

# 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

<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

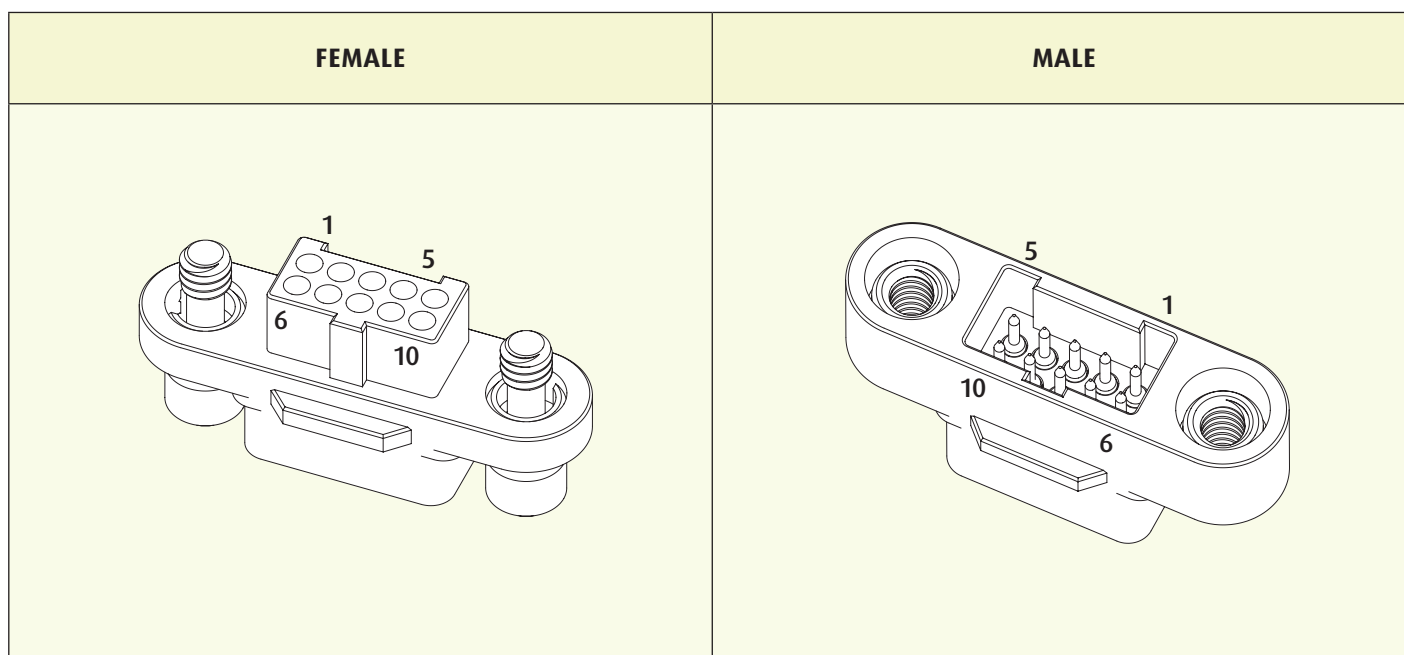
Contact durability:	1000 operations
<b>Mating forces (per contact pair)</b>	
Insertion force:	2.8N max
Withdrawal force:	0.2N min
Contact retention in housing:	6N min

## 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/s <sup>2</sup> (20G) duration 6 hours
*Bump severity:	390m/s <sup>2</sup> (40G), 4000 ±10 bumps
*Shock severity:	981m/s <sup>2</sup> (100G) for 6ms in Z axis 490m/s <sup>2</sup> (50G) for 11ms in X & Y axes
*Acceleration severity:	490m/s <sup>2</sup> (50G)

\* Tested with latched connectors.

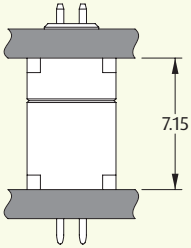
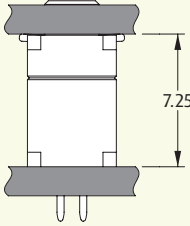
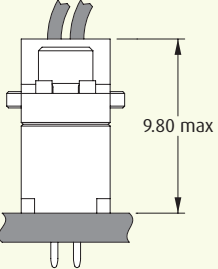
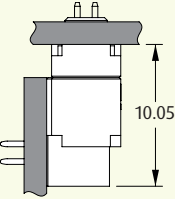
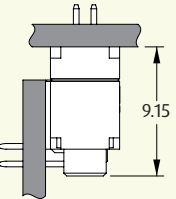
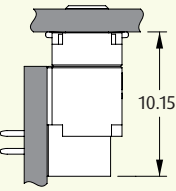
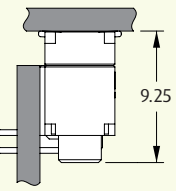
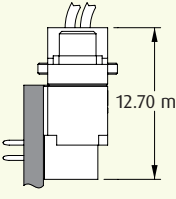
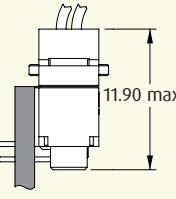
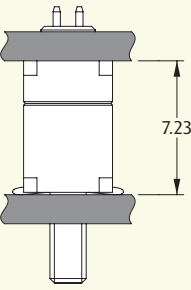
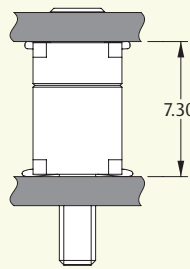
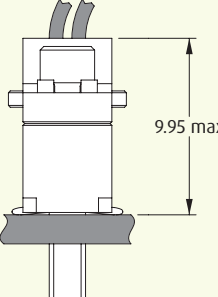
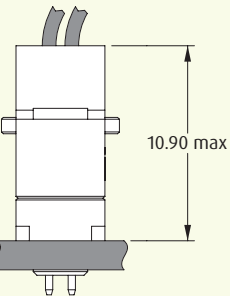
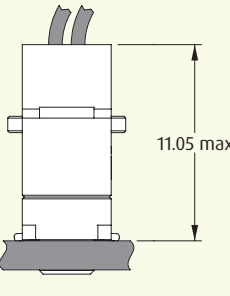
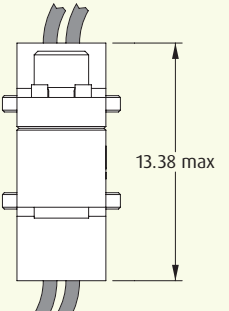
# Pin Numbering



All dimensions in mm.

Patent Published

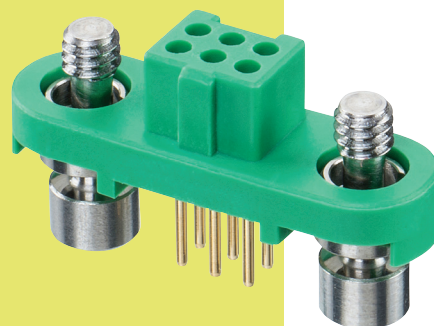
# Gecko Screw-Lok Mating Profiles

		FEMALE		
		VERTICAL THROUGHBOARD	VERTICAL SMT	CABLE
MALE	VERTICAL THROUGHBOARD	 7.15	 7.25	 9.80 max
	HORIZONTAL THROUGHBOARD	 10.05  9.15 Standard      Reverse Fix	 10.15  9.25 Standard      Reverse Fix	 12.70 max  11.90 max Standard      Reverse Fix
	VERTICAL SMT	 7.23	 7.30	 9.95 max
	CABLE	 10.90 max	 11.05 max	 13.38 max

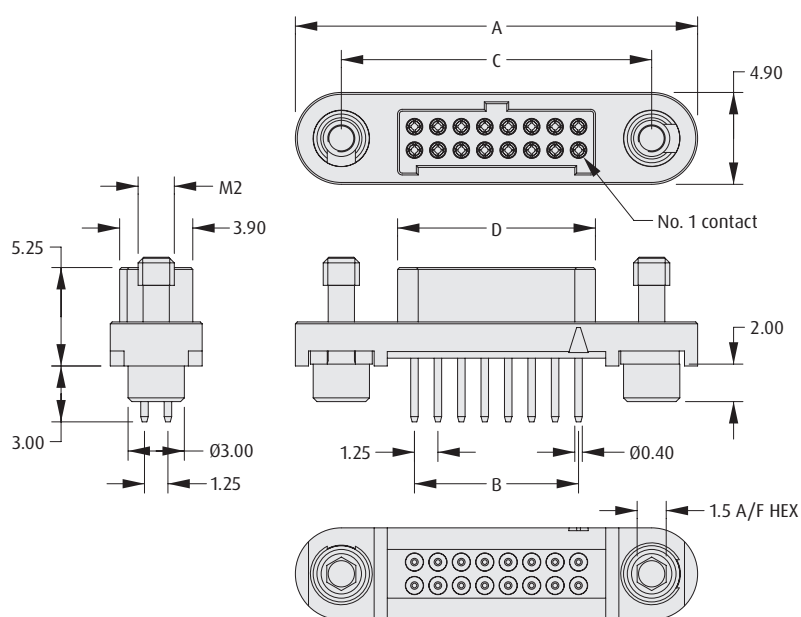
# Gecko Screw-Lok Connectors

## Female Throughboard

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

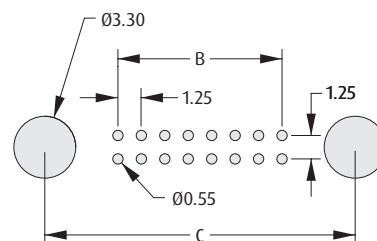


### 3mm THROUGHBOARD



### CALCULATION

<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>	$B + 1.8$



Recommended PC Board Pattern

### HOW TO ORDER

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

#### SERIES CODE

#### TYPE

**V1** 3mm Throughboard

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

#### FINISH

**05** Gold

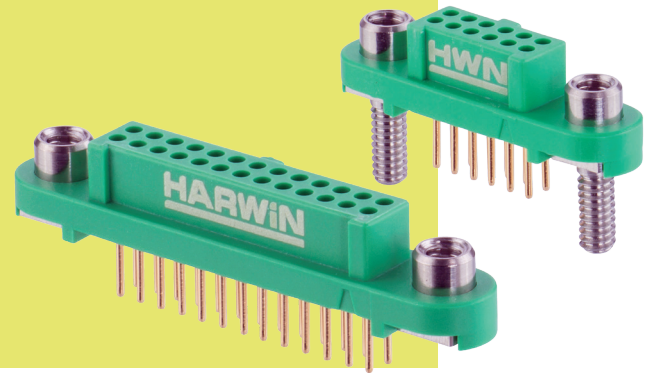
#### TOTAL NO. OF CONTACTS

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

# Gecko Screw-Lok Connectors

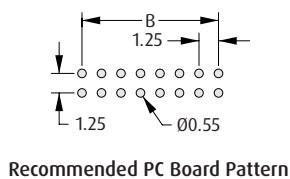
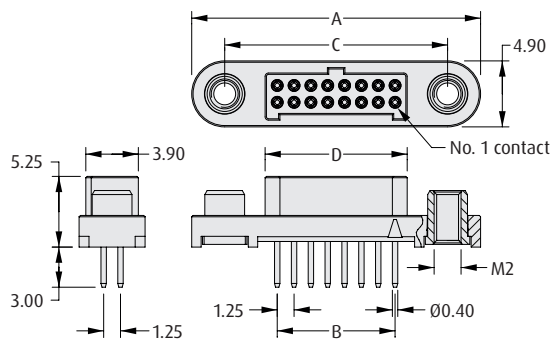
## Female Throughboard - Reverse Fix

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



GECKO SCREW-LOK

### WITHOUT BOARD MOUNT

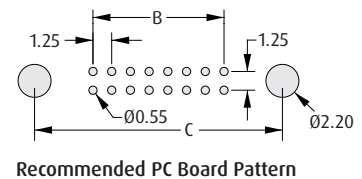
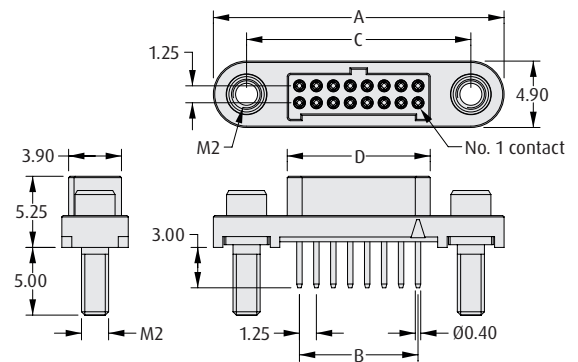


Recommended PC Board Pattern

#### CALCULATION

A	B + 12.7
B	0.625 x (Total No. of contacts - 2)
C	B + 7.8
D	B + 1.8

### WITH BOARD MOUNT



Recommended PC Board Pattern

### HOW TO ORDER

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

#### SERIES CODE

#### TYPE

**V1** 3mm Throughboard

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

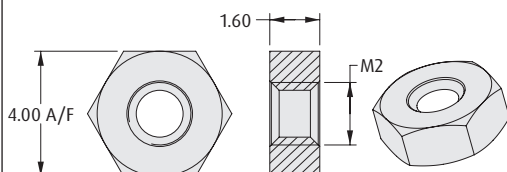
#### SCREW-LOK

<b>F2</b>	Internal Thread
<b>F3</b>	With 5mm Board Mount stud

### REQUIRED HARDWARE

Order separately from connector

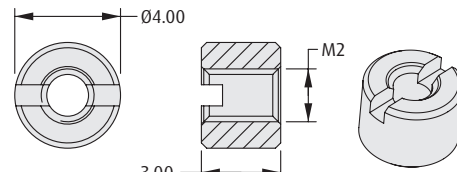
#### Hexagonal Board Mount Nut



#### ORDER CODE

**G125-4500000B**

#### Slotted Board Mount Nut



#### ORDER CODE

**G125-4510000B**

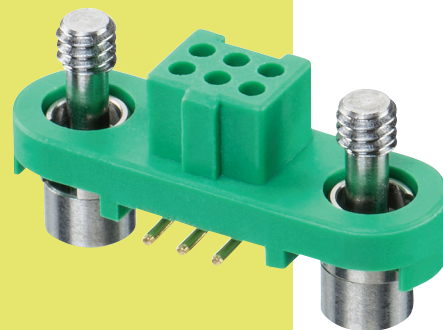
All dimensions in mm.

Patent Published

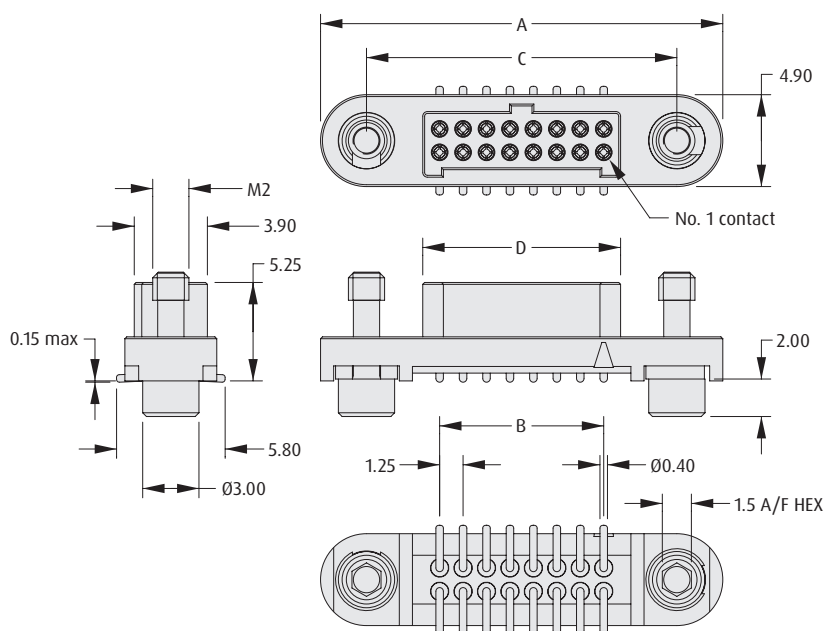
# Gecko Screw-Lok Connectors

## Female Surface Mount

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

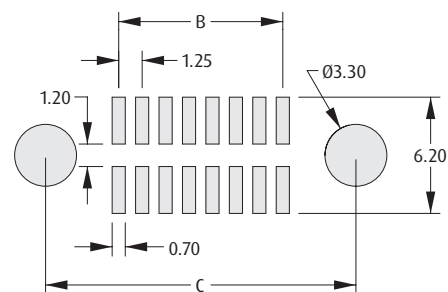


### SURFACE MOUNT



### CALCULATION

<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>	$B + 1.8$



Recommended PC Board Pattern

### HOW TO ORDER

**G125 - F S1 XX 05 F1 X**

#### SERIES CODE

#### TYPE

**S1** Surface Mount

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

#### FINISH

**05** Gold

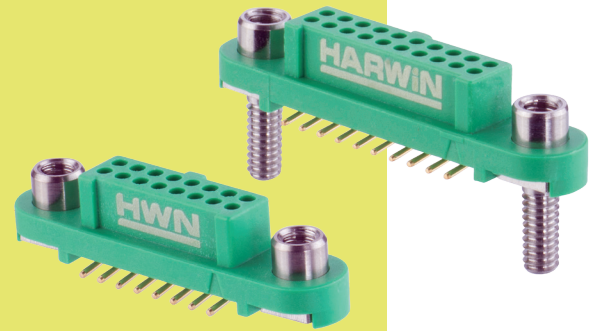
#### TOTAL NO. OF CONTACTS

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

# Gecko Screw-Lok Connectors

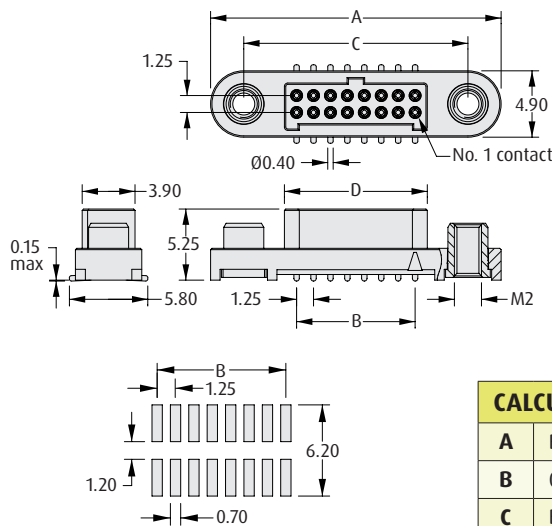
## Female Surface Mount - Reverse Fix

- ❖ 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.



GECKO SCREW-LOK

### WITHOUT BOARD MOUNT

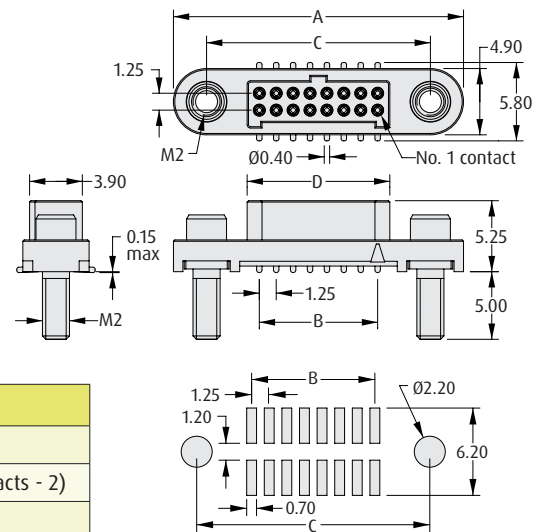


Recommended PC Board Pattern

#### CALCULATION

<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>	$B + 1.8$

### WITH BOARD MOUNT



Recommended PC Board Pattern

### HOW TO ORDER

**G125 - F S1 XX 05 FX X**

#### SERIES CODE

#### TYPE

**S1** Surface Mount

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

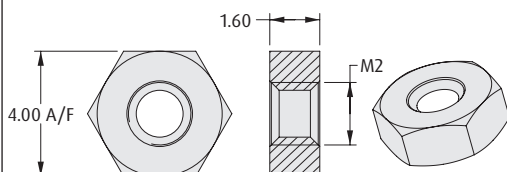
#### SCREW-LOK

<b>F2</b>	Internal Thread
<b>F3</b>	With 5mm Board Mount stud

### REQUIRED HARDWARE

Order separately from connector

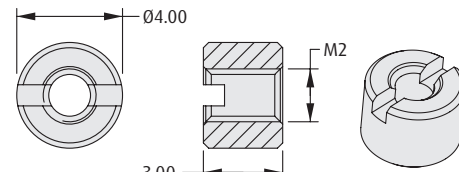
#### Hexagonal Board Mount Nut



#### ORDER CODE

**G125-4500000B**

#### Slotted Board Mount Nut



#### ORDER CODE

**G125-4510000B**

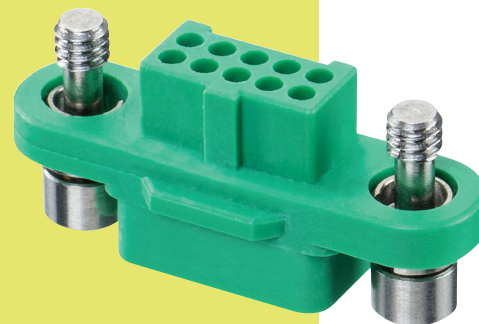
All dimensions in mm.

Patent Published

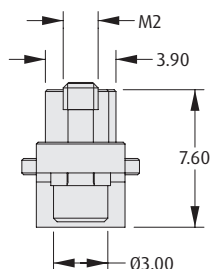
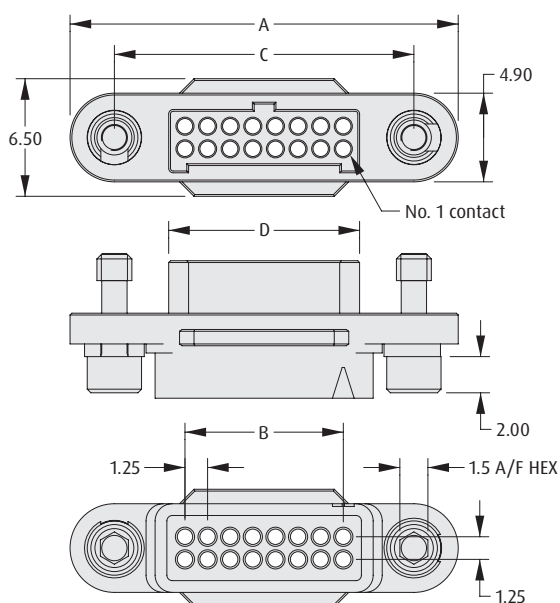
# Gecko Screw-Lok Connectors

## Female Crimp Housings

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on housing.
- 3 polarizing points on each housing prevent mis-mating.
- 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>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$
<b>D</b>	$B + 1.8$

### TOOLS

**Recommended Crimp Tool** - Z125-900

**Positioner** - Z125-901

**Contact Insertion/Removal Tool** - Z125-902

Female contacts shown on following pages.

Instruction sheets available at [www.harwin.com/instructions](http://www.harwin.com/instructions).

### HOW TO ORDER

<b>SERIES CODE</b>	<b>G125 - 224 XX 96 XX</b>	<b>SCREW-LOK</b>
<b>TYPE</b>		<b>F1</b> Floating Hex Socket fixings
<b>224</b> Female Housing		<b>00</b> No fixings (use with Metal Hoods)
<b>TOTAL NO. OF CONTACTS</b>		<b>FINISH</b>
<b>06, 10, 12, 16, 20, 26, 34, 50</b>		<b>96</b> Housing

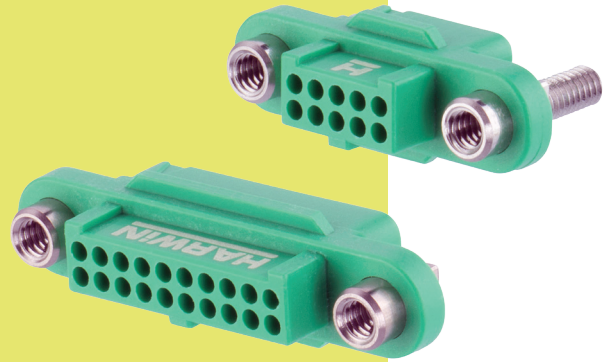
All dimensions in mm.

Patent Published

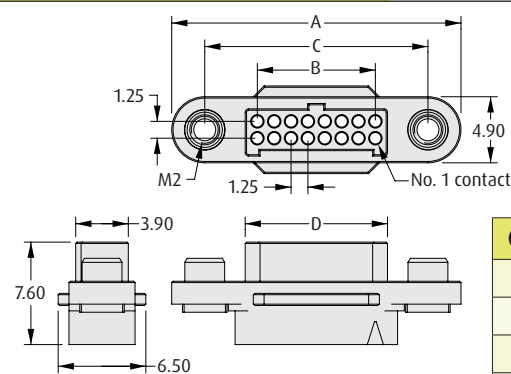
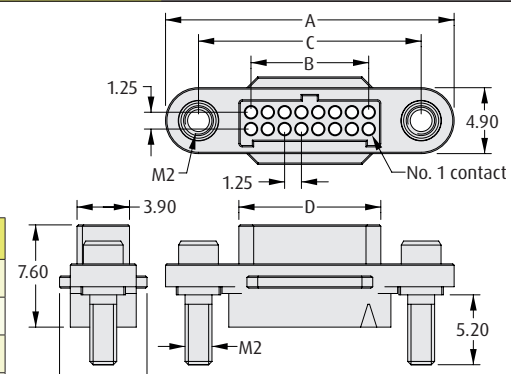
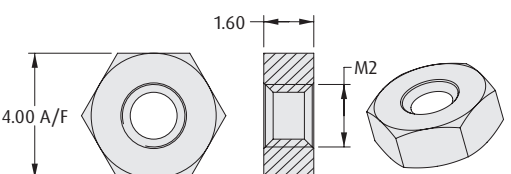
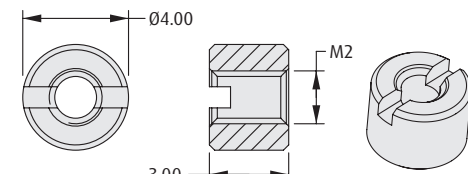
# Gecko Screw-Lok Connectors

## 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.
- ❖ Stainless steel screw fixing mates to applicable male connector fitted with floating screw-loks.
- ❖ Order nuts for panel mount separately - see bottom of page.



GECKO SCREW-LOK

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

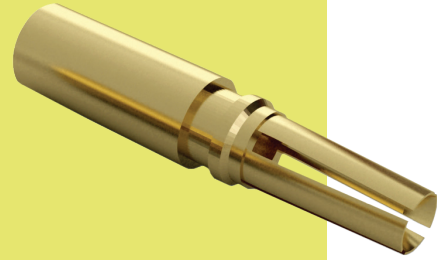
Patent Published

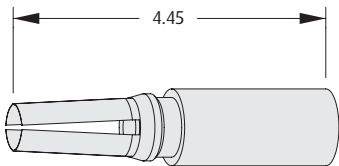
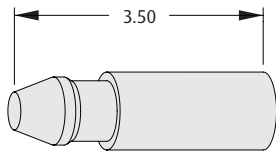
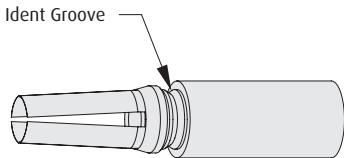
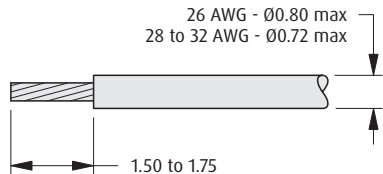


# Gecko Screw-Lok Connectors

## 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 polarization of keying of multiple connectors. Also called Blanking Plug.



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

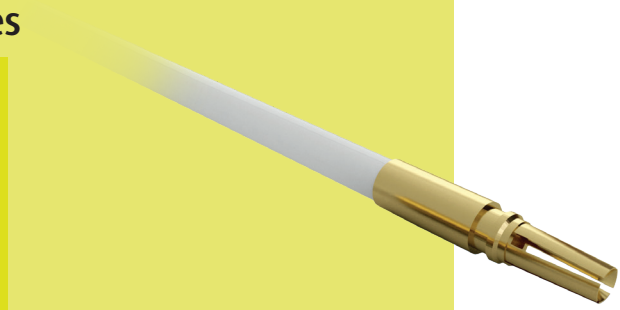
All dimensions in mm.

Patent Published

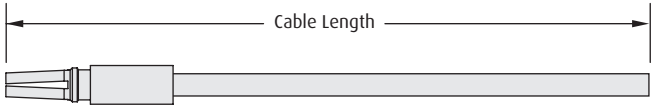
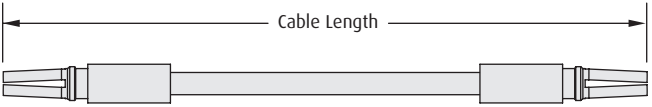
# Gecko Screw-Lok Connectors

## 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.



GECKO SCREW-LOK

FEMALE SINGLE ENDED		FEMALE – FEMALE	
			
TOOLS			
<b>Contact Insertion/Removal Tool</b> – Z125-902		<div>❖ Female crimp housings and loose contacts shown on previous pages.</div> <div>❖ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</div>	
HOW TO ORDER			
<div><div><div><b>SERIES CODE</b></div><div>G125</div></div><div><div><b>GENDER - FIRST END</b></div><div>FFemale</div></div><div><div><b>CABLE SIZE</b></div><div>W126 AWG</div><div>W228 AWG</div><div>W330 AWG</div></div><div><div><b>CABLE COLOR</b></div><div>94White</div></div><div><div><b>TERMINATION - SECOND END</b></div><div>LLoose cut end</div><div>FFemale</div></div><div><div><b>CABLE LENGTH</b></div><div>0150150mm</div><div>0300300mm (double-ended)</div><div>0450450mm (single-ended)</div></div></div> <div><div><b>G125</b></div><div><b>-</b></div><div><b>F</b></div><div><b>WX</b></div><div><b>XXXX</b></div><div><b>X</b></div><div><b>94</b></div></div>			

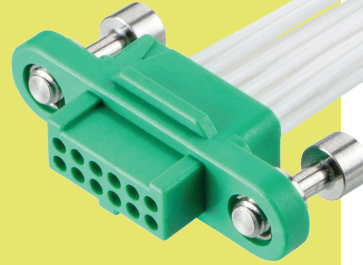
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

## Female Cable Assemblies

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



### PART NUMBERING SYSTEM

**G125 - F C X XX 05 FX - XXXX X**

#### SERIES CODE

#### GENDER - FIRST END

**F** Female

#### CABLE SIZE

<b>1</b>	26 AWG
<b>2</b>	28 AWG

#### TOTAL NO. OF CONTACTS

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

#### TERMINATION - SECOND END

<b>L</b>	Loose cut end
<b>F0 or F1</b>	Female connector (same as First End)

#### CABLE LENGTH

<b>0150</b>	150mm
<b>0300</b>	300mm (double-ended)
<b>0450</b>	450mm (single-ended)

#### SCREW-LOK

<b>F0</b>	No fixings (use with Metal Hoods)
<b>F1</b>	Floating Hex Socket fixings

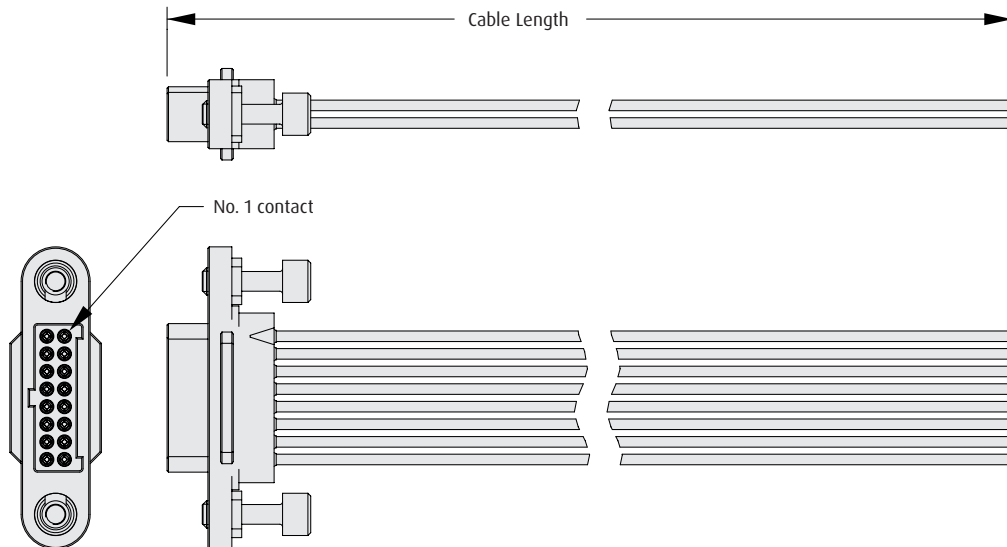
#### FINISH

<b>05</b>	Gold
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# 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.

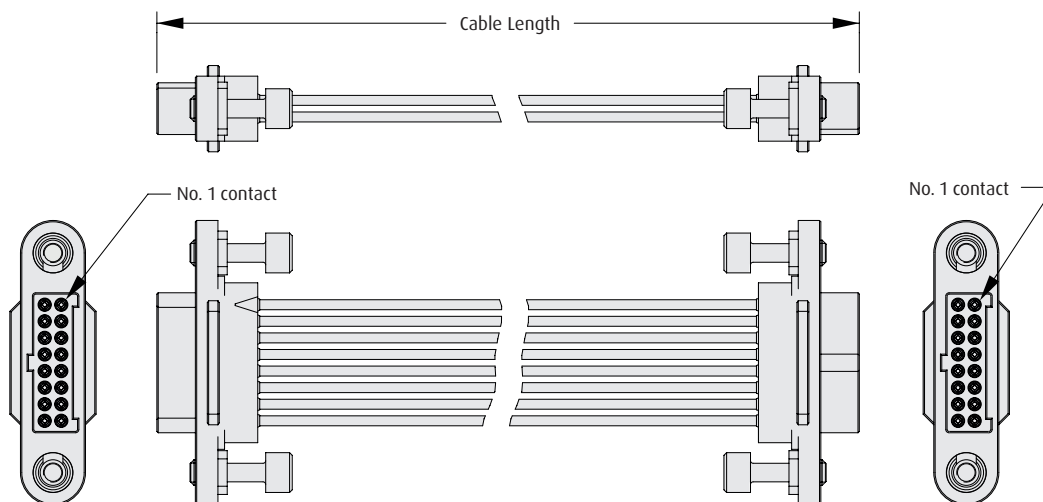
## FEMALE SINGLE ENDED



### ORDER CODE

G125-FCXXX05F1-XXXXL

## FEMALE – FEMALE



### ORDER CODE

G125-FCXXX05F1-XXXXF1

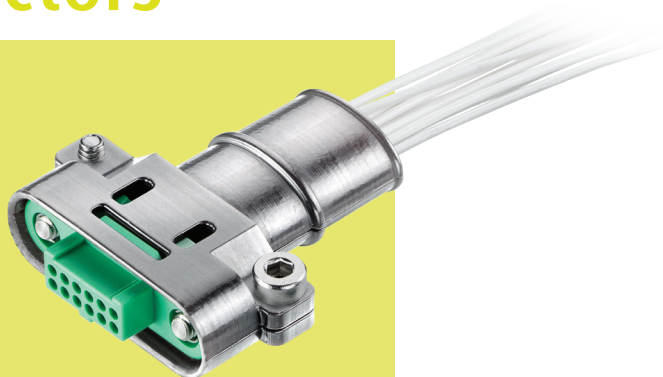
All dimensions in mm.

Patent Published

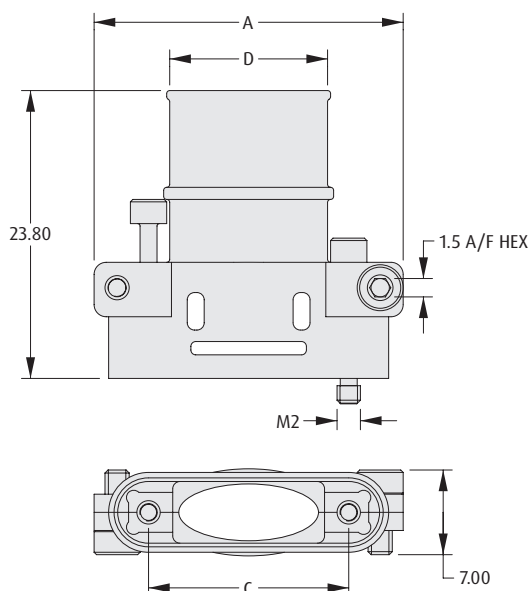
# Gecko Screw-Lok Connectors

## Female Metal Hood / Backshell

- ❖ Supplied as a kit, including 2 metal hood halves, 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.

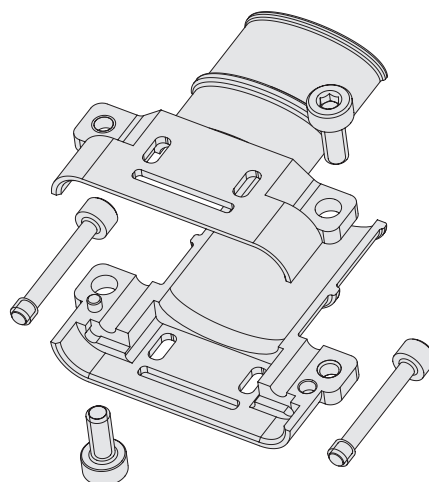


### HOOD / BACKSHELL



### CALCULATION

<b>A</b>	$B + 16.8$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$
<b>D</b>	$B + 4.3$



### BAND-IT TIE

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



### ORDER CODE

<b>M80-9470000</b>	Length = 206.8mm
<b>M80-9480000</b>	Length = 362.0mm

### HOW TO ORDER

**G125 - 964 XX F1**

**SERIES CODE**

**TOTAL NO. OF CONTACTS**

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

# Gecko Screw-Lok Connectors

## Male Vertical Throughboard

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



GECKO SCREW-LOK

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

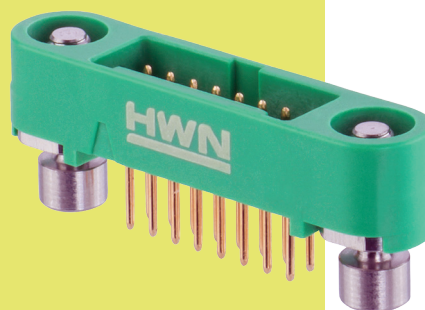
All dimensions in mm.

Patent Published

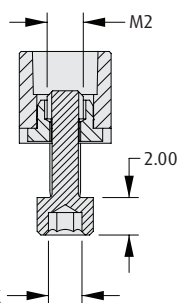
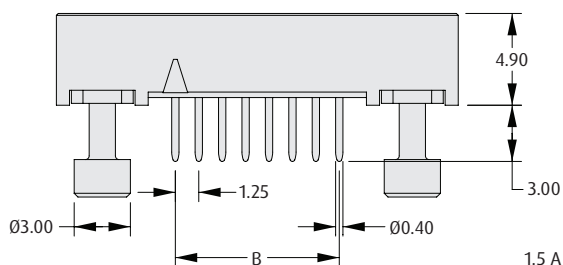
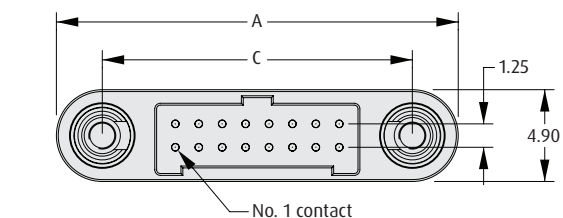
# Gecko Screw-Lok Connectors

## Male Vertical Throughboard - Reverse Fix

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

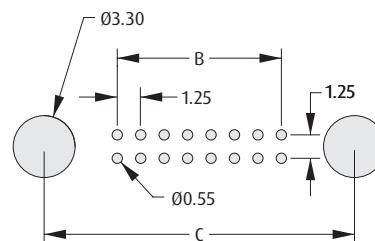


### THROUGHBOARD



### CALCULATION

<b>A</b>	$B + 12.7$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$



Recommended PC Board Pattern

### HOW TO ORDER

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

#### SERIES CODE

#### TYPE

**V1** 3mm Throughboard

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

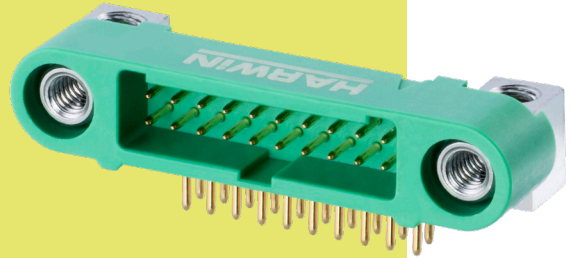
#### FINISH

**05** Gold

# Gecko Screw-Lok Connectors

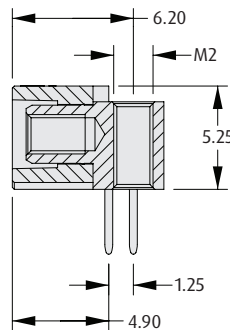
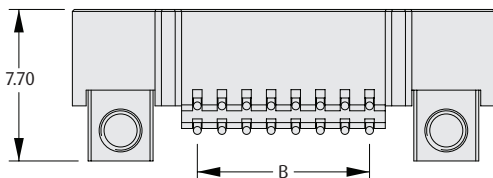
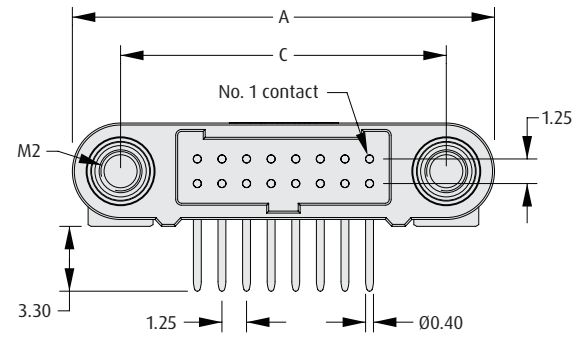
## Male Horizontal Throughboard

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



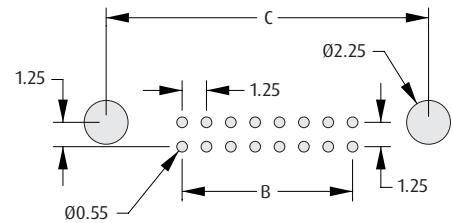
GECKO SCREW-LOK

### THROUGHBOARD



### CALCULATION

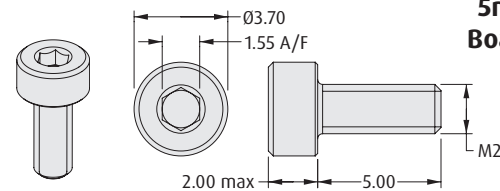
<b>A</b>	$B + 12.7$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$



Recommended PC Board Pattern

### REQUIRED HARDWARE

Order separately from connector



**5mm Hex Socket  
Board Mount Bolt**

### ORDER CODE

**G125-4520000B**

### HOW TO ORDER

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

#### SERIES CODE

#### TYPE

**H1** 3mm Throughboard

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

#### FINISH

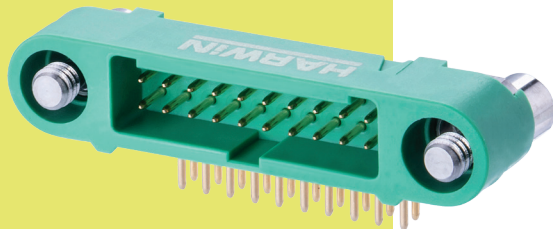
**05** Gold



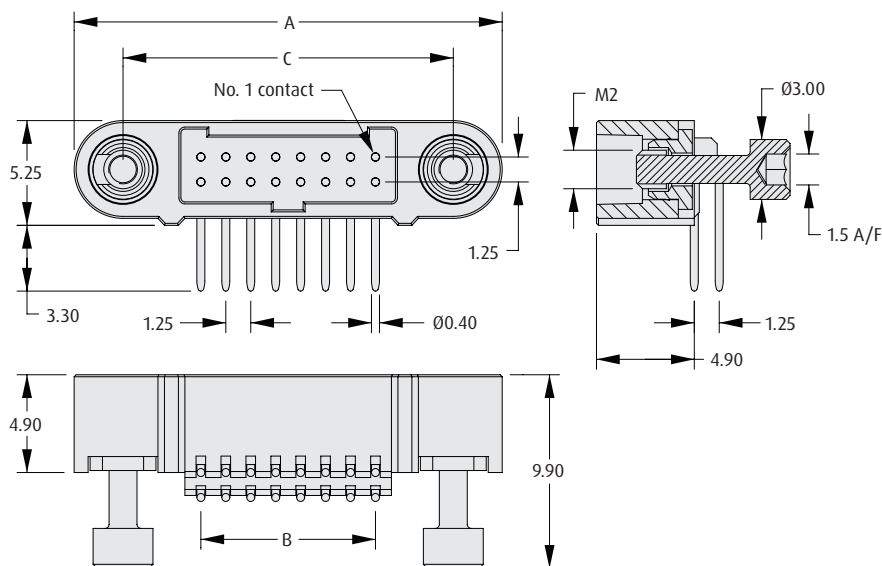
# Gecko Screw-Lok Connectors

## Male Horizontal Throughboard - Reverse Fix

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

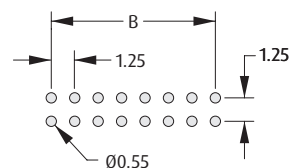


### THROUGHBOARD



### CALCULATION

<b>A</b>	$B + 12.7$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$



Recommended PC Board Pattern

### HOW TO ORDER

**G125 - M H1 XX 05 M3 X**

#### SERIES CODE

#### TYPE

**H1** 3mm Throughboard

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

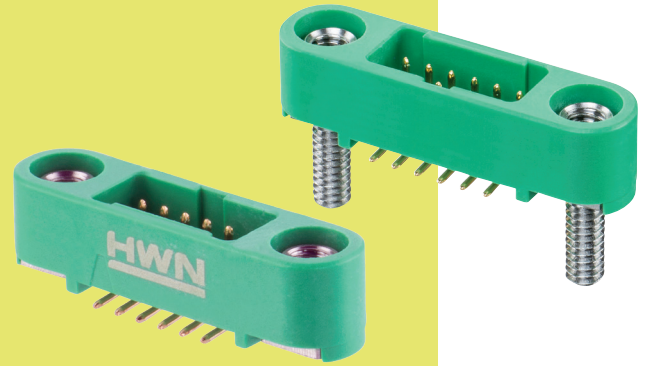
#### FINISH

**05** Gold

# Gecko Screw-Lok Connectors

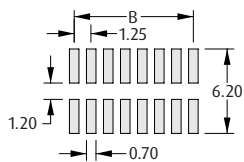
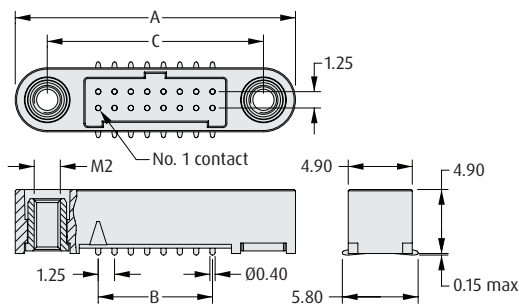
## Male Vertical Surface Mount

- ❖ 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.



GECKO SCREW-LOK

### WITHOUT BOARD MOUNT

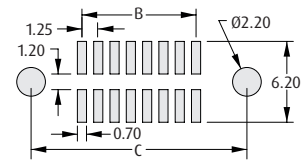
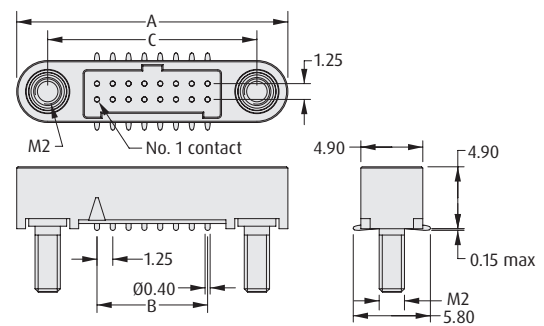


Recommended PC Board Pattern

#### CALCULATION

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

### WITH BOARD MOUNT



Recommended PC Board Pattern

### HOW TO ORDER

**G125 - M S1 XX 05 MX X**

#### SERIES CODE

#### TYPE

**S1** Surface Mount

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

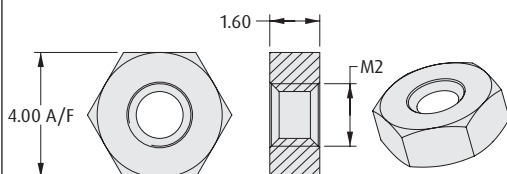
#### SCREW-LOK

<b>M1</b>	Internal Thread
<b>M2</b>	With 5mm Board Mount Stud

### REQUIRED HARDWARE

Order separately from connector

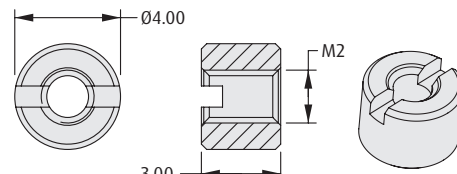
#### Hexagonal Board Mount Nut



#### ORDER CODE

**G125-4500000B**

#### Slotted Board Mount Nut



#### ORDER CODE

**G125-4510000B**

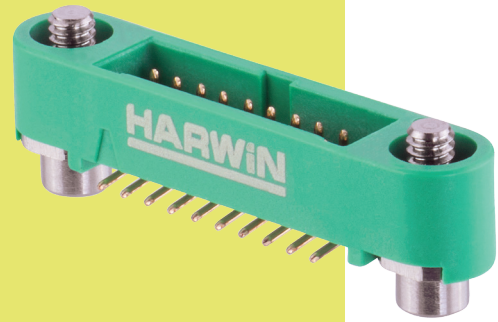
All dimensions in mm.

Patent Published

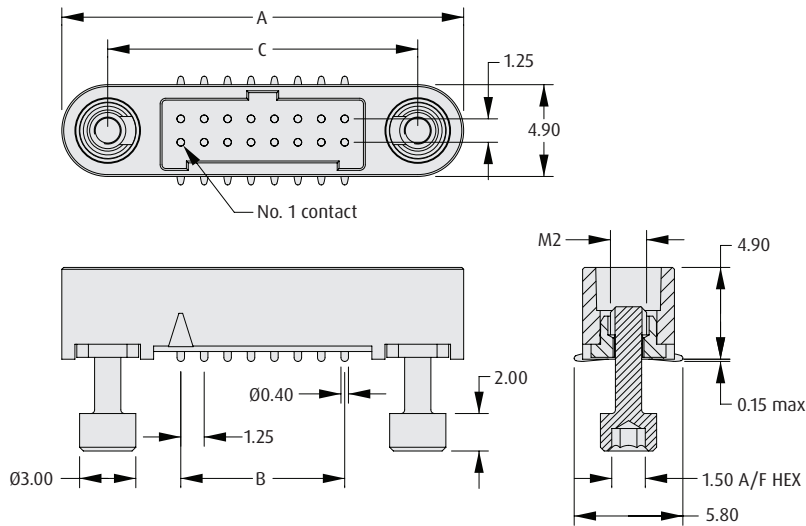
# Gecko Screw-Lok Connectors

## 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.

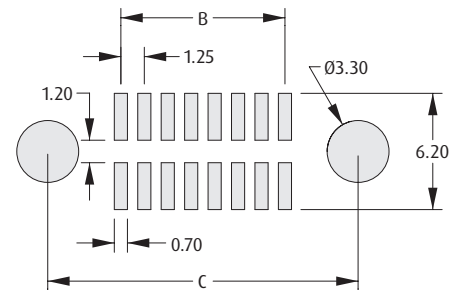


### SURFACE MOUNT



### CALCULATION

<b>A</b>	$B + 12.7$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$



Recommended PC Board Pattern

### HOW TO ORDER

**G125 - M S1 XX 05 M3 X**

#### SERIES CODE

#### TYPE

**S1** Surface Mount

#### TOTAL NO. OF CONTACTS

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

#### PACKAGING

<b>R</b>	Tape & Reeled
<b>P</b>	Loose

#### FINISH

**05** Gold

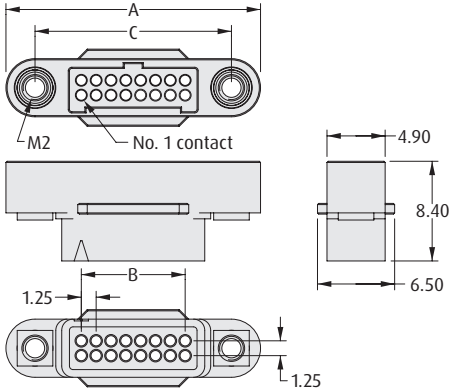
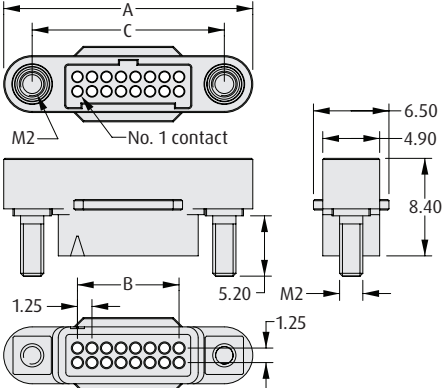
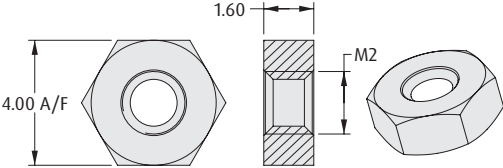
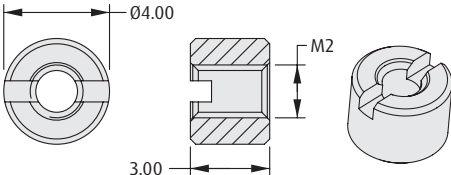
# Gecko Screw-Lok Connectors

## Male Crimp Housing

- Features 2.5mm potting wall for extra security.
- No. 1 position identified on housing.
- 3 polarizing points on each housing prevent mis-mating.
- Use with male crimp contacts and pre-cabled contacts shown on following pages.
- Order nuts for panel mount separately - see bottom of page.



GECKO SCREW-LOK

WITHOUT PANEL MOUNT		WITH PANEL MOUNT											
													
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12.7</td></tr><tr><td>B</td><td>0.625 x (Total No. of contacts - 2)</td></tr><tr><td>C</td><td>B + 7.8</td></tr></table>				CALCULATION		A	B + 12.7	B	0.625 x (Total No. of contacts - 2)	C	B + 7.8		
CALCULATION													
A	B + 12.7												
B	0.625 x (Total No. of contacts - 2)												
C	B + 7.8												
HOW TO ORDER													
<table><tr><th colspan="2">SERIES CODE</th></tr><tr><td colspan="2">G125 - 324 XX 96 XX</td></tr></table>		SERIES CODE		G125 - 324 XX 96 XX		<table><tr><th colspan="2">SCREW-LOK</th></tr><tr><td>M1</td><td>Internal Thread</td></tr><tr><td>M2</td><td>With 5mm Panel Mount stud</td></tr></table>		SCREW-LOK		M1	Internal Thread	M2	With 5mm Panel Mount stud
SERIES CODE													
G125 - 324 XX 96 XX													
SCREW-LOK													
M1	Internal Thread												
M2	With 5mm Panel Mount stud												
<table><tr><th colspan="2">TYPE</th></tr><tr><td>324</td><td>Male Housing</td></tr></table>		TYPE		324	Male Housing	<table><tr><th colspan="2">FINISH</th></tr><tr><td>96</td><td>Housing</td></tr></table>		FINISH		96	Housing		
TYPE													
324	Male Housing												
FINISH													
96	Housing												
<table><tr><th colspan="2">TOTAL NO. OF CONTACTS</th></tr><tr><td colspan="2">06, 10, 12, 16, 20, 26, 34, 50</td></tr></table>		TOTAL NO. OF CONTACTS		06, 10, 12, 16, 20, 26, 34, 50									
TOTAL NO. OF CONTACTS													
06, 10, 12, 16, 20, 26, 34, 50													
TOOLS													
<p><b>Recommended Crimp Tool</b> - Z125-900</p> <p><b>Positioner</b> - Z125-901</p> <p><b>Contact Insertion/Removal Tool</b> - Z125-902</p>		<p>Male contacts shown on following pages.</p> <p>Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</p>											
REQUIRED HARDWARE		Order separately from connector											
<p><b>Hexagonal Board Mount Nut</b></p>  <table><tr><th colspan="2">ORDER CODE</th></tr><tr><td colspan="2">G125-45000008</td></tr></table>		ORDER CODE		G125-45000008		<p><b>Slotted Board Mount Nut</b></p>  <table><tr><th colspan="2">ORDER CODE</th></tr><tr><td colspan="2">G125-45100008</td></tr></table>		ORDER CODE		G125-45100008			
ORDER CODE													
G125-45000008													
ORDER CODE													
G125-45100008													

All dimensions in mm.

Patent Published

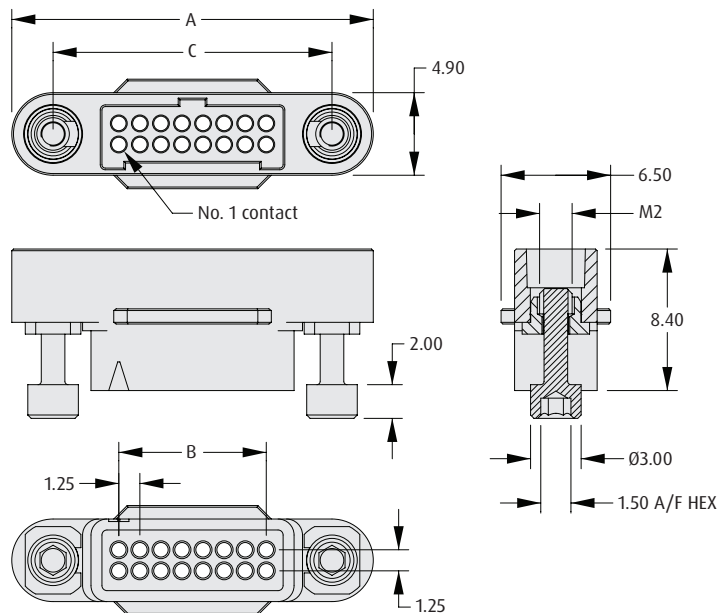
# Gecko Connectors

## 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.



### MALE



### CALCULATION

<b>A</b>	$B + 12.7$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$

### TOOLS

**Recommended Crimp Tool** - Z125-900

**Positioner** - Z125-901

**Contact Insertion/Removal Tool** - Z125-902

❖ Male contacts shown on following pages.

❖ Instruction sheets available at [www.harwin.com/instructions](http://www.harwin.com/instructions).

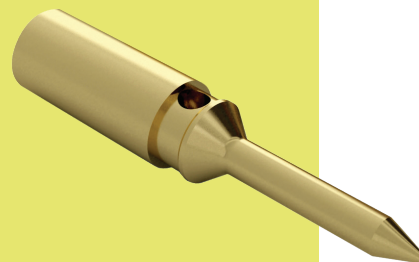
### HOW TO ORDER

<b>SERIES CODE</b>		<b>G125 - 324</b>	<b>XX</b>	<b>96</b>	<b>M3</b>	<b>FINISH</b>	
<b>TYPE</b>		<b>324</b>				<b>96</b>	Housing
		Male Housing				<b>TOTAL NO. OF CONTACTS</b>	
						06, 10, 12, 16, 20, 26, 34, 50	

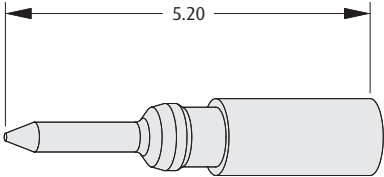
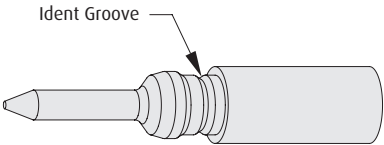
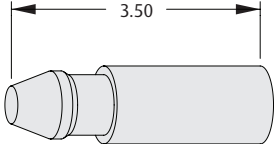
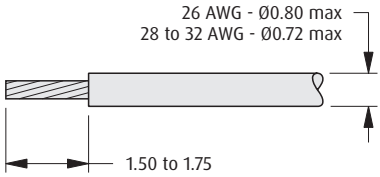
# Gecko Screw-Lok Connectors

## 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 polarization of keying of multiple connectors. Also called Blanking Plug.



GECKO SCREW-LOK

CONTACTS	DUMMY CONTACT										
<p><b>26 AWG</b></p>  <p><b>28 - 32 AWG</b></p> 	 <p><b>WIRE STRIPPING DETAILS</b></p> 										
TOOLS											
<p><b>Recommended Crimp Tool</b> - Z125-900</p> <p><b>Positioner</b> - Z125-901</p> <p><b>Contact Insertion/Removal Tool</b> - Z125-902</p>											
<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											
<p style="text-align: center;"><b>G125 - XXX 00 05</b></p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p><b>SERIES CODE</b></p> <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">TYPE</th> </tr> </thead> <tbody> <tr> <td><b>101</b></td> <td>Male 26 AWG crimp contact</td> </tr> <tr> <td><b>102</b></td> <td>Male 28-32 AWG crimp contact</td> </tr> <tr> <td><b>020</b></td> <td>Dummy Contact (blanking plug)</td> </tr> </tbody> </table> </div> <div style="width: 30%; text-align: center;"> <p>_____</p> <p>_____</p> <p>_____</p> </div> <div style="width: 30%;"> <p><b>FINISH</b></p> <table border="1" style="width: 100%;"> <tbody> <tr> <td><b>05</b></td> <td>Gold</td> </tr> </tbody> </table> </div> </div>		TYPE		<b>101</b>	Male 26 AWG crimp contact	<b>102</b>	Male 28-32 AWG crimp contact	<b>020</b>	Dummy Contact (blanking plug)	<b>05</b>	Gold
TYPE											
<b>101</b>	Male 26 AWG crimp contact										
<b>102</b>	Male 28-32 AWG crimp contact										
<b>020</b>	Dummy Contact (blanking plug)										
<b>05</b>	Gold										

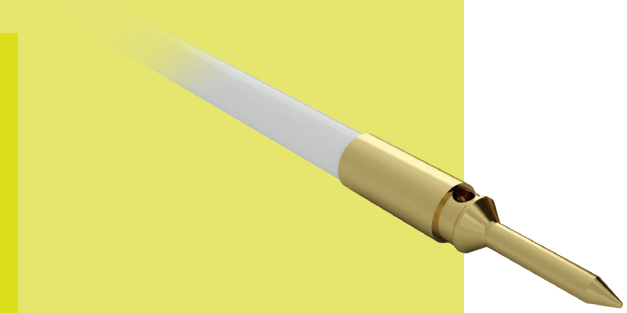
All dimensions in mm.

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.



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

**G125 – M WX XXXX X 94**

### SERIES CODE

### GENDER – FIRST END

**M** Male

### CABLE SIZE

<b>W1</b>	26 AWG
<b>W2</b>	28 AWG
<b>W3</b>	30 AWG

### CABLE COLOR

**94** White

### TERMINATION – SECOND END

<b>L</b>	Loose cut end
<b>F</b>	Female
<b>M</b>	Male

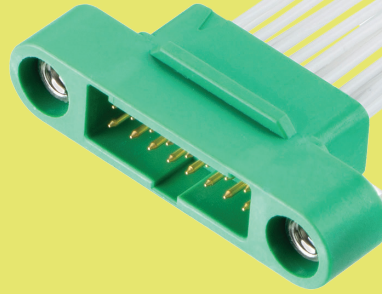
### CABLE LENGTH

<b>0150</b>	150mm
<b>0300</b>	300mm (double-ended)
<b>0450</b>	450mm (single-ended)

# Gecko Screw-Lok Connectors

## 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.



GECKO SCREW-LOK

### PART NUMBERING SYSTEM

**G125 - M C X XX 05 M1 - XXXX XX**

#### SERIES CODE

#### GENDER - FIRST END

**M** Male

#### CABLE SIZE

<b>1</b>	26 AWG
<b>2</b>	28 AWG

#### TOTAL NO. OF CONTACTS

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

#### TERMINATION - SECOND END

<b>L</b>	Loose cut end
<b>F0</b>	Female connector No fixings (use with Metal Hoods)
<b>F1</b>	Female connector Floating Hex Socket fixings
<b>M</b>	Male connector

#### CABLE LENGTH

<b>0150</b>	150mm
<b>0300</b>	300mm (double-ended)
<b>0450</b>	450mm (single-ended)

#### SCREW-LOK

**M1** Internal thread

#### FINISH

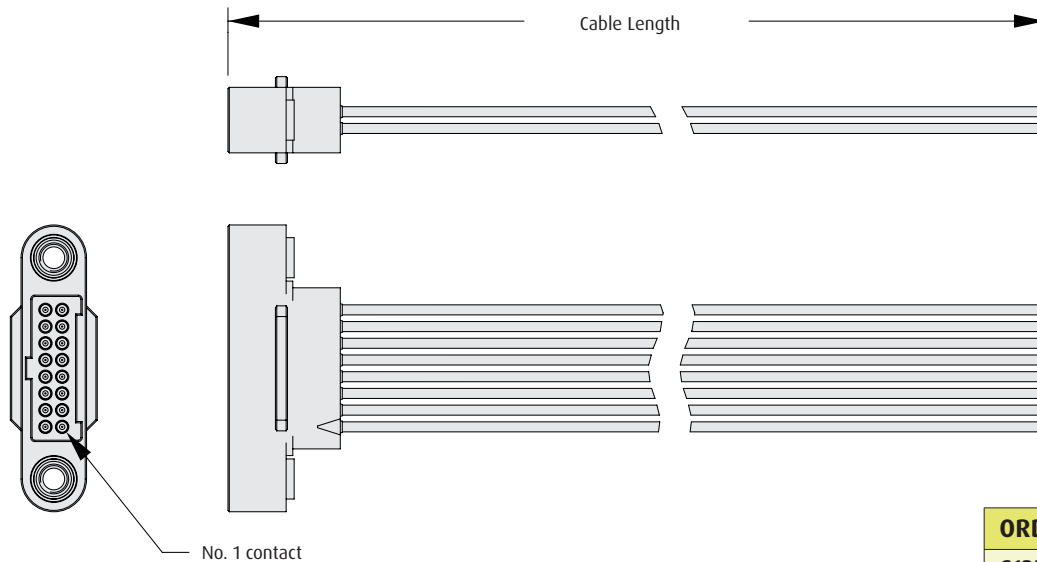
**05** Gold



# 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.

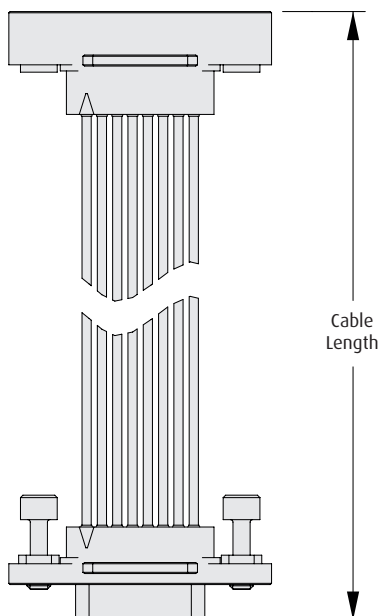
## MALE SINGLE ENDED



### ORDER CODE

G125-MCXXX05M1-XXXXL

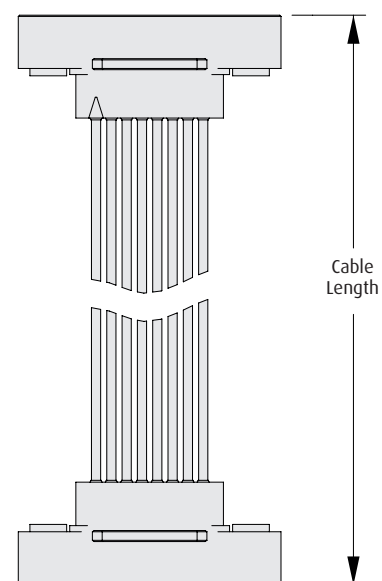
## MALE - FEMALE



### ORDER CODE

G125-MCXXX05M1-XXXXF1

## MALE - MALE



### ORDER CODE

G125-MCXXX05M1-XXXXM1

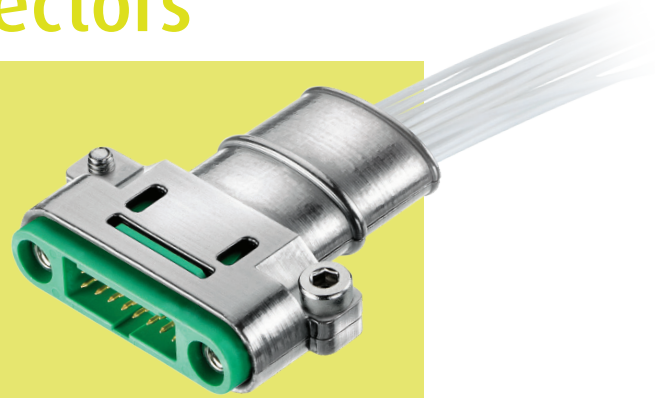
All dimensions in mm.

Patent Published

# Gecko Screw-Lok Connectors

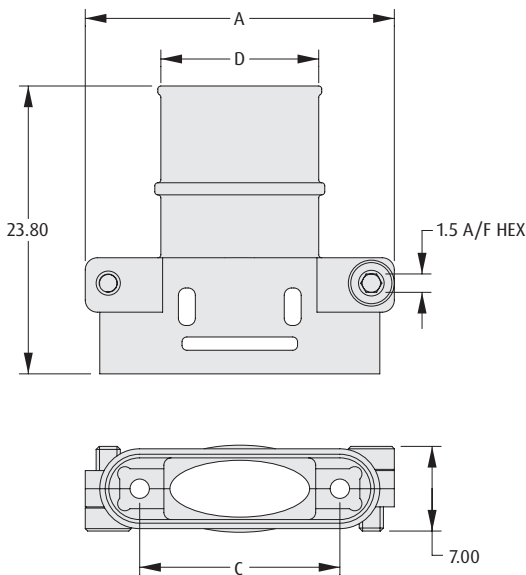
## Male Metal Hood / Backshell

- ❖ Supplied as a kit, including 2 metal hood halves 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.



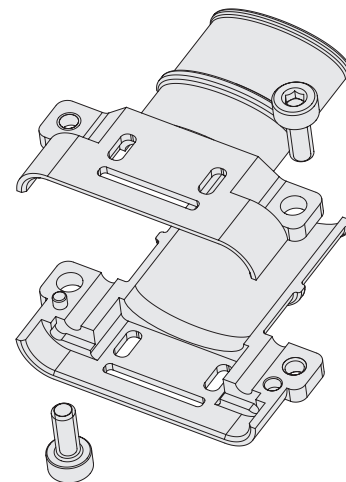
GECKO SCREW-LOK

### HOOD / BACKSHELL



### CALCULATION

<b>A</b>	$B + 16.8$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 7.8$
<b>D</b>	$B + 4.3$



### BAND-IT TIE

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



### ORDER CODE

<b>M80-9470000</b>	Length = 206.8mm
<b>M80-9480000</b>	Length = 362.0mm

### 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

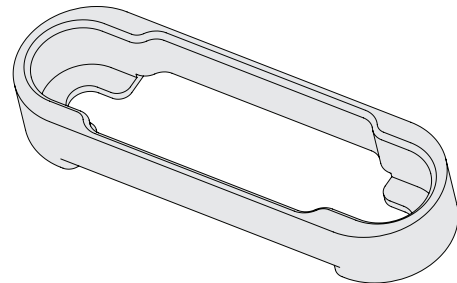
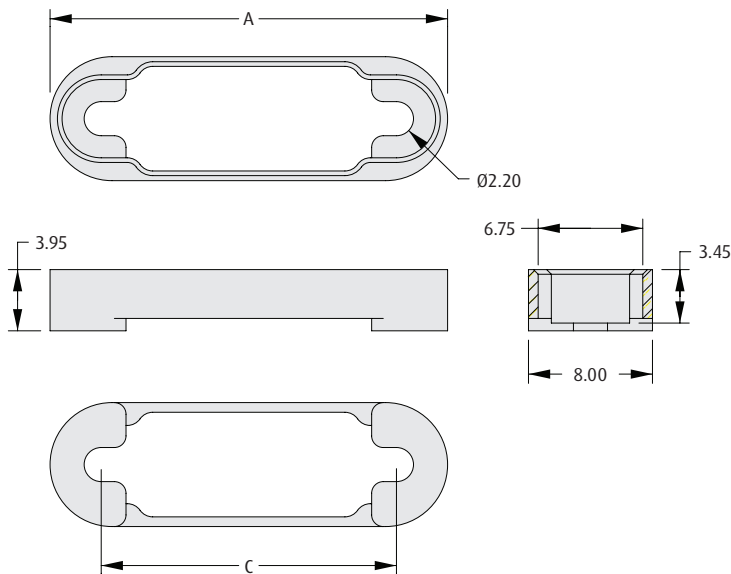
- ❖ Use with G125-MV1xx05M2x connectors for EMC shielding on a PCB mounted application.
- ❖ Use with G125-324xx96M2 connectors for EMC shielding on a panel mount application.
- ❖ Mating female cable connector G125-224xx9600 to be fitted with metal backshell G125-964xxF1 for complete EMC shielded connection.



### HOOD / BACKSHELL

### CALCULATION

<b>A</b>	$B + 14.4$
<b>B</b>	$0.625 \times (\text{Total No. of contacts} - 2)$
<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