

# Gecko

## Contents

### Introduction

#### Screw-Lok 1.25mm pitch High-Reliability Connectors

Specifications

Mating Profiles

Female PCB Connectors

Female Cable Connectors

Female Cable Assemblies

Male PCB Connectors

Male Cable Connectors

Male Cable Assemblies

#### Latched 1.25mm pitch High-Reliability Connectors

Specifications

Mating Profiles

Female PCB Connectors

Female Cable Connectors

Female Cable Assemblies

Male PCB Connectors

Male Cable Connectors

Male Cable Assemblies

### Tooling



# Gecko Connectors Introduction

GECKO

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

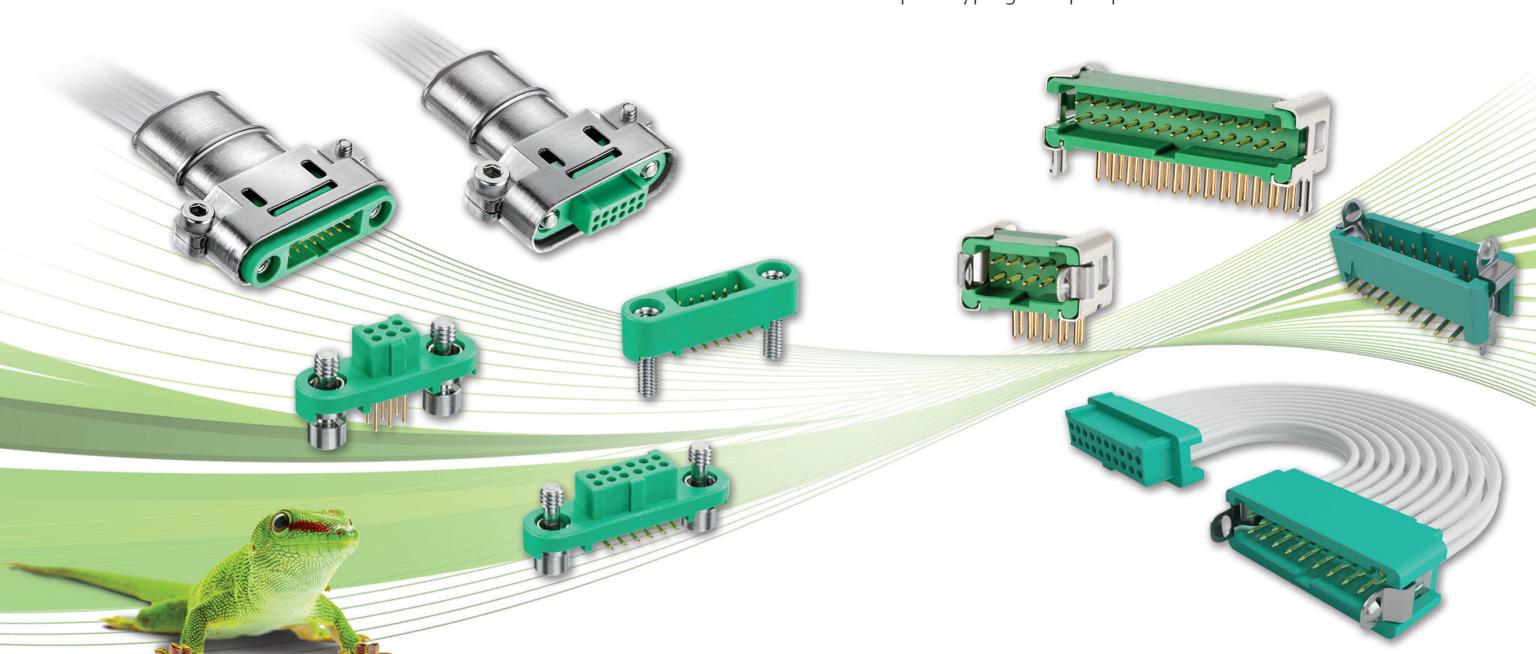
\*Granted US9017089, Pending GB2501063, Pending EP2642604

## Gecko Screw-Lok

- Strong stainless-steel screw fixings for maximum strain relief
- Lightweight hoods for additional cable protection and shielding
- Pre-wired contacts available for prototyping and pre-production

## Gecko with Latches

- The maximum weight and space saving, designed with lightweight robust latches for minimal PCB real estate
- Product range includes complete cable assemblies, ideal for prototyping and pre-production



Patent Published

# Gecko Connectors Product Features

GECKO

## 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.



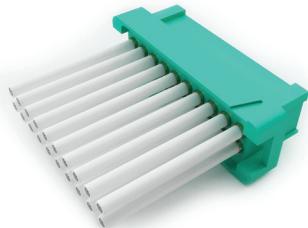
## Keyway Polarisation Points

3 polarising points on each component prevent mis-mating.



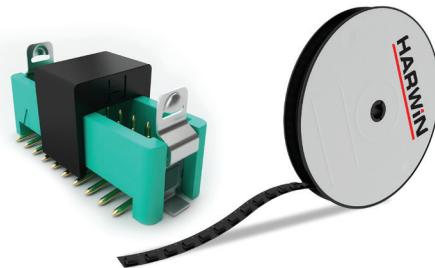
## No. 1 Position identified, Potting Wall

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.



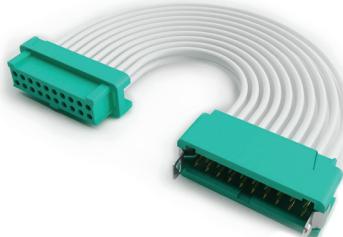
## Gecko Screw-Lok - Robust Metal Backshells

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



## Gecko with Latches - 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.



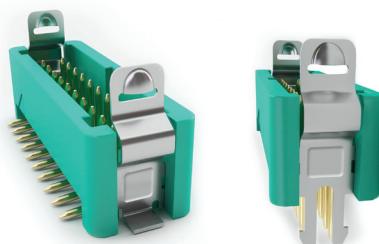
## Gecko Screw-Lok - Maximum strain relief

Fixings with 2mm screw thread for maximum board and connection retention or strain relief.



## Gecko with Latches - Combined Latching & PCB retention

Optional latches allow simple and fast de-latching and require no special tooling. Solder tabs for SMT and barbs for PC Tail versions ensure retention to the PCB.



# Gecko Connectors Specifications

GECKO

## Materials

Mouldings:	Glass-filled High Temperature Thermoplastic UL94V-0
Female contacts:	Beryllium Copper
Male contacts	
PCT/SMT:	Phosphor Bronze
Crimp:	Brass
Finish:	0.2 – 0.3µm (8 – 12µ") Gold, over 1.5 – 2.0µm (60 – 80µ") Nickel
Screw-Loks:	Stainless Steel
Latches:	Copper Alloy

## Electrical

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

## Mechanical

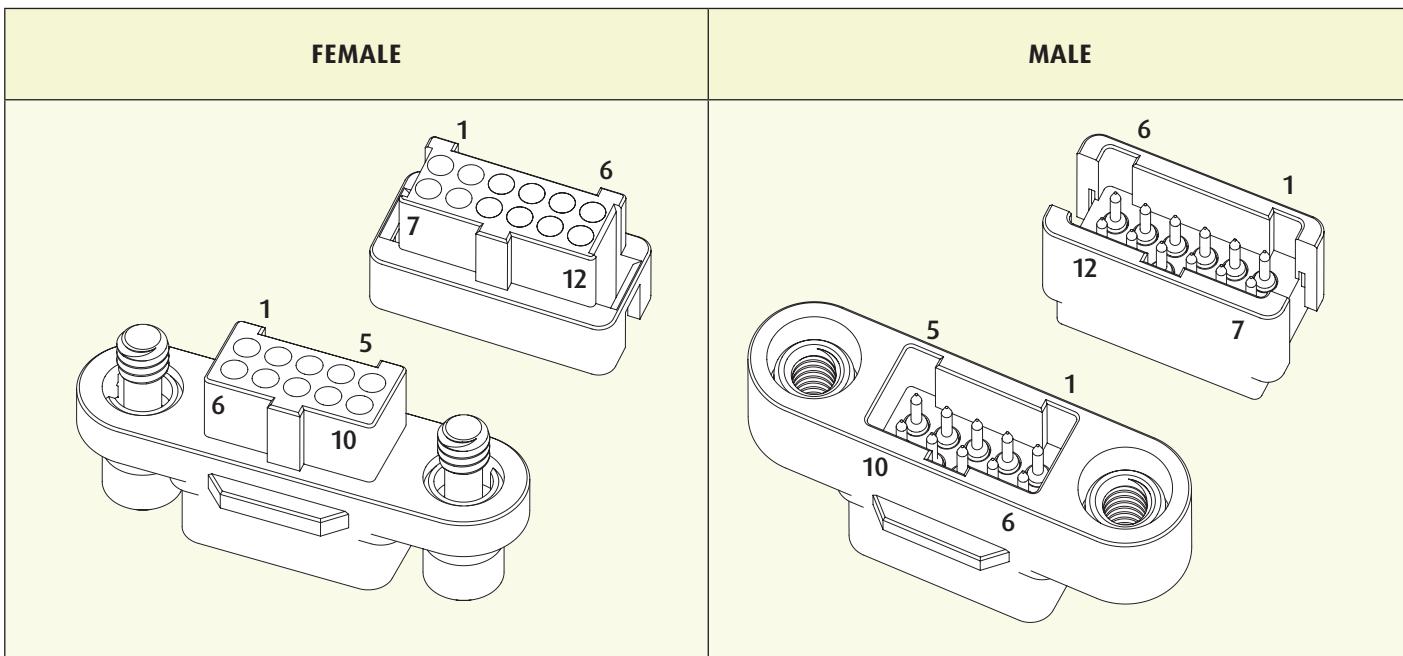
Contact durability:	1000 operations
<b>Mating forces (per contact pair)</b>	
Insertion force:	2.8N max
Withdrawal force:	0.2N min
<b>Contact retention in moulding:</b>	6N min

## Environmental

<b>Environmental classification:</b>	65/150/56 days at 93% RH
<b>Operating temperature:</b>	-65°C to +150°C
* <b>Vibration sensitivity:</b>	10Hz to 2000Hz, 1.5mm, 198mm/s <sup>2</sup> (20G) duration 6 hours
* <b>Bump severity:</b>	390m/s <sup>2</sup> (40G), 4000 ±10 bumps
* <b>Shock severity:</b>	981m/s <sup>2</sup> (100G) for 6ms in Z axis 490m/s <sup>2</sup> (50G) for 11ms in X & Y axes
* <b>Acceleration severity:</b>	490m/s <sup>2</sup> (50G)

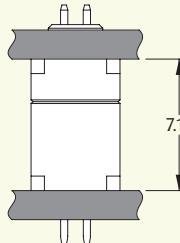
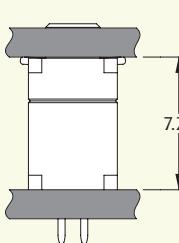
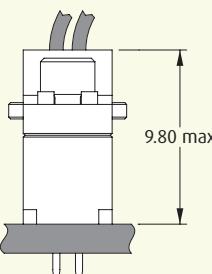
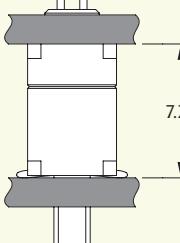
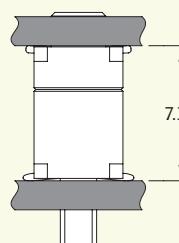
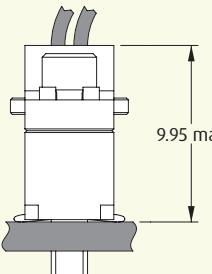
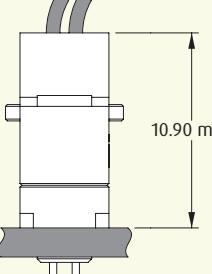
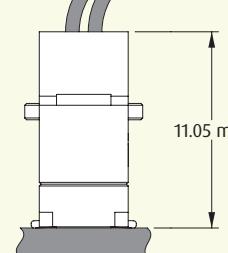
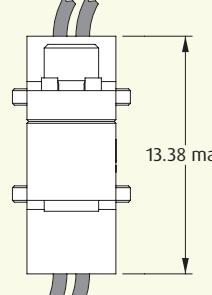
\* Tested with latched connectors.

## Pin Numbering



Patent Published

# Gecko Screw-Lok Mating Profiles

		FEMALE		
		VERTICAL PC TAIL	VERTICAL SMT	CABLE
MALE	VERTICAL PC TAIL			
	VERTICAL SMT			
	CABLE			

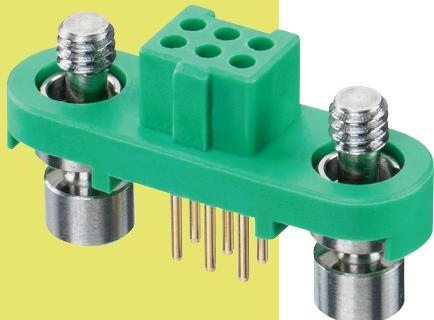
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female PC Tail

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



3mm PC TAIL

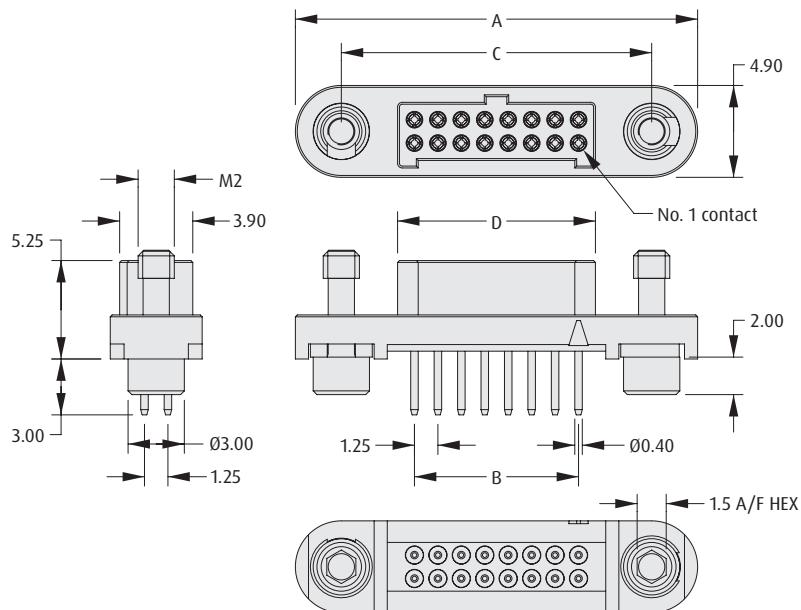
## CALCULATION

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

## HOW TO ORDER

**G125 - F V1 XX 05 F1 X**

SERIES CODE

TYPE

V1 | 3mm PC Tail

## **PACKAGING**

R	Tape & Reeled
P	Loose

FINISH

05 | Gold

## **TOTAL NO. OF CONTACTS**

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

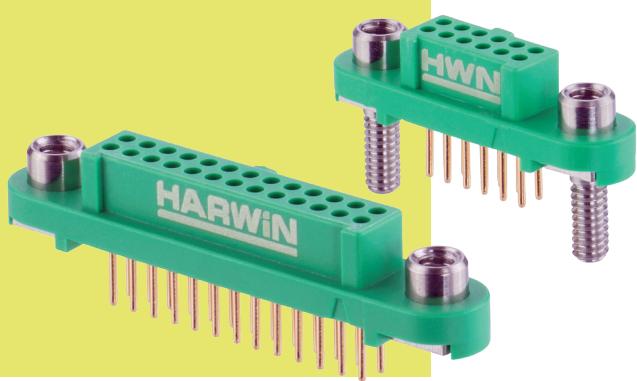
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female PC Tail - 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.



WITHOUT BOARD MOUNT	WITH BOARD MOUNT								
<p>Recommended PC Board Pattern</p>	<p>Recommended PC Board Pattern</p>								
<b>CALCULATION</b> <table border="1"> <tr> <td>A</td> <td><math>B + 12.7</math></td> </tr> <tr> <td>B</td> <td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td> </tr> <tr> <td>C</td> <td><math>B + 7.8</math></td> </tr> <tr> <td>D</td> <td><math>B + 1.8</math></td> </tr> </table>	A	$B + 12.7$	B	$0.625 \times (\text{Total No. of contacts} - 2)$	C	$B + 7.8$	D	$B + 1.8$	
A	$B + 12.7$								
B	$0.625 \times (\text{Total No. of contacts} - 2)$								
C	$B + 7.8$								
D	$B + 1.8$								

HOW TO ORDER	
<b>SERIES CODE</b>	G125
<b>TYPE</b>	- F V1 XX 05 FX X
<b>TOTAL NO. OF CONTACTS</b>	
06, 10, 12, 16, 20, 26, 34, 50	
<b>PACKAGING</b>	
R	Tape & Reeled
P	Loose
<b>SCREW-LOK</b>	
F2	Internal Thread
F3	With 5mm Board Mount stud

REQUIRED HARDWARE	Order separately from connector
<b>Hexagonal Board Mount Nut</b>	
<p>ORDER CODE G125-450000B</p>	<p>Slotted Board Mount Nut</p> <p>ORDER CODE G125-451000B</p>

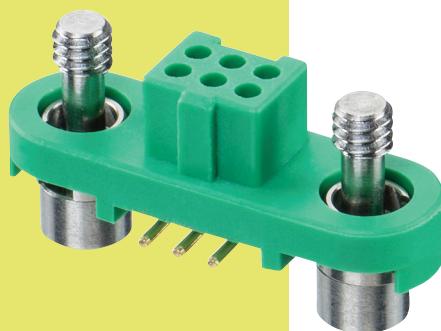
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female Surface Mount

- 4-finger Beryllium Copper contact.
- Stainless steel screw fixing to mate with applicable male connector.
- Positive keyway polarisation 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		CALCULATION			
A	B + 12.7				
B	0.625 x (Total No. of contacts - 2)				
C	B + 7.8				
D	B + 1.8				
Recommended PC Board Pattern					
HOW TO ORDER					
<b>SERIES CODE</b>	G125	- F S1 XX 05 F1 X	<b>PACKAGING</b>		
<b>TYPE</b>	S1	Surface Mount	R Tape & Reeled		
			P Loose		
			<b>FINISH</b>		
			05 Gold		
			<b>TOTAL NO. OF CONTACTS</b>		
			06, 10, 12, 16, 20, 26, 34, 50		

All dimensions in mm.

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# Gecko Screw-Lok 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	WITH BOARD MOUNT								
<p>Recommended PC Board Pattern</p>	<p>Recommended PC Board Pattern</p>								
<b>CALCULATION</b>									
<table border="1"> <tr> <td>A</td><td><math>B + 12.7</math></td></tr> <tr> <td>B</td><td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td></tr> <tr> <td>C</td><td><math>B + 7.8</math></td></tr> <tr> <td>D</td><td><math>B + 1.8</math></td></tr> </table>		A	$B + 12.7$	B	$0.625 \times (\text{Total No. of contacts} - 2)$	C	$B + 7.8$	D	$B + 1.8$
A	$B + 12.7$								
B	$0.625 \times (\text{Total No. of contacts} - 2)$								
C	$B + 7.8$								
D	$B + 1.8$								
<b>HOW TO ORDER</b>									
<b>SERIES CODE</b> <b>TYPE</b> <b>TOTAL NO. OF CONTACTS</b>	<b>G125 - F S1 XX 05 FX X</b>								
<b>R</b> Tape & Reeled <b>P</b> Loose	<b>PACKAGING</b>								
<b>F2</b> Internal Thread <b>F3</b> With 5mm Board Mount stud	<b>SCREW-LOK</b>								
<b>REQUIRED HARDWARE</b>									
<b>Hexagonal Board Mount Nut</b> 	<b>Slotted Board Mount Nut</b> 								
<b>ORDER CODE</b> <b>G125-4500000B</b>	<b>ORDER CODE</b> <b>G125-4510000B</b>								

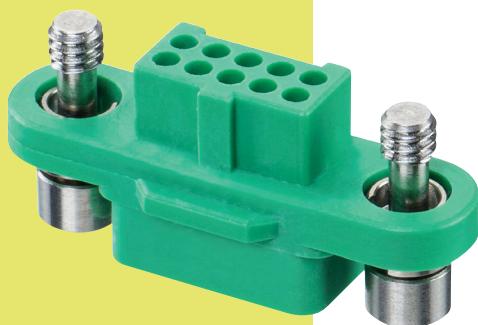
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female Crimp Housings

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on moulding.
- 3 polarising 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.



FEMALE	CALCULATION						
	<b>A</b> B + 12.7 <b>B</b> 0.625 x (Total No. of contacts - 2) <b>C</b> B + 7.8 <b>D</b> B + 1.8						
TOOLS							
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>Female contacts shown on following pages.</li> <li>Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>						
HOW TO ORDER							
<b>SERIES CODE</b> <b>TYPE</b> <b>TOTAL NO. OF CONTACTS</b>	<b>G125</b> – <b>224</b> <b>XX</b> <b>96</b> <b>XX</b> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>SCREW-LOK</b> <table border="1"> <tr> <td><b>F1</b></td> <td>Floating Hex Socket fixings</td> </tr> <tr> <td><b>00</b></td> <td>No fixings (use with Metal Hoods)</td> </tr> </table> </div> <div style="width: 45%;"> <b>FINISH</b> <table border="1"> <tr> <td><b>96</b></td> <td>Housing</td> </tr> </table> </div> </div>	<b>F1</b>	Floating Hex Socket fixings	<b>00</b>	No fixings (use with Metal Hoods)	<b>96</b>	Housing
<b>F1</b>	Floating Hex Socket fixings						
<b>00</b>	No fixings (use with Metal Hoods)						
<b>96</b>	Housing						

All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## 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.
- Reverse fix screw-lok is suitable for board-to-cable applications, where the female connector is located on the PCB.
- Order nuts for panel mount separately - see bottom of page.



WITHOUT PANEL MOUNT	WITH PANEL MOUNT								
<b>CALCULATION</b>									
<table border="1"> <tr><td><b>A</b></td><td><math>B + 12.7</math></td></tr> <tr><td><b>B</b></td><td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td></tr> <tr><td><b>C</b></td><td><math>B + 7.8</math></td></tr> <tr><td><b>D</b></td><td><math>B + 1.8</math></td></tr> </table>		<b>A</b>	$B + 12.7$	<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$	<b>C</b>	$B + 7.8$	<b>D</b>	$B + 1.8$
<b>A</b>	$B + 12.7$								
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$								
<b>C</b>	$B + 7.8$								
<b>D</b>	$B + 1.8$								
<b>HOW TO ORDER</b>									
<b>SERIES CODE</b> G125	<b>SCREW-LOK</b> F2 Internal Thread F3 With 5mm Panel Mount stud								
<b>TYPE</b> 224 Female Housing	<b>FINISH</b> 96 Housing								
<b>TOTAL NO. OF CONTACTS</b> 06, 10, 12, 16, 20, 26, 34, 50									
TOOLS									
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	Female contacts shown on following pages. Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a> .								
REQUIRED HARDWARE	Order separately from connector								
<b>Hexagonal Board Mount Nut</b> 	<b>Slotted Board Mount Nut</b> 								
<b>ORDER CODE</b> G125-4500000B	<b>ORDER CODE</b> G125-4510000B								

All dimensions in mm.

Patent Published

# Gecko Screw-Lok 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 polarisation of keying of multiple connectors. Also called Blanking Plug.



CONTACTS	DUMMY CONTACT
<b>26 AWG</b> 	
<b>28 – 32 AWG</b> 	<b>WIRE STRIPPING DETAILS</b> 
TOOLS	
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"><li>Female crimp housings shown on previous pages.</li><li>Pre-cabled contacts shown on following page.</li><li>Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li></ul>
HOW TO ORDER	
<b>SERIES CODE</b>	G125 – 0XX 00 05
<b>TYPE</b>	<b>FINISH</b>
001 Female 26 AWG crimp contact	05 Gold
002 Female 28-32 AWG crimp contact	
020 Dummy Contact (blanking plug)	

All dimensions in mm.

Patent Published

# Gecko Screw-Lok 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.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



FEMALE SINGLE ENDED	FEMALE – FEMALE								
TOOLS	<p><b>Contact Insertion/Removal Tool</b> – Z125-902</p> <ul style="list-style-type: none"> <li>➢ Female crimp housings and loose contacts shown on previous pages.</li> <li>➢ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>								
HOW TO ORDER									
<b>SERIES CODE</b>	<b>G125</b> – <b>F</b> <b>WX</b> <b>XXXX</b> <b>X</b> <b>94</b>								
<b>GENDER - FIRST END</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>F</b></td><td>Female</td></tr> </table>	<b>F</b>	Female						
<b>F</b>	Female								
<b>CABLE SIZE</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>W1</b></td><td>26 AWG</td></tr> <tr><td><b>W2</b></td><td>28 AWG</td></tr> <tr><td><b>W3</b></td><td>30 AWG</td></tr> <tr><td><b>W4</b></td><td>32 AWG</td></tr> </table>	<b>W1</b>	26 AWG	<b>W2</b>	28 AWG	<b>W3</b>	30 AWG	<b>W4</b>	32 AWG
<b>W1</b>	26 AWG								
<b>W2</b>	28 AWG								
<b>W3</b>	30 AWG								
<b>W4</b>	32 AWG								
<b>CABLE COLOUR</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>94</b></td><td>White</td></tr> </table>	<b>94</b>	White						
<b>94</b>	White								
<b>TERMINATION - SECOND END</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>L</b></td><td>Loose cut end</td></tr> <tr><td><b>F</b></td><td>Female</td></tr> </table>	<b>L</b>	Loose cut end	<b>F</b>	Female				
<b>L</b>	Loose cut end								
<b>F</b>	Female								
<b>CABLE LENGTH</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>0150</b></td><td>150mm</td></tr> <tr><td><b>0300</b></td><td>300mm (double-ended)</td></tr> <tr><td><b>0450</b></td><td>450mm (single-ended)</td></tr> </table>	<b>0150</b>	150mm	<b>0300</b>	300mm (double-ended)	<b>0450</b>	450mm (single-ended)		
<b>0150</b>	150mm								
<b>0300</b>	300mm (double-ended)								
<b>0450</b>	450mm (single-ended)								

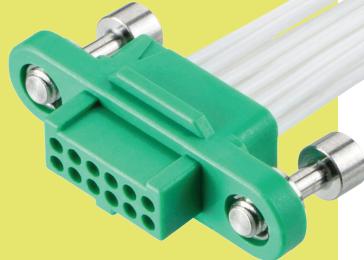
All dimensions in mm.

Patent Published

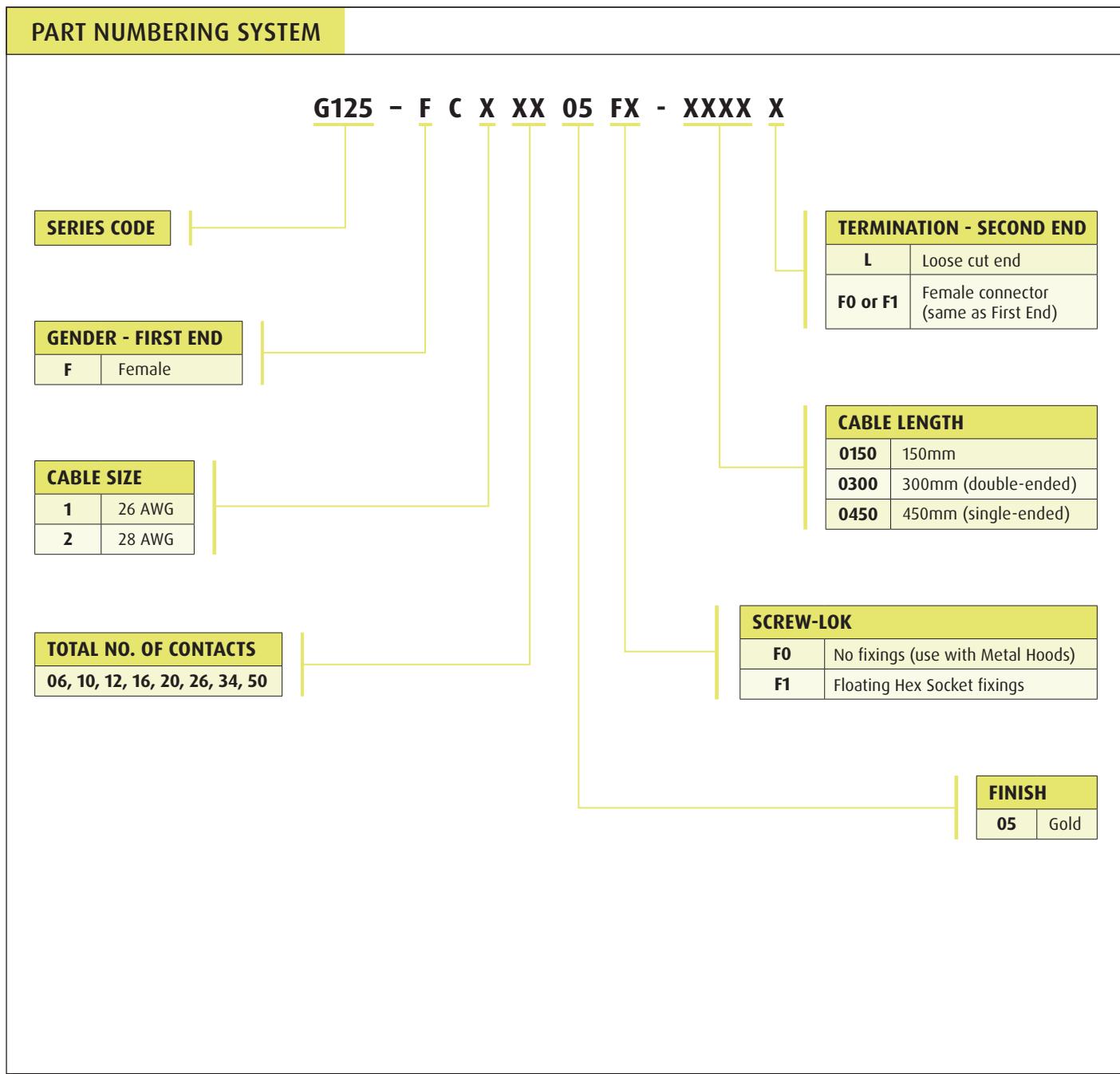
# Gecko Screw-Lok Connectors

## Female Cable Assemblies

- 4-finger Beryllium Copper contact.
- No.1 position identified on moulding.
- Stainless steel screw fixing to mate with applicable male connector.
- Back potted for added strain relief.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



GECKO SCREW-LOK

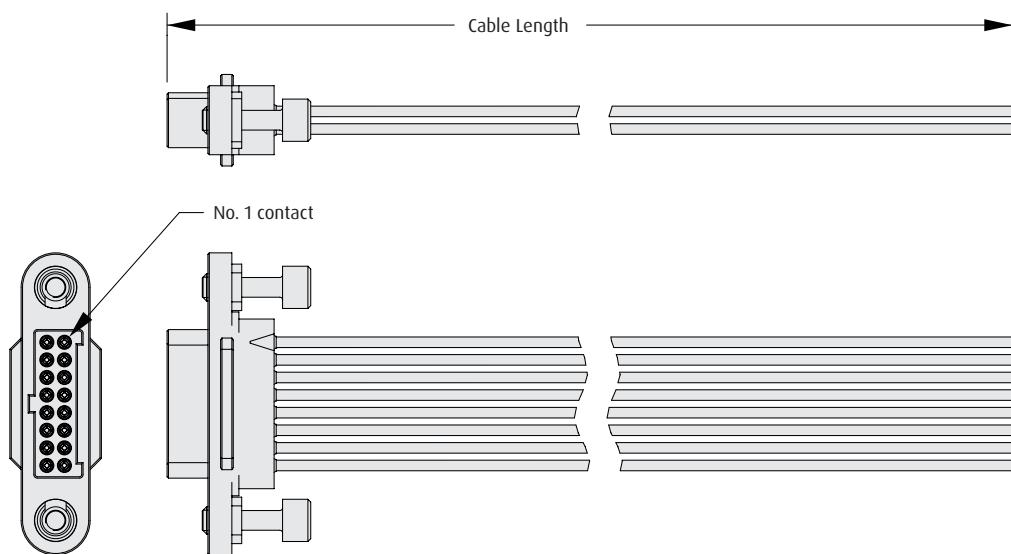


All dimensions in mm.

Patent Published

# Female Cable Assemblies

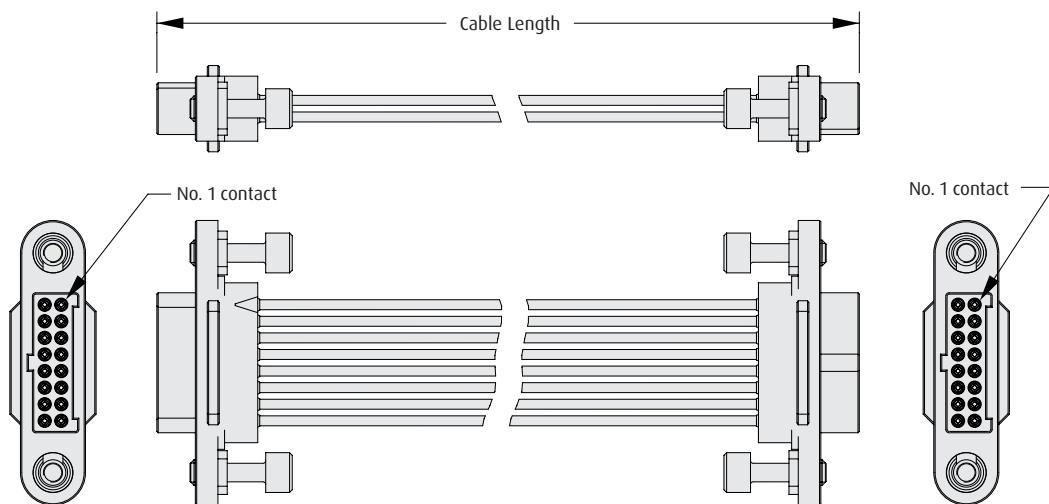
## FEMALE SINGLE ENDED



### ORDER CODE

G125-FCXXX05F1-XXXXL

## FEMALE - FEMALE



### ORDER CODE

G125-FCXXX05F1-XXXXF1

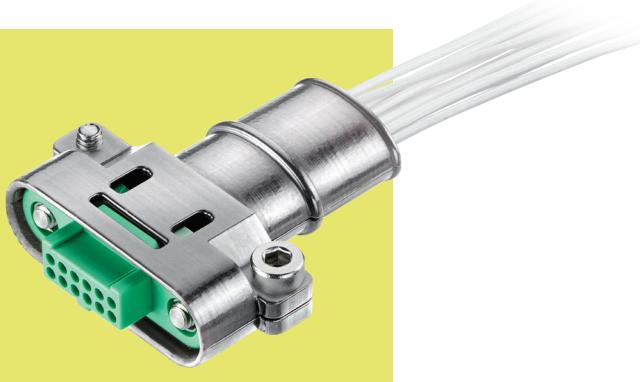
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female Metal Hood / Backshell

- Supplied as a kit, including 2 metal hood halves, tie-band (not shown), 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 attached external braid, to construct a shielded cable assembly.



GECKO SCREW-LOK

HOOD / BACKSHELL		CALCULATION	
A	B + 16.8		
B	0.625 x (Total No. of contacts - 2)		
C	B + 7.8		
D	B + 4.3		

## HOW TO ORDER

G125 - 964 XX F1

SERIES CODE

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

All dimensions in mm.

Patent Published

www.harwin.com

34

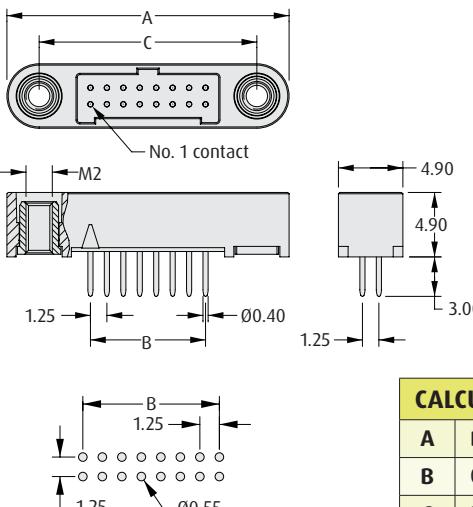
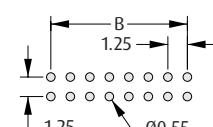
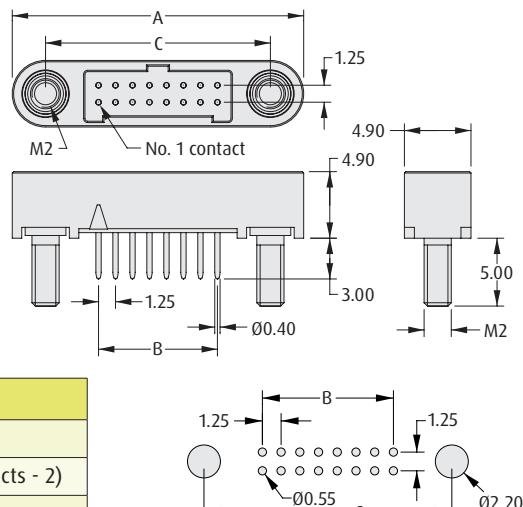
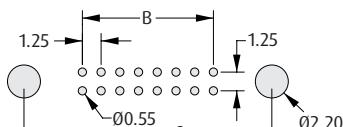
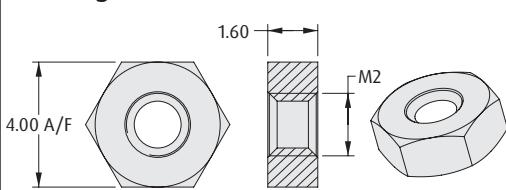
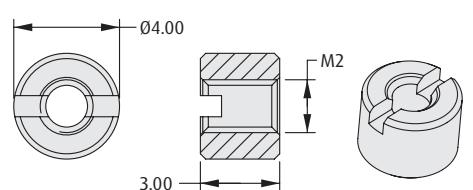
HARWIN

# Gecko Screw-Lok Connectors

## Male Vertical PC Tail

- 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.



WITHOUT BOARD MOUNT	WITH BOARD MOUNT
  <p>Recommended PC Board Pattern</p>	  <p>Recommended PC Board Pattern</p>
<b>CALCULATION</b>	
A   B + 12.7	
B   0.625 x (Total No. of contacts - 2)	
C   B + 7.8	
D   B + 1.8	
<b>HOW TO ORDER</b>	
<b>SERIES CODE</b>	G125 - M V1 XX 05 MX X
<b>TYPE</b>	
V1   3mm PC Tail	
<b>TOTAL NO. OF CONTACTS</b>	
06, 10, 12, 16, 20, 26, 34, 50	
<b>PACKAGING</b>	
R   Tape & Reeled	
P   Loose	
<b>SCREW-LOK</b>	
M1   Internal Thread	
M2   With 5mm Board Mount Stud	
<b>REQUIRED HARDWARE</b>	
<b>Hexagonal Board Mount Nut</b>	Order separately from connector
 <b>ORDER CODE</b> G125-4500000B	
<b>Slotted Board Mount Nut</b>	
 <b>ORDER CODE</b> G125-4510000B	

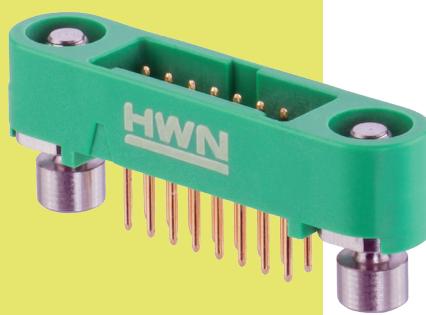
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Male Vertical PC Tail - 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.



PC TAIL	CALCULATION				
	<b>A</b> B + 12.7 <b>B</b> 0.625 x (Total No. of contacts - 2) <b>C</b> B + 7.8				
Recommended PC Board Pattern					
HOW TO ORDER					
<b>SERIES CODE</b>	G125 - M V1 XX 05 M3 X				
<b>TYPE</b>	V1 3mm PC Tail				
<b>TOTAL NO. OF CONTACTS</b>	06, 10, 12, 16, 20, 26, 34, 50				
<b>PACKAGING</b>	<table border="1"> <tr> <td>R</td><td>Tape &amp; Reeled</td></tr> <tr> <td>P</td><td>Loose</td></tr> </table>	R	Tape & Reeled	P	Loose
R	Tape & Reeled				
P	Loose				
<b>FINISH</b>	<table border="1"> <tr> <td>05</td><td>Gold</td></tr> </table>	05	Gold		
05	Gold				

All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## 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.



WITHOUT BOARD MOUNT	WITH BOARD MOUNT								
<p>No. 1 contact</p> <p>M2</p> <p>1.25</p> <p>4.90</p> <p>4.90</p> <p>5.80</p> <p>0.15 max</p> <p>1.25</p> <p>B</p> <p>0.40</p> <p>1.20</p> <p>6.20</p> <p>1.20</p> <p>0.70</p> <p>Recommended PC Board Pattern</p>	<p>A</p> <p>C</p> <p>1.25</p> <p>M2</p> <p>No. 1 contact</p> <p>4.90</p> <p>4.90</p> <p>0.15 max</p> <p>1.25</p> <p>B</p> <p>0.40</p> <p>5.80</p> <p>1.25</p> <p>B</p> <p>0.20</p> <p>1.20</p> <p>6.20</p> <p>1.20</p> <p>0.70</p> <p>C</p> <p>Recommended PC Board Pattern</p>								
<b>CALCULATION</b>									
<table border="1"> <tr> <td><b>A</b></td><td><math>B + 12.7</math></td></tr> <tr> <td><b>B</b></td><td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td></tr> <tr> <td><b>C</b></td><td><math>B + 7.8</math></td></tr> <tr> <td><b>D</b></td><td><math>B + 1.8</math></td></tr> </table>		<b>A</b>	$B + 12.7$	<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$	<b>C</b>	$B + 7.8$	<b>D</b>	$B + 1.8$
<b>A</b>	$B + 12.7$								
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$								
<b>C</b>	$B + 7.8$								
<b>D</b>	$B + 1.8$								
<b>HOW TO ORDER</b>									
<b>SERIES CODE</b> <b>TYPE</b> <b>TOTAL NO. OF CONTACTS</b>	<b>G125 - M S1 XX 05 MX X</b>								
	<b>PACKAGING</b> <b>SCREW-LOK</b>								
	<b>R</b> Tape & Reeled <b>P</b> Loose <b>M1</b> Internal Thread <b>M2</b> With 5mm Board Mount Stud								
<b>REQUIRED HARDWARE</b>									
<b>Hexagonal Board Mount Nut</b> <p>4.00 A/F</p> <p>1.60</p> <p>M2</p>	<b>Slotted Board Mount Nut</b> <p>Ø4.00</p> <p>3.00</p> <p>M2</p>								
Order separately from connector									
<b>ORDER CODE</b> <b>G125-4500000B</b>	<b>ORDER CODE</b> <b>G125-4510000B</b>								

All dimensions in mm.

Patent Published

# Gecko Screw-Lok 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.



PC TAIL	CALCULATION				
	<b>A</b> B + 12.7 <b>B</b> 0.625 x (Total No. of contacts - 2) <b>C</b> B + 7.8				
Recommended PC Board Pattern					
HOW TO ORDER					
<b>SERIES CODE</b>	G125 - M S1 XX 05 M3 X				
<b>TYPE</b>	<table border="1"> <tr> <td>S1</td> <td>Surface Mount</td> </tr> </table>	S1	Surface Mount		
S1	Surface Mount				
<b>TOTAL NO. OF CONTACTS</b>	<table border="1"> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td> </tr> </table>	06, 10, 12, 16, 20, 26, 34, 50			
06, 10, 12, 16, 20, 26, 34, 50					
<b>PACKAGING</b>	<table border="1"> <tr> <td>R</td> <td>Tape &amp; Reeled</td> </tr> <tr> <td>P</td> <td>Loose</td> </tr> </table>	R	Tape & Reeled	P	Loose
R	Tape & Reeled				
P	Loose				
<b>FINISH</b>	<table border="1"> <tr> <td>05</td> <td>Gold</td> </tr> </table>	05	Gold		
05	Gold				

All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Male Crimp Housing

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on moulding.
- 3 polarising 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.



WITHOUT PANEL MOUNT	WITH PANEL MOUNT
<b>CALCULATION</b>	
<b>A</b>   $B + 12.7$ <b>B</b>   $0.625 \times (\text{Total No. of contacts} - 2)$ <b>C</b>   $B + 7.8$	
<b>HOW TO ORDER</b>	
<b>SERIES CODE</b>  <b>TYPE</b> 324 Male Housing	<b>G125 - 324 XX XX 96 XX</b>
<b>TOTAL NO. OF CONTACTS</b> 06, 10, 12, 16, 20, 26, 34, 50	<b>SCREW-LOK</b> M1 Internal Thread M2 With 5mm Panel Mount stud
	<b>FINISH</b> 96 Housing

TOOLS	Order separately from connector
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>► Male contacts shown on following pages.</li> <li>► Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>
REQUIRED HARDWARE	
<b>Hexagonal Board Mount Nut</b> 	<b>Slotted Board Mount Nut</b> 
<b>ORDER CODE</b> G125-4500000B	<b>ORDER CODE</b> G125-4510000B

All dimensions in mm.

Patent Published

# 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.



FEMALE	CALCULATION
	<b>A</b> B + 12.7 <b>B</b> 0.625 x (Total No. of contacts - 2) <b>C</b> B + 7.8
TOOLS	
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>▪ Male contacts shown on following pages.</li> <li>▪ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>
HOW TO ORDER	
<b>SERIES CODE</b>	<b>G125</b> – <b>324</b>
<b>TYPE</b>	<b>XX</b> <b>96</b> <b>M3</b>
324   Male Housing	<b>FINISH</b> 96   Housing
	<b>TOTAL NO. OF CONTACTS</b> 06, 10, 12, 16, 20, 26, 34, 50

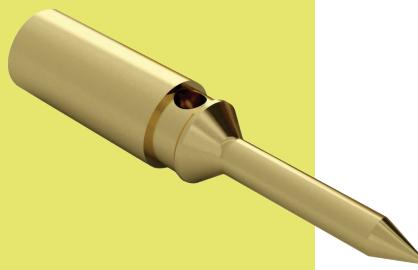
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## 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](http://www.harwin.com/harwintv).
- Dummy Contact can be used for additional polarisation of keying of multiple connectors. Also called Blanking Plug.



CONTACTS	DUMMY CONTACT
<b>26 AWG</b> 	
<b>28 – 32 AWG</b> 	<b>WIRE STRIPPING DETAILS</b> 
TOOLS	
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>• Male crimp housings shown on previous pages.</li> <li>• Pre-cabled contacts shown on following page.</li> <li>• Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>
HOW TO ORDER	
	<b>G125 – XXX 00 05</b>
<b>SERIES CODE</b>	
<b>TYPE</b>	
101   Male 26 AWG crimp contact	
102   Male 28-32 AWG crimp contact	
020   Dummy Contact (blanking plug)	
	<b>FINISH</b>
	05   Gold

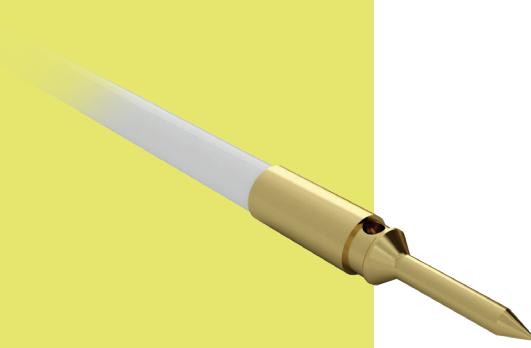
All dimensions in mm.

Patent Published

# Gecko Screw-Lok 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.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



MALE SINGLE ENDED	MALE – MALE								
MALE – FEMALE	TOOLS								
	<p><b>Contact Insertion/Removal Tool</b> – Z125-902</p> <ul style="list-style-type: none"> <li>➢ Male crimp housings and loose contacts shown on previous pages.</li> <li>➢ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>								
HOW TO ORDER									
<b>SERIES CODE</b>	G125 – M WX XXXX X 94								
<b>GENDER – FIRST END</b>	M								
<b>CABLE SIZE</b>	<table border="1"> <tr><td>W1</td><td>26 AWG</td></tr> <tr><td>W2</td><td>28 AWG</td></tr> <tr><td>W3</td><td>30 AWG</td></tr> <tr><td>W4</td><td>32 AWG</td></tr> </table>	W1	26 AWG	W2	28 AWG	W3	30 AWG	W4	32 AWG
W1	26 AWG								
W2	28 AWG								
W3	30 AWG								
W4	32 AWG								
<b>CABLE COLOUR</b>	94 White								
<b>TERMINATION – SECOND END</b>	<table border="1"> <tr><td>L</td><td>Loose cut end</td></tr> <tr><td>F</td><td>Female</td></tr> <tr><td>M</td><td>Male</td></tr> </table>	L	Loose cut end	F	Female	M	Male		
L	Loose cut end								
F	Female								
M	Male								
<b>CABLE LENGTH</b>	<table border="1"> <tr><td>0150</td><td>150mm</td></tr> <tr><td>0300</td><td>300mm (double-ended)</td></tr> <tr><td>0450</td><td>450mm (single-ended)</td></tr> </table>	0150	150mm	0300	300mm (double-ended)	0450	450mm (single-ended)		
0150	150mm								
0300	300mm (double-ended)								
0450	450mm (single-ended)								

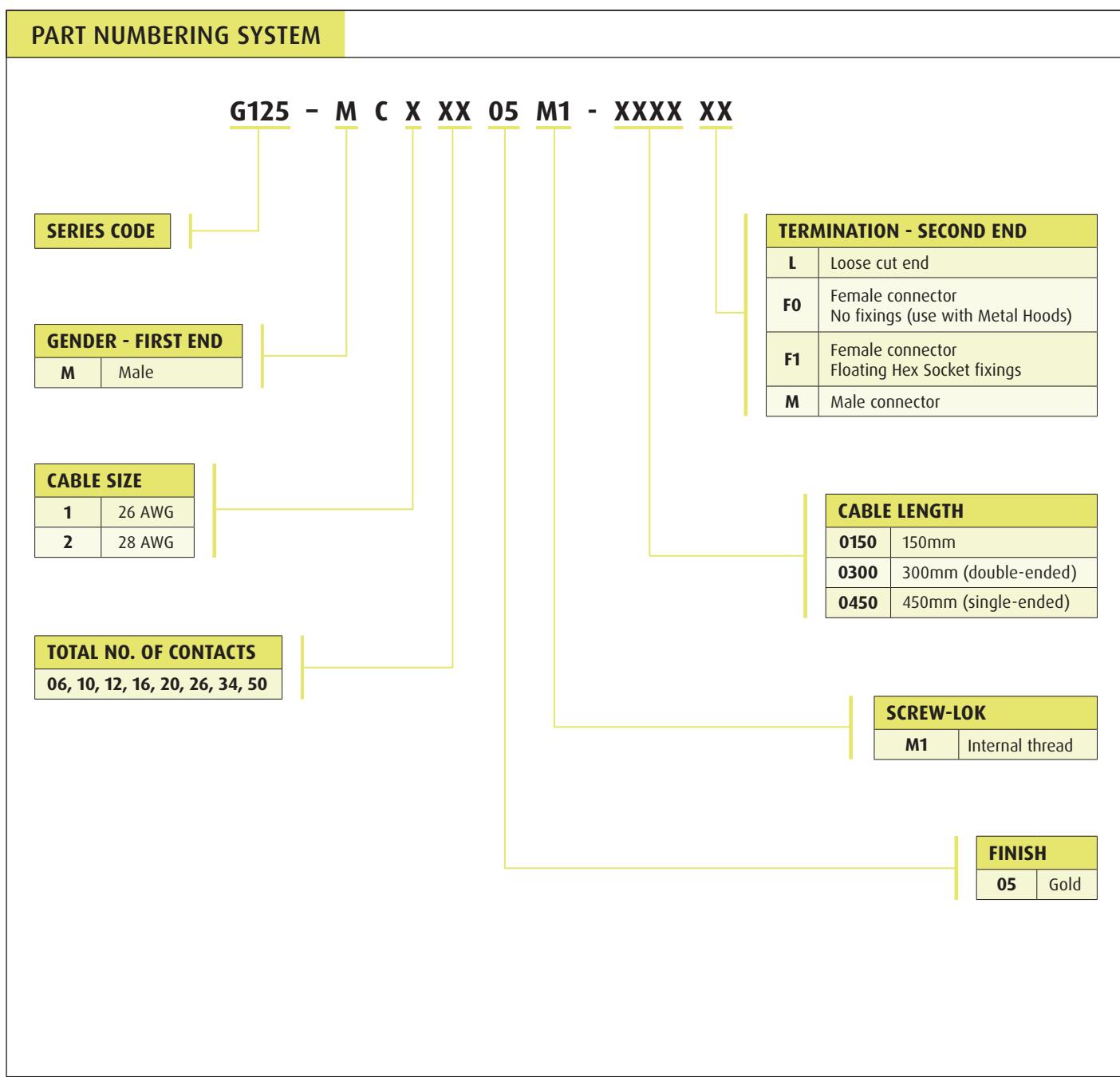
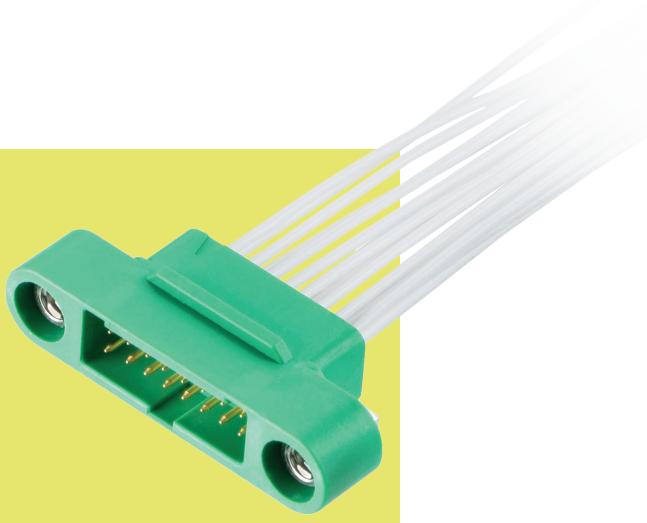
All dimensions in mm.

Patent Published

# Gecko Connectors

## Male Cable Assemblies

- 4-finger Beryllium Copper contact.
- No. 1 position identified on moulding.
- Stainless steel screw fixing to mate with applicable male connector.
- Back potted for added strain relief.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



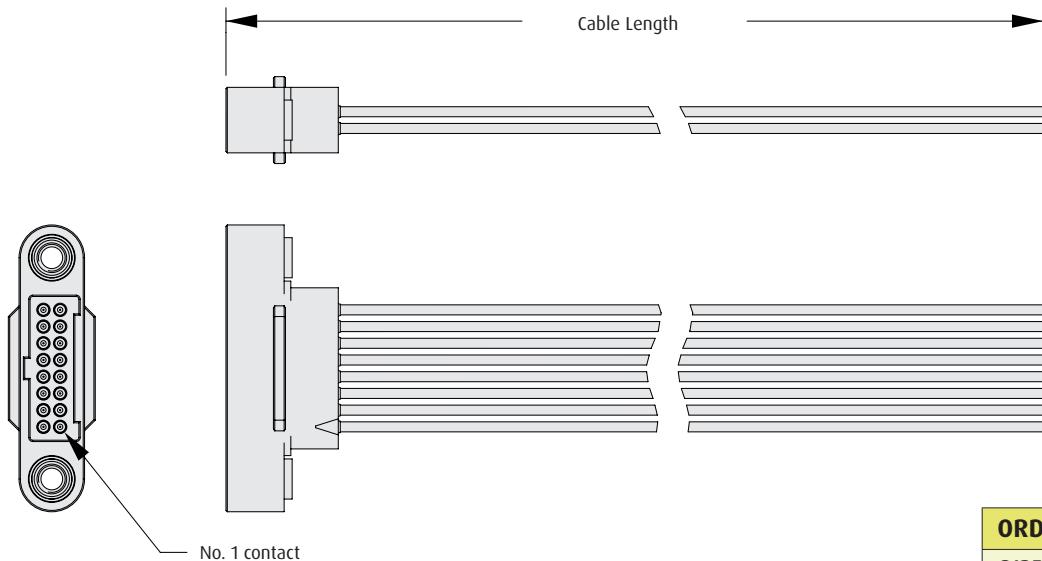
All dimensions in mm.

Patent Published

# 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.

## MALE SINGLE ENDED

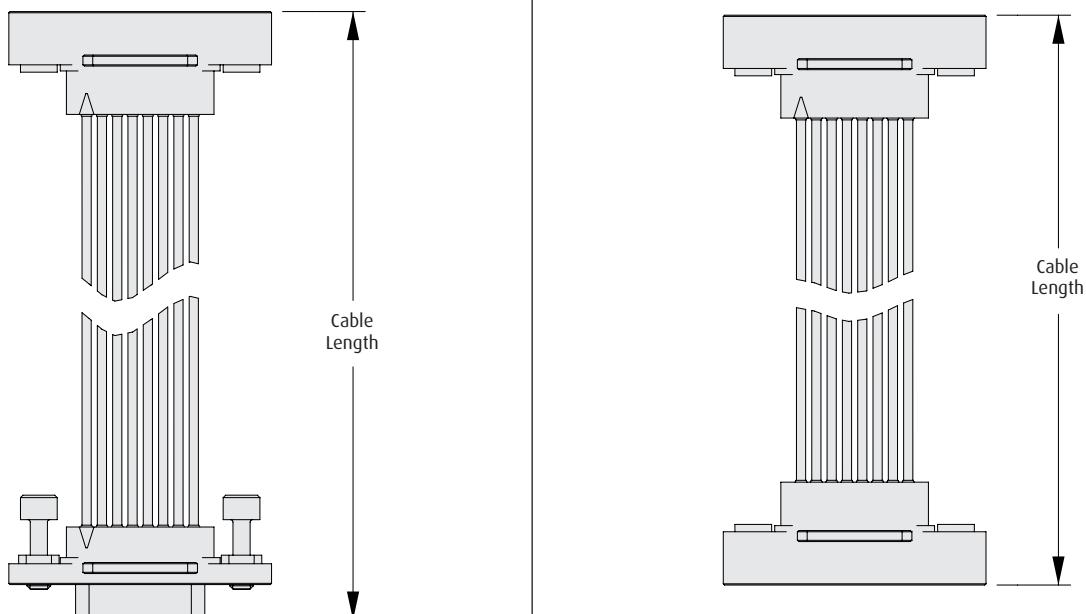


### ORDER CODE

G125-MCXXX05M1-XXXXL

## MALE - FEMALE

## MALE - MALE



### ORDER CODE

G125-MCXXX05M1-XXXXF1

### ORDER CODE

G125-MCXXX05M1-XXXXM1

All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Male Metal Hood / Backshell

- Supplied as a kit, including 2 metal hood halves, tie-band (not shown), and short screws to join the two hood halves together.
- Use with G125-324xx96M1 male crimp housings.
- Tie-band can be used to attached external braid, to construct a shielded cable assembly.



HOOD / BACKSHELL		CALCULATION	
A	B + 16.8		
B	0.625 x (Total No. of contacts - 2)		
C	B + 7.8		
D	B + 4.3		
HOW TO ORDER			
G125 - 964 XX 00		SERIES CODE	TOTAL NO. OF CONTACTS
			06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## 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.

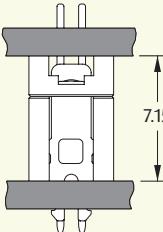
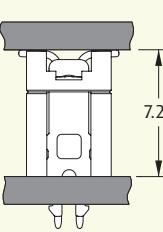
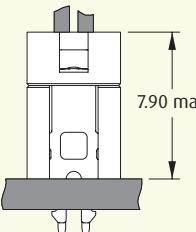
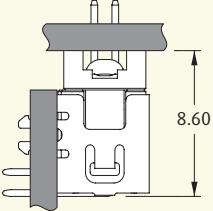
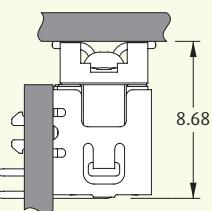
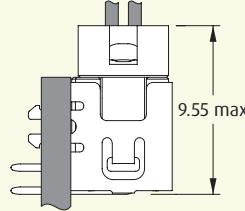
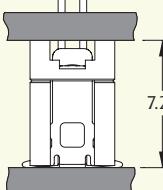
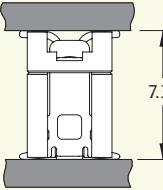
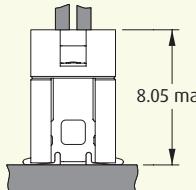
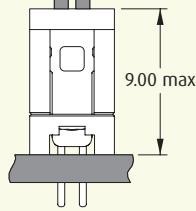
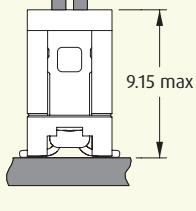
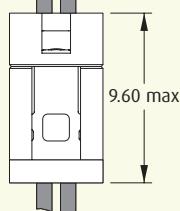


HOOD / BACKSHELL	CALCULATION
	<b>A</b> B + 14.4
	<b>B</b> 0.625 x (Total No. of contacts - 2)
	<b>C</b> B + 7.8
HOW TO ORDER	
G125 - 960 XX 02	
SERIES CODE	TOTAL NO. OF CONTACTS
	06, 10, 12, 16, 20, 26, 34, 50

All dimensions in mm.

Patent Published

# Gecko with Latches Mating Profiles

		FEMALE		
		VERTICAL PC TAIL	VERTICAL SMT	CABLE
MALE	VERTICAL PC TAIL			
	HORIZONTAL PC TAIL			
	VERTICAL SMT			
	CABLE			

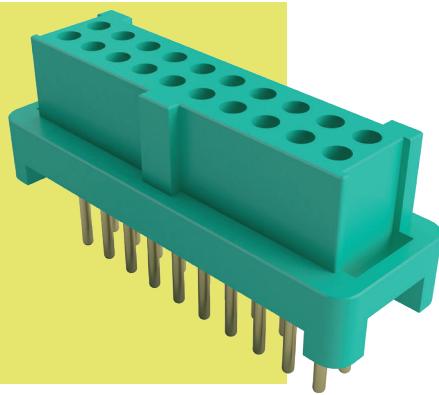
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Female PC Tail

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



3mm PC TAIL	4.5mm PC TAIL						
  <b>Recommended PC Board Pattern</b>	  <b>Recommended PC Board Pattern</b>						
<b>CALCULATION</b>							
<table border="1"> <tr> <td>A</td><td><math>B + 3.8</math></td></tr> <tr> <td>B</td><td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td></tr> <tr> <td>C</td><td><math>B + 1.8</math></td></tr> </table>		A	$B + 3.8$	B	$0.625 \times (\text{Total No. of contacts} - 2)$	C	$B + 1.8$
A	$B + 3.8$						
B	$0.625 \times (\text{Total No. of contacts} - 2)$						
C	$B + 1.8$						
<b>HOW TO ORDER</b>							
<b>SERIES CODE</b>	G125 - F VX XX 05 LO X						
<b>TYPE</b>	<table border="1"> <tr> <td>V1</td><td>3mm PC Tail</td></tr> <tr> <td>V2</td><td>4.5mm PC Tail</td></tr> </table>	V1	3mm PC Tail	V2	4.5mm PC Tail		
V1	3mm PC Tail						
V2	4.5mm PC Tail						
<table border="1"> <tr> <td><b>PACKAGING</b></td></tr> <tr> <td>R</td><td>Tape &amp; Reeled</td></tr> <tr> <td>P</td><td>Loose</td></tr> </table>		<b>PACKAGING</b>	R	Tape & Reeled	P	Loose	
<b>PACKAGING</b>							
R	Tape & Reeled						
P	Loose						
<table border="1"> <tr> <td><b>FINISH</b></td></tr> <tr> <td>05</td><td>Gold</td></tr> </table>		<b>FINISH</b>	05	Gold			
<b>FINISH</b>							
05	Gold						
<table border="1"> <tr> <td><b>TOTAL NO. OF CONTACTS</b></td></tr> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td></tr> </table>		<b>TOTAL NO. OF CONTACTS</b>	06, 10, 12, 16, 20, 26, 34, 50				
<b>TOTAL NO. OF CONTACTS</b>							
06, 10, 12, 16, 20, 26, 34, 50							

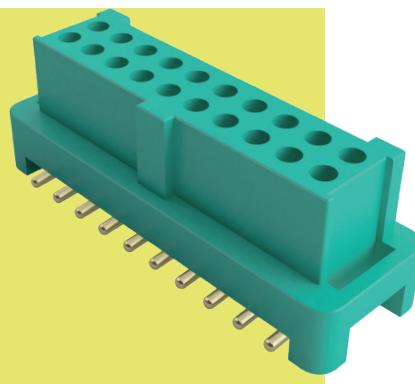
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Female Surface Mount

- 4-finger Beryllium Copper contact.
- Positive keyway polarisation 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		CALCULATION	
		<b>A</b>	B + 3.8
		<b>B</b>	0.625 x (Total No. of contacts - 2)
		<b>C</b>	B + 1.8
		Recommended PC Board Pattern	
HOW TO ORDER			
<b>SERIES CODE</b>	G125	- F S1 XX 05 LO X	<b>PACKAGING</b>
<b>TYPE</b>	S1	Surface Mount	R Tape & Reeled P Loose
			<b>FINISH</b> 05 Gold
			<b>TOTAL NO. OF CONTACTS</b> 06, 10, 12, 16, 20, 26, 34, 50

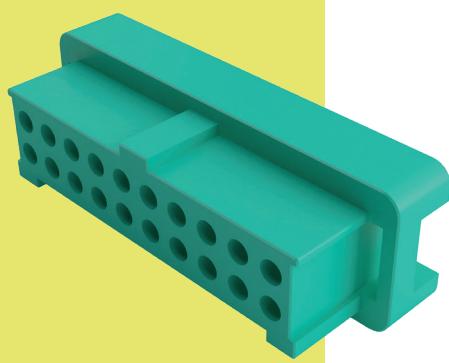
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Female Crimp Housings

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



FEMALE	CALCULATION						
	<table border="1"> <tr> <td><b>A</b></td><td>B + 3.8</td></tr> <tr> <td><b>B</b></td><td>0.625 x (Total No. of contacts - 2)</td></tr> <tr> <td><b>C</b></td><td>B + 1.8</td></tr> </table>	<b>A</b>	B + 3.8	<b>B</b>	0.625 x (Total No. of contacts - 2)	<b>C</b>	B + 1.8
<b>A</b>	B + 3.8						
<b>B</b>	0.625 x (Total No. of contacts - 2)						
<b>C</b>	B + 1.8						
<b>TOOLS</b>							
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>Female contacts shown on following pages.</li> <li>Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>						
<b>HOW TO ORDER</b>							
<b>SERIES CODE</b>	G125 – 204 XX 96 L0						
<b>TYPE</b>	<table border="1"> <tr> <td>204</td> <td>Female Housing</td> </tr> </table>	204	Female Housing				
204	Female Housing						
	<table border="1"> <tr> <td><b>LATCHES</b></td> </tr> <tr> <td>L0      No Latches</td> </tr> </table>	<b>LATCHES</b>	L0      No Latches				
<b>LATCHES</b>							
L0      No Latches							
	<table border="1"> <tr> <td><b>FINISH</b></td> </tr> <tr> <td>96      Housing</td> </tr> </table>	<b>FINISH</b>	96      Housing				
<b>FINISH</b>							
96      Housing							
	<table border="1"> <tr> <td><b>TOTAL NO. OF CONTACTS</b></td> </tr> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td> </tr> </table>	<b>TOTAL NO. OF CONTACTS</b>	06, 10, 12, 16, 20, 26, 34, 50				
<b>TOTAL NO. OF CONTACTS</b>							
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 polarisation of keying of multiple connectors. Also called Blanking Plug.



CONTACTS	DUMMY CONTACT
<b>26 AWG</b> 	
<b>28 – 32 AWG</b> 	<b>WIRE STRIPPING DETAILS</b> 
<b>TOOLS</b>	
<p><b>Recommended Crimp Tool</b> – Z125-900  <b>Positioner</b> – Z125-901  <b>Contact Insertion/Removal Tool</b> – Z125-902</p> <p>► Female crimp housing shown on previous page.      ► Pre-cabled contacts shown on following page.      ► Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</p>	
HOW TO ORDER	
<b>SERIES CODE</b>	G125 – 0XX 00 05
<b>TYPE</b>	
001	Female 26 AWG crimp contact
002	Female 28-32 AWG crimp contact
020	Dummy Contact (blanking plug)
	<b>FINISH</b> 05 Gold

All dimensions in mm.

Patent Published

# 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.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



FEMALE SINGLE ENDED	FEMALE – FEMALE															
TOOLS																
<b>Contact Insertion/Removal Tool</b> – Z125-902																
<ul style="list-style-type: none"><li>▪ Female crimp housing and loose contacts shown on previous pages.</li><li>▪ Full Cable assemblies shown on following page.</li><li>▪ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li></ul>																
HOW TO ORDER																
<b>SERIES CODE</b>	G125	-	F	WX	XXXX	X	94	<b>CABLE COLOUR</b>								
<b>GENDER - FIRST END</b>	<table border="1"><tr><td>F</td><td>Female</td></tr></table>	F	Female							<table border="1"><tr><td>94</td><td>White</td></tr></table>	94	White				
F	Female															
94	White															
<b>CABLE SIZE</b>	<table border="1"><tr><td>W1</td><td>26 AWG</td></tr><tr><td>W2</td><td>28 AWG</td></tr><tr><td>W3</td><td>30 AWG</td></tr><tr><td>W4</td><td>32 AWG</td></tr></table>	W1	26 AWG	W2	28 AWG	W3	30 AWG	W4	32 AWG							<b>TERMINATION - SECOND END</b>
W1	26 AWG															
W2	28 AWG															
W3	30 AWG															
W4	32 AWG															
								<table border="1"><tr><td>L</td><td>Loose cut end</td></tr><tr><td>F</td><td>Female</td></tr></table>	L	Loose cut end	F	Female				
L	Loose cut end															
F	Female															
								<b>CABLE LENGTH</b>								
								<table border="1"><tr><td>0150</td><td>150mm</td></tr><tr><td>0300</td><td>300mm (double-ended)</td></tr><tr><td>0450</td><td>450mm (single-ended)</td></tr></table>	0150	150mm	0300	300mm (double-ended)	0450	450mm (single-ended)		
0150	150mm															
0300	300mm (double-ended)															
0450	450mm (single-ended)															

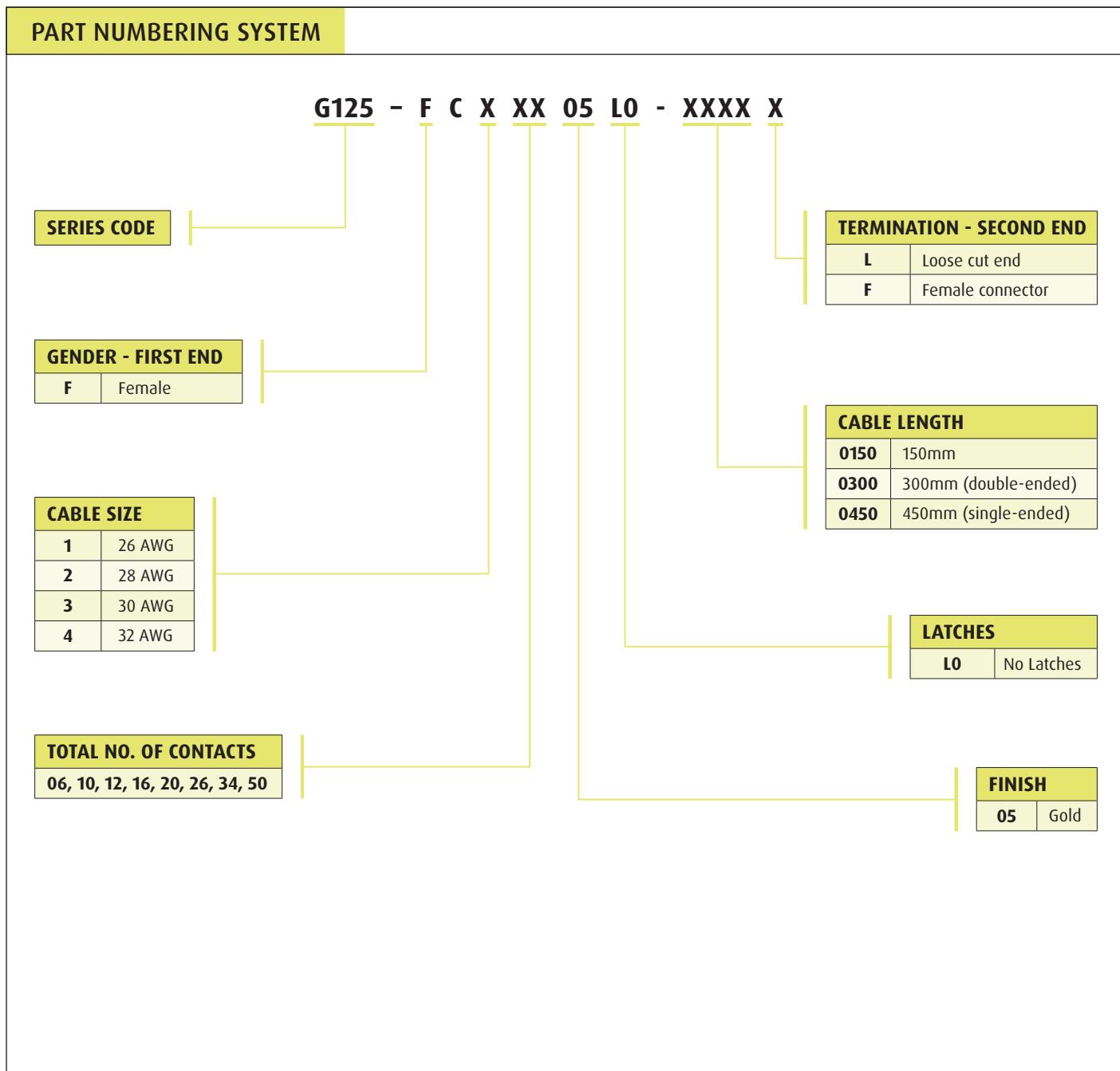
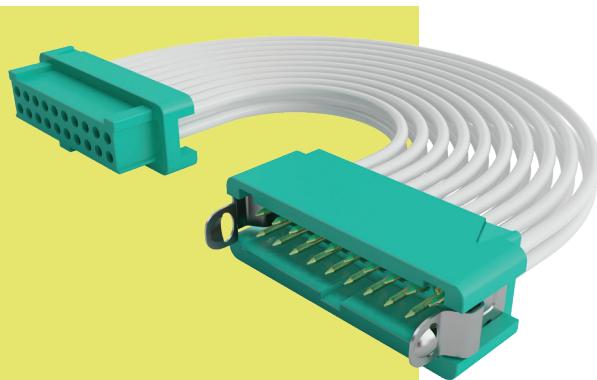
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Female Cable Assemblies

- 4-finger Beryllium Copper contact.
- No. 1 position identified on moulding.
- 2A current capacity, resists high vibration and shock.
- Withstands extremes of temperature: -65°C to +150°C.
- Back potted for added strain relief.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



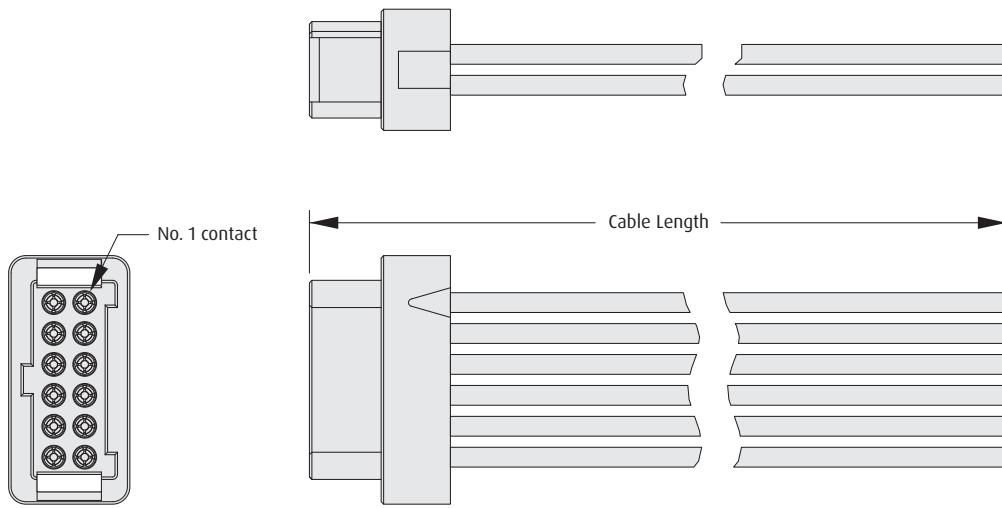
All dimensions in mm.

Patent Published

# 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.

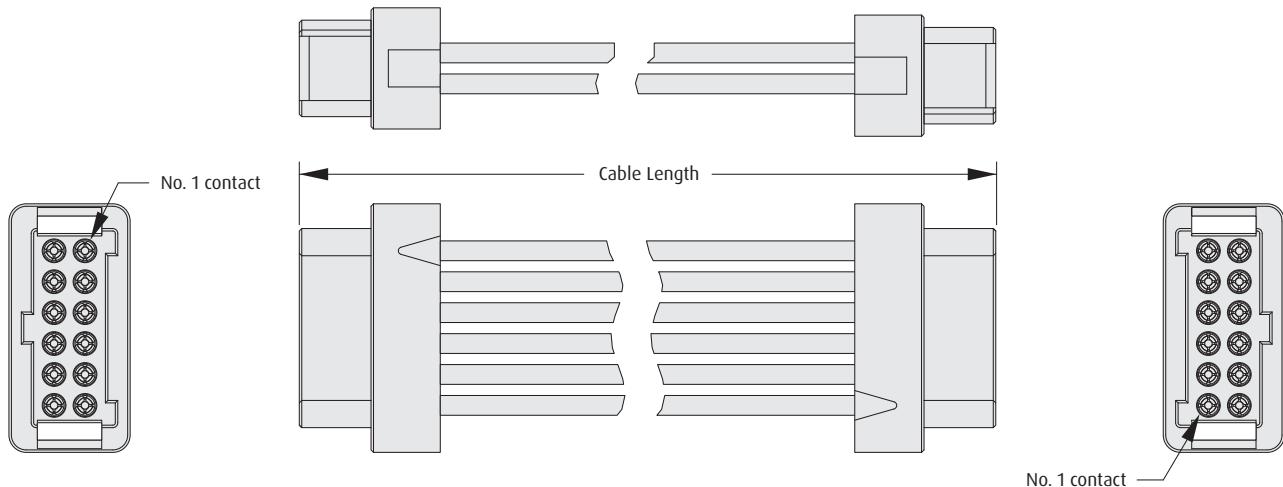
## FEMALE SINGLE ENDED



### ORDER CODE

G125-FCXXX05L0-XXXXL

## FEMALE – FEMALE



### ORDER CODE

G125-FCXXX05L0-XXXXF

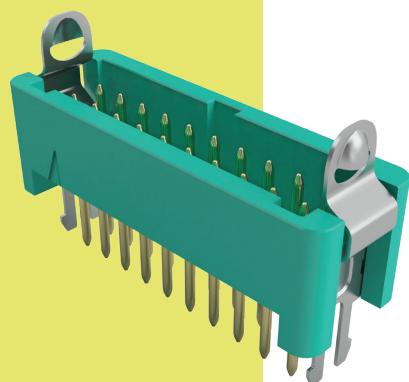
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Male Vertical PC Tail

- 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.



PC TAIL	CALCULATION						
	A    B + 3.8						
	B    0.625 x (Total No. of contacts - 2)						
	C    B + 5.2						
	<b>Recommended PC Board Pattern</b>						
HOW TO ORDER							
<b>SERIES CODE</b>	G125 - M VX XX 05 LX X						
<b>TYPE</b>	<table border="1"> <tr> <td>V1</td><td>3mm PC Tail</td></tr> <tr> <td>V2</td><td>4.5mm PC Tail</td></tr> </table>	V1	3mm PC Tail	V2	4.5mm PC Tail		
V1	3mm PC Tail						
V2	4.5mm PC Tail						
<b>TOTAL NO. OF CONTACTS</b>	<table border="1"> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td></tr> </table>	06, 10, 12, 16, 20, 26, 34, 50					
06, 10, 12, 16, 20, 26, 34, 50							
<b>LATCH</b>	<table border="1"> <tr> <td>L0</td><td>No Latch</td></tr> <tr> <td>L1</td><td>Latch for 1.6mm PCB (use with V1)</td></tr> <tr> <td>L2</td><td>Latch for 2.4mm PCB (use with V2)</td></tr> </table>	L0	No Latch	L1	Latch for 1.6mm PCB (use with V1)	L2	Latch for 2.4mm PCB (use with V2)
L0	No Latch						
L1	Latch for 1.6mm PCB (use with V1)						
L2	Latch for 2.4mm PCB (use with V2)						
<b>PACKAGING</b>	<table border="1"> <tr> <td>R</td><td>Tape &amp; Reeled</td></tr> <tr> <td>P</td><td>Loose</td></tr> </table>	R	Tape & Reeled	P	Loose		
R	Tape & Reeled						
P	Loose						
<b>FINISH</b>	<table border="1"> <tr> <td>05</td><td>Gold</td></tr> </table>	05	Gold				
05	Gold						

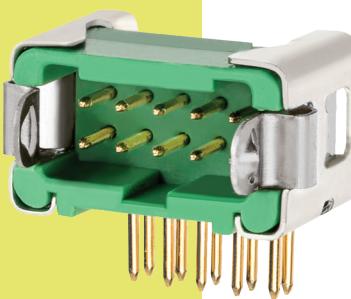
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Male Horizontal PC Tail - Latched

- Secure fixing to the PCB via retention bars 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.



PC TAIL LATCH	SURFACE MOUNT LATCH								
<p>Front View Dimensions:</p> <ul style="list-style-type: none"> <li>A: 8.00</li> <li>B: 0.40</li> <li>C: 6.20</li> </ul> <p>Side View Dimensions:</p> <ul style="list-style-type: none"> <li>No. 1 contact: 1.25</li> <li>Barbs: 0.00</li> <li>Tail: 5.50</li> <li>1.25</li> <li>2.20</li> <li>4.90</li> </ul> <p>Recommended PC Board Pattern:</p>	<p>Front View Dimensions:</p> <ul style="list-style-type: none"> <li>A: 8.00</li> <li>B: 0.40</li> <li>C: 6.20</li> </ul> <p>Side View Dimensions:</p> <ul style="list-style-type: none"> <li>No. 1 contact: 1.25</li> <li>Barbs: 0.00</li> <li>Tail: 5.50</li> <li>1.25</li> <li>4.90</li> </ul> <p>Recommended PC Board Pattern:</p>								
<b>CALCULATION</b> <table border="1"> <tr> <td>A</td> <td><math>B + 4.3</math></td> </tr> <tr> <td>B</td> <td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td> </tr> <tr> <td>C</td> <td><math>B + 5.2</math></td> </tr> </table>		A	$B + 4.3$	B	$0.625 \times (\text{Total No. of contacts} - 2)$	C	$B + 5.2$		
A	$B + 4.3$								
B	$0.625 \times (\text{Total No. of contacts} - 2)$								
C	$B + 5.2$								
<b>HOW TO ORDER</b>									
<b>SERIES CODE</b> <b>G125</b>	<b>M HX XX 05 LX X</b>								
<b>TYPE</b> <table border="1"> <tr> <td>H1</td> <td>3.3mm PC Tail</td> </tr> <tr> <td>H2</td> <td>4.8mm PC Tail</td> </tr> </table>	H1	3.3mm PC Tail	H2	4.8mm PC Tail	<b>PACKAGING</b> <table border="1"> <tr> <td>R</td> <td>Tape &amp; Reeled</td> </tr> <tr> <td>P</td> <td>Loose</td> </tr> </table>	R	Tape & Reeled	P	Loose
H1	3.3mm PC Tail								
H2	4.8mm PC Tail								
R	Tape & Reeled								
P	Loose								
<b>TOTAL NO. OF CONTACTS</b> <table border="1"> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td> </tr> </table>	06, 10, 12, 16, 20, 26, 34, 50	<b>LATCH</b> <table border="1"> <tr> <td>L1</td> <td>Barbs for 3.3mm PC Tail</td> </tr> <tr> <td>L2</td> <td>Barbs for 4.8mm PC Tail</td> </tr> <tr> <td>L3</td> <td>Surface Mount Latch</td> </tr> </table>	L1	Barbs for 3.3mm PC Tail	L2	Barbs for 4.8mm PC Tail	L3	Surface Mount Latch	
06, 10, 12, 16, 20, 26, 34, 50									
L1	Barbs for 3.3mm PC Tail								
L2	Barbs for 4.8mm PC Tail								
L3	Surface Mount Latch								
	<b>FINISH</b> <table border="1"> <tr> <td>05</td> <td>Gold</td> </tr> </table>	05	Gold						
05	Gold								

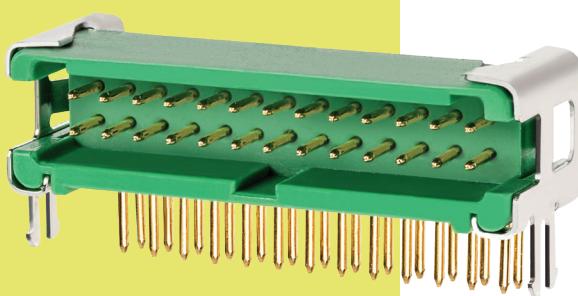
All dimensions in mm.

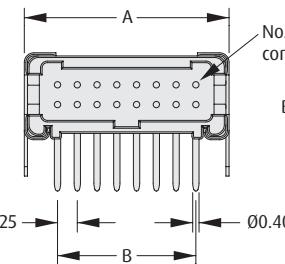
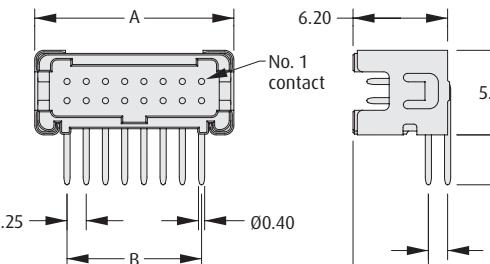
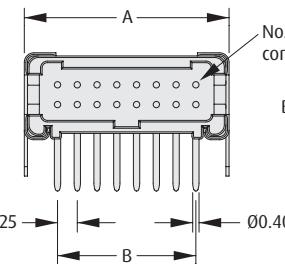
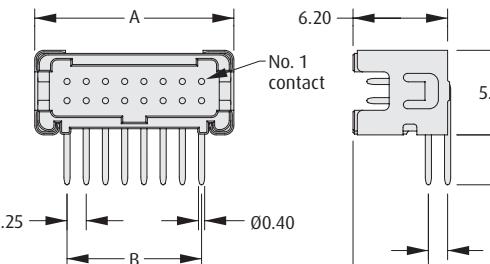
Patent Published

# Gecko with Latches Connectors

## Male Horizontal PC Tail – 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.



PC TAIL FIXING	SURFACE MOUNT FIXING
 	 
<b>CALCULATION</b>	
A $B + 4.3$	
B $0.625 \times (\text{Total No. of contacts} - 2)$	
<b>HOW TO ORDER</b>	
<b>G125 - M HX XX 05 LX X</b>	
<b>SERIES CODE</b>	
<b>TYPE</b>	
H1    3.3mm PC Tail	
H2    4.8mm PC Tail	
<b>TOTAL NO. OF CONTACTS</b>	
06, 10, 12, 16, 20, 26, 34, 50	
<b>PACKAGING</b>	
R    Tape & Reeled	
P    Loose	
<b>FIXING</b>	
L5    Barbs for 3.3mm PC Tail	
L6    Barbs for 4.8mm PC Tail	
L7    Surface Mount Fixing	
<b>FINISH</b>	
05    Gold	

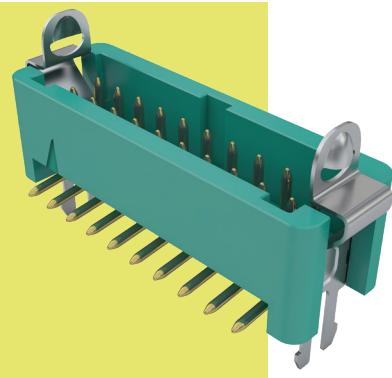
All dimensions in mm.

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.



PC TAIL LATCH	SURFACE MOUNT LATCH								
<p>Technical drawings for PC Tail Latch:</p> <ul style="list-style-type: none"> <li><b>Top View:</b> Dimensions A (width), Ø0.40 (contact pitch), 4.90 (height), 1.25 (width of contacts), and "No. 1 contact".</li> <li><b>Side View:</b> Dimensions C (length), 6.80 (total height), 4.90 (height of contacts), 0.15 max (clearance), and 5.80 (width of contacts). It also shows the latch mechanism.</li> <li><b>PC Board Pattern:</b> Shows the required holes for latches, with dimensions B + 2.50, 1.00, 1.90, 6.20, 1.25, B, 1.20, and 0.70.</li> </ul>	<p>Technical drawings for Surface Mount Latch:</p> <ul style="list-style-type: none"> <li><b>Top View:</b> Dimensions A (width), Ø0.40 (contact pitch), 4.90 (height), 1.25 (width of contacts), and "No. 1 contact".</li> <li><b>Side View:</b> Dimensions C (length), 6.80 (total height), 4.90 (height of contacts), 0.15 max (clearance), and 5.80 (width of contacts). It also shows the latch mechanism.</li> <li><b>PC Board Pattern:</b> Shows the required end pads for latches, with dimensions B + 5.80, B + 2.80, 6.20, 1.20, 1.85, 1.25, B, and 0.70.</li> </ul>								
<b>CALCULATION</b>									
<table border="1"> <tr> <td>A</td><td><math>B + 3.8</math></td></tr> <tr> <td>B</td><td><math>0.625 \times (\text{Total No. of contacts} - 2)</math></td></tr> <tr> <td>C</td><td><math>B + 5.2</math></td></tr> </table>		A	$B + 3.8$	B	$0.625 \times (\text{Total No. of contacts} - 2)$	C	$B + 5.2$		
A	$B + 3.8$								
B	$0.625 \times (\text{Total No. of contacts} - 2)$								
C	$B + 5.2$								
<b>HOW TO ORDER</b>									
<b>SERIES CODE</b>	G125 - M S1 XX 05 LX X								
<b>TYPE</b>	<table border="1"> <tr> <td>S1</td> <td>Surface Mount</td> </tr> </table>	S1	Surface Mount						
S1	Surface Mount								
<b>TOTAL NO. OF CONTACTS</b>	<table border="1"> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td> </tr> </table>	06, 10, 12, 16, 20, 26, 34, 50							
06, 10, 12, 16, 20, 26, 34, 50									
<b>FINISH</b>	<table border="1"> <tr> <td>05</td> <td>Gold</td> </tr> </table>	05	Gold						
05	Gold								
<b>PACKAGING</b> <table border="1"> <tr> <td>R</td> <td>Tape &amp; Reeled</td> </tr> <tr> <td>P</td> <td>Loose</td> </tr> </table>		R	Tape & Reeled	P	Loose				
R	Tape & Reeled								
P	Loose								
<b>LATCH</b> <table border="1"> <tr> <td>L0</td> <td>No Latch</td> </tr> <tr> <td>L1</td> <td>Latch for 1.6mm PCB</td> </tr> <tr> <td>L2</td> <td>Latch for 2.4mm PCB</td> </tr> <tr> <td>L3</td> <td>Surface Mount Latch</td> </tr> </table>		L0	No Latch	L1	Latch for 1.6mm PCB	L2	Latch for 2.4mm PCB	L3	Surface Mount Latch
L0	No Latch								
L1	Latch for 1.6mm PCB								
L2	Latch for 2.4mm PCB								
L3	Surface Mount Latch								

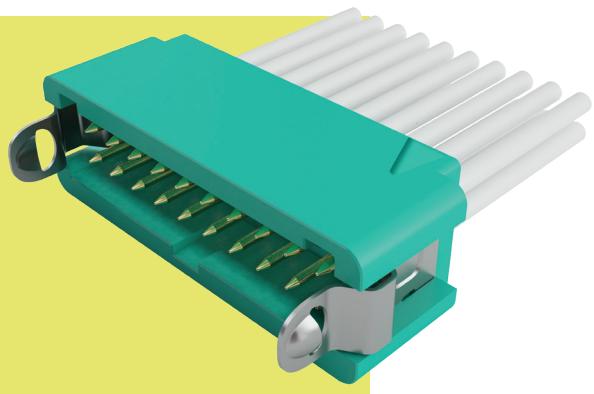
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Male Crimp Housing

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



MALE	CALCULATION				
	<b>A</b> B + 3.8				
	<b>B</b> 0.625 x (Total No. of contacts - 2)				
	<b>C</b> B + 5.2				
TOOLS					
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"> <li>➢ Male contacts shown on following pages.</li> <li>➢ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>				
HOW TO ORDER					
<b>SERIES CODE</b>	G125 – 304 XX 96 LX				
<b>TYPE</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>304</td> <td>Male Housing</td> </tr> </table>	304	Male Housing		
304	Male Housing				
<b>LATCH</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>L0</td> <td>No Latches</td> </tr> <tr> <td>L4</td> <td>Latches (Male Only)</td> </tr> </table>	L0	No Latches	L4	Latches (Male Only)
L0	No Latches				
L4	Latches (Male Only)				
<b>FINISH</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>96</td> <td>Housing</td> </tr> </table>	96	Housing		
96	Housing				
<b>TOTAL NO. OF CONTACTS</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>06, 10, 12, 16, 20, 26, 34, 50</td> </tr> </table>	06, 10, 12, 16, 20, 26, 34, 50			
06, 10, 12, 16, 20, 26, 34, 50					

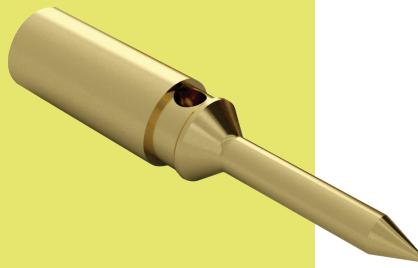
All dimensions in mm.

Patent Published

# 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](http://www.harwin.com/harwintv).
- Dummy Contact can be used for additional polarisation of keying of multiple connectors. Also called Blanking Plug.



CONTACTS	DUMMY CONTACT
<b>26 AWG</b> 	
<b>28 – 32 AWG</b> 	<b>WIRE STRIPPING DETAILS</b> 
TOOLS	
<b>Recommended Crimp Tool</b> – Z125-900 <b>Positioner</b> – Z125-901 <b>Contact Insertion/Removal Tool</b> – Z125-902	<ul style="list-style-type: none"><li>• Male crimp housing shown on previous page.</li><li>• Pre-cable contacts shown on following page.</li><li>• Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li></ul>
HOW TO ORDER	
<b>G125 – XXX 00 05</b>	
<b>SERIES CODE</b>	<b>FINISH</b>
<b>TYPE</b>	<b>05</b> Gold
<b>101</b> Male 26 AWG crimp contact	
<b>102</b> Male 28-32 AWG crimp contact	
<b>020</b> Dummy Contact (blanking plug)	

All dimensions in mm.

Patent Published

# 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.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



MALE SINGLE ENDED	MALE – MALE														
MALE – FEMALE	TOOLS														
	<p><b>Contact Insertion/Removal Tool</b> – Z125-902</p> <ul style="list-style-type: none"> <li>➢ Male crimp housing and loose contacts shown on previous pages.</li> <li>➢ Full Cable assemblies shown on following page.</li> <li>➢ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</li> </ul>														
HOW TO ORDER															
<b>SERIES CODE</b> <b>G125</b>	<b>M</b> <b>WX</b> <b>XXXX</b> <b>X</b> <b>94</b>														
<b>GENDER – FIRST END</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>M</b></td><td>Male</td></tr> </table>	<b>M</b>	Male	<b>CABLE COLOUR</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>94</b></td><td>White</td></tr> </table>	<b>94</b>	White										
<b>M</b>	Male														
<b>94</b>	White														
<b>CABLE SIZE</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>W1</b></td><td>26 AWG</td></tr> <tr><td><b>W2</b></td><td>28 AWG</td></tr> <tr><td><b>W3</b></td><td>30 AWG</td></tr> <tr><td><b>W4</b></td><td>32 AWG</td></tr> </table>	<b>W1</b>	26 AWG	<b>W2</b>	28 AWG	<b>W3</b>	30 AWG	<b>W4</b>	32 AWG	<b>TERMINATION – SECOND END</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>L</b></td><td>Loose cut end</td></tr> <tr><td><b>F</b></td><td>Female</td></tr> <tr><td><b>M</b></td><td>Male</td></tr> </table>	<b>L</b>	Loose cut end	<b>F</b>	Female	<b>M</b>	Male
<b>W1</b>	26 AWG														
<b>W2</b>	28 AWG														
<b>W3</b>	30 AWG														
<b>W4</b>	32 AWG														
<b>L</b>	Loose cut end														
<b>F</b>	Female														
<b>M</b>	Male														
	<b>CABLE LENGTH</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td><b>0150</b></td><td>150mm</td></tr> <tr><td><b>0300</b></td><td>300mm (double-ended)</td></tr> <tr><td><b>0450</b></td><td>450mm (single-ended)</td></tr> </table>	<b>0150</b>	150mm	<b>0300</b>	300mm (double-ended)	<b>0450</b>	450mm (single-ended)								
<b>0150</b>	150mm														
<b>0300</b>	300mm (double-ended)														
<b>0450</b>	450mm (single-ended)														

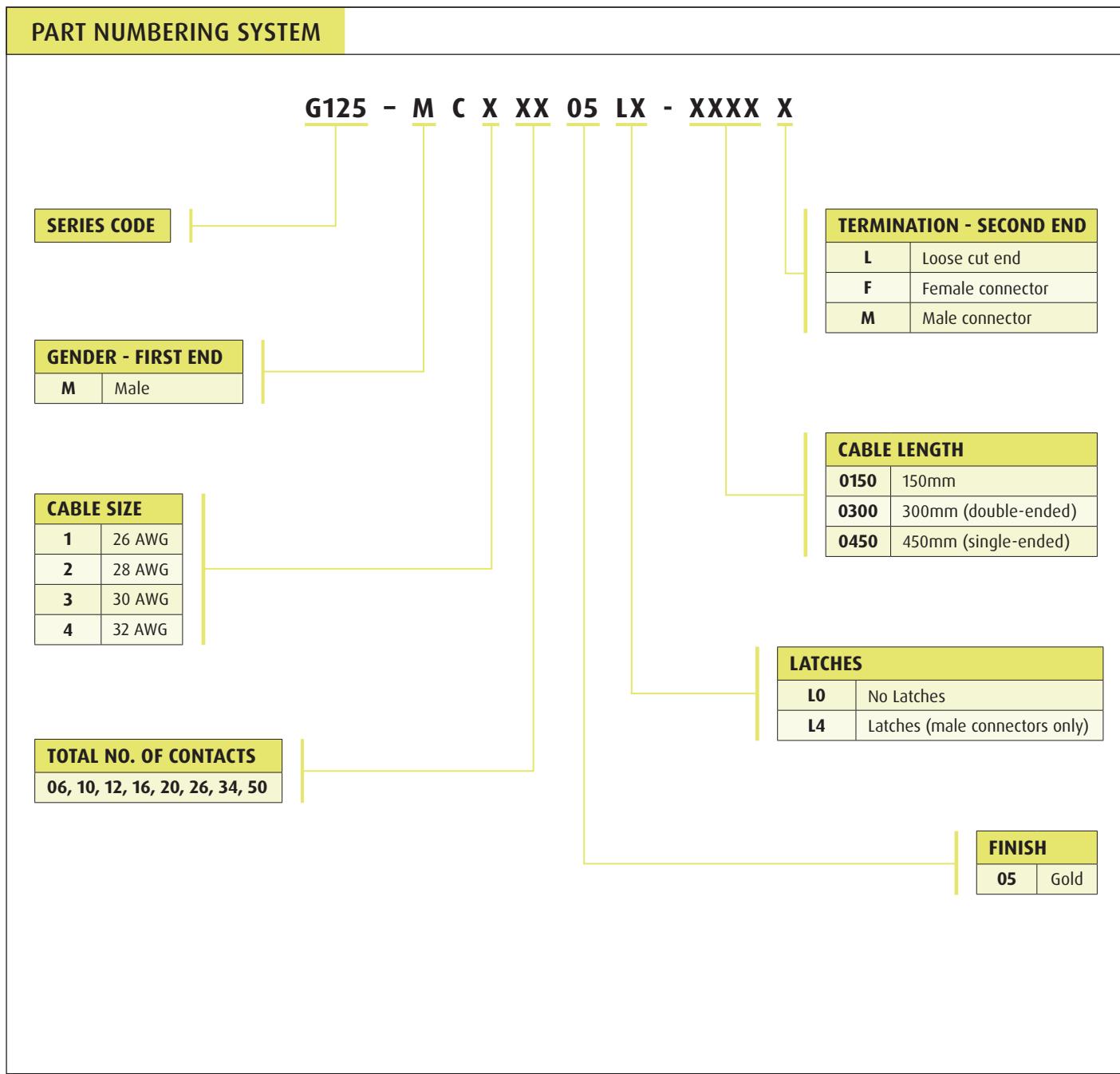
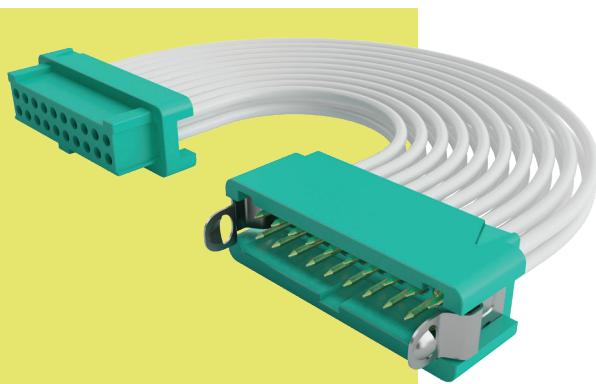
All dimensions in mm.

Patent Published

# Gecko with Latches Connectors

## Male Cable Assemblies

- No. 1 position identified on moulding.
- 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.
- For non-standard cable lengths, please visit [harwin.com/cable-assemblies](http://harwin.com/cable-assemblies) and fill in your requirements.



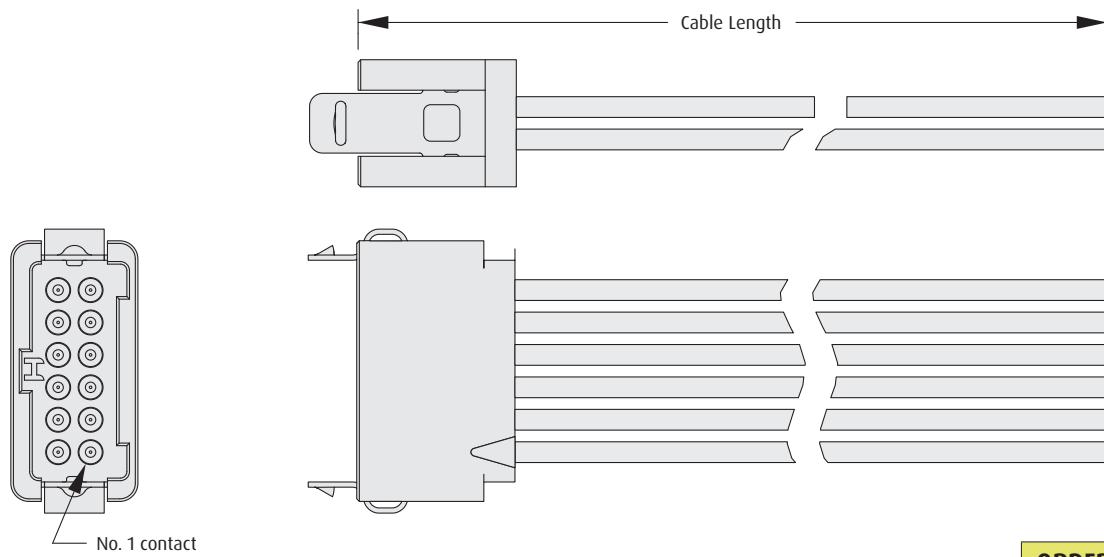
All dimensions in mm.

Patent Published

# 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.

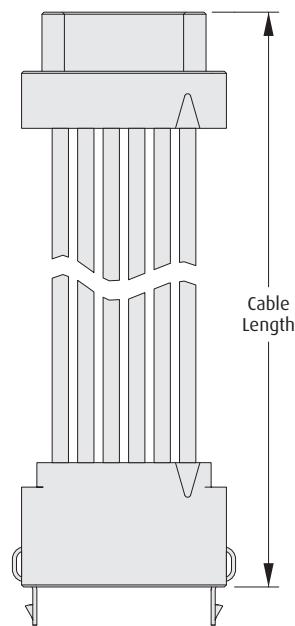
## MALE SINGLE ENDED



### ORDER CODE

G125-MCXXX05LX-XXXXL

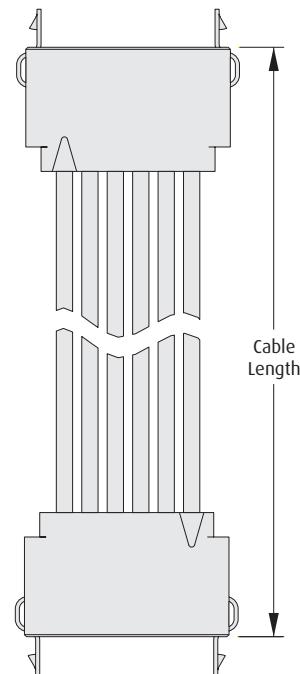
## MALE - FEMALE



### ORDER CODE

G125-MCXXX05LX-XXXXF

## MALE - MALE



### ORDER CODE

G125-MCXXX05LX-XXXXM

All dimensions in mm.

Patent Published

# 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	POSITIONER
<ul style="list-style-type: none"> <li>► Precision tool with ratchet mechanism and 8-indent form.</li> <li>► Must be used with positioner.</li> <li>► Instruction sheet available.</li> </ul>  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> <b>ORDER CODE</b>  Z125-900 </div>	<ul style="list-style-type: none"> <li>► Must be used with hand crimp tool.</li> </ul>  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> <b>ORDER CODE</b>  Z125-901 </div>
INSERTION/REMOVAL TOOL	DE-LATCH TOOL
<ul style="list-style-type: none"> <li>► For inserting and removing crimped contacts into the rear of mouldings.</li> <li>► Instruction sheet available.</li> </ul>  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> <b>ORDER CODE</b>  Z125-902 </div>	<ul style="list-style-type: none"> <li>► For assisting with unmating latched connectors.</li> </ul>  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> <b>ORDER CODE</b>  Z125-926xx00 </div> <p style="text-align: right;">Replace xx with No. of Contacts: 06, 10, 12, 16, 20, 26, 34 or 50</p>

# Gecko Connectors Tooling

GECKO

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

HEX DRIVE BIT	BALL HEX DRIVER
<ul style="list-style-type: none"><li>1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings.</li><li>For use with torque tooling or similar equipment.</li></ul> 	<ul style="list-style-type: none"><li>1.5mm A/F Hex end for Gecko Screw-Lok Hex Socket fixings.</li><li>Ball-shaped end can be used at a wide range of angles.</li></ul> 
<b>ORDER CODE</b>	
Z9950-00	Z9952-00
SCREWDRIVER	
<ul style="list-style-type: none"><li>For use with Gecko Screw-Lok board mount nuts.</li><li>Board mount nuts to be tightened to a torque of <math>21 \pm 2\text{cmN}</math>.</li></ul> 	
<b>ORDER CODE</b>	
Z80-298	