Gecko

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Gecko Connectors Introduction

Gecko is a 1.25mm pitch High-Reliability connector range from Harwin. Improving on the popular 2mm pitch Datamate series, and harnessing the modern technology of micro-machining, this range brings the best of the high-reliability specifications to a smaller size.

Gecko provides a low-profile, dual-row solution for all variations of cable-to-board, board-to-board and cable-to-cable interconnect requirements. With up to 50 contacts per connector, but still capable of 2A per contact, Gecko gives both significant weight and space-saving advantages over Micro-D connections. The Gecko range offers either latching connectors, for maximum weight and space-saving, or Screw-Lok connectors for maximum mating strain relief.

- 2A per contact (all electrically loaded; 2.8A per individual contact)
- 4-finger Patented* contact design to maintain electrical contact through high vibration and shock
- Beryllium Copper Contact for improved temperature range: -65°C to +150°C
- 1,000 Mating cycles durability
- Weight and Space-saving over Micro-D connector products
- Future-proofed Materials - Halogen-free, PFOS-free, SVHC-free and RoHS compliant
- Low outgassing properties - 0.68% TML, 0.01% CVCM, 0.26 WVR (Water Vapour Recovered)
- All PCB connectors available in Tape and Reel for automation

* Granted US9017089, Pending GB2501063, Pending EP2642604

Gecko-SL or Latches

- Strong stainless steel screw fixings for maximum strain relief, or lightweight space-saving robust latches
- Lightweight hoods for additional cable protection and shielding
- Choices of pre-wired contacts or full cable assemblies from stock, for prototyping and full production

Gecko-MT

- Additional power contacts incorporated into the smallest, lightest mixed-layout connector
- Choice of 2 or 4 power contacts rated to 10A each
- Compatible with existing lightweight metal hoods
# Gecko Connectors Product Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Four Finger Beryllium Copper Contact</strong></td>
<td>Unique patented pending high-reliability contact design ensures signal integrity under extremes of bump, vibration and shock. Durable to over 1,000 mating cycles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keyway Polarization Points</strong></td>
<td>3 polarizing points on each component prevent mis-mating.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. 1 Position identified, Potting Wall</strong></td>
<td>Housings are clearly marked with identifier for fast visual inspection. Cable connectors feature a rear potting wall adding an extra level of strain relief.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Packaged in Tape &amp; Reel</strong></td>
<td>All connectors for PCB assembly are available packaged in industry standard Tape and Reel format for automated assembly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Robust Metal Backshells</strong></td>
<td>Lightweight aluminium hoods / backshells available for all connector sizes from stock. Supplied with tie-bands to attach external braiding for shielded cable assemblies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-assembled Cable Configurations</strong></td>
<td>Cable connectors supplied in ready-made cable assemblies. Single and double-ended configurations available in standard lengths off-the-shelf, or custom assemblies on request.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimal Outgassing</strong></td>
<td>Low outgassing properties from future-proofed plastic; within NASA and ESA recommendations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Temperature Range</strong></td>
<td>Performance is maintained across the full operating temperature range of -65°C to +150°C.</td>
</tr>
</tbody>
</table>

All dimensions in mm.
# Geckos-MT Connectors Specifications

## Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housings:</strong></td>
<td>Glass-filled High Temperature Thermoplastic UL94V-0</td>
</tr>
<tr>
<td><strong>Female contacts:</strong></td>
<td>Beryllium Copper</td>
</tr>
<tr>
<td><strong>Male contacts:</strong></td>
<td></td>
</tr>
<tr>
<td>Signal PCB Connector</td>
<td>Phosphor Bronze</td>
</tr>
<tr>
<td>Signal Crimp</td>
<td>Brass</td>
</tr>
<tr>
<td>Power (all)</td>
<td>Beryllium Copper</td>
</tr>
<tr>
<td><strong>Finish</strong></td>
<td></td>
</tr>
<tr>
<td>Signal Contacts</td>
<td>0.2 - 0.3µm (8 - 12µ&quot;&quot;) Gold, over 1.5 - 2.0µm (60 - 80µ&quot;&quot;) Nickel</td>
</tr>
<tr>
<td>Power Contacts</td>
<td>0.8 - 1.0µm (30 - 40µ&quot;&quot;) Gold, over 1.5 - 2.5µm (60 - 100µ&quot;&quot;) Nickel</td>
</tr>
<tr>
<td>Screw-Loks</td>
<td>Stainless Steel</td>
</tr>
</tbody>
</table>

## Electrical

### Current
- Signal contacts in isolation: 2.8A max (at 25°C)
- Signal contacts simultaneous: 2.0A max (at 25°C)
- Power contacts simultaneous: 10A max

### Working voltage
- At sea level 1006 mbar: 450V DC or AC peak
- At altitude 44 mbar: 250V DC or AC peak

### Voltage proof
- At sea level 1013 mbar: 600V DC or AC peak
- At altitude 44 mbar: 350V DC or AC peak

### Contact resistance
- Initial: 20mΩ max
- After conditioning: 25mΩ max

### Insulation resistance
- Initial: 100Ω min at 500V DC
- After conditioning: >1GΩ min at 500V DC

## Mechanical

### Contact durability
- 1000 operations

### Mating forces (per contact pair)
- Insertion force (signal): 2.8N max
- Insertion force (power): 7.0N max
- Withdrawal force: 0.2N min
- Contact retention in housing: 6.0N max

## Environmental

### Environmental classification
- 65/150/56 days at 93% RH
- -65°C to +150°C

### Operating temperature
- 10Hz to 2000Hz, 1.5mm, 198m/s² (20G) duration 6 hours
- 390m/s² (40G), 4000 ±10 bumps
- 981m/s² (100G) for 6ms in Z axis
- 490m/s² (50G) for 11ms in X & Y axes

### Vibration sensitivity
- *Bump severity:*
  - 981m/s² (100G) for 6ms in Z axis
- *Shock severity:*
  - 490m/s² (50G)
- *Acceleration severity:*
  - 490m/s² (50G)

* Tested with latched connectors.

All dimensions in mm.

www.harwin.com
Gecko-MT Pin Numbering

<table>
<thead>
<tr>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>![FEMALE Diagram]</td>
<td>![MALE Diagram]</td>
</tr>
</tbody>
</table>

Gecko-MT Mating Profiles

<table>
<thead>
<tr>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERTICAL THROUGHBOARD</td>
</tr>
<tr>
<td>CABLE</td>
</tr>
<tr>
<td>HORIZONTAL THROUGHBOARD</td>
</tr>
<tr>
<td>![Standard Diagram]</td>
</tr>
</tbody>
</table>

| ![Standard Diagram] | ![Reverse Fix Diagram] |

All dimensions in mm.

Patent Published
Gecko-MT Connectors

Female Vertical Throughboard

- 2A current rating for signal contacts, 10A for power contacts.
- Stainless steel floating screw fixing to mate with internal screw-locks on male connectors.
- 4-finger Beryllium Copper contact design on both signal and power contacts.
- Positive keyway polarization.

<table>
<thead>
<tr>
<th>Configuration</th>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series Code</td>
<td>G125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FV1</td>
<td>FV1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>XABXAB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screw-Lok</td>
<td>F1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended PC Board Pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HOW TO ORDER

PACKAGING

- P Tape & Reel strips

POWER CONTACTS

- 1AB1AB 1+8+1 Configuration
- 2AB2AB 2+8+2 Configuration

All dimensions in mm.

Patent Published

www.harwin.com
Gecko-MT Connectors

Female Vertical Throughboard – Reverse Fix

- Reverse fix screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.
- 2A current rating for signal contacts, 10A for power contacts.
- 4-finger Beryllium Copper contact design on both signal and power contacts.
- Order nuts for board-mount separately – see bottom of page for choice of nut type.

**1+8+1**

<table>
<thead>
<tr>
<th>No. 1 contact</th>
<th>1.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>21.50</td>
<td></td>
</tr>
<tr>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>16.55</td>
<td></td>
</tr>
<tr>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Ø1.25</td>
<td></td>
</tr>
<tr>
<td>Ø0.40</td>
<td></td>
</tr>
<tr>
<td>Ø0.40</td>
<td></td>
</tr>
</tbody>
</table>

Recommended PC Board Pattern

**2+8+2**

All other dimensions as 1+8+1

**HOW TO ORDER**

**SERIES CODE**

G125  -  FV1  08  05  F3  -  XABXAB  P

**TOTAL NO. OF SIGNAL CONTACTS**

8

**SCREW-LOK**

F3 Reverse Fix

**POWER CONTACTS**

1AB1AB  1+8+1 Configuration
2AB2AB  2+8+2 Configuration

**ORDER CODE**

G125-4500000B

**REQUIRED HARDWARE**

Order separately from connector

**Hexagonal Board Mount Nut**

ORDER CODE

G125-4510000B

**Slotted Board Mount Nut**

ORDER CODE

G125-4510000B

All dimensions in mm.

Patent Published
Female Cable Housings

- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.
- Stainless steel floating screw fixing to mate with internal screw-loks on male connectors.
- Available without fixing screws, for use with metal backshells.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram 1+8+1]</td>
<td>![Diagram 2+8+2]</td>
<td></td>
</tr>
</tbody>
</table>

**TOOLS**

**Recommended Crimp Tools** - Z125-900 (signal), Z125-903 (power)
**Positioner** - Z125-901 (signal), Z125-904 (power)
**Contact Insertion/Removal Tool** - Z125-902 (signal), Z125-905 (power)

Female contacts shown on a following page.

**HOW TO ORDER**

**SERIES CODE**

G125 - 22496 XX - 0X - 08 - 0X

**SCREW-LOK**

- **F1** Floating Hex Socket
- **00** No Fixings (Use with Metal Hoods)

**NO. OF CONTACTS**

- **01-08-01** 1+8+1 Configuration
- **02-08-02** 2+8+2 Configuration

All dimensions in mm.

www.harwin.com
**Gecko-MT Connectors**

**Female Cable Housings – Reverse Fix**
- Reverse fix screw-lok, where the male connector has the floating screw.
- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
</table>

**TOOLS**

- **Recommended Crimp Tools** – Z125-900 (signal), Z125-903 (power)
- **Positioner** – Z125-901 (signal), Z125-904 (power)
- **Contact Insertion/Removal Tool** – Z125-902 (signal), Z125-905 (power)

- Female contacts shown on a following page.

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 – 22496 F2 – 0X – 08 – 0X</td>
<td>01-08-01 1+8+1 Configuration</td>
</tr>
<tr>
<td></td>
<td>02-08-02 2+8+2 Configuration</td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
Gecko-MT Connectors

Female Cable Housings – Reverse Fix Panel Mount

- Reverse fix screw-lok, where the male connector has the floating screw.
- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.
- Order nuts for panel mount separately - see bottom of page.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="1+8+1-diagram" alt="Diagram" /></td>
<td><img src="2+8+2-diagram" alt="Diagram" /></td>
<td></td>
</tr>
</tbody>
</table>

### Tools

- **Recommended Crimp Tools** - Z125-900 (signal), Z125-903 (power)
- **Positioner** - Z125-901 (signal), Z125-904 (power)
- **Contact Insertion/Removal Tool** - Z125-902 (signal), Z125-905 (power)

- Female contacts shown on a following page.

### How to Order

**Series Code**

G125 - 22496 F3 - 0X - 08 - 0X

**No. of Contacts**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-08-01</td>
<td>1+8+1 Configuration</td>
</tr>
<tr>
<td>02-08-02</td>
<td>2+8+2 Configuration</td>
</tr>
</tbody>
</table>

**Recommended Crimp Tools**

- Z125-900 (signal), Z125-903 (power)

**Positioner**

- Z125-901 (signal), Z125-904 (power)

**Contact Insertion/Removal Tool**

- Z125-902 (signal), Z125-905 (power)

### Required Hardware

**Hexagonal Board Mount Nut**

- Order separately from connector

**Slotted Board Mount Nut**

- Order separately from connector

All dimensions in mm.

Patent Published

[www.harwin.com](http://www.harwin.com)
Gecko-MT Connectors

Female Crimp Contacts

- 4-finger Beryllium Copper contact design on both signal and power contacts.
- Crimp barrel meets all crimp guidelines and standards.
- Instruction video online at www.harwin.com/harwintv.

<table>
<thead>
<tr>
<th>CONTACTS</th>
<th>POWER CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 AWG</td>
<td>18 AWG</td>
</tr>
<tr>
<td>28 – 32 AWG</td>
<td></td>
</tr>
</tbody>
</table>

WIRE STRIPPING DETAILS

Recommended Crimp Tools – Z125-900 (signal), Z125-903 (power)
Positioner – Z125-901 (signal), Z125-904 (power)
Contact Insertion/Removal Tool – Z125-902 (signal), Z125-905 (power)

- Female crimp housings shown on previous pages.
- Pre-cabled contacts shown on following page.
- Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TYPE</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - 0XX 00 05</td>
<td>001 Female 26 AWG crimp contact</td>
<td>05 Gold</td>
</tr>
<tr>
<td></td>
<td>002 Female 28-32 AWG crimp contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>050 Female power crimp contact</td>
<td></td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
Gecko-MT Connectors

Female Crimp Contacts – Pre-Crimped Wires

- 4-finger Beryllium Copper contact.
- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.

<table>
<thead>
<tr>
<th>FEMALE SINGLE ENDED</th>
<th>FEMALE – FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cable Length

TOOLS

Contact Insertion/Removal Tool – Z125-902 (signal), Z125-905 (power)

- Female crimp housings and loose contacts shown on previous pages.
- Full cable assemblies shown on following page.
- Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

G125 – F XXXX X 94

<table>
<thead>
<tr>
<th>SERIES CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER - FIRST END</td>
</tr>
<tr>
<td>F Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 26 AWG (signal)</td>
</tr>
<tr>
<td>W2 28 AWG (signal)</td>
</tr>
<tr>
<td>W3 30 AWG (signal)</td>
</tr>
<tr>
<td>P1 18 AWG (power)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TERMINATION - SECOND END</th>
</tr>
</thead>
<tbody>
<tr>
<td>L Loose cut end</td>
</tr>
<tr>
<td>F Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0150 150mm</td>
</tr>
<tr>
<td>0300 300mm (double-ended)</td>
</tr>
<tr>
<td>0450 450mm (single-ended)</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-MT Connectors

Female Cable Assemblies

- Ready-made cable assemblies, backpotted for added strain relief.
- 4-finger Beryllium Copper contacts.
- No. 1 position identified on housing.
- Constructed with Contact 1 to Contact 1, Contact A to Contact A, etc.

HOW TO ORDER

G125 - F CX 08 FX - XBXB - XXXX - XX

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>GENDER - FIRST END</th>
<th>CABLE SIZE (SIGNAL)</th>
<th>SCREW-LOK</th>
<th>TERMINATION - SECOND END</th>
<th>CABLE LENGTH</th>
<th>POWER CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>C1 26 AWG</td>
<td>F1</td>
<td>L</td>
<td>XXXX mm</td>
<td>1B1B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C2 28 AWG</td>
<td>F2</td>
<td>F1 or F2 (Female connector)</td>
<td></td>
<td>2B2B</td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
Gecko-MT Connectors

Male Horizontal Throughboard

- 2A current rating for signal contacts, 10A for power contacts.
- Polarized housing with 3 keyways.
- Stainless steel screw fixing to mate with floating screw-loks on female connectors, also with board mount thread.
- Order bolts for board-mount separately.
- If mating to a female cable connector, ensure the front face of this connector is level to the PCB edge, or over. Check Technical Drawing for details.

### 1+8+1

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.70</td>
</tr>
<tr>
<td>21.50</td>
</tr>
<tr>
<td>3.30</td>
</tr>
<tr>
<td>3.50</td>
</tr>
</tbody>
</table>

### REQUIRED HARDWARE

<table>
<thead>
<tr>
<th>Hardware Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>5mm Hex Socket</td>
<td>G125-4520000B</td>
</tr>
<tr>
<td>Board Mount Bolt</td>
<td></td>
</tr>
</tbody>
</table>

### HOW TO ORDER

**SERIES CODE**

G125 - MH1 08 05 M4 - XADXAD P

**TOTAL NO. OF SIGNAL CONTACTS**

08

**SCREW-LOK**

M4 With Board Mount

**PACKAGING**

P Tape & Reel strips

**POWER CONTACTS**

1AD1AD 1+8+1 Configuration

2AD2AD 2+8+2 Configuration

---

All dimensions in mm.
Gecko-MT Connectors

Male Horizontal Throughboard – Reverse Fix

- Reverse fix screw-lok, where the male connector has the floating screw.
- 2A current rating for signal contacts, 10A for power contacts.
- Polarized housing with 3 keyways.
- If mating to a female cable connector, ensure the front face of this connector is level to the PCB edge, or over. Check Technical Drawing for details.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td>Recommended PC Board Pattern</td>
</tr>
</tbody>
</table>

**Recommended PC Board Pattern**

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TOTAL NO. OF SIGNAL CONTACTS</th>
<th>SCREW-LOK</th>
<th>PACKAGING</th>
<th>POWER CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - MH1 08 05 M3 - XADXAD P</td>
<td>08</td>
<td>M3 Reverse Fix Floating Hex Socket</td>
<td>P Tape &amp; Reel strips</td>
<td>1AD1AD 1+8+1 Configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2AD2AD 2+8+2 Configuration</td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published
Gecko-MT Connectors

Male Cable Housings

- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.
- Stainless steel screw fixing to mate with floating screw-locks on female connectors.
- Compatible with metal backshells.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="1+8+1.png" alt="Diagram" /></td>
<td><img src="2+8+2.png" alt="Diagram" /></td>
<td></td>
</tr>
</tbody>
</table>
Gecko-MT Connectors

Male Cable Housings – Panel Mount

- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.
- Stainless steel screw fixing to mate with floating screw-locks on female connectors.
- Order nuts for panel mount separately - see bottom of page.

TOOLS

Recommended Crimp Tools – Z125-900 (signal), Z125-903 (power)
Positioner – Z125-901 (signal), Z125-904 (power)
Contact Insertion/Removal Tool – Z125-902 (signal), Z125-905 (power)

HOW TO ORDER

G125 – 32496 M2 – 0X – 08 – 0X

SERIES CODE

SCREW-LOK

M2 With 5.2mm Panel Mount stud

NO. OF CONTACTS

01-08-01 1+8+1 Configuration
02-08-02 2+8+2 Configuration

REQUIRED HARDWARE

Order separately from connector

Hexagonal Board Mount Nut

Slotted Board Mount Nut

All dimensions in mm.
**Gecko-MT Connectors**

**Male Cable Housings – Reverse Fix**
- Reverse fix floating screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.
- Features potting wall for backpotting to give extra security.
- No. 1 position identified on housing.

<table>
<thead>
<tr>
<th>1+8+1</th>
<th>2+8+2</th>
<th>All other dimensions as 1+8+1</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram of 1+8+1 configuration]</td>
<td>![Diagram of 2+8+2 configuration]</td>
<td></td>
</tr>
<tr>
<td>![Diagram of dimensions]</td>
<td>![Diagram of dimensions]</td>
<td></td>
</tr>
</tbody>
</table>

**TOOLS**

- **Recommended Crimp Tools** – Z125-900 (signal), Z125-903 (power)
- **Positioner** – Z125-901 (signal), Z125-904 (power)
- **Contact Insertion/Removal Tool** – Z125-902 (signal), Z125-905 (power)

- Male contacts shown on a following page.

**HOW TO ORDER**

- **SERIES CODE**
  - G125 – 32496
  - M3 – 0X – 08 – 0X

- **SCREW-LOK**
  - M3 Reverse Fix Floating Hex Socket

- **NO. OF CONTACTS**
  - 01-08-01 1+8+1 Configuration
  - 02-08-02 2+8+2 Configuration

All dimensions in mm.
### Gecko-MT Connectors

#### Male Crimp Contacts
- Crimp barrel meets all crimp guidelines and standards.
- Instruction video online at [www.harwin.com/harwintv](http://www.harwin.com/harwintv).

#### Contacts and Power Contact

<table>
<thead>
<tr>
<th>CONTACTS</th>
<th>POWER CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 AWG</td>
<td>18 AWG</td>
</tr>
<tr>
<td>28 – 32 AWG</td>
<td>7.30</td>
</tr>
</tbody>
</table>

#### Wire Stripping Details
- 18 AWG - Ø1.80 max
- 26 AWG - Ø0.80 max
- 28 to 32 AWG - Ø0.72 max
- 1.50 to 1.75 - 26 to 32 AWG
- 1.90 to 2.30 - 18 AWG

#### Tools
- **Recommended Crimp Tools** – Z125-900 (signal), Z125-903 (power)
- **Positioner** – Z125-901 (signal), Z125-904 (power)
- **Contact Insertion/Removal Tool** – Z125-902 (signal), Z125-905 (power)

#### How to Order
- **G125** – 1XX 00 05

#### Series Code

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Male 26 AWG crimp contact</td>
</tr>
<tr>
<td>102</td>
<td>Male 28-32 AWG crimp contact</td>
</tr>
<tr>
<td>150</td>
<td>Male power crimp contact</td>
</tr>
</tbody>
</table>

#### Finish
- 05 Gold

---

*All dimensions in mm.*

Patent Published
## Male Crimp Contacts – Pre-Crimped Wires

- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.

### HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>G125</th>
<th>M</th>
<th>XX</th>
<th>XXXX</th>
<th>X</th>
<th>94</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER – FIRST END</td>
<td>M</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABLE SIZE</td>
<td>W1</td>
<td>26 AWG (signal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W2</td>
<td>28 AWG (signal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W3</td>
<td>30 AWG (signal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P1</td>
<td>18 AWG (power)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABLE LENGTH</td>
<td>0150</td>
<td>150mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0300</td>
<td>300mm (double-ended)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0450</td>
<td>450mm (single-ended)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| CABLE COLOR | 94 | White |

### TOOLS

- Contact Insertion/Removal Tool – Z125-902 (signal), Z125-905 (power)
- Male crimp housings and loose contacts shown on previous pages.
- Full cable assemblies shown on following page.
### Male Cable Assemblies

- Ready-made cable assemblies, backpotted for added strain relief.
- 4-finger Beryllium Copper contacts.
- No. 1 position identified on housing.
- Constructed with Contact 1 to Contact 1, Contact A to Contact A, etc.
- Male-to-male cable length (not shown) is measured in the same style as male-to-female.

### HOW TO ORDER

**Male Single Ended**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>M1</th>
<th>M3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER - FIRST END</td>
<td>M</td>
<td>Male</td>
</tr>
<tr>
<td>CABLE SIZE (SIGNAL)</td>
<td>C1 26 AWG</td>
<td>C2 28 AWG</td>
</tr>
<tr>
<td>SCREW-LOK</td>
<td>M1 Internal Thread</td>
<td>M3 Floating Hex Socket (Reverse Fix)</td>
</tr>
</tbody>
</table>

**Male-Female**

<table>
<thead>
<tr>
<th>TERMINATION - SECOND END</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
</tr>
<tr>
<td>F1</td>
</tr>
<tr>
<td>F2</td>
</tr>
<tr>
<td>M1 or M3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POWER CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1D1D</td>
</tr>
<tr>
<td>2D2D</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-MT Connectors

Metal Hood / Backshell - Cable

- Supplied as a kit - includes 2 metal hood halves, and short screws & nuts to join the two hood halves together (nuts not illustrated).
- Use 00 fixing kit on male housings G125-32496M1-xx-08-xx for standard gender fixings.
- F1 kit includes extended fixing screws - use with female housings G125-2249600-xx-08-xx.
- Tie-band can be used to attach external braid, to construct a shielded cable assembly.

<table>
<thead>
<tr>
<th>HOOD / BACKSHELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>23.80</td>
</tr>
<tr>
<td>1.5 A/F HEX</td>
</tr>
<tr>
<td>M2</td>
</tr>
</tbody>
</table>

HOW TO ORDER

G125 – 964 XX XX

<table>
<thead>
<tr>
<th>SERIES CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCREW-LOK</td>
</tr>
<tr>
<td>00</td>
</tr>
<tr>
<td>F1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
<tr>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BAND-IT TIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>For fixing braid to rear collar (requires Tie Dex II A30199 Micro Band tool).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORDER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M80-9470000</td>
</tr>
<tr>
<td>M80-9480000</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-MT Connectors

Metal Hood / Backshell - Board Mount or Panel Mount

- Use with G125-FV10805F3-xABxAB connectors in a PCB mounted application.
- Use with G125-22496F3-xx-08-xx housings for a panel mount application.

**HOOD / BACKSHELL**

<table>
<thead>
<tr>
<th>CALCULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

**HOW TO ORDER**

G125 - 960 XX 02

<table>
<thead>
<tr>
<th>SERIES CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL NO. OF CONTACTS</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>26</td>
</tr>
</tbody>
</table>

All dimensions in mm.
## Gecko-SL Specifications

### Materials

**Housings:**
Glass-filled High Temperature Thermoplastic UL94V-0

**Female contacts:**
Beryllium Copper

**Male contacts:**
PCB Connector: Phosphor Bronze
Crimp: Brass

**Finish:**
0.2 – 0.3μm (8 – 12μ”) Gold, over 1.5 – 2.0μm (60 – 80μ”) Nickel

**Screw-Loks:**
Stainless Steel

### Electrical

**Current**
- Individual contacts in isolation: 2.8A max (At 25°C)
- All contacts simultaneously: 2.0A max (At 25°C)

**Working voltage**
- At sea level 1006 mbar: 450V DC or AC peak
- At altitude 44 mbar: 250V DC or AC peak

**Voltage proof**
- At sea level 1013 mbar: 600V DC or AC peak

**Contact resistance**
- Initial: 20mΩ max
- After conditioning: 25mΩ max

**Insulation resistance**
- Initial: 10GΩ min at 500V DC
- After conditioning: >1GΩ min at 500V DC

### Mechanical

**Contact durability:** 1000 operations

**Mating forces (per contact pair)**
- Insertion force: 2.8N max
- Withdrawal force: 0.2N min

**Contact retention in housing:** 6N min

### Environmental

**Environmental classification:** 65/150/56 days at 93% RH

**Operating temperature:**
- -65°C to +150°C

**Vibration sensitivity:**
- 10Hz to 2000Hz, 1.5mm, 198mm/s² (20G) duration 6 hours
- 390m/s² (40G), 4000 ±10 bumps

**Bump severity:**
- 981m/s² (100G) for 6ms in Z axis
- 490m/s² (50G) for 11ms in X & Y axes

**Shock severity:**
- 490m/s² (50G)

**Acceleration severity:**
- *Tested with latched connectors.*

### Pin Numbering

<table>
<thead>
<tr>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Female Pin Numbering" /></td>
<td><img src="image" alt="Male Pin Numbering" /></td>
</tr>
</tbody>
</table>

All dimensions in mm.
# Gecko-SL Mating Profiles

<table>
<thead>
<tr>
<th></th>
<th>FEMALE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VERTICAL THROUGHBOARD</td>
<td>VERTICAL SMT</td>
<td>CABLE</td>
<td></td>
</tr>
<tr>
<td>VERTICAL THROUGHBOARD</td>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
<td><img src="image3" alt="Diagram" /></td>
<td>9.80 max</td>
</tr>
<tr>
<td>HORIZONTAL THROUGHBOARD</td>
<td><img src="image4" alt="Diagram" /></td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
<td>12.70 max</td>
</tr>
<tr>
<td>MALE</td>
<td>Standard</td>
<td>Reverse Fix</td>
<td>Standard</td>
<td>Reverse Fix</td>
</tr>
<tr>
<td>VERTICAL SMT</td>
<td><img src="image7" alt="Diagram" /></td>
<td><img src="image8" alt="Diagram" /></td>
<td><img src="image9" alt="Diagram" /></td>
<td>9.95 max</td>
</tr>
<tr>
<td>CABLE</td>
<td><img src="image10" alt="Diagram" /></td>
<td><img src="image11" alt="Diagram" /></td>
<td><img src="image12" alt="Diagram" /></td>
<td>13.38 max</td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published

www.harwin.com
Gecko-SL Connectors

Female Throughboard

- 4-finger Beryllium Copper contact.
- Stainless steel screw fixing to mate with applicable male connector.
- Positive keyway polarization features.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

3mm THROUGHBOARD

<table>
<thead>
<tr>
<th>CALCULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 12.7</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

HOW TO ORDER

G12S - F V1 XX 05 F1 X

SERIES CODE

TYPE

V1 3mm Throughboard

PACKAGING

R Tape & Reeled
P Tape & Reel strips

FINISH

05 Gold

TOTAL NO. OF CONTACTS

06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.
Gecko-SL Connectors

Female Throughboard - Reverse Fix

- 4-finger Beryllium Copper contact.
- Stainless steel screw fixing to mate with applicable male connector.
- Reverse fix screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.
- Order nuts for board-mount separately - see bottom of page.
- F3 Screw-Lok is compatible with board mount metal backshell G125-960 range.

<table>
<thead>
<tr>
<th>WITHOUT BOARD MOUNT</th>
<th>WITH BOARD MOUNT</th>
</tr>
</thead>
</table>

**CALCULATION**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 12.7</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**HOW TO ORDER**

**SERIES CODE**

G125 - F V1 XX 05 FX X

**TYPE**

V1 3mm Throughboard

**TOTAL NO. OF CONTACTS**

06, 10, 12, 16, 20, 26, 34, 50

**RECOMMENDED PC BOARD PATTERN**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø4.00</td>
<td>1.60</td>
</tr>
</tbody>
</table>

**REQUIRED HARDWARE**

Hexagonal Board Mount Nut

| ORDER CODE | G125-4500000B |

Slotted Board Mount Nut

| ORDER CODE | G125-4510000B |

**ORDER CODES**

- G125-4500000B
- G125-4510000B

**PACKAGING**

- R Tape & Reeled
- P Tape & Reel strips

**SCREW-LOK**

- F2 Internal Thread
- F3 With 5mm Board Mount stud

All dimensions in mm.
**Gecko-SL Connectors**

**Female Surface Mount**

- 4-finger Beryllium Copper contact.
- Stainless steel screw fixing to mate with applicable male connector.
- Positive keyway polarization features.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Available in Tape and Reel Packaging, with Pick and Place cap.

### SURFACE MOUNT

<table>
<thead>
<tr>
<th>A</th>
<th>B + 12.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

### HOW TO ORDER

- **SERIES CODE**
  - **TYPE**
    - **S1** Surface Mount

- **PACKAGING**
  - **R** Tape & Reeled
  - **P** Tape & Reel strips

- **FINISH**
  - **05** Gold

- **TOTAL NO. OF CONTACTS**
  - 06, 10, 12, 16, 20, 26, 34, 50

### Calculation

- \( A = B + 12.7 \)
- \( B = 0.625 \times (\text{Total No. of contacts} - 2) \)
- \( C = B + 7.8 \)
- \( D = B + 1.8 \)

**Recommended PC Board Pattern**

All dimensions in mm. Patent Published
Gecko-SL Connectors

Female Surface Mount - Reverse Fix

- Stainless steel screw fixing to mate with applicable male connector.
- Reverse fix screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.
- Order nuts for board-mount separately - see bottom of page.
- Available in Tape and Reel Packaging, with Pick and Place cap.

**WITHOUT BOARD MOUNT**

<table>
<thead>
<tr>
<th>CALCULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
</tbody>
</table>

Recommended PC Board Pattern

**WITH BOARD MOUNT**

<table>
<thead>
<tr>
<th>How to Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES CODE</td>
</tr>
</tbody>
</table>

**REQUIRED HARDWARE**

- Hexagonal Board Mount Nut
- Slotted Board Mount Nut

ORDER CODE

- Hexagonal Board Mount Nut: G125-4500000B
- Slotted Board Mount Nut: G125-4510000B

**PACKAGING**

- R: Tape & Reeled
- P: Tape & Reel strips

**SCREW-LOK**

- F2: Internal Thread
- F3: With 5mm Board Mount stud

All dimensions in mm.
Gecko-SL Connectors

Female Crimp Housings

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on housing.
- 3 polarizing points on each housing prevent mis-mating.
- Use 00 Screw-Lok version (without fixings) with G125-964xxF1 metal hood / backshell, shown on a following page.

**CALCULATION**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 12.7</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**TOOLS**

- Recommended Crimp Tool – Z125-900
- Positioner – Z125-901
- Contact Insertion/Removal Tool – Z125-902

- Female contacts shown on a following page.
- Instruction sheets available at www.harwin.com/instructions.

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TYPE</th>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 – 224</td>
<td>224</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
</tbody>
</table>

**SCREW-LOK**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Floating Hex Socket fixings</td>
</tr>
<tr>
<td>00</td>
<td>No fixings (use with Metal Hoods)</td>
</tr>
</tbody>
</table>

**FINISH**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>Housing</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-SL Connectors

Female Crimp Housings - Reverse Fix

- Features 2.5mm potting wall for extra security.
- F3 Screw-Lok is compatible with panel mount metal backshell G125-960 range.
- Stainless steel screw fixing mates to applicable male connector fitted with floating screw-loks.
- Order nuts for panel mount separately - see bottom of page.

**WITHOUT PANEL MOUNT**

<table>
<thead>
<tr>
<th>A</th>
<th>B + 12.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**HOW TO ORDER**

**SERIES CODE**

G125 - 224 XX 96 FX

**TYPE**

224 Female Housing

**TOTAL NO. OF CONTACTS**

06, 10, 12, 16, 20, 26, 34, 50

**FINISH**

96 Housing

**SCREW-LOK**

F2 Internal Thread

F3 With 5.2mm Panel Mount stud

**TOOLS**

- Recommended Crimp Tool - Z125-900
- Positioner - Z125-901
- Contact Insertion/Removal Tool - Z125-902

- Female contacts shown on a following page.
- Instruction sheets available at www.harwin.com/instructions.

**REQUIRED HARDWARE**

Order separately from connector

**Hexagonal Board Mount Nut**

ORDER CODE

G125-4500000B

**Slotted Board Mount Nut**

ORDER CODE

G125-4510000B

All dimensions in mm.

www.harwin.com
**Gecko-SL Connectors**

### Female Crimp Contacts, Dummy Contact

- 4-finger Beryllium Copper contact on a female connector.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Instruction video online at [www.harwin.com/harwintv](http://www.harwin.com/harwintv).
- Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.

<table>
<thead>
<tr>
<th>CONTACTS</th>
<th>DUMMY CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>26 AWG</strong></td>
<td>![26 AWG Contact Image]</td>
</tr>
</tbody>
</table>

| **28 – 32 AWG** | ![28-32 AWG Contact Image] |

<table>
<thead>
<tr>
<th><strong>WIRE STRIPPING DETAILS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>26 AWG - Ø0.80 max</td>
</tr>
<tr>
<td>28 to 32 AWG - Ø0.72 max</td>
</tr>
<tr>
<td>1.50 to 1.75</td>
</tr>
</tbody>
</table>

### TOOLS

- **Recommended Crimp Tool** – Z125-900
- **Positioner** – Z125-901
- **Contact Insertion/Removal Tool** – Z125-902

- Female crimp housings shown on previous pages.
- Pre-cabled contacts shown on following page.

### HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - 0XX 00 05</td>
<td>05 Gold</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Female 26 AWG crimp contact</td>
</tr>
<tr>
<td>002</td>
<td>Female 28-32 AWG crimp contact</td>
</tr>
<tr>
<td>020</td>
<td>Dummy Contact (blanking plug)</td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published

[www.harwin.com](http://www.harwin.com)

34
Gecko-SL Connectors

Female Crimp Contacts – Pre-Crimped Wires

- 4-finger Beryllium Copper contact.
- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

<table>
<thead>
<tr>
<th>FEMALE SINGLE ENDED</th>
<th>FEMALE – FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Cable Length

TOOLS

Contact Insertion/Removal Tool – Z125-902

- Female crimp housings and loose contacts shown on previous pages.
- Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>CABLE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - F WX XXXX X 94</td>
<td>94 White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENDER – FIRST END</th>
<th>CABLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>F Female</td>
<td>W1 26 AWG</td>
</tr>
<tr>
<td>F Female</td>
<td>W2 28 AWG</td>
</tr>
<tr>
<td>F Female</td>
<td>W3 30 AWG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TERMINATION – SECOND END</th>
<th>CABLE LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>L Loose cut end</td>
<td>0150 150mm</td>
</tr>
<tr>
<td>F Female</td>
<td>0300 300mm (double-ended)</td>
</tr>
<tr>
<td>F Female</td>
<td>0450 450mm (single-ended)</td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
Gecko-SL Connectors

Female Cable Assemblies

- 4-finger Beryllium Copper contact.
- No.1 position identified on housing.
- Stainless steel screw fixing to mate with applicable male connector.
- Back potted for added strain relief.
- Check website or Ask an Expert for available combinations.

### PART NUMBERING SYSTEM

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>GENDER - FIRST END</th>
<th>CABLE STYLE</th>
<th>CABLE SIZE</th>
<th>TOTAL NO. OF CONTACTS</th>
<th>TERMINATION - SECOND END</th>
<th>CABLE LENGTH</th>
<th>SCREW-LOK</th>
<th>CABLE COLOR / BRAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125</td>
<td>F</td>
<td>C</td>
<td>1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
<td>L</td>
<td>0150</td>
<td>F0</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>2</td>
<td></td>
<td>F0, F1, F2 or F3</td>
<td>0300</td>
<td>F1</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Female connector</td>
<td>0450</td>
<td>F2</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(same as First End)</td>
<td>XXXX</td>
<td>F3</td>
<td></td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published
Gecko-SL Connectors

- Examples of available cable assembly options - see previous page for part numbering.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.
- Twisted Pairs are 2 twists per inch and 3 twists per inch, alternated along the connector.

<table>
<thead>
<tr>
<th>FEMALE SINGLE ENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram of FEMALE SINGLE ENDED" /></td>
</tr>
<tr>
<td><strong>Cable Length</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEMALE - FEMALE WITH TWISTED PAIRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image2" alt="Diagram of FEMALE - FEMALE WITH TWISTED PAIRS" /></td>
</tr>
<tr>
<td><strong>Cable Length</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEMALE - FEMALE WITH SHIELDING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Diagram of FEMALE - FEMALE WITH SHIELDING" /></td>
</tr>
<tr>
<td><strong>Cable Length</strong></td>
</tr>
</tbody>
</table>

All dimensions in mm.
# Gecko-SL Connectors

## Male Vertical Throughboard

- Stainless steel screw fixing to mate with applicable female connector.
- Order nuts for board-mount separately - see bottom of page.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

<table>
<thead>
<tr>
<th>WITHOUT BOARD MOUNT</th>
<th>WITH BOARD MOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
</tbody>
</table>

**CALCULATION**

<table>
<thead>
<tr>
<th>A</th>
<th>B + 12.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**Recommended PC Board Pattern**

**HOW TO ORDER**

**SERIES CODE**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
</tbody>
</table>

**ORDER CODE**

<table>
<thead>
<tr>
<th>Hexagonal Board Mount Nut</th>
<th>Slotted Board Mount Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125-4500000B</td>
<td>G125-4510000B</td>
</tr>
</tbody>
</table>

**ORDER CODE**

<table>
<thead>
<tr>
<th>Hexagonal Board Mount Nut</th>
<th>Slotted Board Mount Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125-4500000B</td>
<td>G125-4510000B</td>
</tr>
</tbody>
</table>

**REQUIRED HARDWARE**

- Hexagonal Board Mount Nut
- Slotted Board Mount Nut

**RECOMMENDED PC BOARD PATTERN**

<table>
<thead>
<tr>
<th>No. 1 contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø0.40</td>
</tr>
<tr>
<td>4.90</td>
</tr>
<tr>
<td>3.00</td>
</tr>
<tr>
<td>M2</td>
</tr>
</tbody>
</table>

**RECOMMENDED PC BOARD PATTERN**

<table>
<thead>
<tr>
<th>No. 1 contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø0.55</td>
</tr>
<tr>
<td>Ø2.20</td>
</tr>
<tr>
<td>B</td>
</tr>
</tbody>
</table>

**PACKAGING**

- R Tape & Reeled
- P Tape & Reel strips

**SCREW-LOK**

- M1 Internal Thread
- M2 With 5mm Board Mount Stud

**Recommended PC Board Pattern**

<table>
<thead>
<tr>
<th>No. 1 contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø0.55</td>
</tr>
<tr>
<td>4.90</td>
</tr>
<tr>
<td>4.90</td>
</tr>
<tr>
<td>1.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. 1 contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø0.55</td>
</tr>
<tr>
<td>4.90</td>
</tr>
<tr>
<td>4.90</td>
</tr>
<tr>
<td>1.25</td>
</tr>
</tbody>
</table>
Gecko-SL Connectors

Male Vertical Throughboard - Reverse Fix

- Stainless steel screw fixing to mate with applicable female connector.
- No. 1 position identified on housing.

**THROUGHBOARD**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
</tbody>
</table>

**Calculation**

\[
A = B + 12.7 \\
B = 0.625 \times (\text{Total No. of contacts} - 2) \\
C = B + 7.8
\]

**HOW TO ORDER**

**SERIES CODE**

- **G125** - **M** - **V1** - **XX** - **05** - **M3** - **X**

**Type**

- **V1** - 3mm Throughboard

**Total No. of Contacts**

- 06, 10, 12, 16, 20, 26, 34, 50

**Packaging**

- **R** - Tape & Reeled
- **P** - Tape & Reel strips

**Finish**

- **05** - Gold

All dimensions in mm.

Patent Published

www.harwin.com
Gecko-SL Connectors

Male Horizontal Throughboard

- Stainless steel screw fixing to mate with floating screw-loks on female connectors, also with board mount thread.
- Order bolts for board-mount separately.
- If mating to a female cable connector, ensure the front face of this connector is level to the PCB edge, or over. Check Technical Drawing for details.

**Throughboard**

**Calculation**

- \( A = B + 12.7 \)
- \( B = 0.625 \times (\text{Total No. of contacts} - 2) \)
- \( C = B + 7.8 \)

**Recommended PC Board Pattern**

**Required Hardware**

Order separately from connector

- 5mm Hex Socket Board Mount Bolt

**Order Code**

G125-4520000B

**How to Order**

- **Series Code**
  - G125 - M H1 XX 05 M4 X

- **Type**
  - H1: 3mm Throughboard

- **Total No. of Contacts**
  - 06, 10, 12, 16, 20, 26, 34, 50

- **Packaging**
  - R: Tape & Reeled
  - P: Tape & Reel strips

- **Finish**
  - 05: Gold

All dimensions in mm.
Gecko-SL Connectors

Male Horizontal Throughboard - Reverse Fix

- Stainless steel screw fixing to mate with applicable female connector.
- No. 1 position identified on housing.
- If mating to a female cable connector, ensure the front face of this connector is level to the PCB edge, or over. Check Technical Drawing for details.

### Throughboard

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$B + 12.7$</td>
</tr>
<tr>
<td>B</td>
<td>$0.625 \times$ (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>$B + 7.8$</td>
</tr>
</tbody>
</table>

![Diagram of Throughboard]

**Recommended PC Board Pattern**

#### How to Order

- **Series Code**: G125 - M H1 XX 05 M3 X
- **Type**: H1 3mm Throughboard
- **Total No. of Contacts**: 06, 10, 12, 16, 20, 26, 34, 50
- **Packaging**:
  - R: Tape & Reeled
  - P: Tape & Reel strips
- **Finish**: 05 Gold

All dimensions in mm.
Male Vertical Surface Mount

- Stainless steel screw fixing to mate with applicable female connector.
- Order nuts for board-mount separately - see bottom of page.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

### HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TYPE</th>
<th>TOTAL NO. OF CONTACTS</th>
<th>ORDER CODE</th>
<th>PACKAGING</th>
<th>SCREW-LOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - M S1 XX 05 MX X</td>
<td>Surface Mount</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
<td>G125-4500000B</td>
<td>R Tape &amp; Reeled</td>
<td>M1 Internal Thread</td>
</tr>
</tbody>
</table>

**Required Hardware**

- **Hexagonal Board Mount Nut**
  - ORDER CODE: G125-4500000B
  - All dimensions in mm.

- **Slotted Board Mount Nut**
  - ORDER CODE: G125-4510000B

**Recommended PC Board Pattern**

**CALCULATION**

<table>
<thead>
<tr>
<th>A</th>
<th>B + 12.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**Packaging**

- R Tape & Reeled
- P Tape & Reel strips
- M1 Internal Thread
- M2 With 5mm Board Mount Stud

**All dimensions in mm.**

Patent Published
**Gecko-SL Connectors**

**Male Vertical Surface Mount - Reverse Fix**
- Stainless steel screw fixing to mate with applicable female connector.
- Reverse fix screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.

**SURFACE MOUNT**

![Surface Mount Diagram]

<table>
<thead>
<tr>
<th>CALCULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 12.7</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
</tbody>
</table>

**HOW TO ORDER**

**SERIES CODE**

<table>
<thead>
<tr>
<th>TYPE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>Surface Mount</td>
</tr>
</tbody>
</table>

**TOTAL NO. OF CONTACTS**

06, 10, 12, 16, 20, 26, 34, 50

**PACKAGE**

R  Tape & Reeled
P  Tape & Reel strips

**FINISH**

05  Gold

All dimensions in mm.

www.harwin.com
Gecko-SL Connectors

Male Crimp Housing

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on housing.
- 3 polarizing points on each housing prevent mis-mating.
- Housing without fixings can be used with G125-964xxF1 metal hoods / backshells for reverse fix screw-lok.
- Order nuts for panel mount separately - see bottom of page.

### WITHOUT PANEL MOUNT

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.90</td>
<td>6.50</td>
<td>8.40</td>
</tr>
</tbody>
</table>

### WITH PANEL MOUNT

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.90</td>
<td>6.50</td>
<td>8.40</td>
</tr>
</tbody>
</table>

### CALCULATION

- A = B + 12.7
- B = 0.625 x (Total No. of contacts - 2)
- C = B + 7.8

### HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TYPE</th>
<th>TOTAL NO. OF CONTACTS</th>
<th>SCREW-LOK</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - 324</td>
<td>324</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
<td>M1 - Internal Thread</td>
<td>96 - Housing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M2 - With 5.2mm Panel Mount stud</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>00 - No fixings (use with metal hoods)</td>
<td></td>
</tr>
</tbody>
</table>

### TOOLS

- Recommended Crimp Tool - Z125-900
- Positioner - Z125-901
- Contact Insertion/Removal Tool - Z125-902

### REQUIRED HARDWARE

- Hexagonal Board Mount Nut
  - ORDER CODE: G125-4500000B
- Slotted Board Mount Nut
  - ORDER CODE: G125-4510000B

All dimensions in mm.
Gecko-SL Connectors

Male Crimp Housing - Reverse Fix

- Features 2.5mm potting wall for extra security.
- Stainless steel screw fixing to mate with applicable female connector.
- Reverse fix screw-lok suitable for board-to-cable applications, where the female connector is located on the PCB.

**MALE**

<table>
<thead>
<tr>
<th>CALCULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 12.7</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
</tbody>
</table>

**TOOLS**

- **Recommended Crimp Tool** - Z125-900
- **Positioner** - Z125-901
- **Contact Insertion/Removal Tool** - Z125-902

- Male contacts shown on following page.
- Instruction sheets available at www.harwin.com/instructions.

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>G125</th>
<th>324</th>
<th>XX</th>
<th>96</th>
<th>M3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>324</td>
<td>Male Housing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINISH</th>
<th>96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish Code</td>
<td>Housing</td>
</tr>
</tbody>
</table>

| TOTAL NO. OF CONTACTS | 06, 10, 12, 16, 20, 26, 34, 50 |

All dimensions in mm.
Crimp barrel meets all crimp guidelines and standards.
2A current capacity, resists high vibration and shock.
Withstands extremes of temperature: -65°C to +150°C.
Instruction video online at www.harwin.com/harwintv.
Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.

**CONTACTS**

<table>
<thead>
<tr>
<th>26 AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.20</td>
</tr>
</tbody>
</table>

**WIRE STRIPPING DETAILS**

- 26 AWG - Ø0.80 max
- 28 to 32 AWG - Ø0.72 max
- 1.50 to 1.75

**TOOLS**

- Recommended Crimp Tool – Z125-900
- Positioner – Z125-901
- Contact Insertion/Removal Tool – Z125-902

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 – XXX 00 05</td>
</tr>
</tbody>
</table>

**TYPE**

| 101 | Male 26 AWG crimp contact |
| 102 | Male 28-32 AWG crimp contact |
| 020 | Dummy Contact (blanking plug) |

**FINISH**

| 05 | Gold |

www.harwin.com
Gecko-SL Connectors

Male Crimp Contacts – Pre-Crimped Wires

- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

<table>
<thead>
<tr>
<th>MALE SINGLE ENDED</th>
<th>MALE – MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="cable1.png" alt="Cable Length" /></td>
<td><img src="cable2.png" alt="Cable Length" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MALE – FEMALE</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="cable3.png" alt="Cable Length" /></td>
<td>Contact Insertion/Removal Tool – Z125-902</td>
</tr>
</tbody>
</table>

- Male crimp housings and loose contacts shown on previous pages.
- > Full cable assemblies shown on following page.
- Instruction sheets available at www.harwin.com/instructions.

### HOW TO ORDER

**SERIES CODE**

**G125** - **M** WX XXXX X **94**

**CABLE COLOR**

94 White

**TERMINATION – SECOND END**

<table>
<thead>
<tr>
<th>L</th>
<th>Loose cut end</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Female</td>
</tr>
<tr>
<td>M</td>
<td>Male</td>
</tr>
</tbody>
</table>

**CABLE LENGTH**

<table>
<thead>
<tr>
<th>0150</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0300</td>
<td>300mm (double-ended)</td>
</tr>
<tr>
<td>0450</td>
<td>450mm (single-ended)</td>
</tr>
</tbody>
</table>

**GENDER – FIRST END**

| M | Male |

**CABLE SIZE**

<table>
<thead>
<tr>
<th>W1</th>
<th>26 AWG (signal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2</td>
<td>28 AWG (signal)</td>
</tr>
<tr>
<td>W3</td>
<td>30 AWG (signal)</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-SL Connectors

Male Cable Assemblies

- No. 1 position identified on housing.
- Stainless steel screw fixing to mate with applicable male connector.
- Back potted for added strain relief.
- Check website or Ask an Expert for available combinations.

PART NUMBERING SYSTEM

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>GENDER - FIRST END</th>
<th>CABLE SIZE</th>
<th>TOTAL NO. OF CONTACTS</th>
<th>TERMINATION - SECOND END</th>
<th>SCREW-LOK</th>
<th>CABLE COLOR / BRAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125</td>
<td>M</td>
<td>1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
<td>L</td>
<td>Loose cut end</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>F0</td>
<td>Female connector No fixings (use with Metal Hoods)</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F1</td>
<td>Female connector Floating Hex Socket fixings</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M1 or M3</td>
<td>Male connector (same as First end)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M1</td>
<td>Internal thread</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M3</td>
<td>Floating Hex Socket (reverse fix)</td>
</tr>
</tbody>
</table>

All dimensions in mm.
Gecko-SL Connectors

- Examples of available cable assembly options - see previous page for part numbering.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.
- Twisted Pairs are 2 twists per inch and 3 twists per inch, alternated along the connector.

### MALE SINGLE ENDED

![Diagram of male single ended connector](image)

### MALE - FEMALE WITH SHIELDING

![Diagram of male-female with shielding connector](image)

### MALE - MALE WITH TWISTED PAIRS

![Diagram of male-male with twisted pairs connector](image)

All dimensions in mm.
Gecko-SL Connectors

Metal Hood / Backshell - Cable

- Supplied as a kit - includes 2 metal hood halves, and short screws & nuts to join the two hood halves together (nuts not illustrated).
- Use 00 fixing kit on male housings G125-324xx96M1 for standard gender fixings.
- F1 kit includes extended fixing screws - use with female housings G125-224xx9600 for standard gender fixings, or G125-324xx9600 for reverse fix.

HOOD / BACKSHELL

<table>
<thead>
<tr>
<th>CALCULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 16.8</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
<tr>
<td>D</td>
<td>B + 4.3</td>
</tr>
</tbody>
</table>

HOW TO ORDER

G125 - 964 XX XX

SERIES CODE

- SCREW-LOK
  - 00: Use with G125-324xx96M1 male housings
  - F1: Use with G125-224xx9600 female housings or G125-324xx9600 male housings

TOTAL NO. OF CONTACTS

06, 10, 12, 16, 20, 26, 34, 50

BAND-IT TIE

- For fixing braid to rear collar (requires Tie Dex II A30199 Micro Band tool).

ORDER CODE

- M80-9470000 Length = 206.8mm
- M80-9480000 Length = 362.0mm

All dimensions in mm.
Gecko-SL Connectors

Metal Hood / Backshell - Board Mount or Panel Mount

- Use with G125-MV1xx05M2x male connectors or G125-FV1xx05F3x female connectors in a PCB mounted application.
- Use with G125-324xx96M2 male housings or G125-224xx96F3 female housings in a panel mount application.
- Mating connector to be fitted with metal backshell G125-964xxF1 (shown on previous page) for complete EMC shielded connection.

### HOW TO ORDER

**G125 – 960 XX 02**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 – 960</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
</tbody>
</table>

**CALCULATION**

<table>
<thead>
<tr>
<th>A</th>
<th>B + 14.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 7.8</td>
</tr>
</tbody>
</table>

A = 3.95, B = 6.75, C = 3.45

All dimensions in mm.
Gecko with Latches Specifications

**Materials**

<table>
<thead>
<tr>
<th>Housings:</th>
<th>Glass-filled High Temperature Thermoplastic UL94V-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female contacts:</td>
<td>Beryllium Copper</td>
</tr>
<tr>
<td>Male contacts:</td>
<td></td>
</tr>
<tr>
<td>PCB Connector:</td>
<td>Phosphor Bronze</td>
</tr>
<tr>
<td>Crimp:</td>
<td>Brass</td>
</tr>
<tr>
<td>Finish:</td>
<td>0.2 – 0.3μm (8 – 12μ&quot;) Gold, over 1.5 – 2.0μm (60 – 80μ&quot;) Nickel</td>
</tr>
<tr>
<td>Latches:</td>
<td>Copper Alloy</td>
</tr>
</tbody>
</table>

**Mechanical**

| Contact durability:       | 1000 operations                                    |
| Mating forces (per contact pair) |     |
| Insertion force:          | 2.8N max                                           |
| Withdrawal force:         | 0.2N min                                           |
| Contact retention in housing: | 6N min     |

**Electrical**

| Current                   |                                                     |
| Individual contacts in isolation: | 2.8A max (At 25°C)                                 |
| All contacts simultaneously: | 2.0A max (At 25°C)                                 |
| Flex Circuit Assembly:      | 0.4A max per track (At 25°C)                        |
| Working voltage            |                                                     |
| At sea level 1006 mbar:     | 450V DC or AC peak                                 |
| At altitude 44 mbar:        | 250V DC or AC peak                                 |
| Voltage proof              |                                                     |
| At sea level 1013 mbar:     | 600V DC or AC peak                                 |
| Contact resistance         |                                                     |
| Initial:                   | 20mΩ max                                           |
| After conditioning:        | 25mΩ max                                           |
| Insulation resistance      |                                                     |
| Initial:                   | 10GΩ min at 500V DC                                |
| After conditioning:        | >1GΩ min at 500V DC                                |

**Environmental**

| Environmental classification: | 65/150/56 days at 93% RH |
| Operating temperature:        | -65°C to +150°C           |
| Vibration sensitivity:        | 10Hz to 2000Hz, 1.5mm, 198mm/s² (20G) duration 6 hours |
| Bump severity:                | 390m/s² (40G), 4000 ±10 bumps |
| Shock severity:               | 981m/s² (100G) for 6ms in Z axis, 490m/s² (50G) for 11ms in X & Y axes |
| Acceleration severity:        | 490m/s² (50G)             |

* Tested with latched connectors.

**Pin Numbering**

<table>
<thead>
<tr>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Pin Numbering Diagram" /></td>
<td><img src="image" alt="Pin Numbering Diagram" /></td>
</tr>
</tbody>
</table>

All dimensions in mm.
## Gecko with Latches Mating Profiles

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Female</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vertical Throughboard</strong></td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td><strong>Horizontal Throughboard</strong></td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
</tr>
<tr>
<td><strong>Vertical SMT</strong></td>
<td><img src="image7" alt="Image" /></td>
<td><img src="image8" alt="Image" /></td>
<td><img src="image9" alt="Image" /></td>
</tr>
<tr>
<td><strong>Cable</strong></td>
<td><img src="image10" alt="Image" /></td>
<td><img src="image11" alt="Image" /></td>
<td><img src="image12" alt="Image" /></td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published

www.harwin.com
Gecko with Latches Connectors

Female Throughboard

- 4-finger Beryllium Copper contact.
- Positive keyway polarization features.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

### 3mm THROUGHBOARD

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 3.8</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**Recommended PC Board Pattern**

### 4.5mm THROUGHBOARD

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 3.8</td>
</tr>
<tr>
<td>B</td>
<td>Ø0.40</td>
</tr>
<tr>
<td>C</td>
<td>Ø0.55 min</td>
</tr>
</tbody>
</table>

**Recommended PC Board Pattern**

### HOW TO ORDER

**SERIES CODE**

- **TYPE**
  - V1: 3mm Throughboard
  - V2: 4.5mm Throughboard

**PACKAGING**

- R: Tape & Reeled
- P: Tape & Reel strips

**FINISH**

- 05: Gold

**TOTAL NO. OF CONTACTS**

- 06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.

Patent Published

www.harwin.com
Gecko with Latches Connectors

Female Surface Mount

- 4-finger Beryllium Copper contact.
- Positive keyway polarization features.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Available in Tape and Reel Packaging, with Pick and Place cap.

**SURFACE MOUNT**

<table>
<thead>
<tr>
<th>CALCULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 3.8</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

**HOW TO ORDER**

**SERIES CODE**

- **TYPE**
  - **S1** Surface Mount

**FINISH**

- **05** Gold

**PACKAGING**

- **R** Tape & Reeled
- **P** Tape & Reel strips

**TOTAL NO. OF CONTACTS**

- 06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.
Gecko with Latches Connectors

Female Crimp Housings

- Features potting wall for extra security.
- No. 1 position identified on housing.
- Withstands extremes of temperature: -65°C to +150°C.
- 3 polarizing points on each housing prevent mis-mating.

FEMALE

```
<table>
<thead>
<tr>
<th>A</th>
<th>B + 3.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 1.8</td>
</tr>
</tbody>
</table>

```

TOOLS

Recommended Crimp Tool - Z125-900
Positioner - Z125-901
Contact Insertion/Removal Tool - Z125-902

> Female contacts shown on following pages.
> Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

```
G125 - 204 XX 96 L0
```

SERIES CODE

- TYPE
  - 204 Female Housing

LATCHES

- L0 No Latches

FINISH

- 96 Housing

TOTAL NO. OF CONTACTS

- 06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.

Patent Published
**Gecko with Latches Connectors**

**Female Crimp Contacts, Dummy Contact**
- 4-finger Beryllium Copper contact on a female connector.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Instruction video online at [www.harwin.com/harwintv](http://www.harwin.com/harwintv).
- Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.

<table>
<thead>
<tr>
<th>CONTACTS</th>
<th>DUMMY CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>26 AWG</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="26 AWG crimp contact" /></td>
</tr>
<tr>
<td><strong>28 – 32 AWG</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="28-32 AWG crimp contact" /></td>
</tr>
</tbody>
</table>

**Wire Stripping Details**
- 26 AWG - Ø0.80 max
- 28 to 32 AWG - Ø0.72 max
- 1.50 to 1.75
- Ident Groove

**TOOLS**
- Recommended Crimp Tool – Z125-900
- Positioner – Z125-901
- Contact Insertion/Removal Tool – Z125-902
- Female crimp housing shown on previous page.
- Pre-cabled contacts shown on following page.

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G125 – 0XX 00 05</strong></td>
<td><strong>05</strong> Gold</td>
</tr>
<tr>
<td><strong>TYPE</strong></td>
<td></td>
</tr>
<tr>
<td>001</td>
<td>Female 26 AWG crimp contact</td>
</tr>
<tr>
<td>002</td>
<td>Female 28-32 AWG crimp contact</td>
</tr>
<tr>
<td>020</td>
<td>Dummy Contact (blanking plug)</td>
</tr>
</tbody>
</table>

All dimensions in mm.
# Gecko with Latches Connectors

## Female Crimp Contacts – Pre-Crimped Wires
- 4-finger Beryllium Copper contact.
- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

## Table: Female Single Ended vs. Female - Female

<table>
<thead>
<tr>
<th>Cable Length</th>
<th>Female Single Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cable Length</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cable Length</th>
<th>Female - Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cable Length</td>
</tr>
</tbody>
</table>

## Tools
- **Contact Insertion/Removal Tool** – Z125-902
- Female crimp housing and loose contacts shown on previous pages.
- Full Cable assemblies shown on following page.

## How to Order

**Series Code**
- G125
- F
- WX
- XXXX
- X
- 94

**Gender – First End**
- F: Female

**Cable Size**
- W1: 26 AWG
- W2: 28 AWG
- W3: 30 AWG

**Cable Color**
- 94: White

**Termination – Second End**
- L: Loose cut end
- F: Female

**Cable Length**
- 0150: 150mm
- 0300: 300mm (double-ended)
- 0450: 450mm (single-ended)

All dimensions in mm.
## Gecko with Latches Connectors

### Female Cable Assemblies
- 4-finger Beryllium Copper contact.
- No. 1 position identified on housing.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Back potted for added strain relief.
- Check website or Ask an Expert for available combinations.

### PART NUMBERING SYSTEM

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>GENDER - FIRST END</th>
<th>CABLE STYLE</th>
<th>CABLE SIZE</th>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125</td>
<td>F</td>
<td>C</td>
<td>1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TERMINATION - SECOND END</th>
<th>CABLE LENGTH</th>
<th>LATCHES</th>
<th>CABLE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>0150 150mm</td>
<td>L0 No Latches</td>
<td>05 White cable</td>
</tr>
<tr>
<td>F</td>
<td>0300 300mm (double-ended)</td>
<td></td>
<td>68 Multicolor cable (single-ended)</td>
</tr>
<tr>
<td></td>
<td>0450 450mm (single-ended)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>XXXX XXXXmm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Gecko with Latches Connectors

- Examples of available cable assembly options - see previous page for part numbering.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.
- Twisted Pairs are 2 twists per inch and 3 twists per inch, alternated along the connector.
Gecko with Latches Connectors

Male Vertical Throughboard

- Secure fixing to the PCB via retention barbs for through hole.
- Easy-to-release latches require no tooling.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>TYPE</th>
<th>TOTAL NO. OF CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125 - M VX XX 05 LX X</td>
<td>V1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
<tr>
<td></td>
<td>V2</td>
<td></td>
</tr>
</tbody>
</table>

CALCULATION

| A | B + 3.8 |
| B | 0.625 x (Total No. of contacts - 2) |
| C | B + 5.2 |

Recommended PC Board Pattern

PACKAGING

<table>
<thead>
<tr>
<th>LATCH</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>L0 No Latch</td>
<td>05 Gold</td>
</tr>
<tr>
<td>L1 Latch for 1.6mm PCB (use with V1)</td>
<td></td>
</tr>
<tr>
<td>L2 Latch for 2.4mm PCB (use with V2)</td>
<td></td>
</tr>
<tr>
<td>R Tape &amp; Reeled</td>
<td></td>
</tr>
<tr>
<td>P Tape &amp; Reel strips</td>
<td></td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published
# Gecko with Latches Connectors

## Male Horizontal Throughboard - Latched

- Secure fixing to the PCB via retention barbs for through hole.
- Surface mount option for automated assembly.
- Easy-to-release latches – tooling available for additional assistance with releasing latches – see part numbers Z125-926xx00.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

## Throughboard Latch

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 4.3</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 5.2</td>
</tr>
</tbody>
</table>

## Surface Mount Latch

<table>
<thead>
<tr>
<th>Recommended PC Board Pattern</th>
</tr>
</thead>
</table>

## How To Order

<table>
<thead>
<tr>
<th>G125 – M HX XX 05 LX X</th>
</tr>
</thead>
</table>

### Series Code

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>3.3mm Throughboard Tail</td>
</tr>
<tr>
<td>H2</td>
<td>4.8mm Throughboard Tail</td>
</tr>
</tbody>
</table>

### Total No. of Contacts

| 06, 10, 12, 16, 20, 26, 34, 50 |

### Packaging

<table>
<thead>
<tr>
<th>R</th>
<th>Tape &amp; Reeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Tape &amp; Reel strips</td>
</tr>
</tbody>
</table>

### Latch

<table>
<thead>
<tr>
<th>L1</th>
<th>Latch for 1.6mm PCB (use with H1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2</td>
<td>Latch for 2.4mm PCB (use with H2)</td>
</tr>
<tr>
<td>L3</td>
<td>Surface Mount Latch</td>
</tr>
</tbody>
</table>

### Finish

| 05 | Gold |

All dimensions in mm.
Gecko with Latches Connectors

Male Horizontal Throughboard - Without Latch

- Secure fixing to the PCB via retention barbs for through hole.
- Surface mount option for automated assembly.
- 2A current capacity.
- Withstands extremes of temperature: -65°C to +150°C.

THROUGHBOARD FIXING

<table>
<thead>
<tr>
<th>A</th>
<th>B + 4.3</th>
</tr>
</thead>
</table>

B = 0.625 x (Total No. of contacts - 2)

SURFACE MOUNT FIXING

| A | B |

Recommended PC Board Pattern

HOW TO ORDER

G125 - M HX XX 05 LX X

SERIES CODE

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>3.3mm Throughboard Tail</td>
</tr>
<tr>
<td>H2</td>
<td>4.8mm Throughboard Tail</td>
</tr>
</tbody>
</table>

TOTAL NO. OF CONTACTS

<table>
<thead>
<tr>
<th>CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
</tr>
</tbody>
</table>

PACKAGING

<table>
<thead>
<tr>
<th>FIXING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>L5</td>
<td>Barbs for 1.6mm PCB (use with H1)</td>
</tr>
<tr>
<td>L6</td>
<td>Barbs for 2.4mm PCB (use with H2)</td>
</tr>
<tr>
<td>L7</td>
<td>Surface Mount Fixing</td>
</tr>
</tbody>
</table>

FINISH

<table>
<thead>
<tr>
<th>FINISH</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Gold</td>
</tr>
</tbody>
</table>

All dimensions in mm.

Patent Published
Gecko with Latches Connectors

**Male Vertical Surface Mount**

- Secure fixing to the PCB via hold-down tabs (SMT).
- Easy-to-release latches require no tooling.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

**Throughboard Latch**

- **Calculation**
  - A = B + 3.8
  - B = 0.625 x (Total No. of contacts - 2)
  - C = B + 5.2

**Surface Mount Latch**

- **Recommended PC Board Pattern**

**How to Order**

- **Series Code**
  - G125 - M S1 XX 05 LX X

- **Type**
  - S1 Surface Mount

- **Total No. of Contacts**
  - 06, 10, 12, 16, 20, 26, 34, 50

- **Finish**
  - 05 Gold

- **Packaging**
  - R Tape & Reeled
  - P Tape & Reel strips

- **Latch**
  - L0 No Latch
  - L1 Latch for 1.6mm PCB
  - L2 Latch for 2.4mm PCB
  - L3 Surface Mount Latch

All dimensions in mm. Patent Published
**Gecko with Latches Connectors**

**Male Crimp Housing**
- Features potting wall for extra security.
- No. 1 position identified on housing.
- Withstands extremes of temperature: -65°C to +150°C.
- 3 polarizing points on each housing prevent mis-mating.
- Easy to release latches require no tooling.

**CALCULATION**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B + 3.8</td>
</tr>
<tr>
<td>B</td>
<td>0.625 x (Total No. of contacts - 2)</td>
</tr>
<tr>
<td>C</td>
<td>B + 5.2</td>
</tr>
</tbody>
</table>

**TOOLS**

- Recommended Crimp Tool - Z125-900
- Positioner - Z125-901
- Contact Insertion/Removal Tool - Z125-902
- Male contacts shown on following pages.

**HOW TO ORDER**

- **SERIES CODE**: G125 – 304 XX 96 LX
- **TYPE**: 304 Male Housing
- **LATCH**: L0 No Latches, L4 Latches (Male Only)
- **FINISH**: 96 Housing
- **TOTAL NO. OF CONTACTS**: 06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.
Gecko with Latches Connectors

Male Crimp Contacts

- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Instruction video online at www.harwin.com/harwintv.
- Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.

<table>
<thead>
<tr>
<th>CONTACTS</th>
<th>DUMMY CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 AWG</td>
<td></td>
</tr>
<tr>
<td>28 – 32 AWG</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WIRE STRIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 AWG - Ø0.80 max</td>
</tr>
<tr>
<td>28 to 32 AWG - Ø0.72 max</td>
</tr>
<tr>
<td>1.50 to 1.75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Recommended Crimp Tool – Z125-900
Positioner – Z125-901
Contact Insertion/Removal Tool – Z125-902

- Male crimp housing shown on previous page.
- Pre-cable contacts shown on following page.
- Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

G125 – XXX 00 05

<table>
<thead>
<tr>
<th>SERIES CODE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TYPE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Male 26 AWG crimp contact</td>
</tr>
<tr>
<td>102</td>
<td>Male 28-32 AWG crimp contact</td>
</tr>
<tr>
<td>020</td>
<td>Dummy Contact (blanking plug)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
Gecko with Latches Connectors

Male Crimp Contacts – Pre-Crimped Wires

- Ready for assembling to housing.
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.

<table>
<thead>
<tr>
<th>MALE SINGLE ENDED</th>
<th>MALE – MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cable Length" /></td>
<td><img src="image" alt="Cable Length" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MALE – FEMALE</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cable Length" /></td>
<td>Contact Insertion/Removal Tool – Z125-902</td>
</tr>
</tbody>
</table>

- Male crimp housing and loose contacts shown on previous pages.
- Full Cable assemblies shown on following page.

HOW TO ORDER

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>G125 – M WX XXXX X 94</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>GENDER – FIRST END</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 26 AWG</td>
</tr>
<tr>
<td>W2 28 AWG</td>
</tr>
<tr>
<td>W3 30 AWG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TERMINATION – SECOND END</th>
</tr>
</thead>
<tbody>
<tr>
<td>L Loose cut end</td>
</tr>
<tr>
<td>F Female</td>
</tr>
<tr>
<td>M Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CABLE LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0150 150mm</td>
</tr>
<tr>
<td>0300 300mm (double-ended)</td>
</tr>
<tr>
<td>0450 450mm (single-ended)</td>
</tr>
</tbody>
</table>

All dimensions in mm.

www.harwin.com
## Gecko with Latches Connectors

### Male Cable Assemblies

- **No. 1 position identified on housing.**
- **2A current capacity, resists high vibration and shock.**
- **Withstands extremes of temperature: -65°C to +150°C.**
- **Back potted for added strain relief.**
- **4-finger Beryllium Copper contact on the female connector.**
- **Check website or Ask an Expert for available combinations.**

### PART NUMBERING SYSTEM

<table>
<thead>
<tr>
<th>SERIES CODE</th>
<th>GENDER - FIRST END</th>
<th>CABLE STYLE</th>
<th>CABLE SIZE</th>
<th>TOTAL NO. OF CONTACTS</th>
<th>TERMINATION - SECOND END</th>
<th>CABLE LENGTH</th>
<th>LATCHES</th>
<th>CABLE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125</td>
<td>M</td>
<td>C</td>
<td>1</td>
<td>06, 10, 12, 16, 20, 26, 34, 50</td>
<td>L</td>
<td>150mm</td>
<td>L0</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>2</td>
<td></td>
<td>F</td>
<td>300mm (double-ended)</td>
<td>L4</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>M</td>
<td>450mm (single-ended)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- All dimensions in mm.
- Patent Published

www.harwin.com 68
Gecko with Latches Connectors

- Examples of available cable assembly options - see previous page for part numbering.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.
- Twisted Pairs are 2 twists per inch and 3 twists per inch, alternated along the connector.

### MALE SINGLE ENDED

#### MALE – FEMALE WITH TWISTED PAIRS

#### MALE – MALE

All dimensions in mm.
Gecko with Latches Connectors

Flexible Circuit Assemblies

- Surface mount connectors with latches assembled to flexible printed circuit for an alternative to cable connection.
- Improved bend radius and lower mated height than equivalent cable assemblies.
- The free end of the single-ended assembly is compatible with 0.5mm pitch FPC connectors.
- Contact Harwin for alternative connector sizes and cable lengths.

MALE SINGLE ENDED

MALE - FEMALE DOUBLE ENDED

HOW TO ORDER

SERIES CODE

CONNECTOR – FIRST END

MS1 Male with Latches

TOTAL NO. OF CONTACTS

10

CONNECTOR – SECOND END

L Free End (Single Ended)
FS1 Female compatible with Latches

CIRCUIT LENGTH

075 75mm

All dimensions in mm.

www.harwin.com
## Gecko Connectors Tooling

- Instruction sheets can be accessed at [www.harwin.com/instructions](http://www.harwin.com/instructions).
- A Gecko Crimping Instruction video is available at [www.harwin.com/harwintv](http://www.harwin.com/harwintv).

### Hand Crimp Tool

- Precision tool with ratchet mechanism and 8-indent form.
- Must be used with positioner.
- Instruction sheet available.

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>Signal crimps</th>
<th>Power crimps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z125-900</td>
<td>Z125-903</td>
<td></td>
</tr>
</tbody>
</table>

### Positioner

- Must be used with hand crimp tool.

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>Signal crimps</th>
<th>Power crimps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z125-901</td>
<td>Z125-904</td>
<td></td>
</tr>
</tbody>
</table>

### Insertion/Removal Tool

- For inserting and removing crimped signal contacts into the rear of housings.
- Instruction sheet available.

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>Z125-902</th>
</tr>
</thead>
</table>

### Insertion/Removal Tool

- For inserting and removing crimped power contacts into the rear of housings.
- Instruction sheet available.

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>Z125-905</th>
</tr>
</thead>
</table>

All dimensions in mm.

- Patent Published

www.harwin.com
# Gecko Connectors Tooling

> Instruction sheets can be accessed at [www.harwin.com/instructions](http://www.harwin.com/instructions).

<table>
<thead>
<tr>
<th>HEX DRIVE BIT</th>
<th>BALL HEX DRIVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings.</td>
<td>1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings.</td>
</tr>
<tr>
<td>For use with torque tooling or similar equipment.</td>
<td>Ball-shaped end can be used at a wide range of angles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>ORDER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z80-298</td>
<td>Z9950-00</td>
</tr>
<tr>
<td>Z9952-00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCREWDRIVER</th>
<th>DELATCH TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>For use with Gecko Screw-Lok board mount nuts.</td>
<td>For assisting with unmating latched connectors.</td>
</tr>
<tr>
<td>Board mount nuts to be tightened to a torque of 21 ±2cmN.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>ORDER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z80-298</td>
<td>Z125-926xx00</td>
</tr>
</tbody>
</table>

All dimensions in mm.

Replace xx with No. of Contacts: 06, 10, 12, 16, 20, 26, 34 or 50.