockKet connectors represents a strategic advancement toward the eventual replacement of D38999 connectors.

Key Features & Benefits:

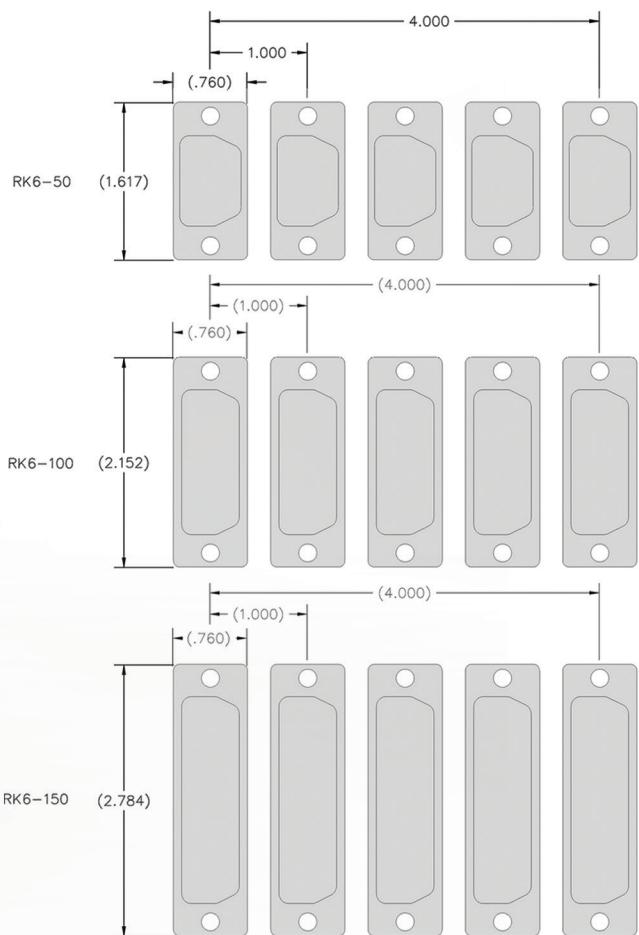
- 2-, 3-, 4- and 6-row models available
- 8, 25, 50, 74, 100 and 150 pin/socket positions
- Fit three 150 position AirBorn RockKet connectors in the space of a single 151 position D38999 shell size 23
- Crimp-removable and customer-terminated
- Install and remove wiring multiple times
- Panel-mount capability
- Delivers both signal and power
- A full complement of backshells available including straight, 45°, 90° and lace wiring

Rectangular: The Key to Cost, Weight and Space Savings in Space Applications

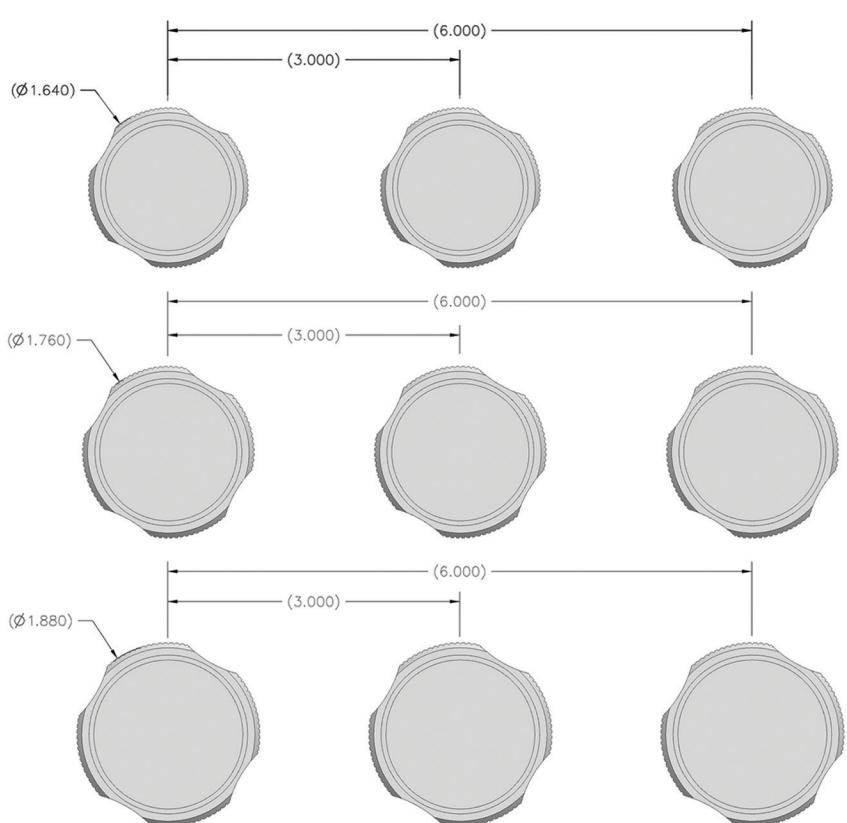
When establishing a desired pin count, comparing circular to rectangular connectors often reveals a staggering amount of savings in terms of footprint, weight and cost. Often, circular connectors are required for gloved-hand installations, as used by astronauts in space applications. With that requirement lifted, rectangular AirBorn RockEt Macro-D Connectors are ideal for space, weight and cost savings.

As shown below, these connectors fit 750, 24 AWG I/O contacts in the same space as 450 I/O contacts when housed in a circular D38999 body.

AirBorn RockEt Macro-D Connectors



D38999 Circular Connectors



Two-Row, Power I/O Connector

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



| Crimp-Removable Plug | | | | | | | | Sample Part Number — RK232-008-801-5901 | | | |
|---|----------------------------|------------------------------------|--|---------------------------------|-----------|--|--|---|--|--|---|
| RK | 2 | 3 | 2 | 008 | 80 | 1 | | | | | 015 |
| SERIES AirBorn RockEt 8 AWG power connector | ROWS 2 - Two-row | STYLE 3 - Plug, straight | BODY MATERIAL 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | SIZE 008 - 8 contacts | | PLATING 1 - Gold | | HARDWARE 00 - None 59 - Turning jackscrews | | | OPTIONS 015 - Hood, 180° exit, uninstalled, contact factory for details |
| | | | | | | TERMINATION 80 - Socket, straight, crimp removable, wire barrel 8 AWG* | | | | | |
| | | | | | | | | POLARIZATION 00 - No Hardware 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options 37 - Universal, non-polarized, factory installed | | | |
| | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

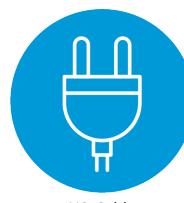
| Crimp-Removable, Panel-Mount Receptacle | | | | | | | | Sample Part Number — RK222-008-901-2901 | | | |
|---|----------------------------|---|--|---------------------------------|-----------|---|--|---|--|--|---|
| RK | 2 | 2 | 2 | 008 | 90 | 1 | | | | | 015 |
| SERIES AirBorn RockEt 8 AWG power connector | ROWS 2 - Two-row | STYLE 2 - Receptacle, straight, panel mount | BODY MATERIAL 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | SIZE 008 - 8 contacts | | PLATING 1 - Gold | | HARDWARE 00 - None 29 - Fixed jacksockets | | | OPTIONS 015 - Hood, 180° exit, uninstalled, contact factory for details |
| | | | | | | TERMINATION 90 - Pin, straight, crimp removable, wire barrel 8 AWG* | | | | | |
| | | | | | | | | POLARIZATION 00 - No Hardware 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options 37 - Universal, non-polarized, factory installed | | | |
| | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG14569
2. Crimp positioner - Molex Part Number: CDG14570 (Pin and socket contacts)
3. Removal tool - Molex Part Number: CDG5418
4. Crimp instructions - see page XXIV

*Full complement of crimp removable contacts packaged with connectors.



I/O Cable



2 Row

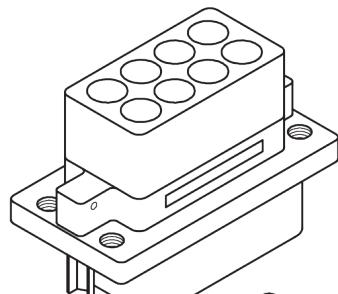


Crimp Removable

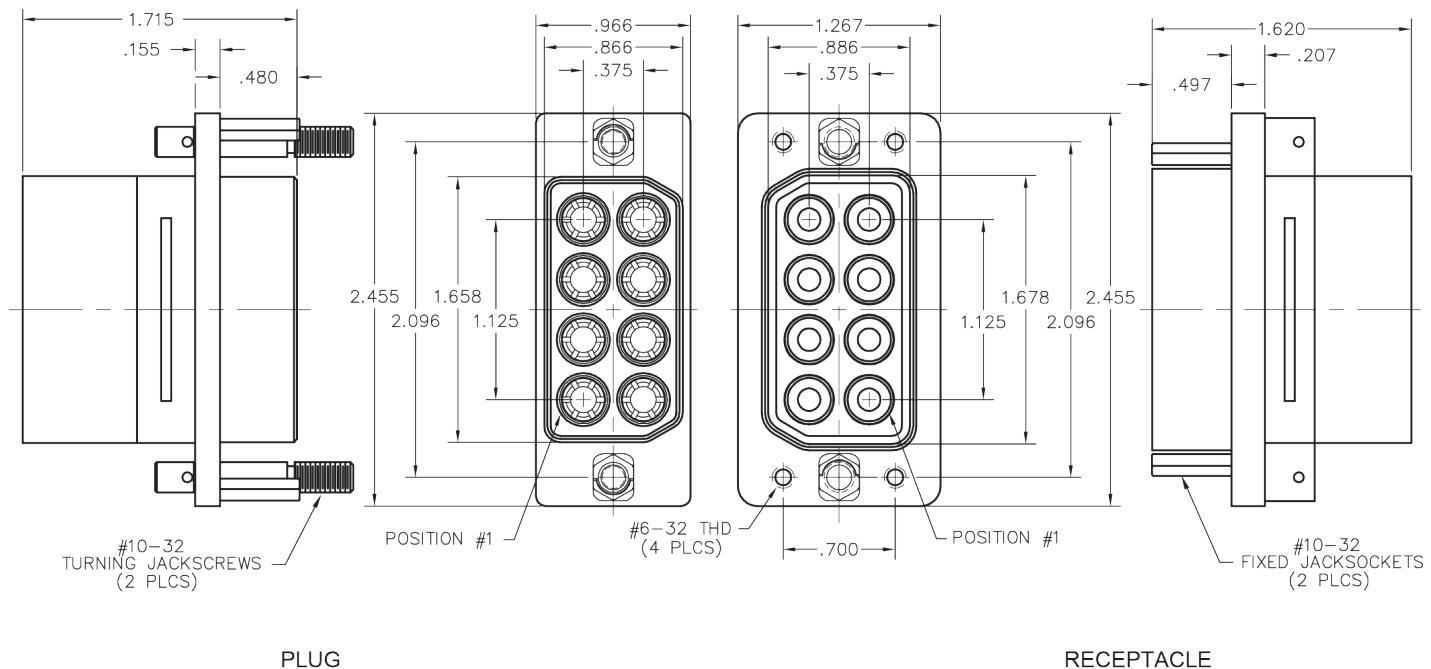
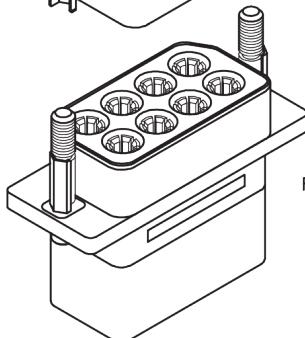
DIMENSIONAL DATA

(In Inches)

RK222-008-901-2901



RK232-008-801-5901



PLUG

RECEPTACLE

| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|------------|
| PLUG | RECEPTACLE |
| | |

RK232-DIM-1A
(CTR087 REV. 1)

Two-Row, Power I/O Connector

RK2 is an 8 AWG crimp-removable contact system available in an eight-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 — RK212-008-801-2901

| | | | | | | | | | |
|--|-------------|--|----------|--|------------------|----------|--|---|--|
| RK | 2 | 1 | 2 | -008 | 80 | 1 | | | -015 |
| SERIES | ROWS | STYLE | | BODY MATERIAL | SIZE | | PLATING | | OPTIONS |
| AirBorn RockEt 8 AWG power connector | 2 - Two-row | 1 - Plug, straight, panel mount | | 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | 008 - 8 contacts | | 1 - Gold | | 015 - Hood, 180° exit, uninstalled, contact factory for details |
| | | | | | | | TERMINATION | | |
| | | | | | | | 80 - Socket, straight, crimp removable, wire barrel 8 AWG* | | |
| | | | | | | | | POLARIZATION | |
| | | | | | | | | 00 - No Hardware | |
| | | | | | | | | 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options | |
| | | | | | | | | 37 - Universal, non-polarized, factory installed | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

Crimp-Removable Receptacle

Sample Part Number — RK242-008-901-5901

| | | | | | | | | | |
|--|-------------|-----------------------------|----------|--|------------------|----------|---|---|--|
| RK | 2 | 4 | 2 | -008 | 90 | 1 | | | -015 |
| SERIES | ROWS | STYLE | | BODY MATERIAL | SIZE | | PLATING | | OPTIONS |
| AirBorn RockEt 8 AWG power connector | 2 - Two-row | 4 - Receptacle, straight | | 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | 008 - 8 contacts | | 1 - Gold | | 015 - Hood, 180° exit, uninstalled, contact factory for details |
| | | | | | | | TERMINATION | | |
| | | | | | | | 90 - Pin, straight, crimp removable, wire barrel 8 AWG* | | |
| | | | | | | | | POLARIZATION | |
| | | | | | | | | 00 - No Hardware | |
| | | | | | | | | 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options | |
| | | | | | | | | 37 - Universal, non-polarized, factory installed | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG14569
2. Crimp positioner - Molex Part Number: CDG14570 (Pin and socket contacts)
3. Removal tool - Molex Part Number: CDG5418
4. Crimp instructions - see page XXIV

*Full complement of crimp removable contacts packaged with connectors.



I/O Cable



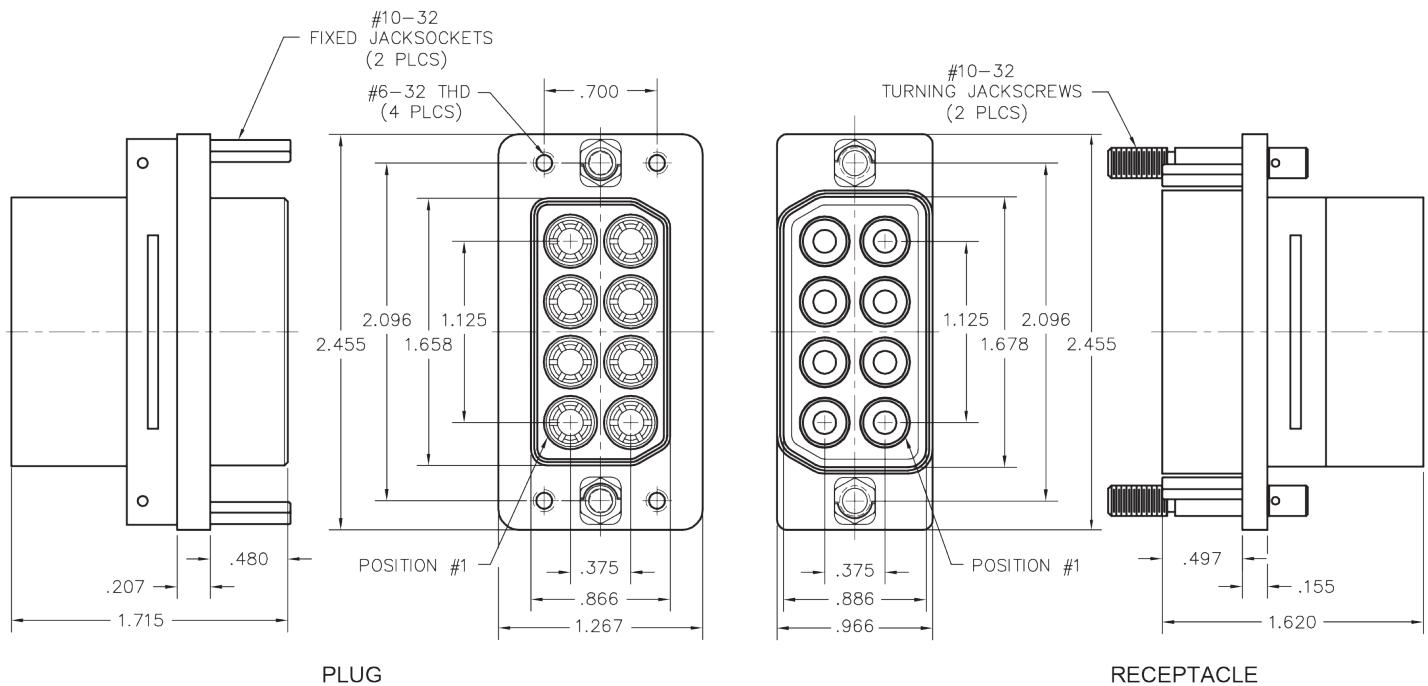
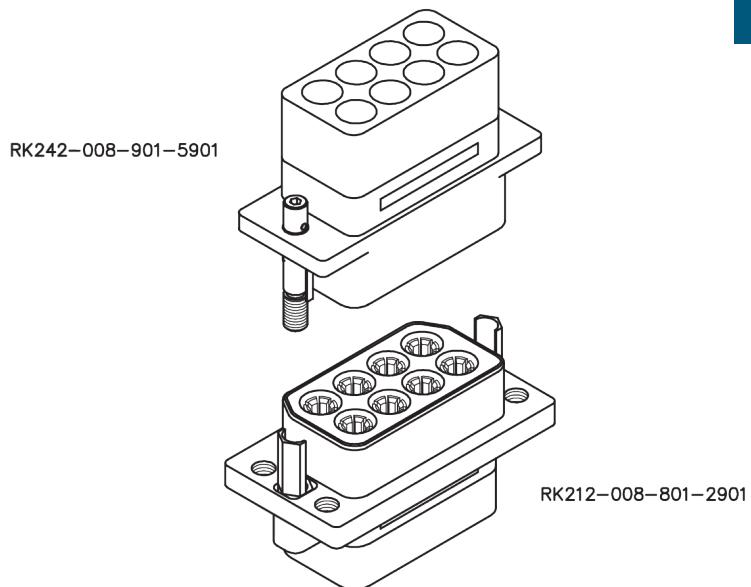
2 Row



Crimp Removable

DIMENSIONAL DATA

(In Inches)



| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|------------|
| PLUG | RECEPTACLE |
| | |

RK212-DIM-3A
(CTR089, REV. 1)

Three-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 Receptacle **Sample Part Number — RK322-025-701-2901**

| Series | Rows | Style | Body Material | Size | Termination | Plating | Hardware | Options |
|----------------|--------------------------------------|---------------------------------------|--|-------------------|--|----------------|-------------------------------------|---|
| AirBorn RockEt | 3 - Three-row 16 AWG power connector | 2 - Receptacle, straight, panel mount | 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | 025 - 25 contacts | 70 - Pin, straight, crimp removable, wire barrel 16 AWG* | 1 - Gold | 29 - None 29 - Fixed jacksockets | 015 - Hood, 180° exit, uninstalled, contact factory for details 016 - Hood, 90° exit, uninstalled, contact factory for details 017 - Hood, 45° exit, uninstalled, contact factory for details |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG14569
2. Crimp positioner - Molex Part Number: CDG14570 (Pin and socket contacts)
3. Removal tool - Molex Part Number: CDG4493
4. Crimp instructions - see page XXVIII

*Full complement of crimp removable contacts packaged with connectors

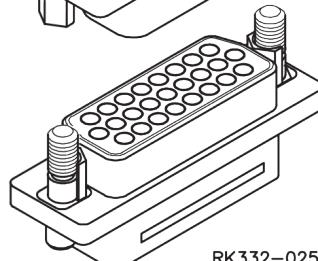
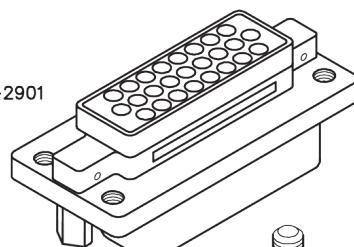


RK332-PNB-1A
(CTR091, REV. 2)

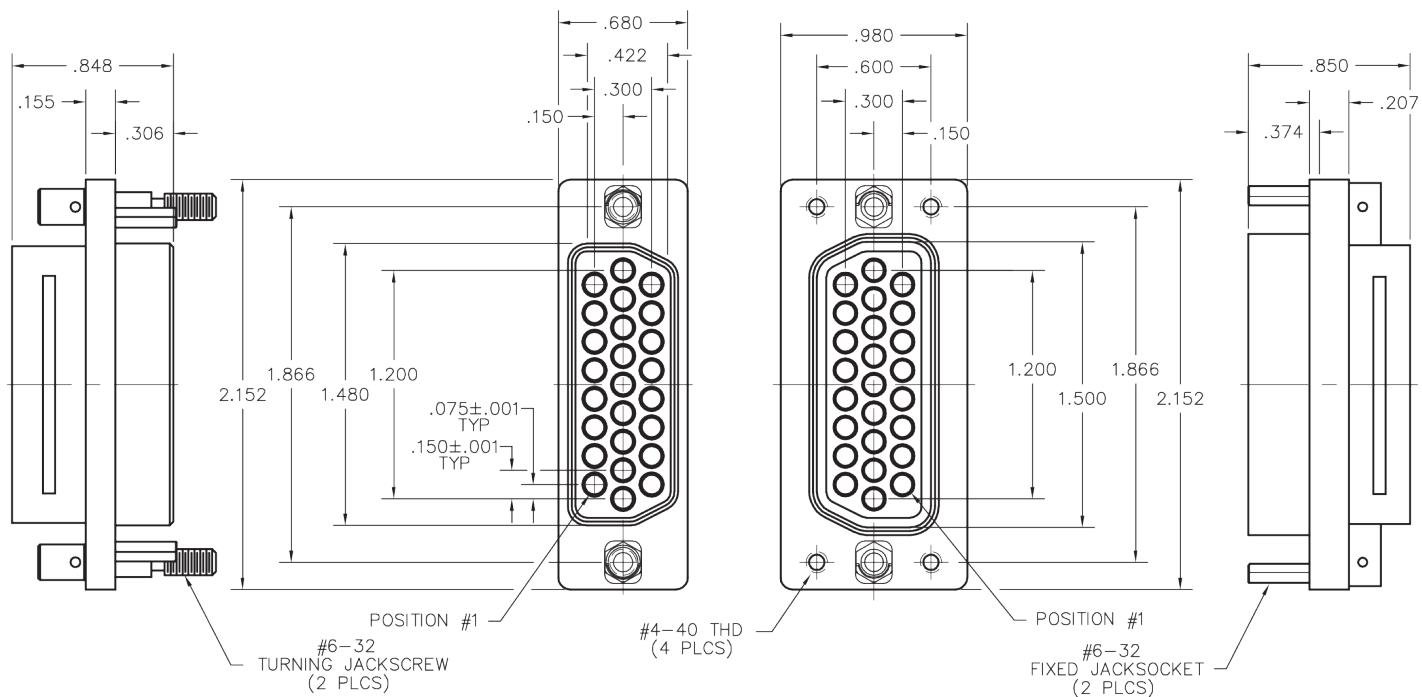
DIMENSIONAL DATA

(In Inches)

RK322-025-701-2901



RK332-025-601-5901



PLUG

RECEPTACLE

| CONTACT ARRANGEMENT MATING FACE VIEW | |
|--|--|
| PLUG | RECEPTACLE |
| <p>25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1</p> | <p>18 19 20 21 22 23 24 25 9 10 11 12 13 14 15 16 17 1 2 3 4 5 6 7 8</p> |

RK332-DIM-1A
(CTR091, REV. 1)

Three-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 | | | | | | | | | | Sample Part Number — RK312-025-601-2901 | | | | |
|--|------------------------------|--|--|----------------------------------|-----------|---|---|--|--|---|--|--|--|--|
| RK | 3 | 1 | 2 | -025 | 60 | 1 | | | | OPTIONS | | | | |
| SERIES AirBorn RockEt 16 AWG power connector | ROWS 3 - Three-row | STYLE 1 - Plug, straight, panel mount | BODY MATERIAL 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | SIZE 025 - 25 contacts | | PLATING 1 - Gold | HARDWARE 00 - None 29 - Fixed jacksockets | | | 015 - Hood, 180° exit, uninstalled, contact factory for details | | | | |
| | | | | | | TERMINATION 60 - Socket, straight, crimp removable, wire barrel 16 AWG* | | | 016 - Hood, 90° exit, uninstalled, contact factory for details | | | | | |
| | | | | | | | POLARIZATION 00 - No Hardware 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options 37 - Universal, non-polarized, factory installed | | 017 - Hood, 45° exit, uninstalled, contact factory for details | | | | | |
| | | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

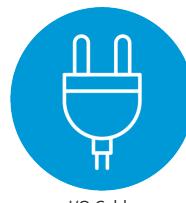
| Crimp-Removable Receptacle | | | | | | | | | | Sample Part Number — RK342-025-701-5901 | | | | |
|--|------------------------------|---|--|----------------------------------|-----------|---|---|--|--|---|--|--|--|--|
| RK | 3 | 4 | 2 | -025 | 70 | 1 | | | | OPTIONS | | | | |
| SERIES AirBorn RockEt 16 AWG Power Connector | ROWS 3 - Three-row | STYLE 4 - Receptacle, straight | BODY MATERIAL 2 - Polyphenylene sulfide (PPS) with aluminum shell electroless nickel shell plating | SIZE 025 - 25 contacts | | PLATING 1 - Gold | HARDWARE 00 - None 59 - Turning jackscrews | | | 015 - Hood, 180° exit, uninstalled, contact factory for details | | | | |
| | | | | | | TERMINATION 70 - Pin, straight, crimp removable, wire barrel 16 AWG* | | | 016 - Hood, 90° exit, uninstalled, contact factory for details | | | | | |
| | | | | | | | POLARIZATION 00 - No Hardware 01-36 - Polarization position, see page XXII, factory installed, for keying hardware options 37 - Universal, non-polarized, factory installed | | 017 - Hood, 45° exit, uninstalled, contact factory for details | | | | | |
| | | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

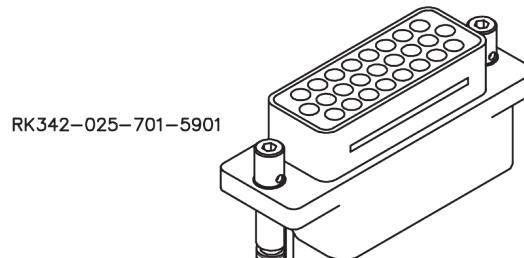
1. Crimp tool - Molex Part Number: CDG14569
2. Crimp positioner - Molex Part Number: CDG14570 (Pin and socket contacts)
3. Removal tool - Molex Part Number: CDG4493
4. Crimp instructions - see page XXVIII

*Full complement of crimp removable contacts packaged with connectors.

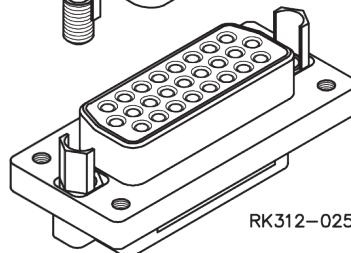


DIMENSIONAL DATA

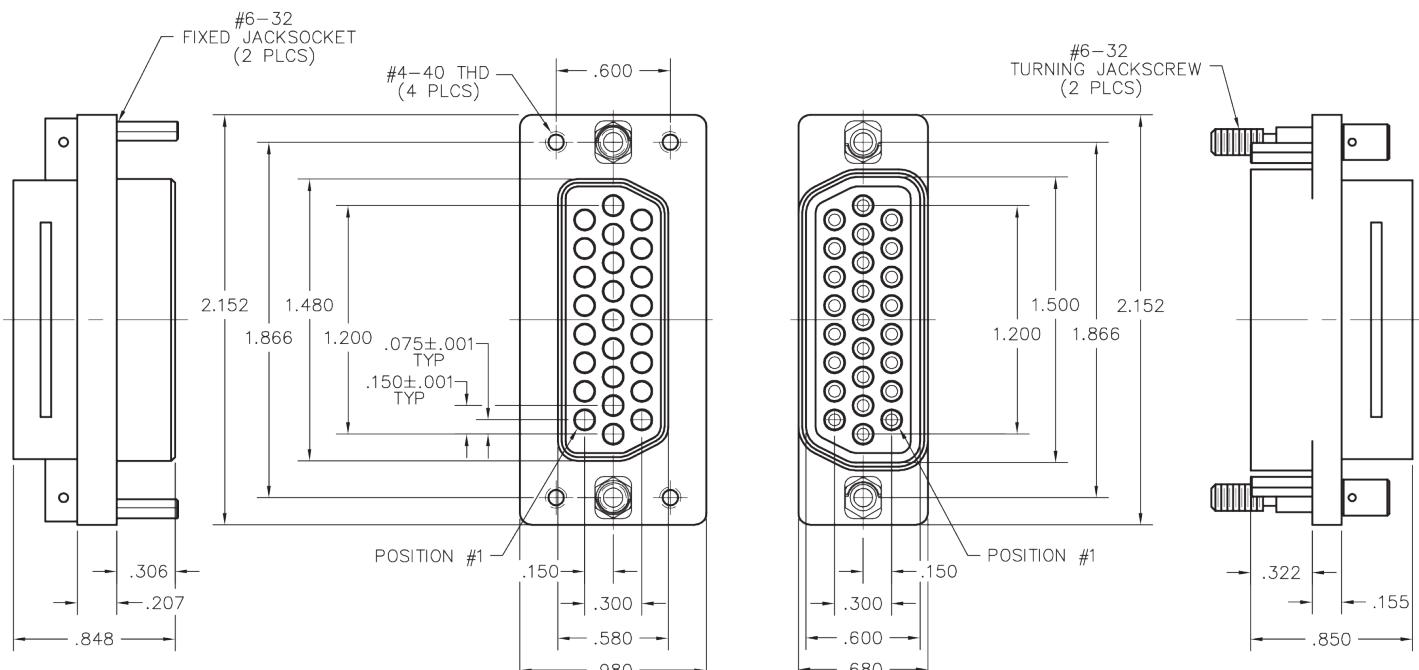
(In Inches)



RK342-025-701-5901



RK312-025-601-2901



PLUG

RECEPTACLE

| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|------------|
| PLUG | RECEPTACLE |
| | |

RK312-DIM-1A
(CTR093, REV. 1)

Four-Row, Power I/O Connector

RK4 is a 20 AWG crimp-removable contact system available in a 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 | | | | | |
|--|-----------------------------|---------------------------------------|--|---|---|--|----------------------------|--|---|---|--|--|--|--|--|
| RK | 4 | 3 | | | 20 | 1 | | | | | | | | | |
| SERIES AirBorn RockEt 20 AWG power connector | ROWS 4 – Four-row | STYLE 3 – Plug, straight | | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell | SIZE 050 – 50 contacts 074 – 74 contacts | | PLATING 1 – Gold | | HARDWARE 00 – None 59 – Turning jackscrews | | | | | | OPTIONS 015 – Hood, 180° exit, uninstalled, contact factory for details |
| | | | | 1 – No shell plating; bare aluminum | | | | | | | | | | | 016 – Hood, 90° exit, uninstalled, contact factory for details |
| | | | | 2 – Electroless nickel shell plating | | | | | | | | | | | 017 – Hood, 45° exit, uninstalled, contact factory for details |
| | | | | 3 – Cadmium shell plating | | | | | | | | | | | |
| | | | | | | TERMINATION 20 – Socket, straight, crimp removable, wire barrel 20-22 AWG* | | | POLARIZATION 00 – No Hardware 01-36 – Polarization position, see page XXII, factory installed, for keying hardware options 37 – Universal, non-polarized, factory installed | | | | | | |
| | | | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

| Crimp-Removable, Panel-Mount Receptacle | | | | | | | | | | Sample Part Number — RK422-050-301-2901 | | | | | |
|--|-----------------------------|--|--|---|---|---|----------------------------|--|---|---|--|--|--|--|--|
| RK | 4 | 2 | | | 30 | 1 | | | | | | | | | |
| SERIES AirBorn RockEt 20 AWG power connector | ROWS 4 – Four-row | STYLE 2 – Receptacle, straight, panel mount | | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell | SIZE 050 – 50 contacts 074 – 74 contacts | | PLATING 1 – Gold | | HARDWARE 00 – None 29 – Fixed jacksockets | | | | | | OPTIONS 015 – Hood, 180° exit, uninstalled, contact factory for details |
| | | | | 1 – No shell plating; bare aluminum | | | | | | | | | | | 016 – Hood, 90° exit, uninstalled, contact factory for details |
| | | | | 2 – Electroless nickel shell plating | | | | | | | | | | | 017 – Hood, 45° exit, uninstalled, contact factory for details |
| | | | | 3 – Cadmium shell plating | | | | | | | | | | | |
| | | | | | | TERMINATION 30 – Pin, straight, crimp removable, wire barrel 20-22 AWG* | | | POLARIZATION 00 – No Hardware 01-36 – Polarization position, see page XXII, factory installed, for keying hardware options 37 – Universal, non-polarized, factory installed | | | | | | |
| | | | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG4601, MIL-SPEC number MIL-C-22520/2-01
2. Crimp positioner - Molex Part Number: CDG7936 (Pin contacts)
CDG7935 (Socket contacts)
3. Removal tool - Molex Part Number CDG7932
4. Crimp instructions - see page XXXI

*Full complement of crimp removable contacts packaged with connectors.

RK431-PNB-1A
(CTR095, REV. 2)



I/O Cable



4 Row

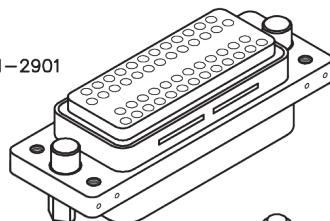


Crimp Removable

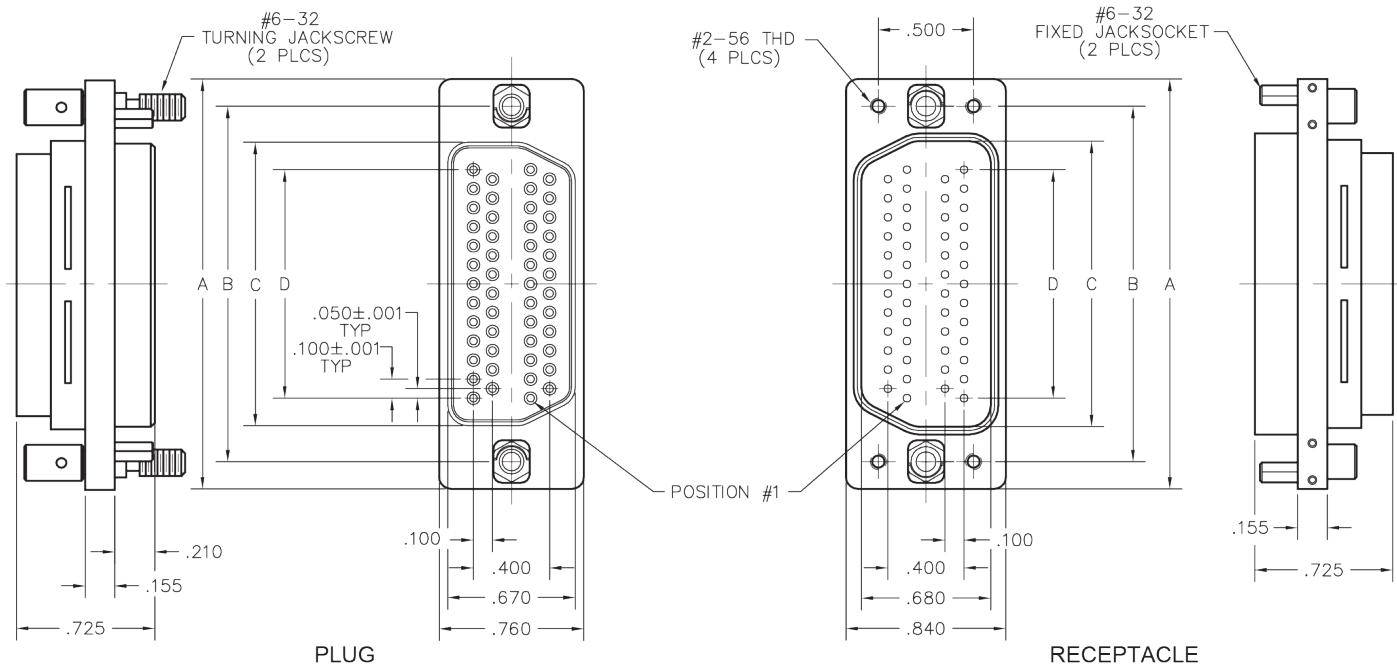
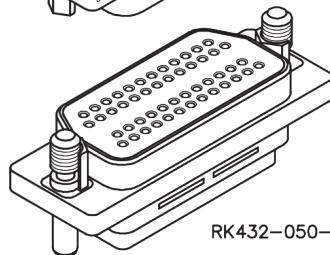
DIMENSIONAL DATA

(In Inches)

RK422-050-301-2901



RK432-050-201-5901



| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|-----------------|
| PLUG | RECEPTACLE |
| 50 POSITION | 50 POSITION |
| 74 POSITION | 74 POSITION |

| SIZE | A | B | C | | D |
|------|-------|-------|-------|-------|-------|
| | | | PLUG | RCPT | |
| 50 | 2.152 | 1.866 | 1.488 | 1.500 | 1.200 |
| 74 | 2.784 | 2.500 | 2.122 | 2.134 | 1.875 |

RK431-DIM-1A
(CTR095, REV. 1)

Four-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 | | | | |
|--|-----------------------------|--|--|---|-----------|----------------------------|--|---|--|--|--|--|--|--|
| RK | 4 | 1 | | | 20 | 1 | | | | | | | | |
| SERIES AirBorn RockEt 20 AWG power connector | ROWS 4 - Four-row | STYLE 1 - Plug, straight, panel mount | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell 1 - No shell plating; bare aluminum 2 - Electroless nickel shell plating 3 - Cadmium shell plating | SIZE 050 - 50 contacts 074 - 74 contacts | | PLATING 1 - Gold | | HARDWARE 29 - None 29 - Fixed jacksockets | | OPTIONS 015 - Hood, 180° exit, uninstalled, contact factory for details | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

| Crimp-Removable Receptacle | | | | | | | | | | Sample Part Number — RK442-050-301-5901 | | | | |
|--|-----------------------------|---|--|---|-----------|----------------------------|--|--|--|--|--|--|--|--|
| RK | 4 | 4 | | | 30 | 1 | | | | | | | | |
| SERIES AirBorn RockEt 20 AWG power Connector | ROWS 4 - Four-row | STYLE 4 - Receptacle, straight | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell 1 - No shell plating; bare aluminum 2 - Electroless nickel shell plating 3 - Cadmium shell plating | SIZE 050 - 50 contacts 074 - 74 contacts | | PLATING 1 - Gold | | HARDWARE 00 - None 59 - Turning jackscrews | | OPTIONS 015 - Hood, 180° exit, uninstalled, contact factory for details | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG4601, number MIL-C-22520/2-01
2. Crimp positioner - Molex Part Number: CDG7936 (Pin contacts)
CDG7935 (Socket contacts)
3. Removal tool - Molex Part Number: CDG7932
4. Crimp instructions - see page XXXI



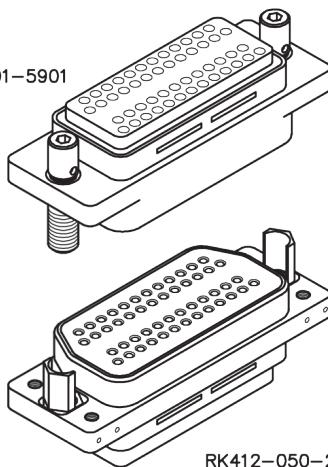
*Full complement of crimp removable contacts packaged with connectors.

RK411-PNB-1A
(CTR097, REV. 2)

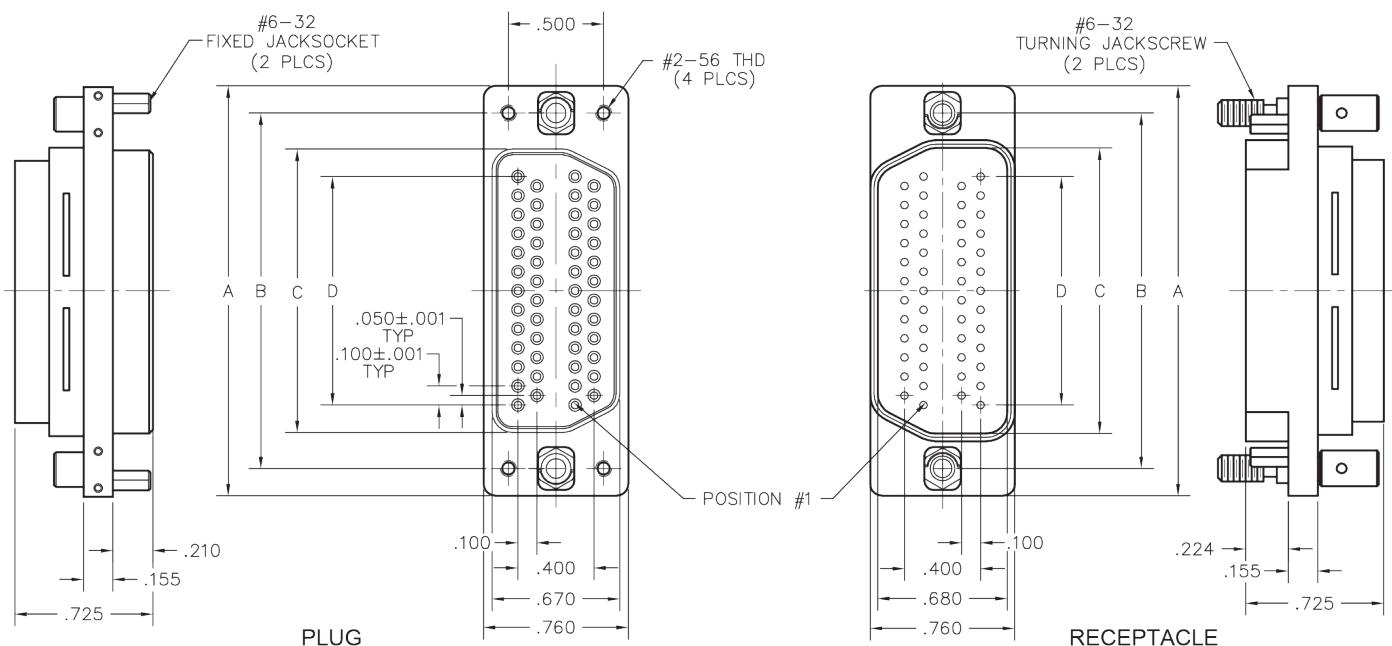
DIMENSIONAL DATA

(In Inches)

RK442-050-301-5901



RK412-050-201-2901



| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|-----------------|
| PLUG | RECEPTACLE |
| 50 POSITION | 50 POSITION |
| 74 POSITION | 74 POSITION |

| SIZE | A | B | DIMENSIONS | | D |
|------|-------|-------|------------|-------|-------|
| | | | PLUG | RCPT | |
| 50 | 2.152 | 1.866 | 1.488 | 1.500 | 1.200 |
| 74 | 2.784 | 2.500 | 2.122 | 2.134 | 1.875 |

RK411-DIM-1A
(CTR097, REV. 1)

Six-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 Plug | | | | | | Sample Part Number — RK632-100-581-5901 | | | | | | | |
|--|----------------------------|---------------------------------------|---|--|--|--|---|--|--|--|--|--|--|
| RK | 6 | 3 | | | | 1 | | | | | | | |
| SERIES AirBorn RockEt 24 AWG power connector | ROWS 6 – Six-row | STYLE 3 – Plug, straight | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell | SIZE 050 – 50 contacts 100 – 100 contacts 150 – 150 contacts | | PLATING 1 – Gold | HARDWARE 00 – None 59 – Turning jackscrews | | | OPTIONS 015 – Hood, 180° exit, uninstalled, contact factory for details | | | |
| | | | 1 – No shell plating; bare aluminum | | | | | | | 016 – Hood, 90° exit, uninstalled, contact factory for details | | | |
| | | | 2 – Electroless nickel shell plating | | | | | | | 017 – Hood, 45° exit, uninstalled, contact factory for details | | | |
| | | | 3 – Cadmium shell plating | | | | | | | | | | |
| | | | | | | TERMINATION 58 – Socket, straight, crimp removable, wire barrel 24-26 AWG* 59 – Socket, straight, crimp removable, wire barrel 28-30 AWG* | POLARIZATION 00 – No Hardware 01-36 – Polarization position, see page XXII, factory installed, for keying hardware options 37 – Universal, non-polarized, factory installed | | | | | | |
| | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

| Crimp-Removable, Panel-Mount Receptacle | | | | | | Sample Part Number — RK622-100-181-2901 | | | | | | | |
|--|----------------------------|--|---|--|--|--|---|--|--|--|--|--|--|
| RK | 6 | 2 | | | | 1 | | | | | | | |
| SERIES AirBorn RockEt 24 AWG power connector | ROWS 6 – Six-row | STYLE 2 – Receptacle, straight, panel mount | BODY MATERIAL Polyphenylene sulfide (PPS) with aluminum shell | SIZE 050 – 50 contacts 100 – 100 contacts 150 – 150 contacts | | PLATING 1 – Gold | HARDWARE 00 – None 29 – Turning jacksockets | | | OPTIONS 015 – Hood, 180° exit, uninstalled, contact factory for details | | | |
| | | | 1 – No shell plating; bare aluminum | | | | | | | 016 – Hood, 90° exit, uninstalled, contact factory for details | | | |
| | | | 2 – Electroless nickel shell plating | | | | | | | 017 – Hood, 45° exit, uninstalled, contact factory for details | | | |
| | | | 3 – Cadmium shell plating | | | | | | | | | | |
| | | | | | | TERMINATION 18 – Pin, straight, crimp removable, wire barrel 24-26 AWG* 19 – Pin, straight, crimp removable, wire barrel 28-30 AWG* | POLARIZATION 00 – No Hardware 01-36 – Polarization position, see page XXII, factory installed, for keying hardware options 37 – Universal, non-polarized, factory installed | | | | | | |
| | | | | | | | | | | | | | |

NOTE: Please consult molex.com to configure your part number and for the latest revision controlled drawing and technical data.

NOTES:

1. Crimp tool - Molex Part Number: CDG4601, MIL-SPEC number MIL-C-22520/2-01
2. Crimp positioner - Molex Part Number: CDG5598 (Pin contacts)
CDG4602 (Socket contacts)
3. Removal tool - Molex Part Number: CDG8161
4. Crimp instructions - see page XXXIV

*Full complement of crimp removable contacts packaged with connectors.

RK632-PNB-1A
(CTR099, REV. 2)



I/O Cable



6 Row

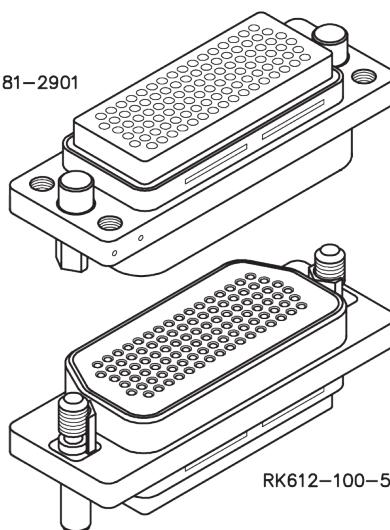


Crimp Removable

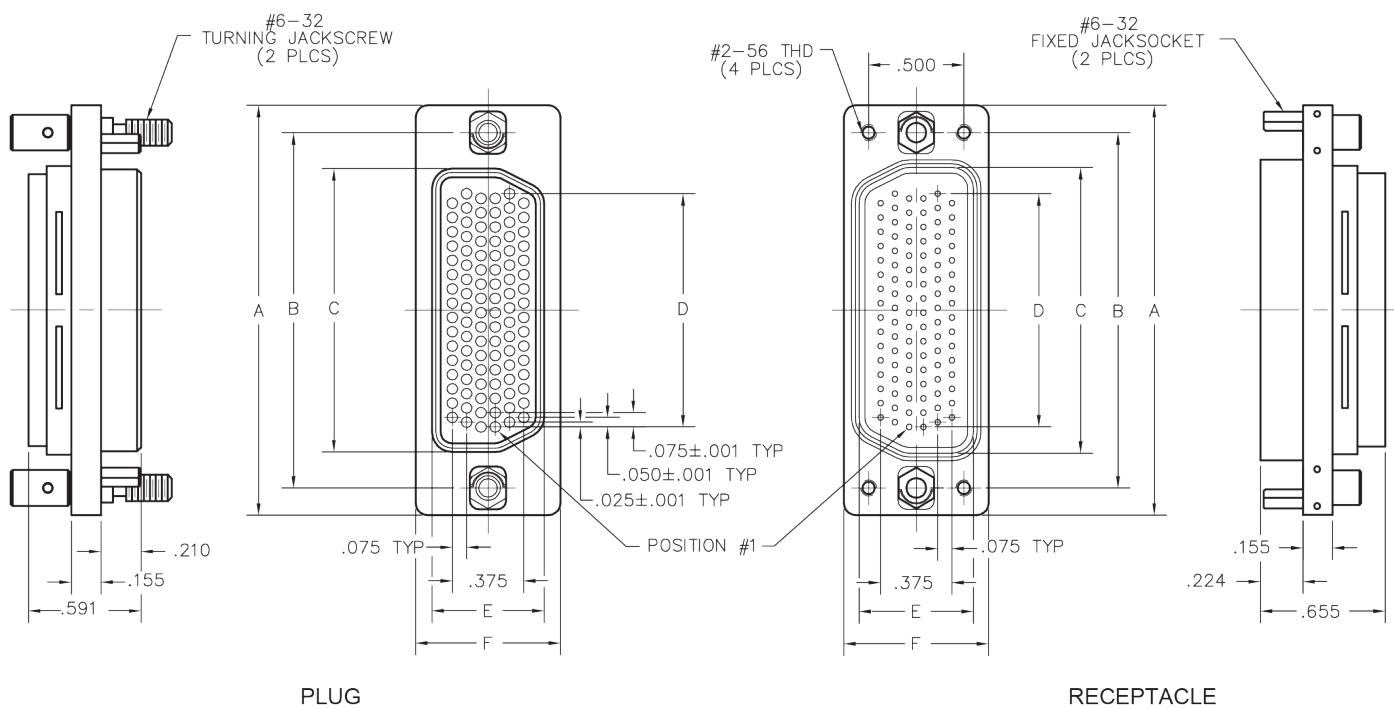
DIMENSIONAL DATA

(In Inches)

RK622-100-181-2901



RK612-100-581-5901



PLUG

RECEPTACLE

| SIZE | DIMENSIONS | | | | | | | |
|------|------------|-------|-------|-------|-------|------|------|------|
| | C | | D | | E | | F | |
| | PLUG | RCPT | | PLUG | RCPT | PLUG | RCPT | |
| 50 | 1.617 | 1.331 | .930 | .950 | .600 | .630 | .650 | .760 |
| 100 | 2.152 | 1.866 | 1.488 | 1.500 | 1.225 | .590 | .600 | .760 |
| 150 | 2.784 | 2.500 | 2.122 | 2.134 | 1.875 | | | .760 |

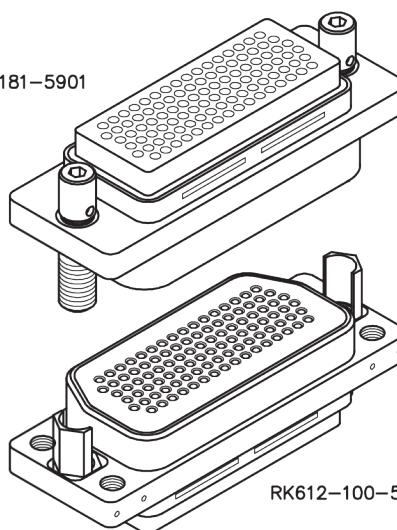
For contact arrangement, see page 23.

RK632-DIM-1A
(CTR099, REV. 1)

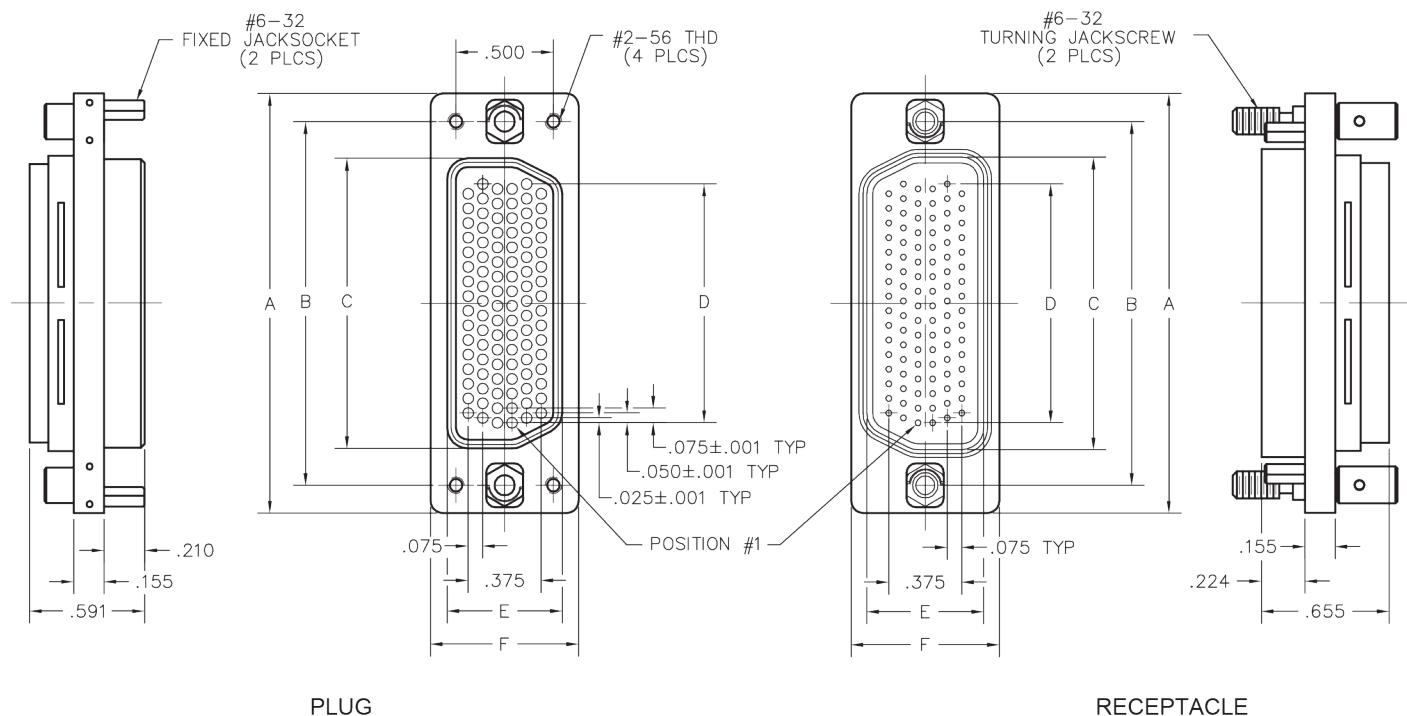
DIMENSIONAL DATA

(In Inches)

RK642-100-181-5901



RK612-100-581-2901



| SIZE | A | B | C | | D | E | | F | |
|------|-------|-------|-------|-------|-------|------|------|------|------|
| | | | PLUG | RCPT | | PLUG | RCPT | PLUG | RCPT |
| 50 | 1.617 | 1.331 | .930 | .950 | .600 | .630 | .650 | | .810 |
| 100 | 2.152 | 1.866 | 1.488 | 1.500 | 1.225 | | | .760 | |
| 150 | 2.784 | 2.500 | 2.122 | 2.134 | 1.875 | .590 | .600 | | .760 |

For contact arrangement, see page 23.

RK611-DIM-1A
(CTR101, REV. 1)

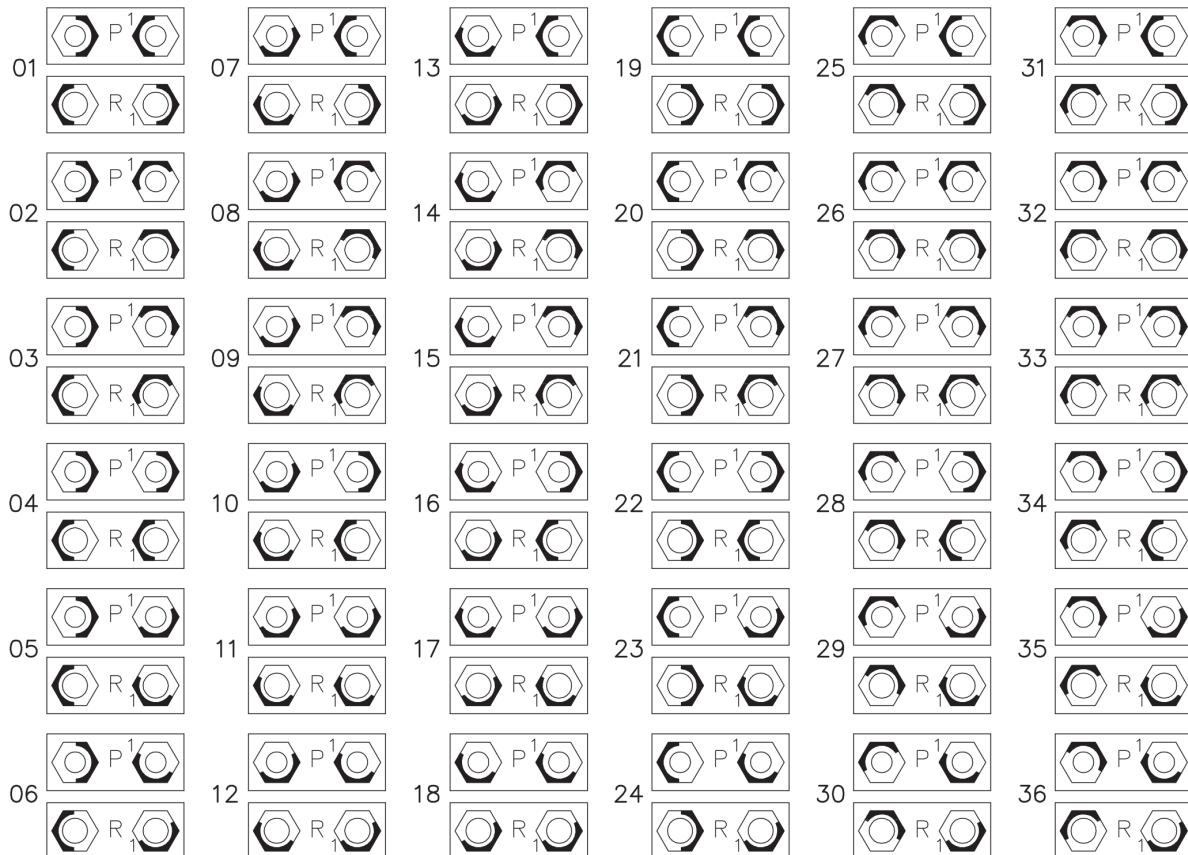
| | |
|------------------------------|---|
| Contacts | BeCu, per ASTM-B196, ASTM B 197/B 197M |
| Contact Finish | Gold plate per ASTM B 488-, SAE AMS 2422, or localized finish per MIL-C-55302 |
| Shells/Hoods | Aluminum alloy 6061-T6 per QQ-A-250/11 or 6061-T6511 per QQ-A-200/8. |
| Aluminum Shell Finish | None - as specified by part number or electroless nickel per SAE AMS-C-26074, grade B, class 3. or electrodeposited cadmium per SAE AMS-QQ-P-416, type II, class 3. |
| Molded Insulators | Glass filled polphenylene sulfide per MIL-M-24519, type GST-40F. |
| Embedment | Insulating compound per MIL-I-16923. |
| Hardware | Corrosion resistant steel per ASTM-A484/ASTM-484M and ASTM-A582/A582M, passivated per ASTM-A967, SAE AMS-QQ-P-35. |
| Connector Markings | Contact numbers are stamped on the side of the connector. Numbers are stamped on the low-numbered side only on 2- and 3-row right-angle connectors. |
| Tolerances | Unless otherwise specified: Fractions = $\pm 1/64"$ Decimals = $\pm 0.010"$ Angles = $\pm 5^\circ$ |

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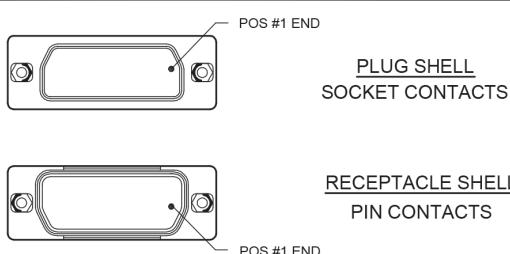
Test Method
Per: SAE AS
13441

| Category | Requirements | |
|---|---|-------|
| Contact Rating | RK2-8 AWG (42 amperes) RK3-16 AWG (13 amperes) RK4-20 AWG (5 amperes) RK6-24 AWG (3 amperes) | |
| Operating Temp. | -65° to +125° C or -85° to +257° F | |
| Test Voltage | 750 V, RMS, 60 Hz @ sea level 250 V, RMS, 60 Hz @ 70,000 feet | #3001 |
| Insulation Resistance | 5,000 megohms minimum @ 500 VDC per | #3003 |
| Durability | 500 connector mating cycles | |
| Vibration | Mated connectors, Test Condition III | #2005 |
| Shock | Mated connectors, Test Condition B | #2004 |
| Salt Spray | Mated connectors, Test Condition G | #1001 |
| Humidity | Test type II, except steps 7A and 7B not required | #1002 |
| Temperature Cycling | Mated connectors, Test condition A | #1003 |
| Contact Resistance | .015 ohms max (interface measurement) @ 3 amperes | #3004 |
| 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. | |

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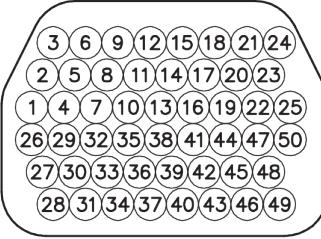
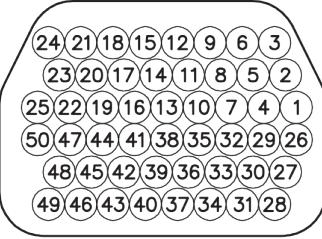
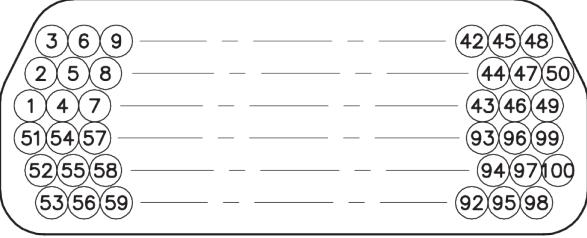
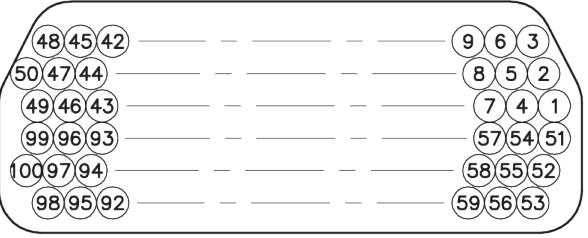
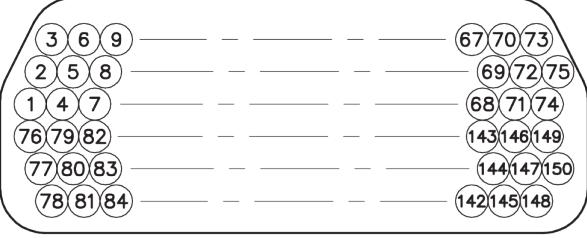
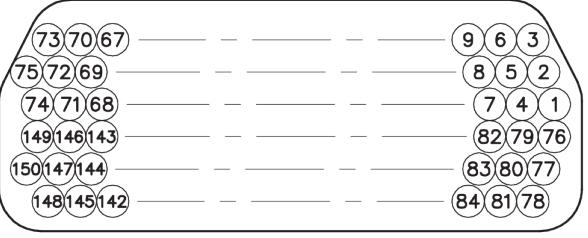
37 UNIVERSAL



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 RK442-050-301-2901

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

| CONTACT ARRANGEMENT MATING FACE VIEW | |
|---|--|
| PLUG | RECEPTACLE |
|  <p>50 POSITION</p> |  <p>50 POSITION</p> |
|  <p>100 POSITION</p> |  <p>100 POSITION</p> |
|  <p>150 POSITION</p> |  <p>150 POSITION</p> |

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CRIMPING INSTRUCTIONS CONT'D

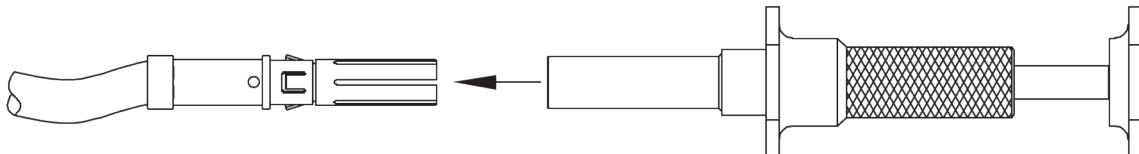
8 AWG CONTACT WITH 8 AWG WIRE BARREL

INSTALLING CONTACTS

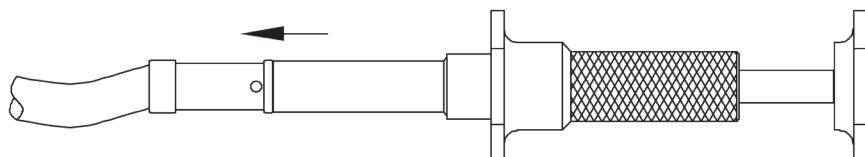
1. CHOOSE CRIMPED WIRE TO BE INSTALLED.
2. HOLD CONTACT BETWEEN THUMB AND INDEX FINGER AT THE BACK OF THE CONTACT BARREL.
3. INSERT CONTACT INTO CONTACT CAVITY FROM THE REAR OF CONNECTOR.
4. PUSH CONTACT INTO CAVITY UNTIL RETAINER IS ENGAGED.
GENTLY PULL BACK ON THE WIRE TO ENSURE SEATING.
IF CONTACT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

REMOVING CONTACTS

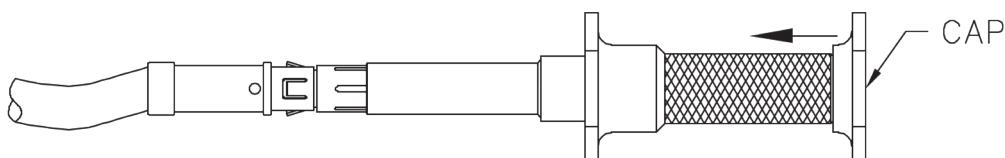
1. IN THE EVENT THAT A WIRE MUST BE EXTRACTED FROM THE CONTACT CAVITY, THE REMOVAL TOOL IS REQUIRED.
2. IN THE FRONT OF THE CONNECTOR(MATING FACE), INSERT REMOVAL TOOL INTO THE CONTACT CAVITY.



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.

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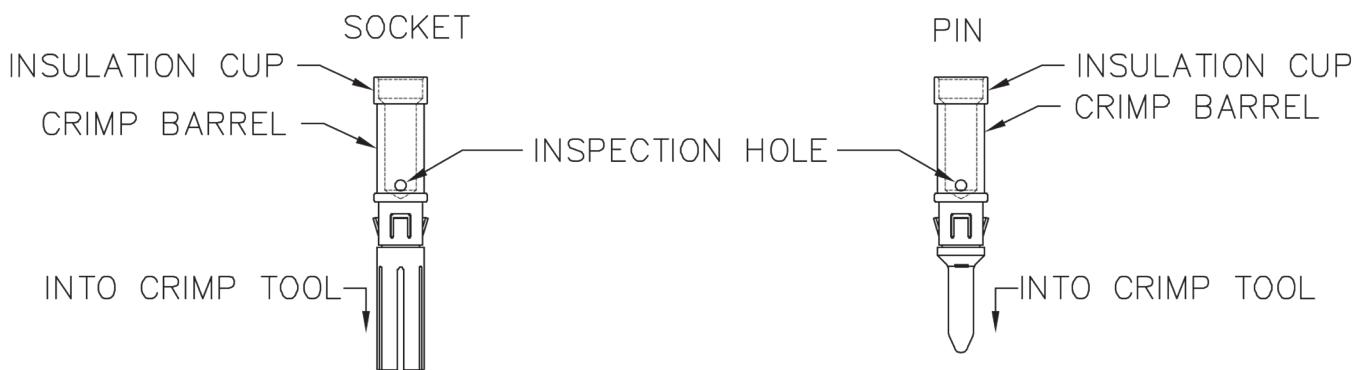
CRIMPING INSTRUCTIONS
8 AWG CONTACT WITH
8 AWG WIRE BARREL

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

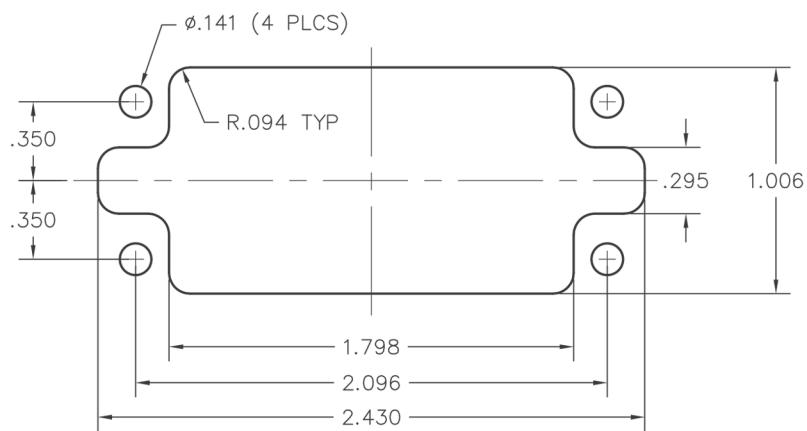
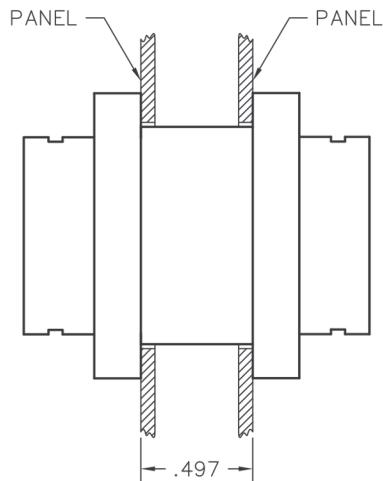
1. INSTALL POSITIONER ONTO CRIMP TOOL.
2. STRIP INSULATION OF WIRE $.510 \pm .010$
3. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT IN THE POSITIONER.



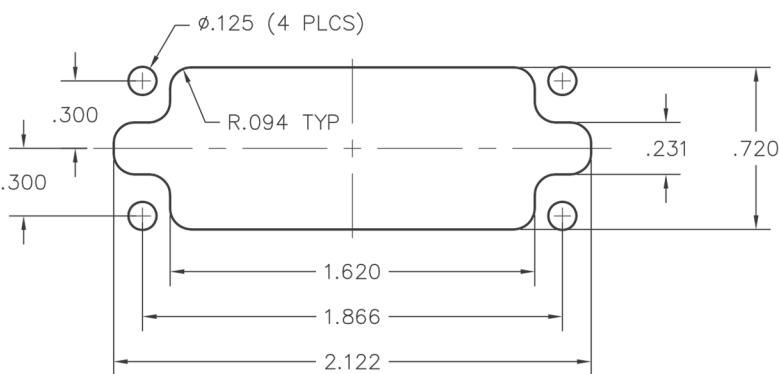
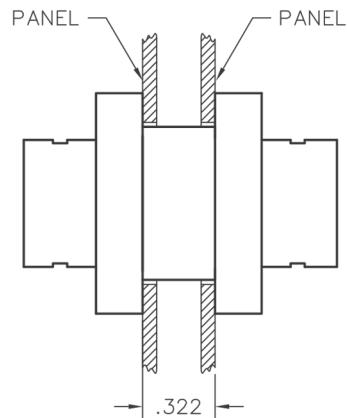
4. INSERT STRIPPED END OF WIRE INTO CRIMP BARREL OF CONTACT. INSULATION SHOULD EXTEND INTO INSULATION CUP.
5. CRIMP CONTACT BY DEPRESSING FOOT PEDAL
6. VISUALLY INSPECT CRIMP:
 - A. WIRE INSULATION SHOULD EXTEND INTO INSULATION CUP. THERE SHOULD NOT BE A GAP BETWEEN INSULATION AND INSULATION CUP.
 -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

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

RK2

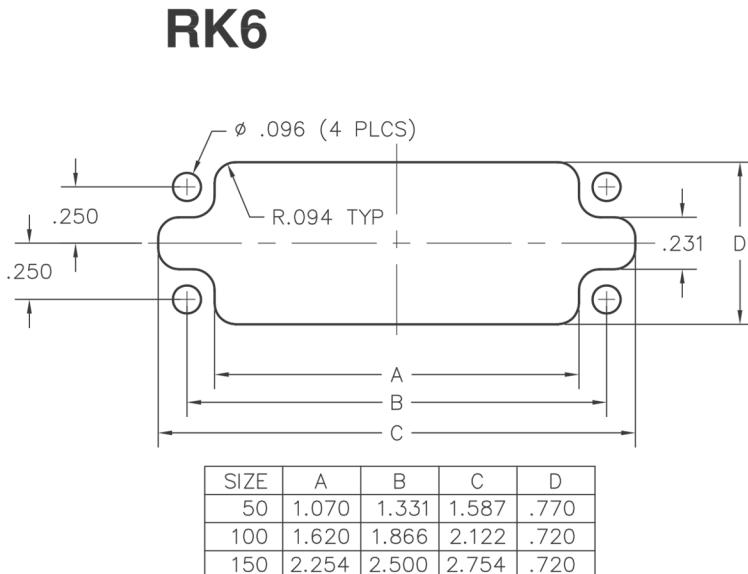
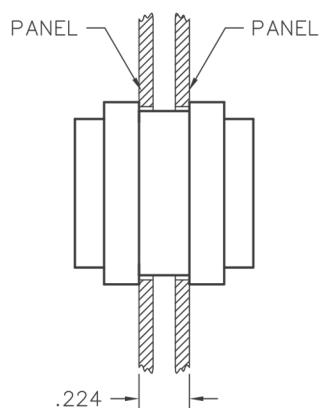
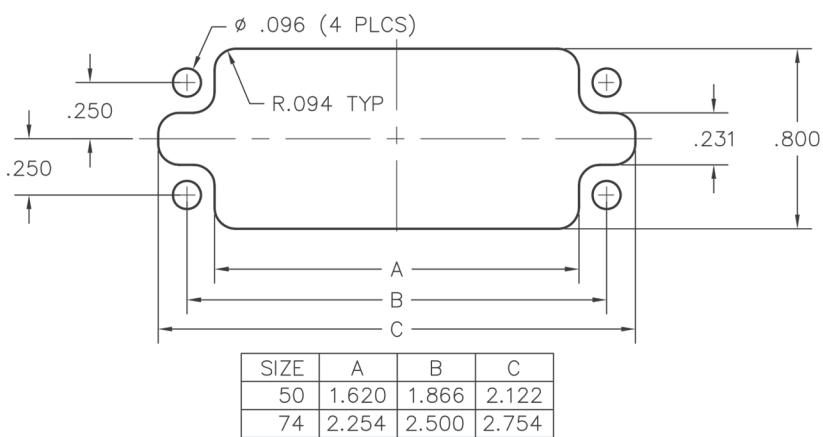
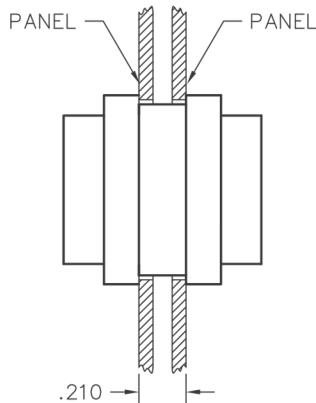


RK3



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RK4



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CRIMPING INSTRUCTIONS

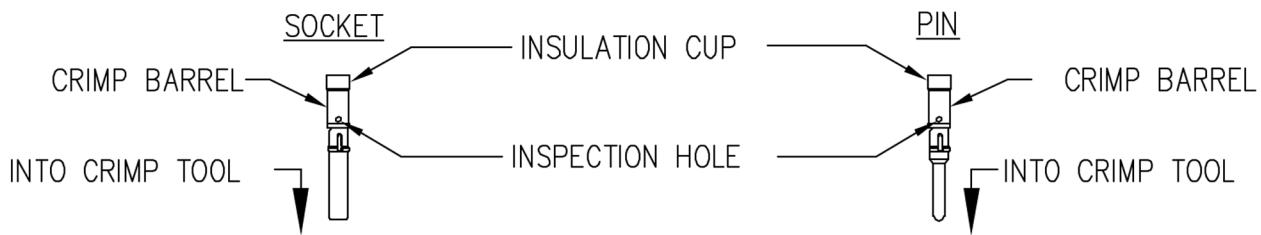
16 AWG CONTACT WITH
16 AWG WIRE BARREL

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 $.200 \pm .010$.
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.

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

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 $.200 \pm .010$ " 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.

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

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 $.145 \pm .005$
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.

Please consult the Molex 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.

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

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: $.145 \pm .005$
20 AWG: $.190 \pm .005$
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.

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

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.

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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 $.145 \pm .005$
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.

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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.

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CRIMPING INSTRUCTIONS

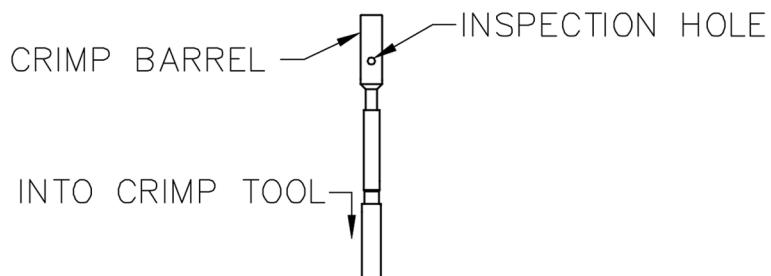
24 AWG CONTACT WITH
22 AND 20 AWG WIRE BARREL

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 $.145 \pm .005$
4. DROP CONTACT INTO THE NEST OF THE CRIMP TOOL, MAKING SURE THAT IT BOTTOMS OUT ON THE POSITIONER.



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 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.

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