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.

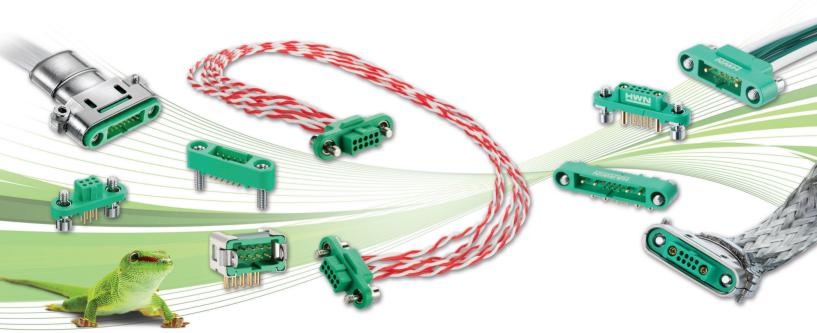
Gecko provides a low-profile, dual-row solution for all variations of cable-to-board, board-to-board and cable-to-cable interconnect requirements. With up to 50 contacts per connector, but still capable of 2A per contact, Gecko gives both significant weight and space-saving advantages over Micro-D connections. 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

Gecko-SL or Latches Gecko-MT

- 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
- Additional power contacts incorporated into the smallest, lightest mixed-layout connector
- Choice of 2 or 4 power contacts rated to 13A each
- Compatible with existing lightweight metal hoods





^{*} Granted US9017089, Pending GB2501063, Pending EP2642604

Gecko Connectors Product Features

Four Finger Beryllium Copper Contact

Unique patented pending high-reliability contact design ensures signal integrity under extremes of bump, vibration and shock. Durable to over 1,000 mating cycles.



Keyway Polarization Points

3 polarizing points on each component prevent mis-mating.





No. 1 Position identified, Potting Wall

Housings are clearly marked with identifier for fast visual inspection. Cable connectors feature a rear potting wall adding an extra level of strain relief.



Packaged in Tape & Reel

All connectors for PCB assembly are available packaged in industry standard Tape and Reel format for automated assembly.



Robust Metal Backshells

Lightweight aluminium hoods / backshells available for all connector sizes from stock. Supplied with tie-bands to attach external braiding for shielded cable assemblies.



Pre-assembled Cable Configurations

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.



Minimal Outgassing

www.harwin.com

Low outgassing properties from future-proofed plastic; within NASA and ESA recommendations.



Operating Temperature Range

Performance is maintained across the full operating temperature range of -65°C to +150°C.



Gecko-MT Connectors Specifications

Materials

Housings: Glass-filled High Temperature

Thermoplastic UL94V-0

Female contacts: Beryllium Copper

Male contacts

Signal PCB Connector: Phosphor Bronze

Signal Crimp: Brass

Power (all): Beryllium Copper

Finish

Signal Contacts: 0.2 - 0.3μm (8 - 12μ") Gold,

over 1.5 - 2.0μm (60 - 80μ") Nickel

Power Contacts: 0.8 - 1.0μm (30 - 40μ") Gold,

over 1.5 - 2.5μm (60 - 100μ") Nickel

Screw-Loks: Stainless Steel

: 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: $20m\Omega$ max After conditioning: $25m\Omega$ max

Insulation resistance

Initial: $10G\Omega$ min at 500V DC After conditioning: $>1G\Omega$ 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

*Bump severity:

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

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

*Vibration sensitivity: 10Hz to 2000Hz, 1.5mm,

198m/s² (20G) duration 6 hours 390m/s² (40G), 4000 ±10 bumps

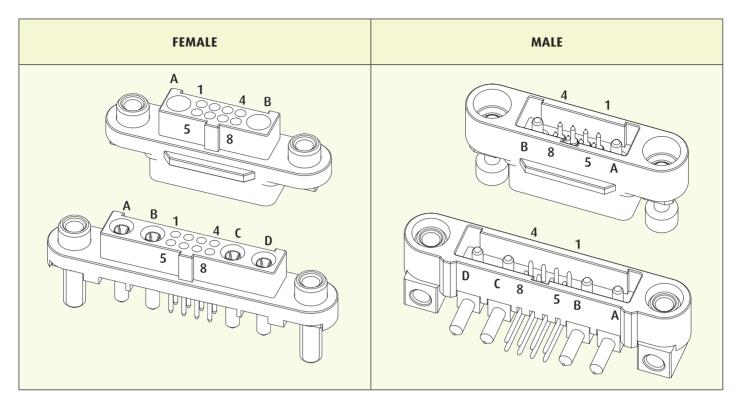
*Shock severity: 981m/s² (100G) for 6ms in Z axis 490m/s² (50G) for 11ms in X & Y axes

*Acceleration severity: 490m/s² (50G)

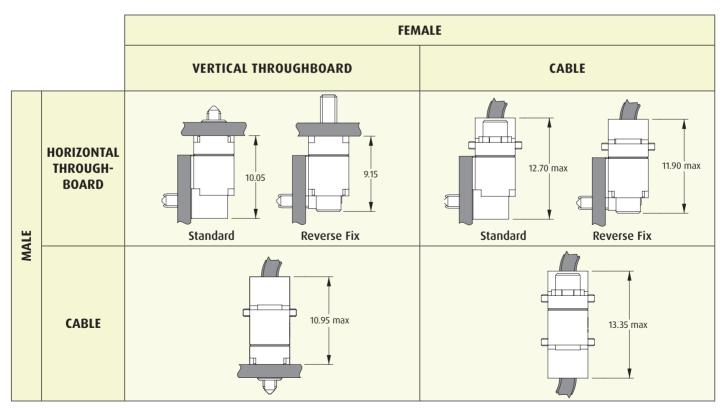


^{*} Tested with latched connectors.

Gecko-MT Pin Numbering



Gecko-MT Mating Profiles

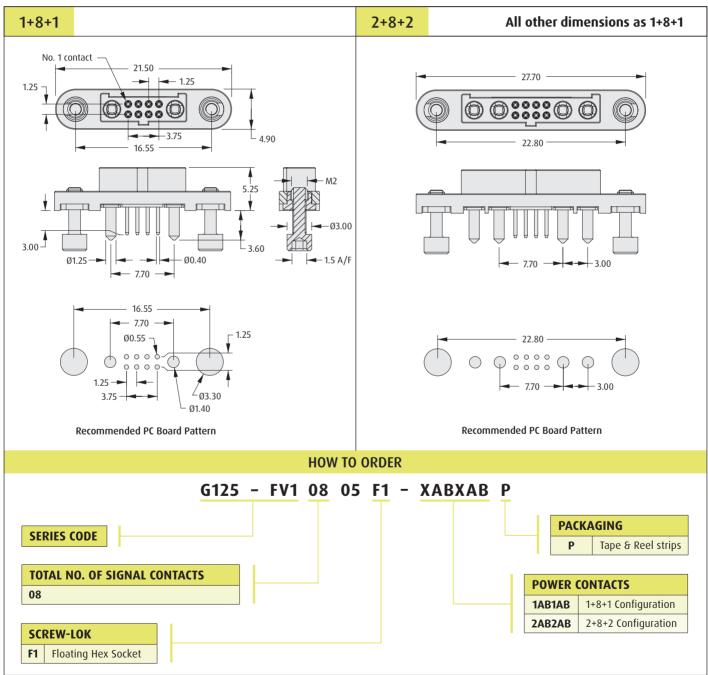




Female Vertical Throughboard

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





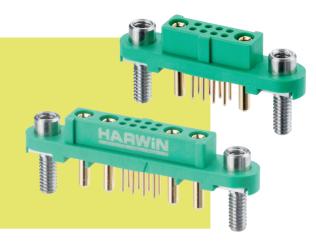
Patent Published

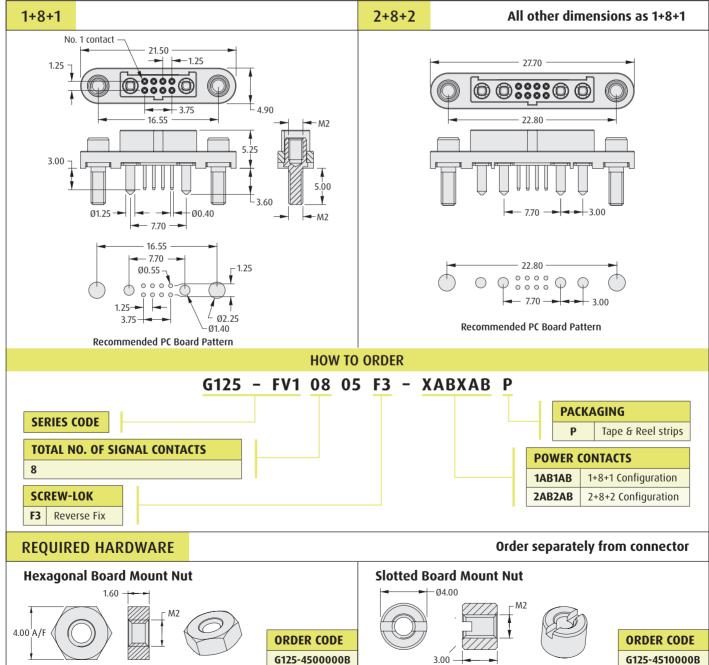


www.harwin.com

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.





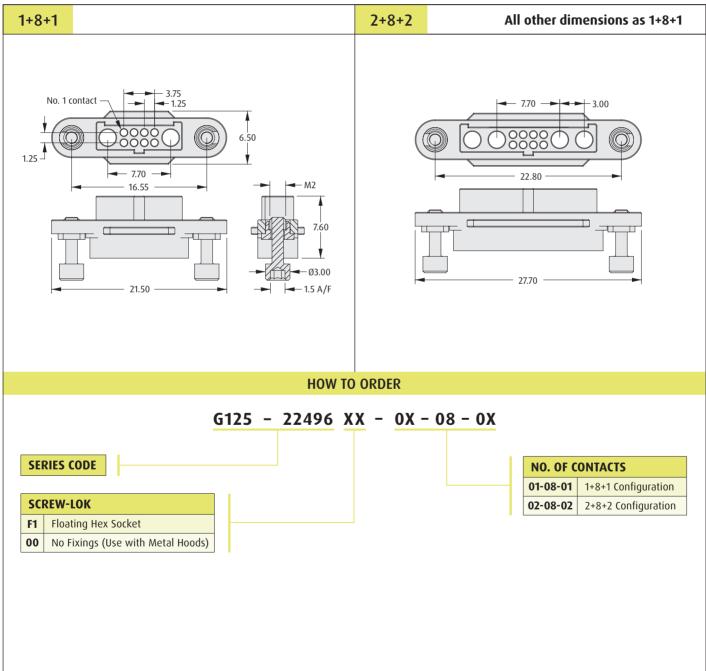
All dimensions in mm.



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.
- **▶** Use with female crimp contacts shown on a following page.



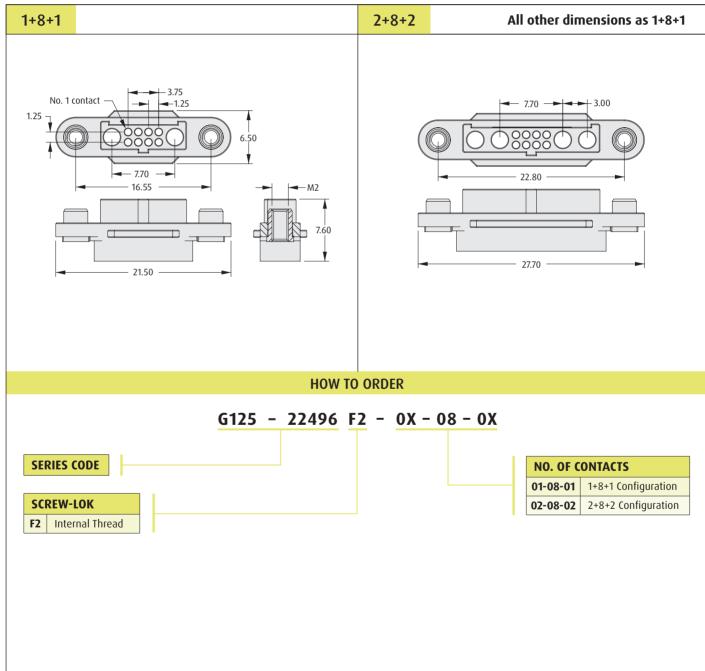




Female Cable Housings - Reverse Fix

- ➤ 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.
- **▶** Use with female crimp contacts shown on following page.





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.



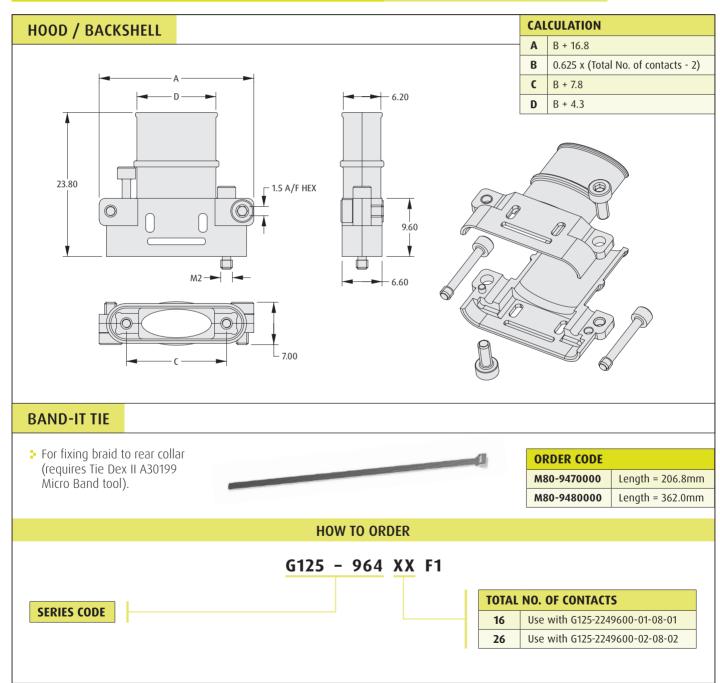
CONTACTS **POWER CONTACT 26 AWG 18 AWG** 6.90 4.45 WIRE STRIPPING DETAILS 28 - 32 AWG 18 AWG - Ø1.80 max Ident Groove 26 AWG - Ø0.80 max 28 to 32 AWG - Ø0.72 max 1.50 to 1.75 - 26 to 32 AWG 1.90 to 2.30 - 18 AWG **TOOLS** Recommended Crimp Tools - Z125-900 (signal), Female crimp housings shown on previous pages. Z125-903 (power) > Instruction sheets available at **Positioner** – Z125-901 (signal), Z125-904 (power) www.harwin.com/instructions. Contact Insertion/Removal Tool - Z125-902 (signal), Z125-905 (power) **HOW TO ORDER** G125 - 0XX 00 05 **SERIES CODE FINISH TYPE** Gold 001 Female 26 AWG crimp contact Female 28-32 AWG crimp contact 002 050 Female power crimp contact

All dimensions in mm.

Female Metal Hood / Backshell

- ➤ Supplied as a kit, including 2 metal hood halves, extended fixing screws for female connectors, and short screws to join the two hood halves together.
- **▶** Use with G125-2249600-xx-08-xx female crimp housings without fixings fixings are supplied with these hoods.
- ► Tie-band can be used to attach external braid, to construct a shielded cable assembly.

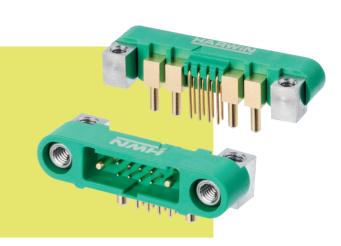


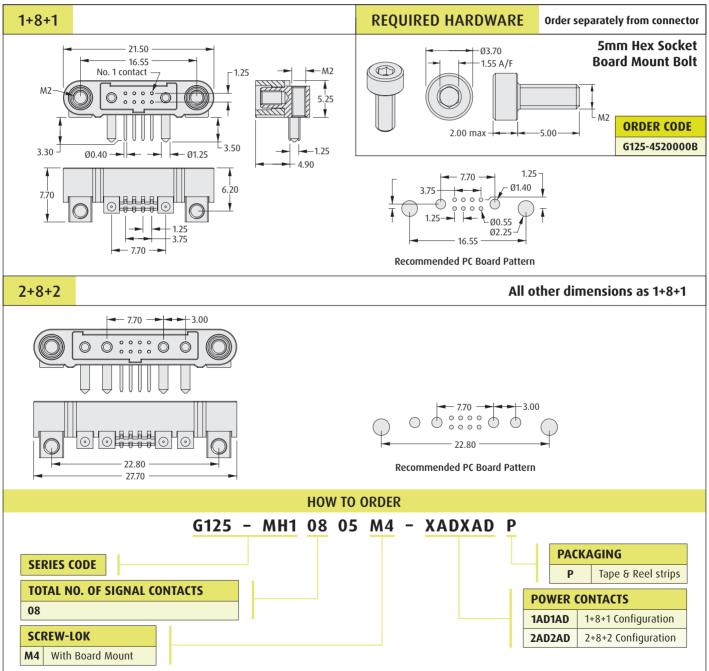




Male Horizontal Throughboard

- **▶** 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 see bottom of page.

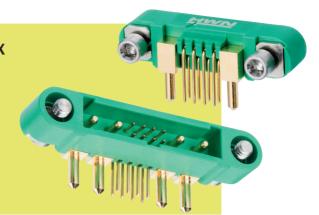


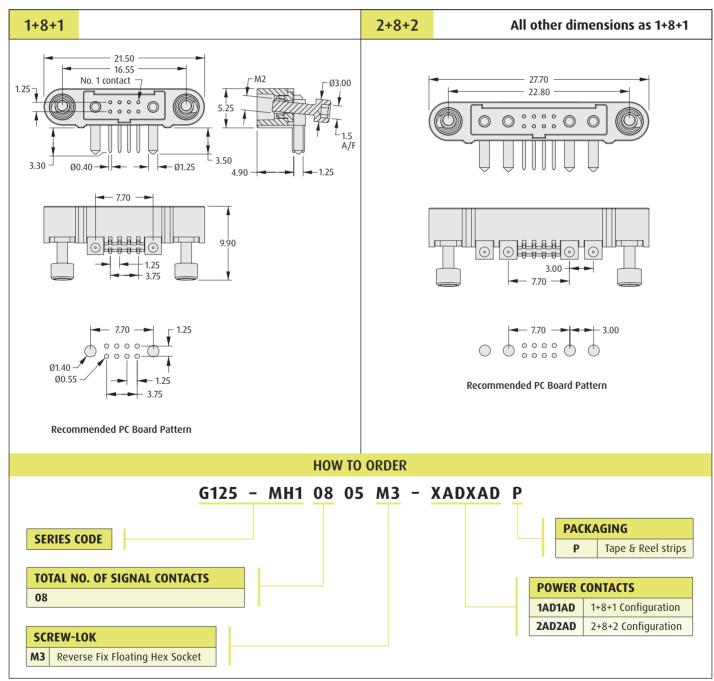




Male Horizontal Throughboard - Reverse Fix

- 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.

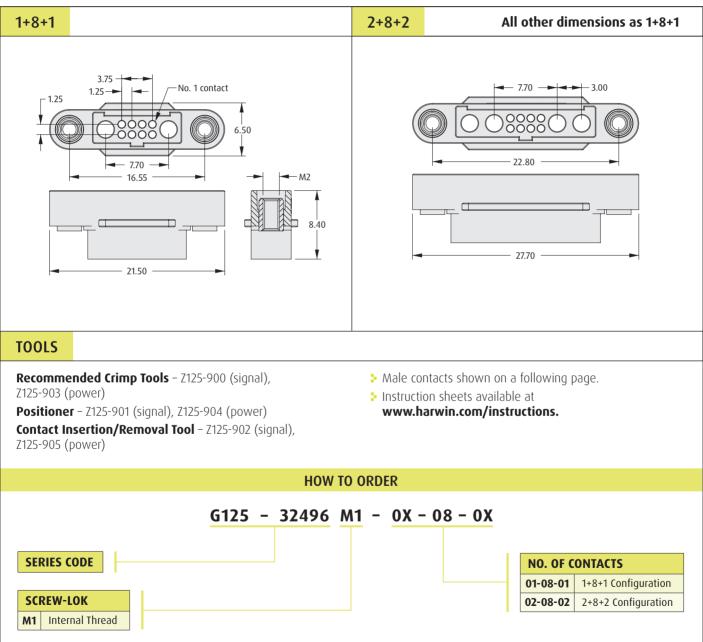




Male Cable Housings

- **▶** Features potting wall for backpotting to give extra security.
- ▶ No. 1 position identified on housing.
- Stainless steel screw fixing to mate with floating screw-loks on female connectors.
- Compatible with metal backshells.
- **▶** Use with male crimp contacts shown on a following page.

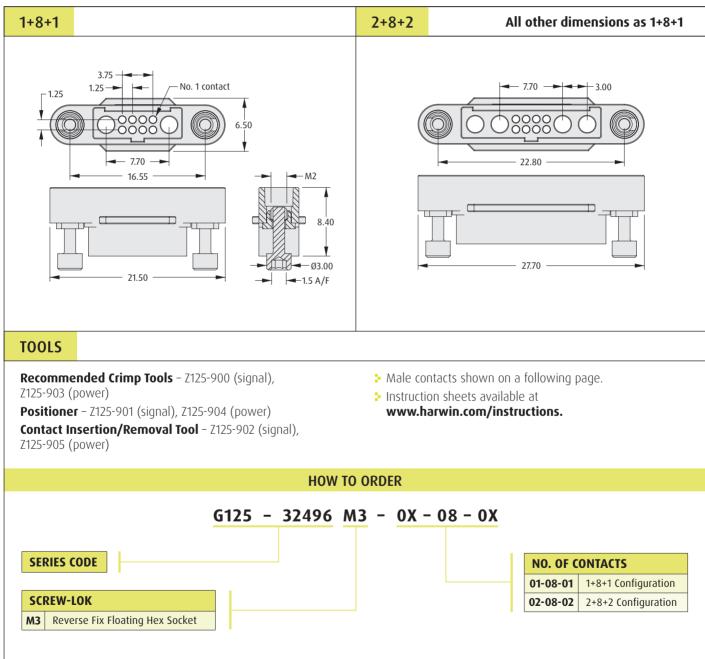




Male Cable Housings - Reverse Fix

- ➤ Reverse fix floating screw-lok suitable for board-to-cable applications, where the female connector is located on the
- Features potting wall for backpotting to give extra security.
- ▶ No. 1 position identified on housing.
- Use with male crimp contacts shown on following page.





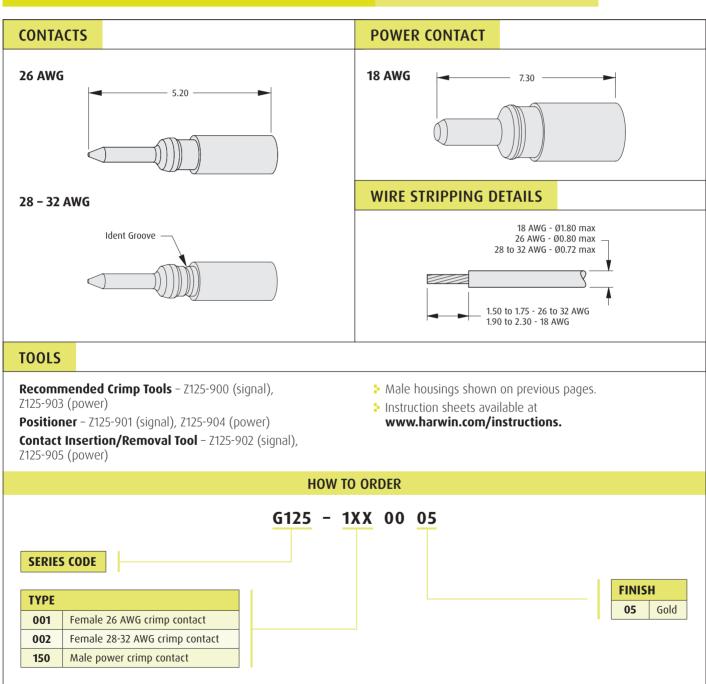
All dimensions in mm. Patent Published

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Male Crimp Contacts

- ➤ Crimp barrel meets all crimp guidelines and standards.
- ► Instruction video online at www.harwin.com/harwintv.



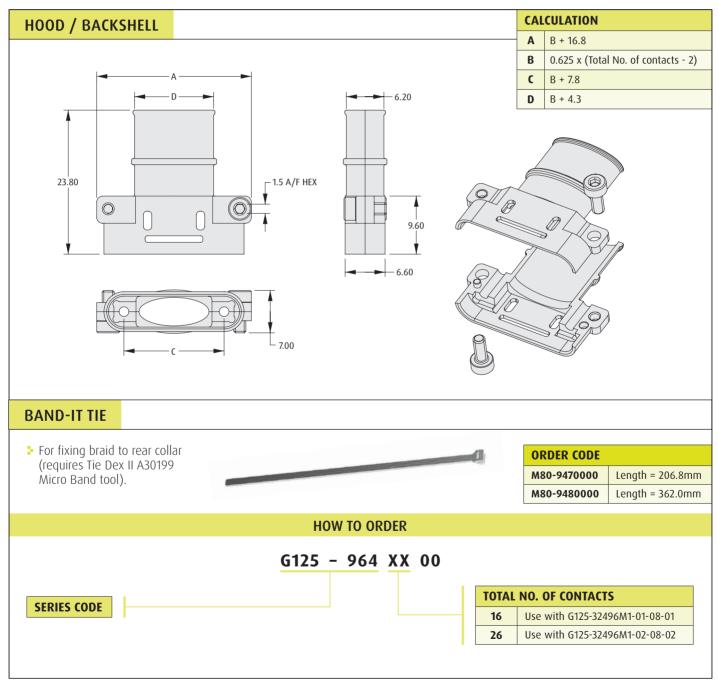


All dimensions in mm.

Male Metal Hood / Backshell

- Supplied as a kit, including 2 metal hood halves and short screws to join the two hood halves together.
- ▶ Use with G125-32496M1-xx-08-xx male crimp housings.
- ► Tie-band can be used to attach external braid, to construct a shielded cable assembly.







Gecko Screw-Lok 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

 $\begin{array}{ll} \text{Initial:} & 20\text{m}\Omega \text{ max} \\ \text{After conditioning:} & 25\text{m}\Omega \text{ max} \end{array}$

Insulation resistance

 $\begin{array}{ll} \text{Initial:} & \text{10G}\Omega \text{ min at 500V DC} \\ \text{After conditioning:} & \text{>1G}\Omega \text{ min at 500V DC} \\ \end{array}$

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

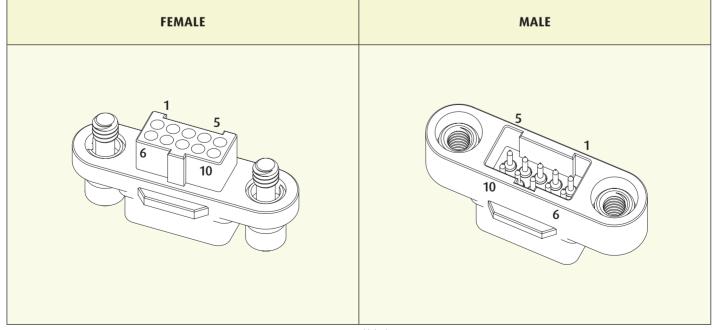
*Bump severity: 390m/s² (40G), 4000 ±10 bumps *Shock severity: 981m/s² (100G) for 6ms in Z axis

490m/s² (50G) for 11ms in X & Y axes

*Acceleration severity: 490m/s² (50G)

* Tested with latched connectors.

Pin Numbering





Gecko Screw-Lok Mating Profiles

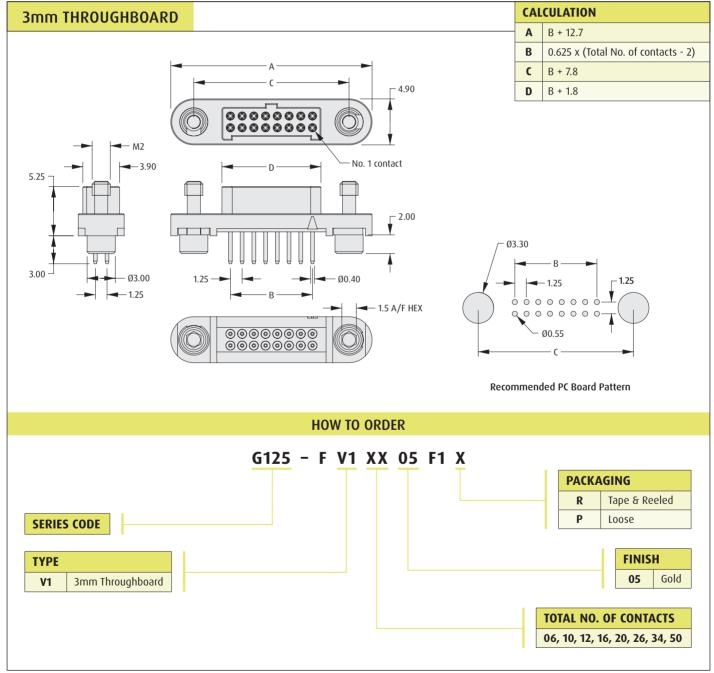
| | | FEMALE | | | |
|------|---------------------------------|-----------------------|----------------------|----------------------|--|
| | | VERTICAL THROUGHBOARD | VERTICAL SMT | CABLE | |
| MALE | VERTICAL THROUGH- BOARD | 7.15 | 7.25 | 9.80 max | |
| | HORIZONTAL THROUGH- BOARD | Standard Reverse Fix | Standard Reverse Fix | Standard Reverse Fix | |
| | VERTICAL SMT | 7.23 | 7.30 | 9.95 max | |
| | CABLE | 10.90 max | 11.05 max | 13.38 max | |

<u>HARWIN</u>

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.

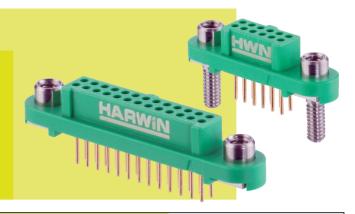


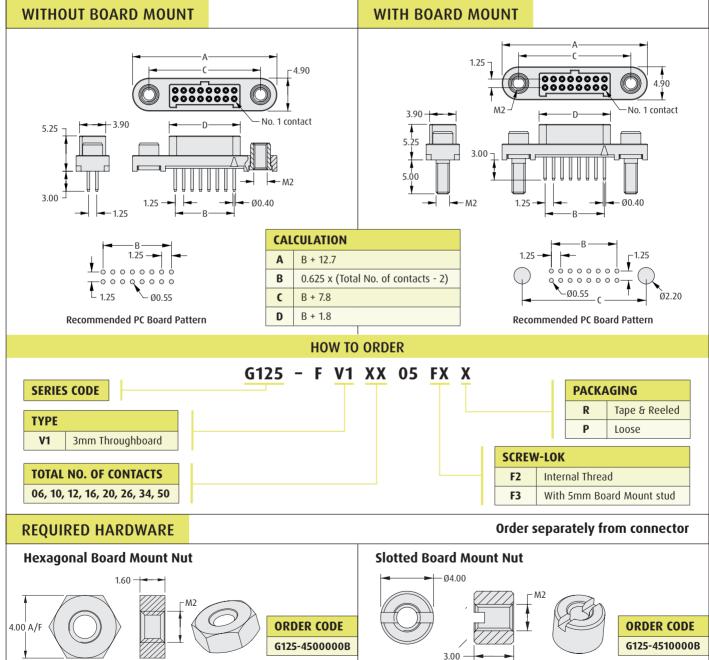




Female Throughboard - Reverse Fix

- ♣ 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.

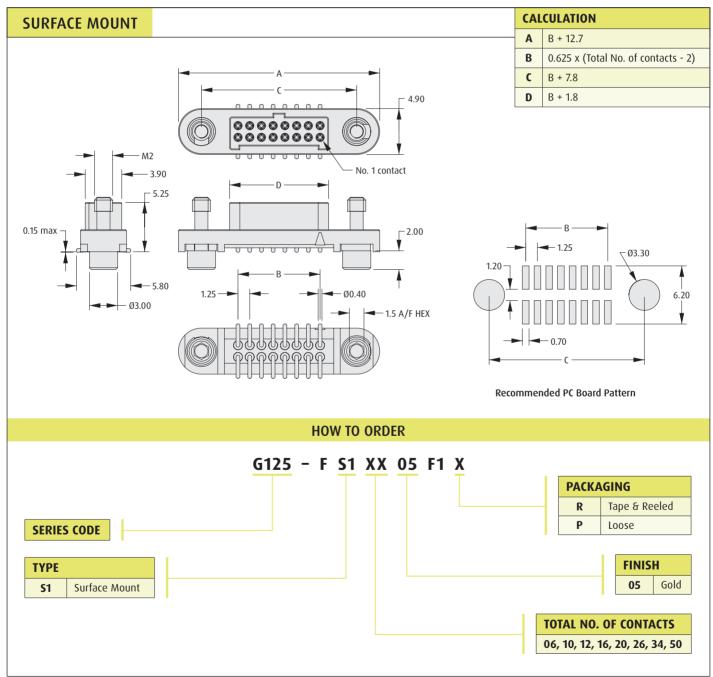




Female Surface Mount

- ♣ 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.



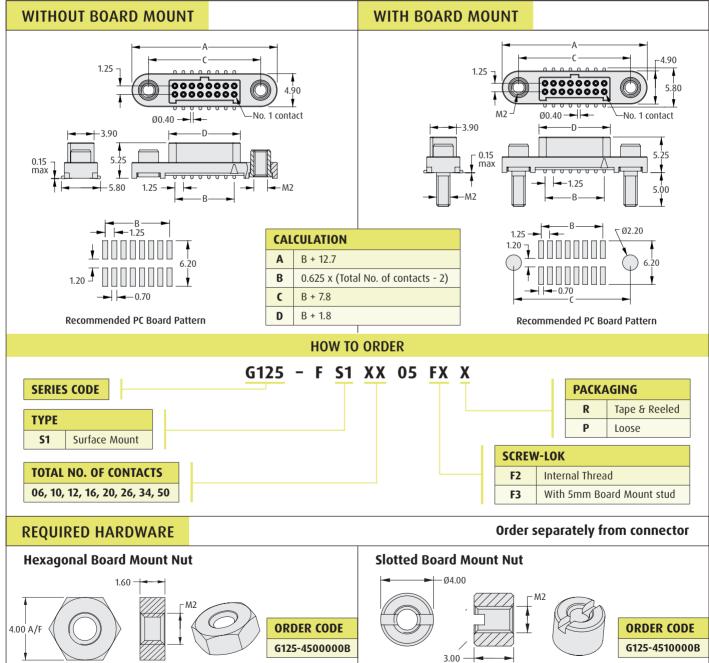




Female Surface Mount - Reverse Fix

- 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.



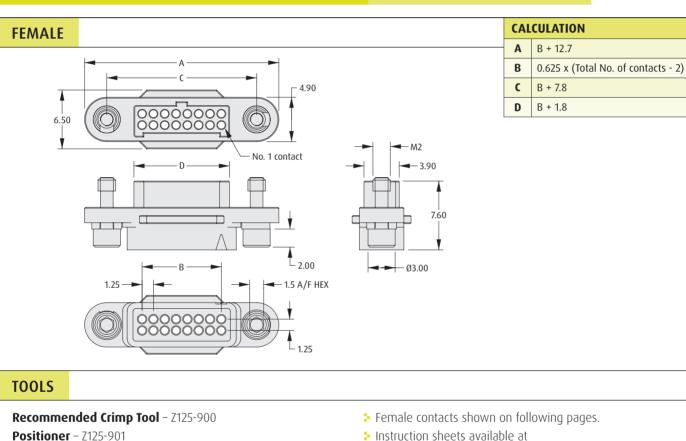




Female Crimp Housings

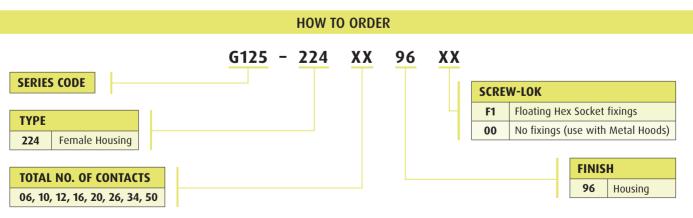
- Features 2.5mm potting wall for extra security.
- No. 1 position identified on housing.
- **▶** 3 polarizing points on each housing prevent mis-mating.
- ► Available without fixing screws, for use with metal hoods shown on a following page.
- Use with female crimp contacts and pre-cabled contacts shown on following pages.





Contact Insertion/Removal Tool - Z125-902

Instruction sheets available at www.harwin.com/instructions.



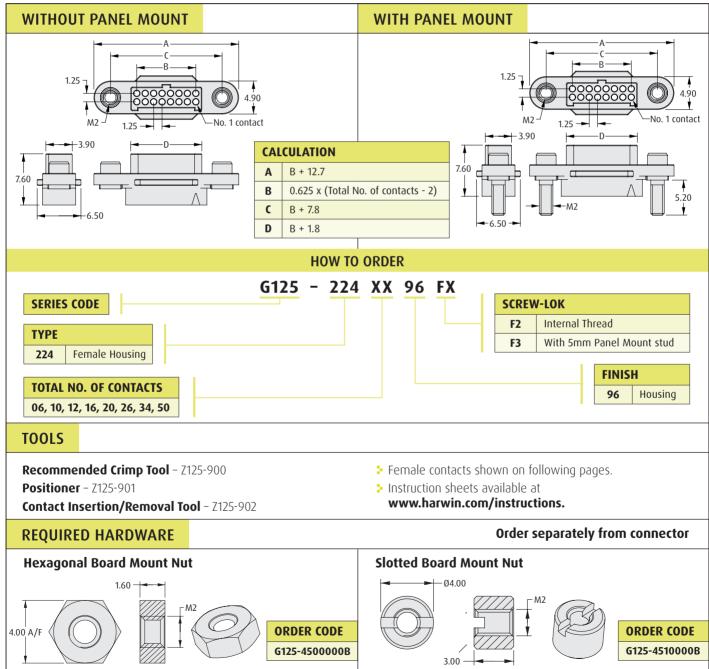
All dimensions in mm.



Female Crimp Housings - Reverse Fix

- Features 2.5mm potting wall for extra security.
- Use with female crimp contacts and pre-cabled contacts shown on following pages.
- ➡ Stainless steel screw fixing mates to applicable male connector fitted with floating screw-loks.
- Order nuts for panel mount separately see bottom of page.



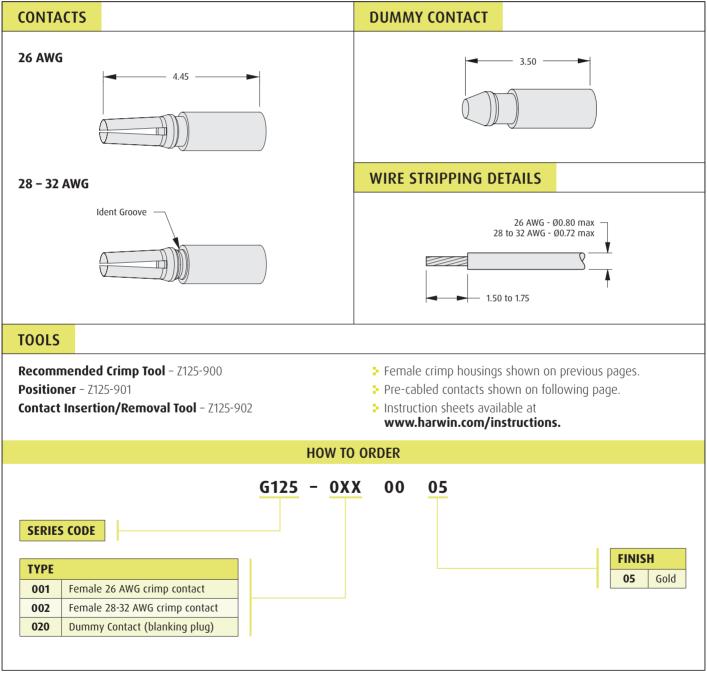




Female Crimp Contacts, Dummy Contact

- ♣ 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.
- ▶ Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.





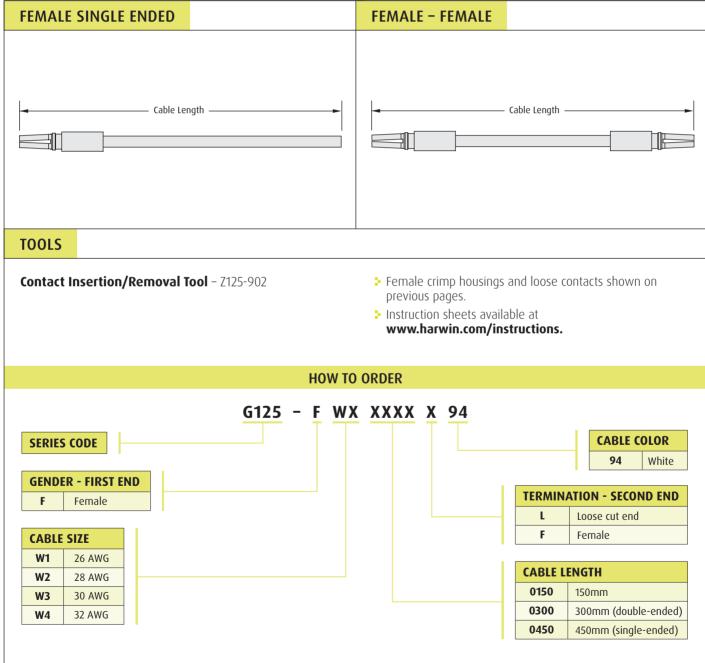
All dimensions in mm.



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.



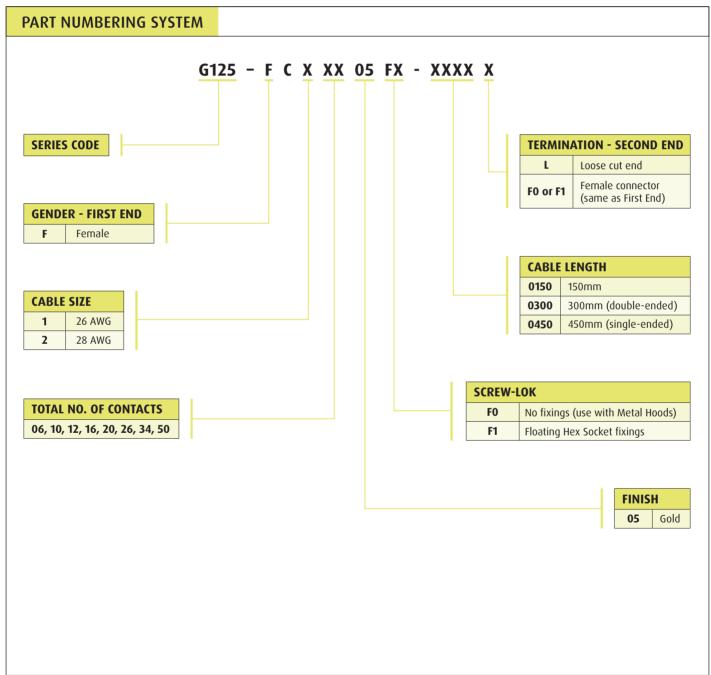




Female Cable Assemblies

- ♣ 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.

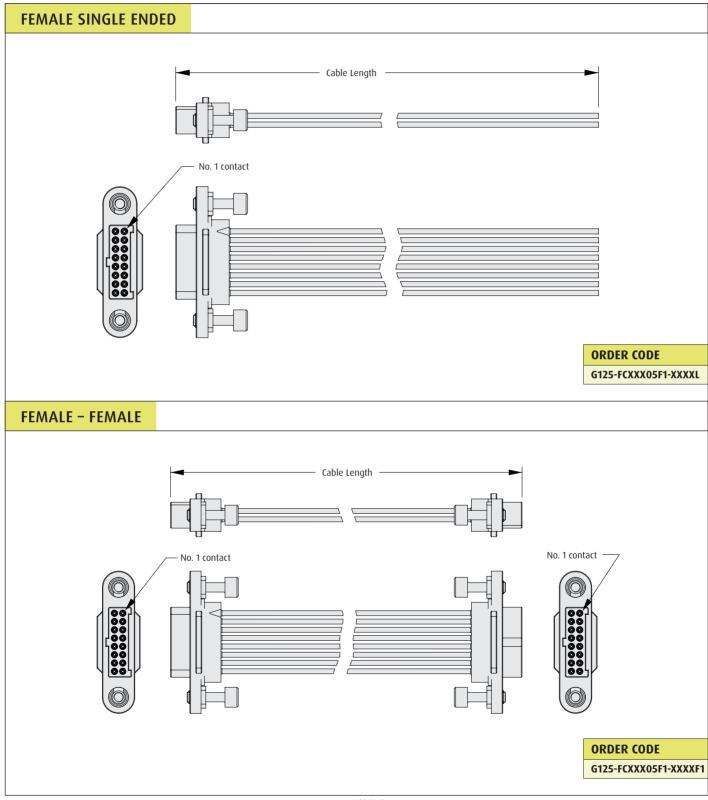






Female Cable Assemblies

- See previous page for cable length options.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.



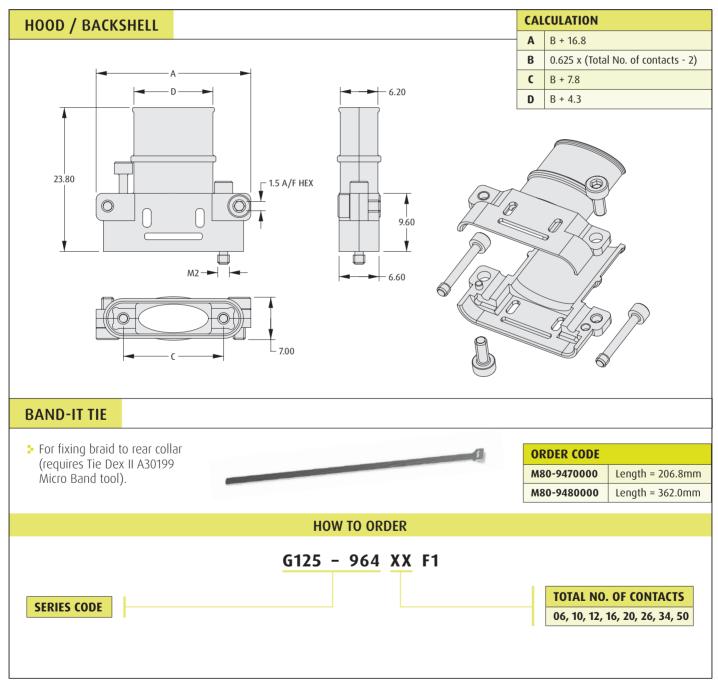
All dimensions in mm.



Female Metal Hood / Backshell

- ➤ Supplied as a kit, including 2 metal hood halves, extended fixing screws for female connectors, and short screws to join the two hood halves together.
- ► Use with G125-224xx9600 female crimp housings without fixings fixings are supplied with these hoods.
- ▶ Tie-band can be used to attach external braid, to construct a shielded cable assembly.



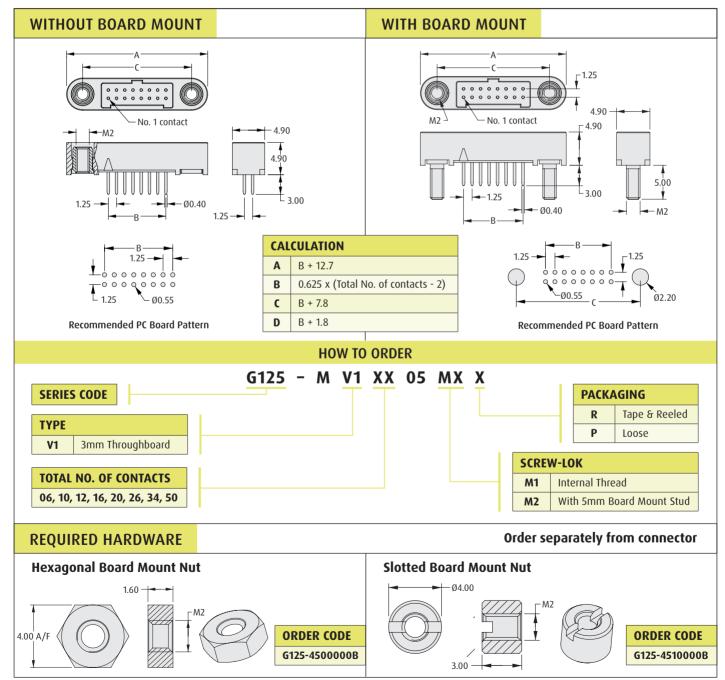




Male Vertical Throughboard

- 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.

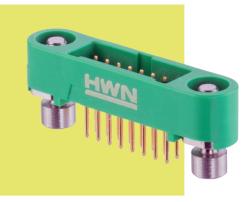


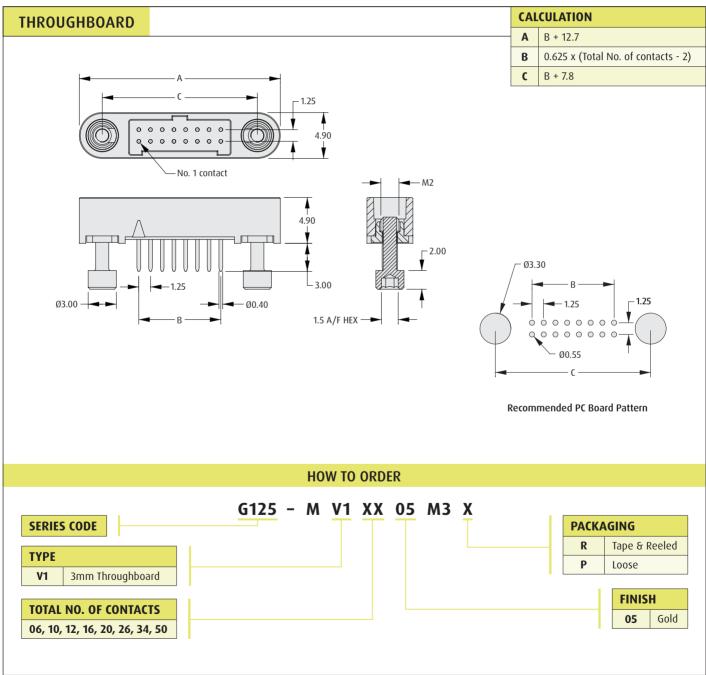




Male Vertical Throughboard - Reverse Fix

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



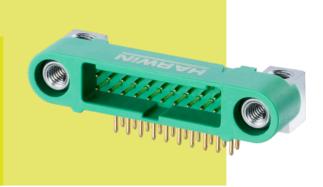


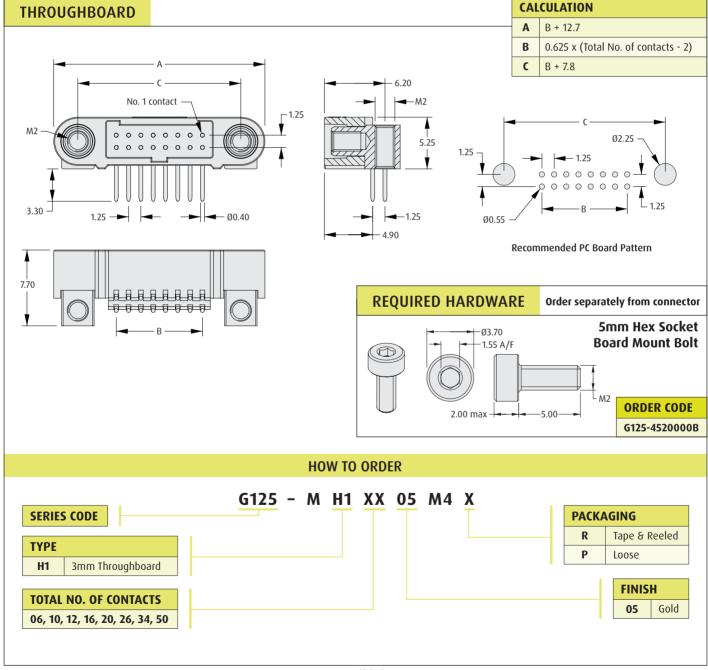
All dimensions in mm.



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.





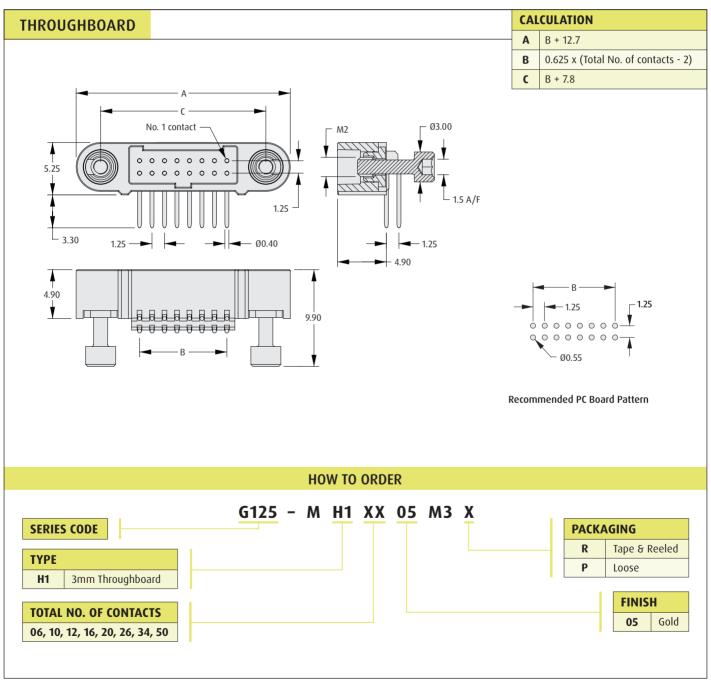
All dimensions in mm.



Male Horizontal Throughboard - Reverse Fix

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





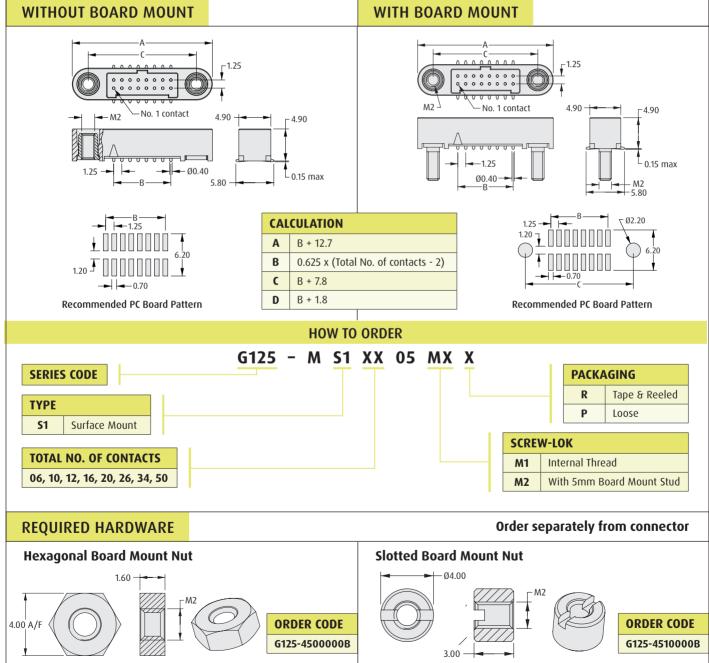
All dimensions in mm.



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.



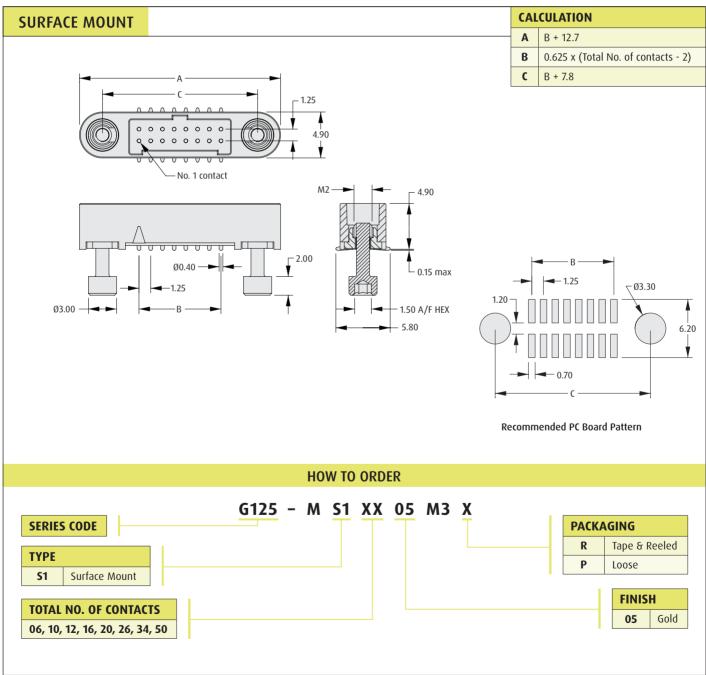




Male Vertical Surface Mount - Reverse Fix

- 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.





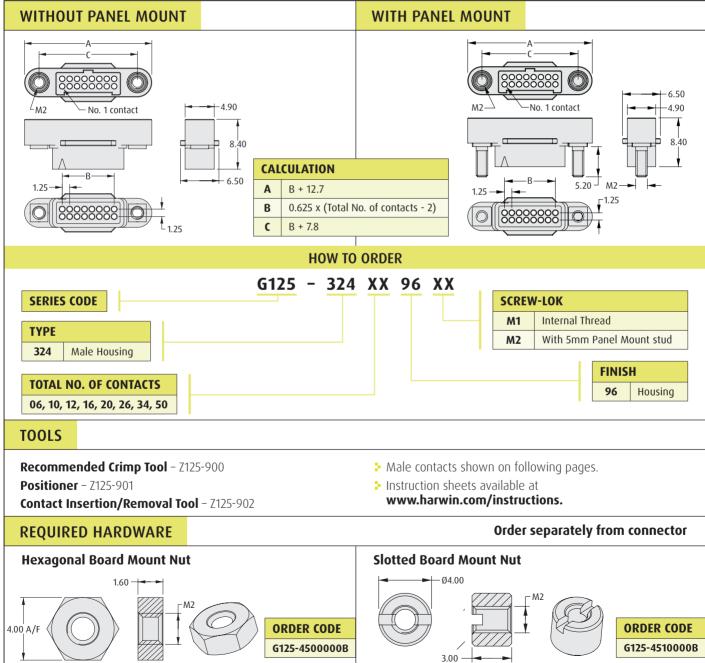
All dimensions in mm.



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.
- Use with male crimp contacts and pre-cabled contacts shown on following pages.
- Order nuts for panel mount separately see bottom of page.





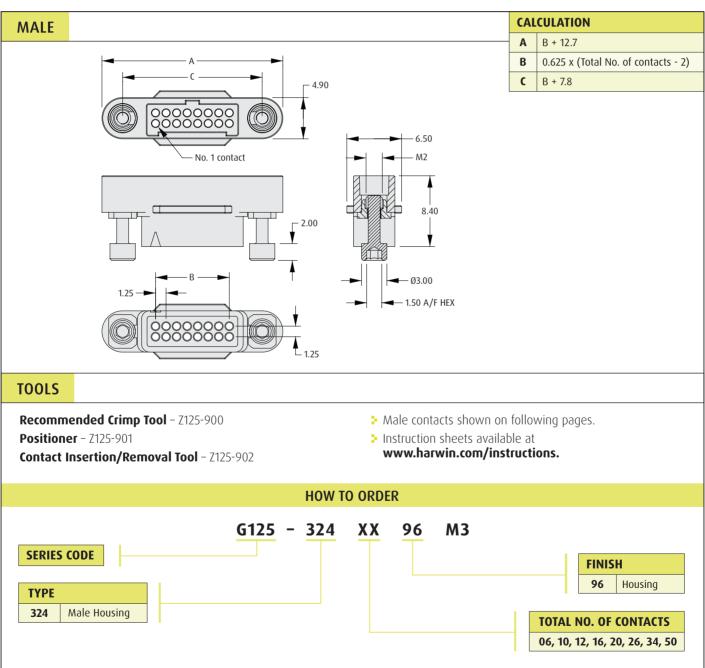


Gecko Connectors

Male Crimp Housing - Reverse Fix

- Features 2.5mm potting wall for extra security.
- ➤ Use with male crimp contacts and pre-cabled contacts shown on following pages.
- 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.

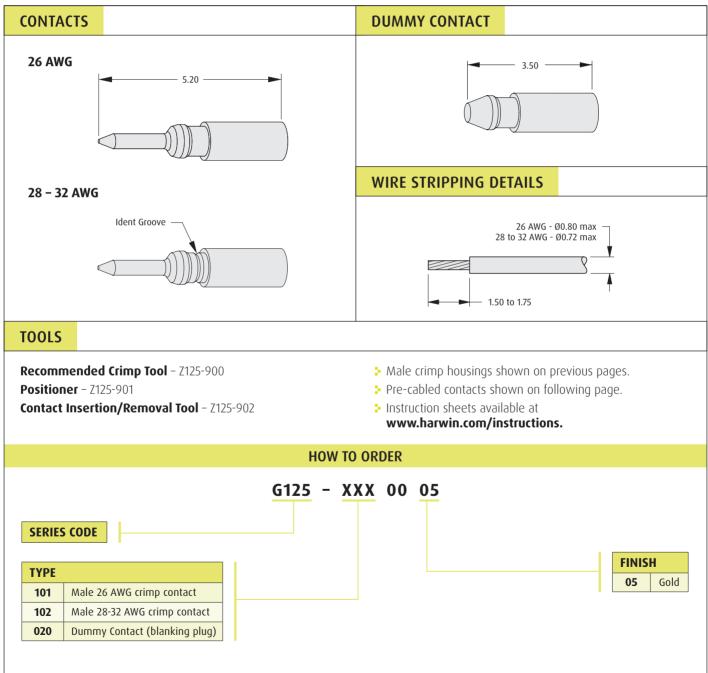




Male Crimp Contacts, Dummy Contact

- 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.

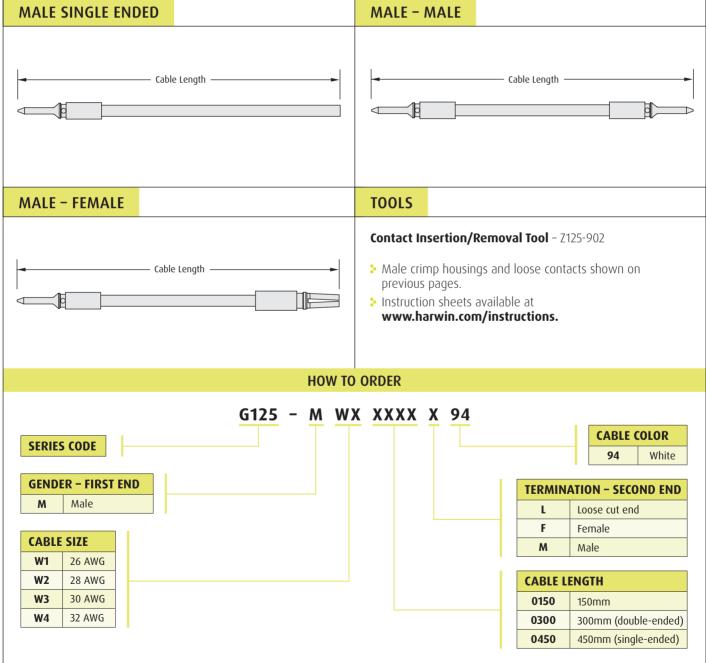




Male Crimp Contacts - Pre-Crimped Wires

- 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.





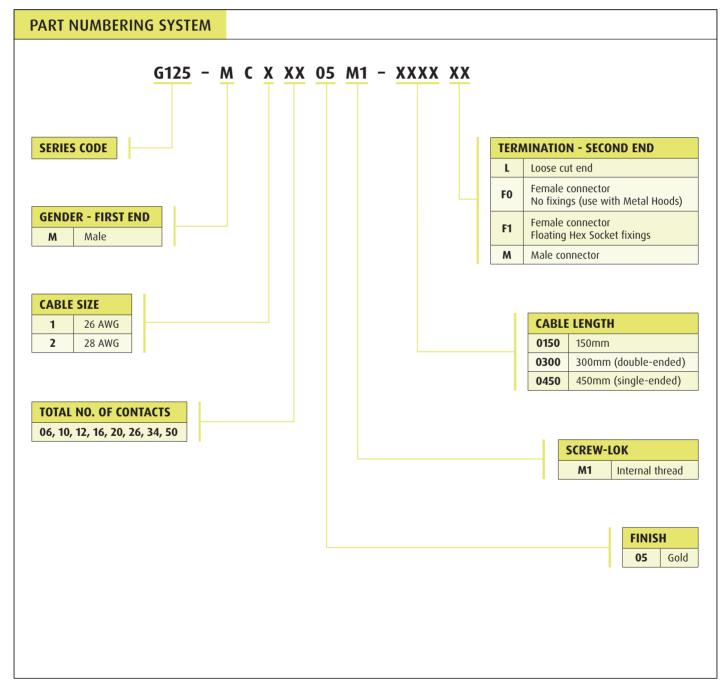
All dimensions in mm.



Male Cable Assemblies

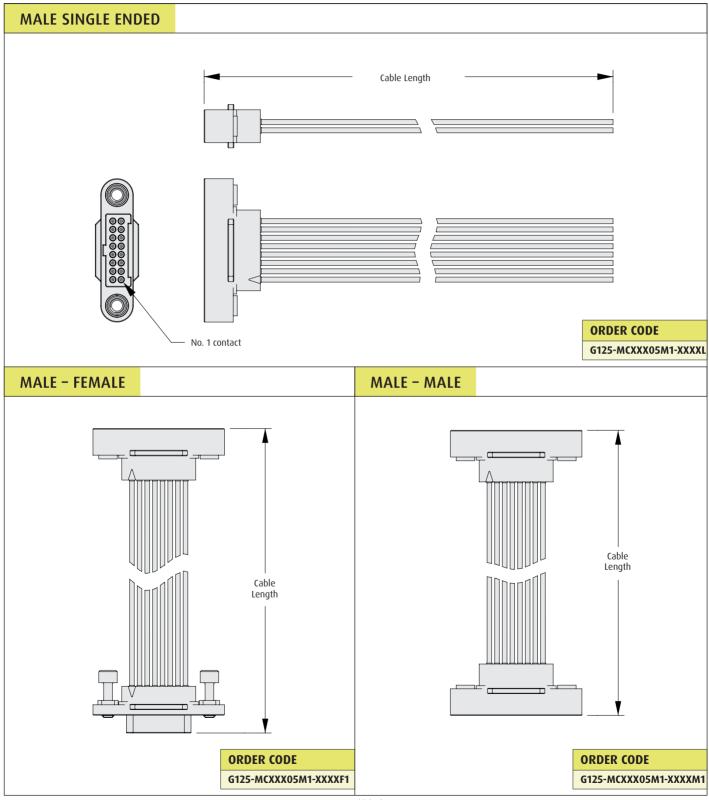
- ♣ 4-finger Beryllium Copper contact.
- No. 1 position identified on housing.
- Stainless steel screw fixing to mate with applicable male connector.
- ▶ Back potted for added strain relief.





Male Cable Assemblies

- See previous page for cable length options.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.



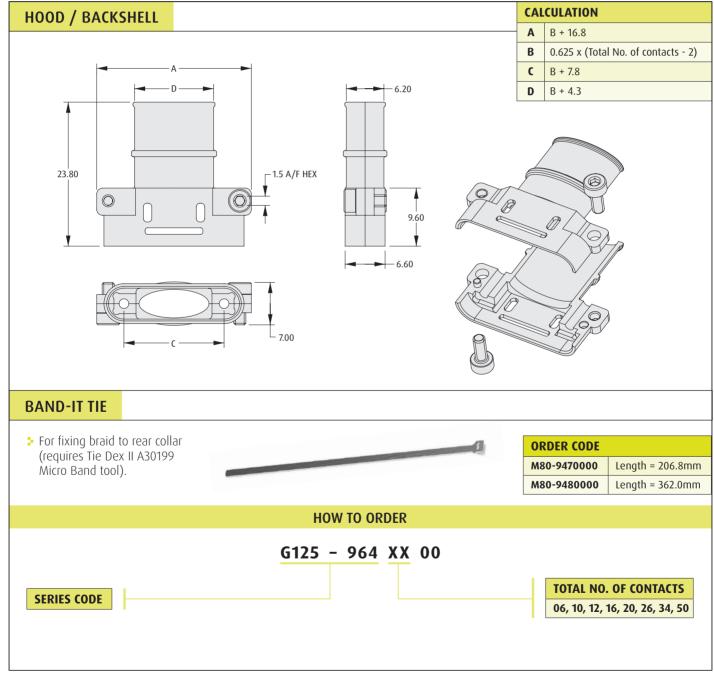
All dimensions in mm.



Male Metal Hood / Backshell

- Supplied as a kit, including 2 metal hood halves and short screws to join the two hood halves together.
- ▶ Use with G125-324xx96M1 male crimp housings.
- Tie-band can be used to attach external braid, to construct a shielded cable assembly.



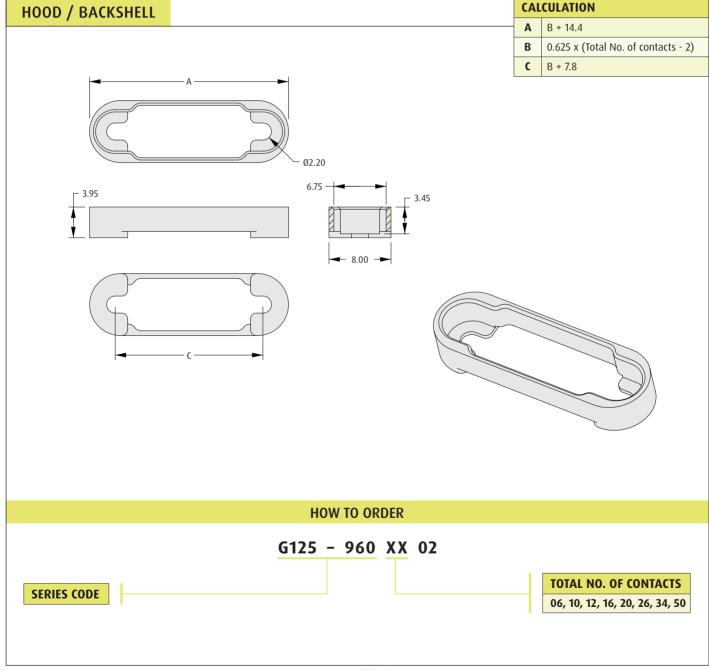




Throughboard Metal Hood / Backshell

- **▶** Use with G125-MV1xx05M2x connectors for EMC shielding on a PCB mounted application.
- **▶** Use with G125-324xx96M2 connectors for EMC shielding on a panel mount application.
- ➤ Mating female cable connector G125-224xx9600 to be fitted with metal backshell G125-964xxF1 for complete EMC shielded connection.





Gecko with Latches 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

Latches: Copper Alloy

: 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: $20m\Omega$ max After conditioning: $25m\Omega$ max

Insulation resistance

Initial: $10G\Omega$ min at 500V DC After conditioning: $>1G\Omega$ 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,

*Bump severity: 390m/s² (20G) duration 6 hours *Bump severity: 390m/s² (40G), 4000 ±10 bumps *Shock severity: 981m/s² (100G) for 6ms in Z axis

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

| FEMALE | MALE |
|----------|------|
| 1 6 6 12 | 12 7 |



Gecko with Latches Mating Profiles

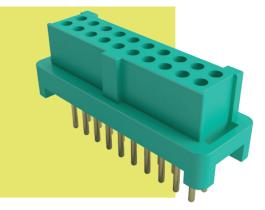
| | | FEMALE | | |
|------|---------------------------------|-----------------------|--------------|----------|
| | | VERTICAL THROUGHBOARD | VERTICAL SMT | CABLE |
| | VERTICAL THROUGH- BOARD | 7.15 | 7.23 | 7.90 max |
| MALE | HORIZONTAL THROUGH- BOARD | 8.60 | 8.68 | 9.55 max |
| W/ | VERTICAL SMT | 7.23 | 7.31 | 8.05 max |
| | CABLE | 9.00 max | 9.15 max | 9.60 max |

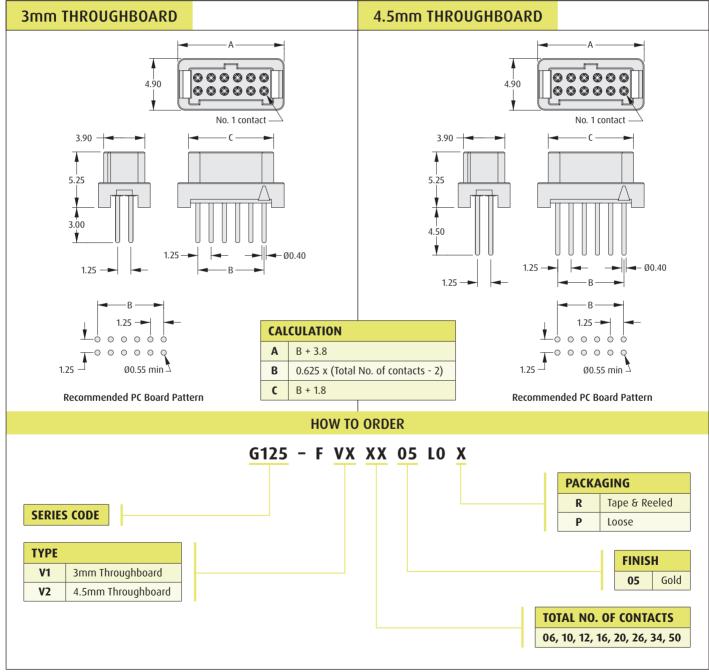
48



Female Throughboard

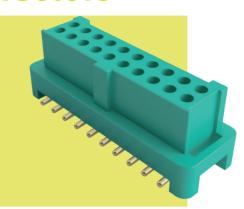
- → 4-finger Beryllium Copper contact.
- ▶ Positive keyway polarization features.
- **▶** 2A current capacity, resists high vibration and shock.
- ▶ Withstands extremes of temperature: -65°C to +150°C.

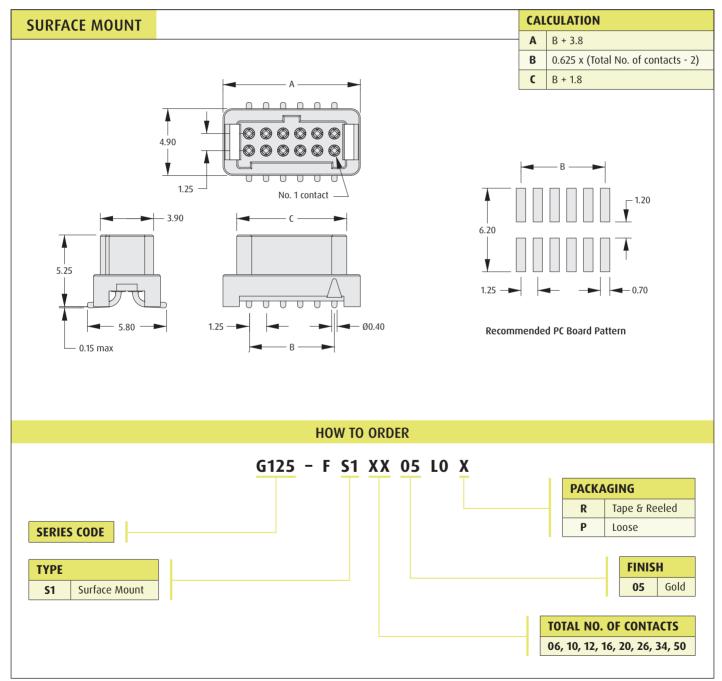




Female Surface Mount

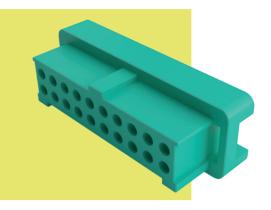
- ♣ 4-finger Beryllium Copper contact.
- ▶ Positive keyway polarization features.
- **▶** 2A current capacity, resists high vibration and shock.
- ▶ Withstands extremes of temperature: -65°C to +150°C.
- ▶ Available in Tape and Reel Packaging, with Pick and Place cap.

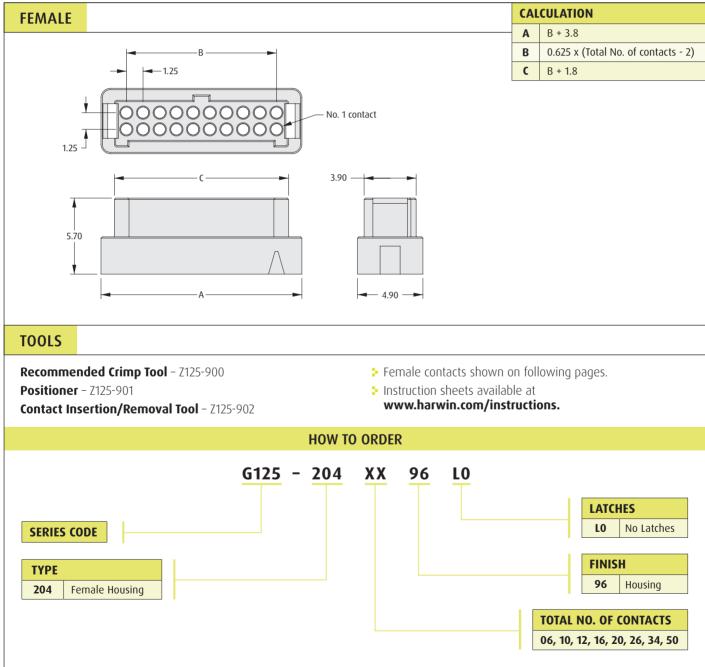




Female Crimp Housings

- ▶ 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.

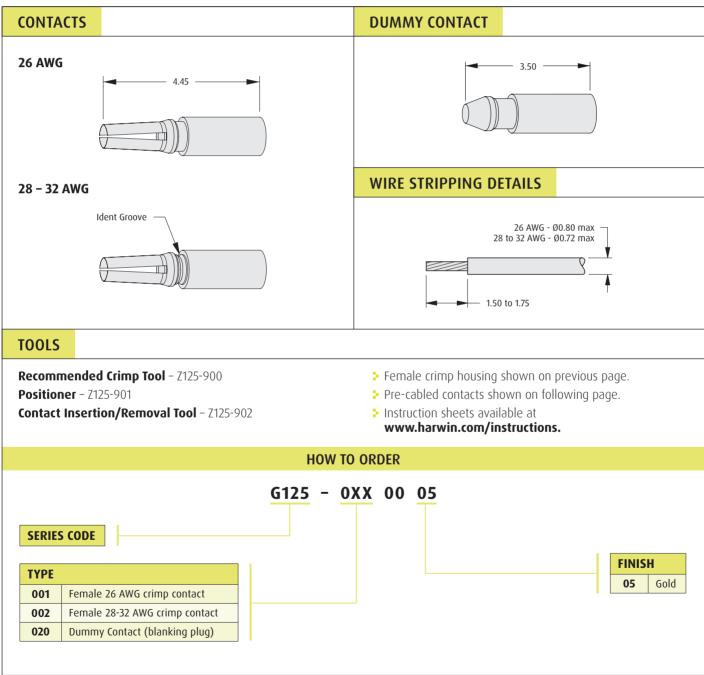




Female Crimp Contacts, Dummy Contact

- ♣ 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.
- ▶ Dummy Contact can be used for additional polarization of keying of multiple connectors. Also called Blanking Plug.



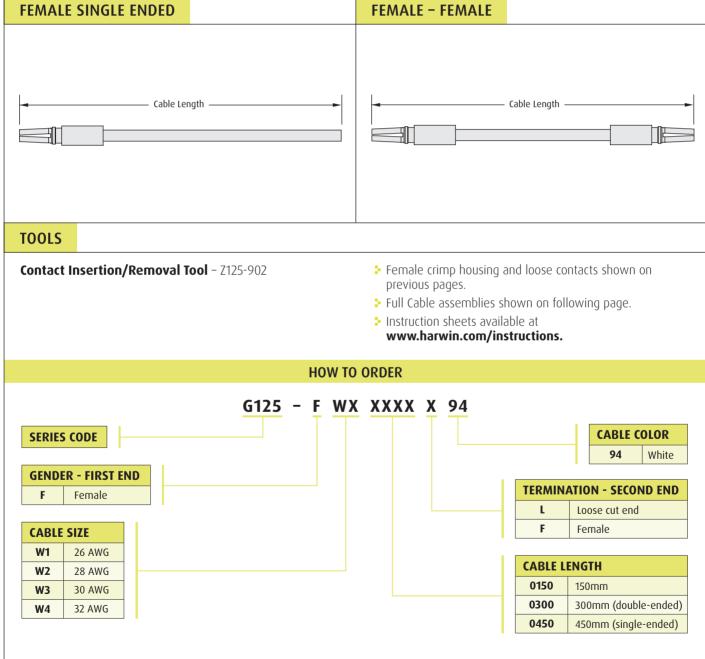


All dimensions in mm.

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.



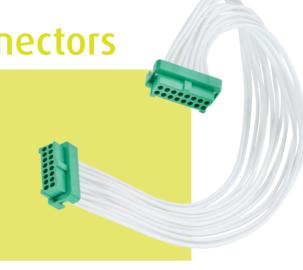


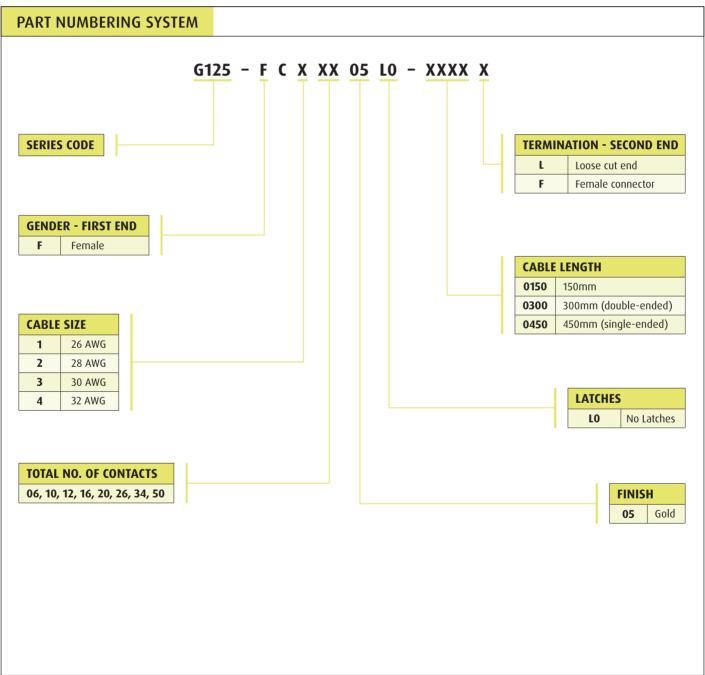
All dimensions in mm.

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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.

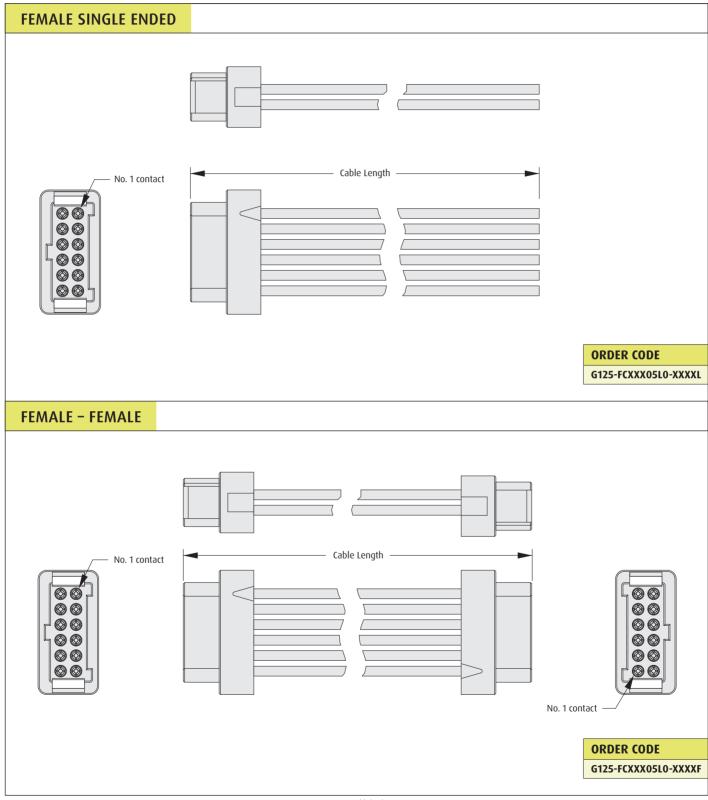




All dimensions in mm.

Female Cable Assemblies

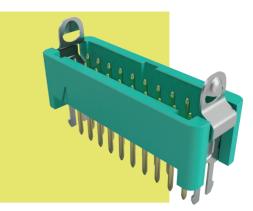
- See previous page for cable length options.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.

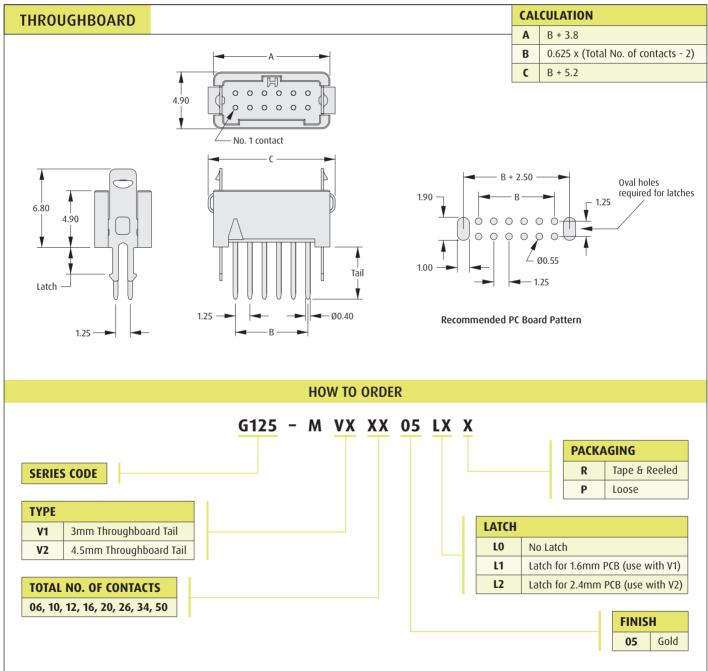




Male Vertical Throughboard

- Secure fixing to the PCB via retention barbs for through hole.
- **▶** 2A current capacity, resists high vibration and shock.
- ➤ Withstands extremes of temperature: -65°C to +150°C.

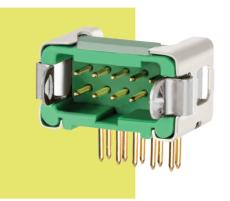


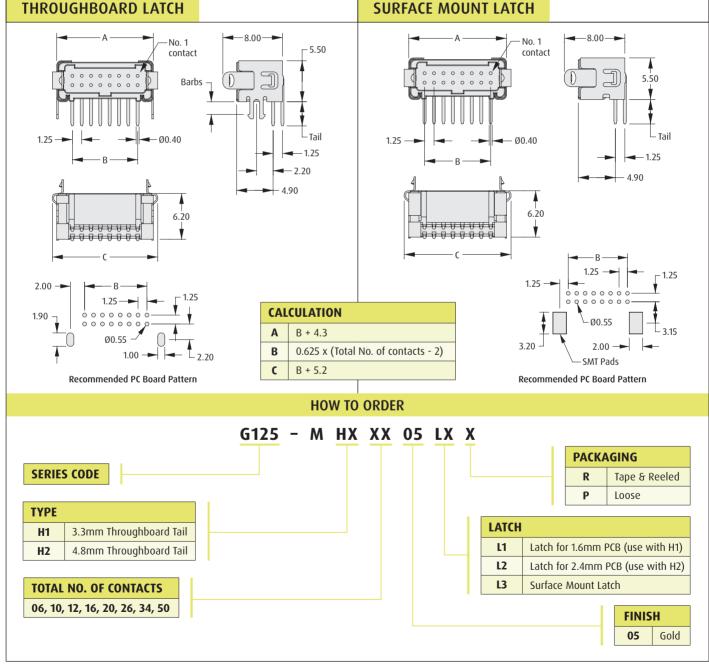




Male Horizontal Throughboard - Latched

- Secure fixing to the PCB via retention barbs for through hole.
- Surface mount option for automated assembly.
- - see part numbers Z125-926xx00.
- **▶** 2A current capacity, resists high vibration and shock.
- ▶ Withstands extremes of temperature: -65°C to +150°C.

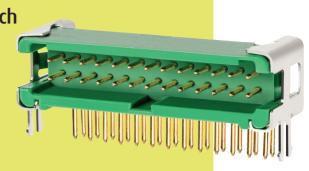


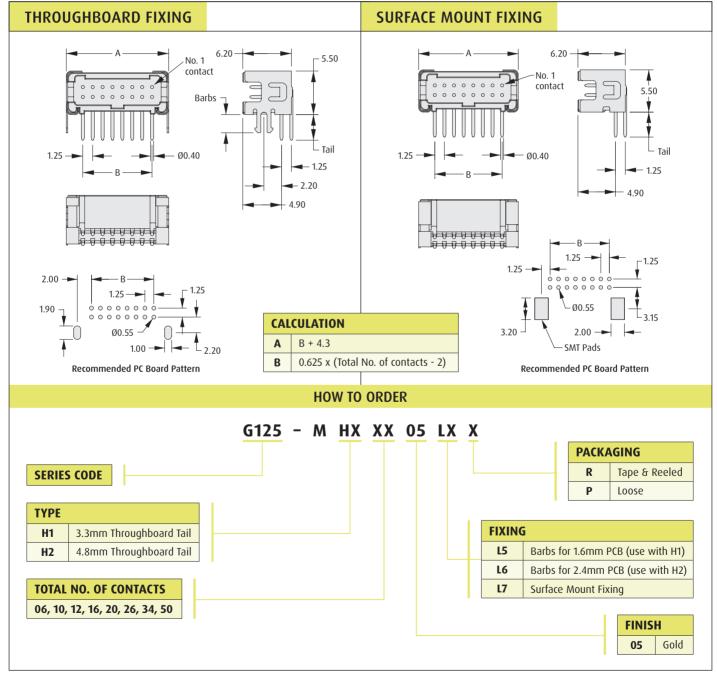




Male Horizontal Throughboard - Without Latch

- 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.



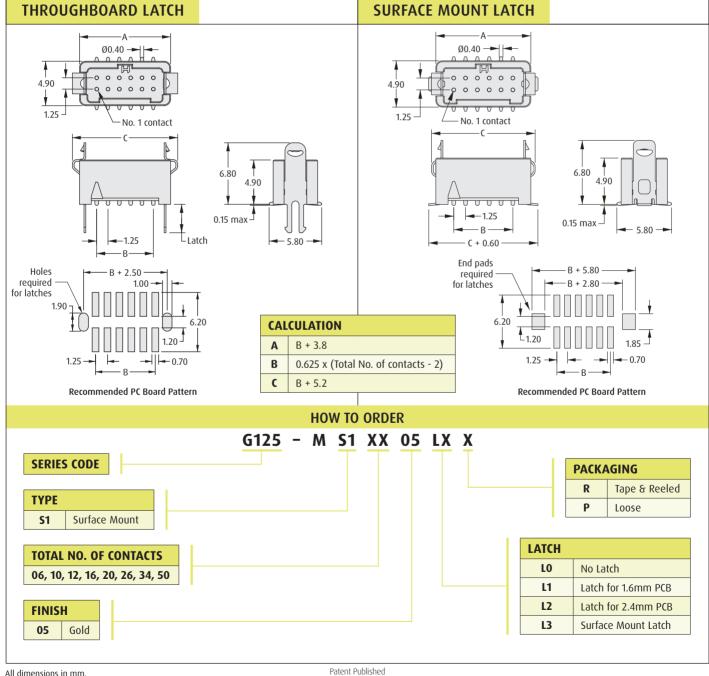


All dimensions in mm.

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.

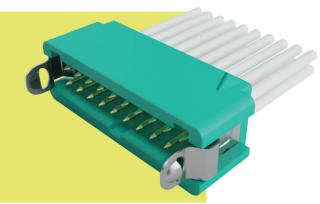


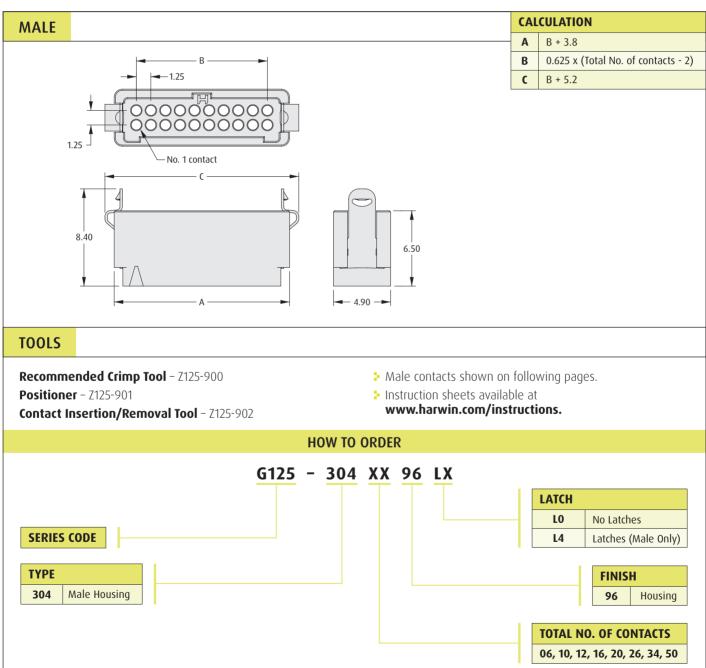


All dimensions in mm.

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.

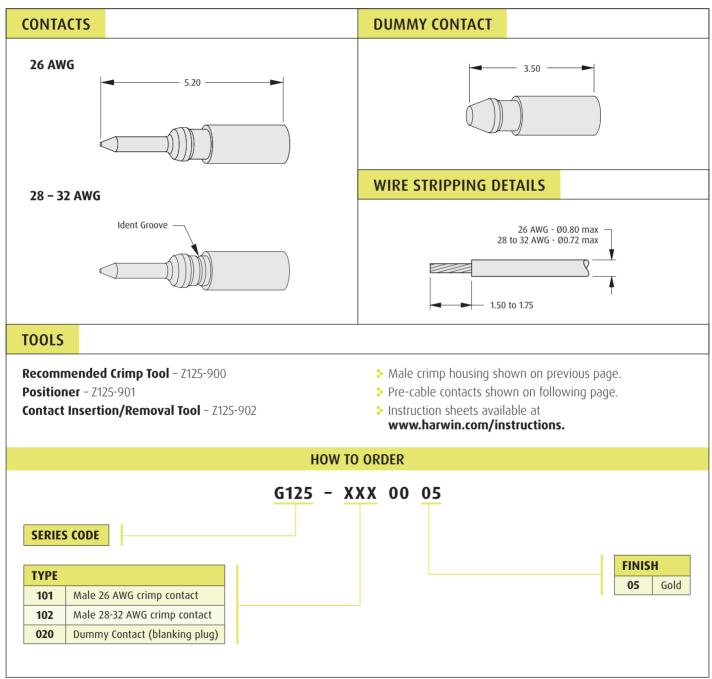




Male Crimp Contacts

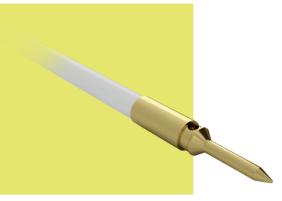
- Crimp barrel meets all crimp guidelines and standards.
- 2A current capacity, resists high vibration and shock.
- ▶ Withstands extremes of temperature: -65°C to +150°C.
- **▶** Instruction video online at www.harwin.com/harwintv.
- ▶ Dummy Contact can be used for additional polarization of keying of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

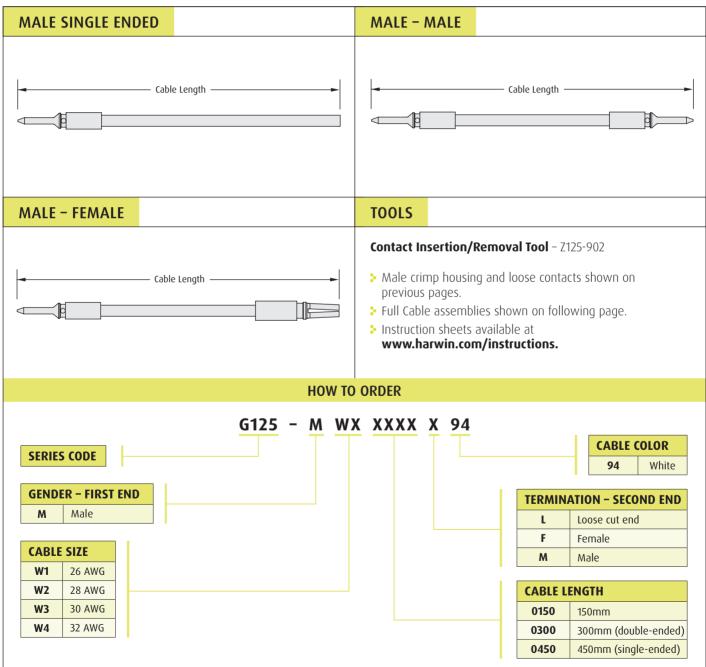




Male Crimp Contacts - Pre-Crimped Wires

- 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.

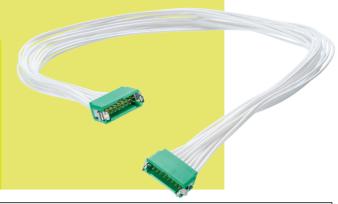


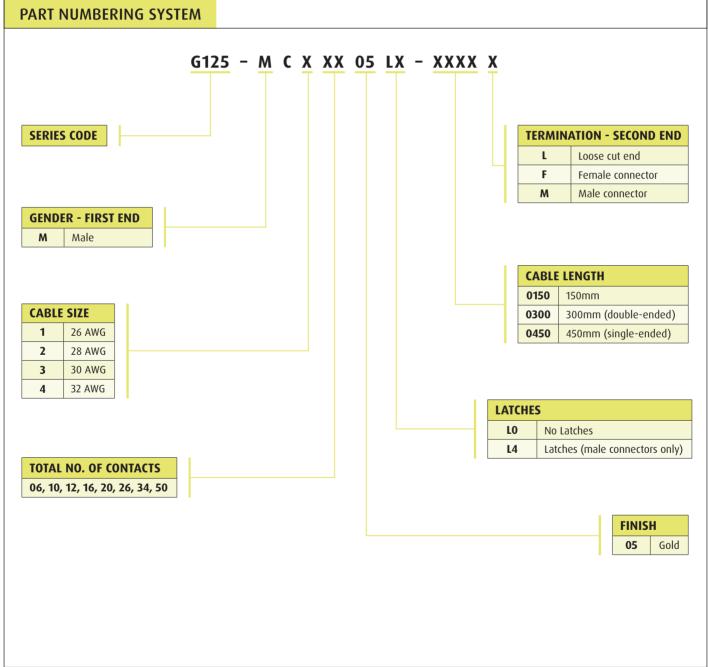


All dimensions in mm.

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.

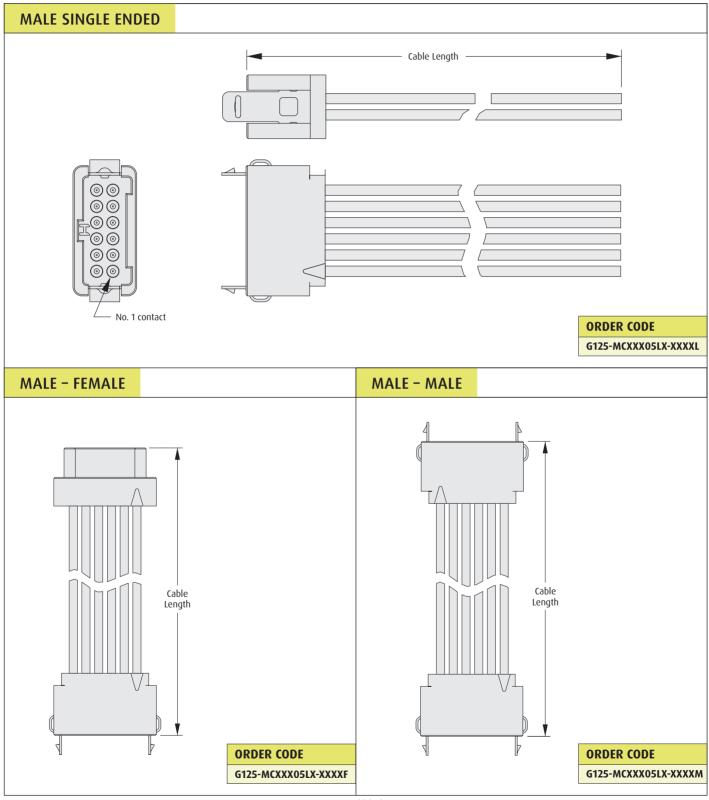






Male Cable Assemblies

- See previous page for cable length options.
- Cable assemblies are constructed with Contact 1 attached to Contact 1, Contact 2 to Contact 2, etc.

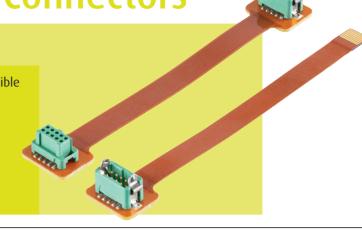


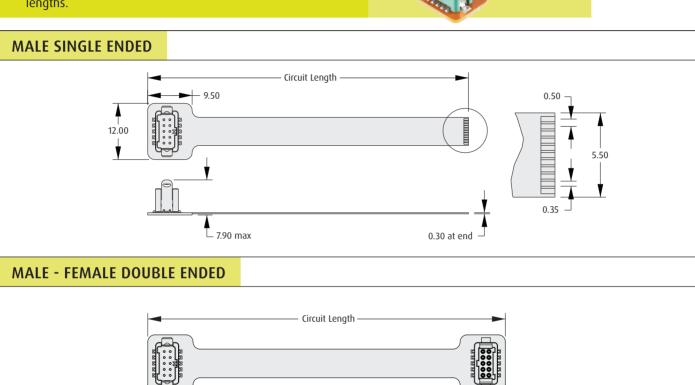
All dimensions in mm.

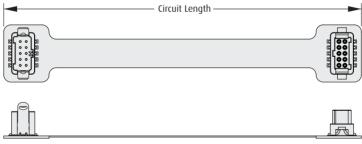


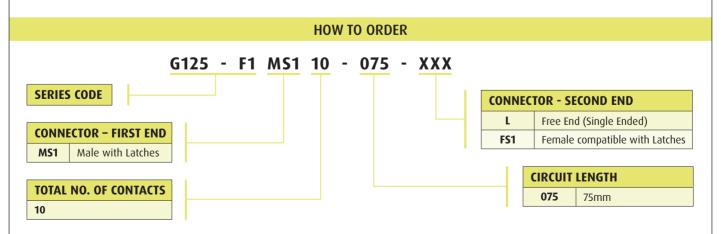
Flexible Circuit Assemblies

- 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.









Patent Published All dimensions in mm.



Gecko Connectors Tooling

- Instruction sheets can be accessed at www.harwin.com/instructions.
- A Gecko Crimping Instruction video is available at www.harwin.com/harwintv.

HAND CRIMP TOOL

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



| ORDER CODE | | |
|---------------|----------|--|
| Signal crimps | Z125-900 | |
| Power crimps | Z125-903 | |

POSITIONER

Must be used with hand crimp tool.





| ORDER CODE | | |
|---------------|----------|--|
| Signal crimps | Z125-901 | |
| Power crimps | Z125-904 | |

INSERTION/REMOVAL TOOL

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



ORDER CODE

INSERTION/REMOVAL TOOL

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



ORDER CODE Z125-905

All dimensions in mm.



Gecko Connectors Tooling

Instruction sheets can be accessed at www.harwin.com/instructions.

HEX DRIVE BIT BALL HEX DRIVER ▸ 1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings. ▶ 1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings. For use with torque tooling or similar equipment. **>** Ball-shaped end can be used at a wide range of angles. in the same **ORDER CODE** ORDER CODE Z9950-00 Z9952-00 **SCREWDRIVER DELATCH TOOL** For assisting with unmating latched connectors. For use with Gecko Screw-Lok board mount nuts. ▶ Board mount nuts to be tightened to a torque of 21 ±2cmN. **ORDER CODE ORDER CODE** Z80-298 Z125-926xx00 Replace xx with No. of Contacts: 06, 10, 12, 16, 20, 26, 34 or 50

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www.harwin.com