

Gecko-SL 1.25mm pitch Screw-Lok Connectors

Secure & Robust Miniature Connectors for demanding applications

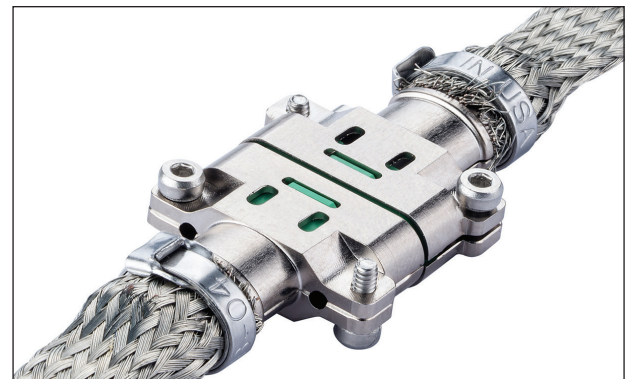
For applications that must not fail, Gecko-SL brings high-reliability connection at a miniature 1.25mm pitch. Fitted with screw-loks that are configured for Mate-Before-Lok, connection and disconnection is fast and simple to handle. An ideal choice for SWaP-C optimization (Size, Weight, Power and Cost).

Featuring cable-to-board, board-to-board and cable-to-cable in pin counts up to 50. Throughboard and Surface Mount designs for PCB flexibility are available, all packaged in Tape and Reel for automated assembly. Stainless steel screw-loks in both standard and reverse gender fixings (reverse fix) ensure a strong and secure connection.

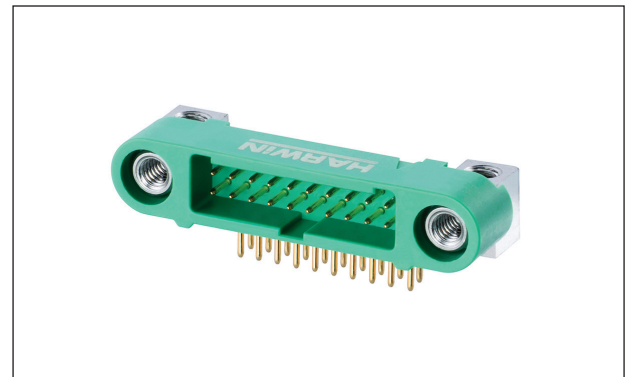
Lightweight metal hoods give additional cable protection and shielding from radio frequency Interference (RFI). Individual pre wired contacts and full cable assembly options complete the range for prototyping and pre-production simplicity.



Female Cable Assembly with 12 contacts



Metal backshells shown with full braiding



Male horizontal throughboard with 20 contacts

Features and Benefits

| | |
|---|---|
| 2A per contact (all electrically loaded; 2.8A per individual contact) at 1.25mm pitch | Excellent current capacity for a miniature connector, saving PCB real estate |
| Compact design – significant space saving over Micro-D | Up to 45% smaller and up to 75% lighter over existing equivalent industry standards, ideal for avionics |
| Horizontal male through-board connectors | For additional board edge to cable connection, with reduced total mated height |
| Mate before Lock in both standard and reverse fix screws | Quick and easy mating process |
| Low outgassing materials | Meets NASA and ESA requirements |
| Ready-made cable assemblies and pre wired contacts | Eliminate the tooling costs, training requirements and additional inspections |
| Robust design of 4 finger Beryllium Copper contact | Assures electrical contact in extreme shock and vibration conditions |
| Metal Backshells for cable and panel mount | Protect cables from wear and reduce RF / EM interference |

Key Applications

| | |
|--------------------------------|---|
| Aviation | Avionic controls, guidance systems, engine controls, radar and tracking |
| Motorsport & Electric Vehicles | Navigation, AI, GPS and tracking equipment, communications and telemetry, ERS controls |
| Space | Satellites & CubeSats, radar, communications, launch systems |
| Defense & Security | UAVs, UUV and other ROV, ground communications, handheld portable equipment, rugged vehicle electronics |

Product Features

Small size, lightweight

3 points of polarization

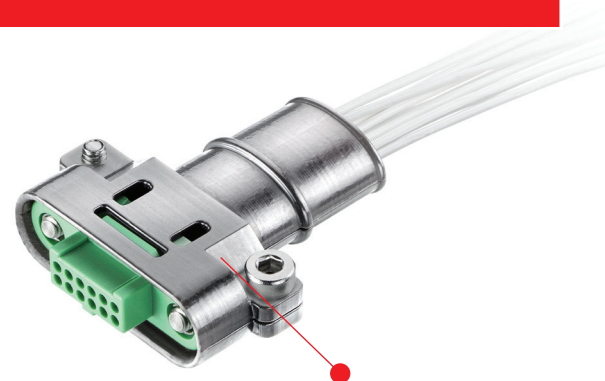
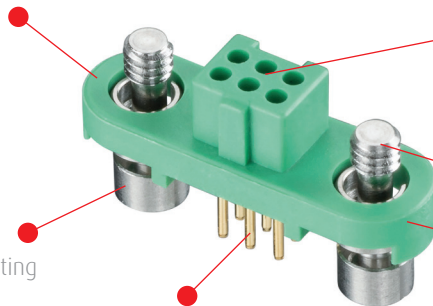
Stainless steel screw-lok fixings, standard and reverse gender

Hex socket head on floating screw-loks

Throughboard and Surface Mount available in Tape and Reeled packaging

Low outgassing materials

Metal hood/backshell for shielding and durability



How to Order

G125 - XXX XX XX XX X

GENDER/TYPE

| | |
|------------|----------------------------------|
| 224 | Female Cable Housing |
| 324 | Male Cable Housing |
| FV1 | Female 3mm Throughboard Vertical |
| FS1 | Female Surface Mount Vertical |
| MV1 | Male 3mm Throughboard Vertical |
| MH1 | Male 3mm Throughboard Horizontal |
| MS1 | Male Surface Mount Vertical |

TOTAL NO. OF CONTACTS

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

FINISH/COLOR

| | |
|-----------|--------------------------------|
| 05 | Gold finish (PCB Connectors) |
| 96 | Green Housing (Cable Housings) |

PACKAGING

| | |
|--------------|-------------------------------------|
| Blank | Loose (Cable Housings) |
| P | Tape & Reel strips (PCB Connectors) |
| R | Tape & Reeled (PCB Connectors) |

FIXINGS

| | |
|-----------|---------------------------------------|
| F0 | No Screw-Lok (female for Backshells) |
| F1 | Female Standard, Hex Socket Floating |
| F2 | Female Reverse Fix, no Board Mount |
| F3 | Female Reverse Fix, 5mm Board Mount |
| M1 | Male Standard, no Board Mount |
| M2 | Male Standard, 5mm Vert. Board Mount |
| M3 | Male Reverse Fix, Hex Socket Floating |
| M4 | Male Standard, Horizontal Board Mount |

Check Technical Drawings for available combinations

Cable Contacts



G125-0010005
Female 26AWG
Crimp Contact



G125-0020005
Female 28-32AWG
Crimp Contact



G125-1010005
Male 26AWG
Crimp Contact



G125-1020005
Male 28-32AWG
Crimp Contact

Board Mount Accessories



G125-4500000B
Hex Board
Mount Nut



G125-4510000B
Slotted Board
Mount Nut



G125-4520000B
5mm Hex Socket
Board Mount Bolt

Also Available

Crimp Tooling

Insertion Tooling

Dummy Contacts

Custom Cable Facility

Instruction Sheets

Instruction Videos

Expert Advice

Gecko-SL Ready-Made Cable Assemblies

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To save time and resources, Cable Assemblies from Harwin are supplied ready-to-use, fully tested and backpotted. No additional tooling or training is required, and extensive stocks eliminate time spent waiting for custom-made manufacturing and quality inspection.

Product Features

All cable assemblies electrically tested and inspected

6 to 50 contacts available, stocked in depth

Floating screw-lok option on female connector, with hex socket head

Backpotting as standard on all cable assemblies

Low outgassing materials

White 26AWG PTFE insulated cable, to BS 3G 210 Type A

Contact position 1 identifier

How to Order

G125 - X C1 XX 05 XX - XXXX XX

GENDER - FIRST END

| | |
|----------|--------|
| F | Female |
| M | Male |

TOTAL NO. OF CONTACTS

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

FIXING - FIRST END

| | |
|-----------|--|
| F0 | No Screw-Lok (Female) |
| F1 | Hex Socket Floating Screw-Lok (Female) |
| M1 | Screw-Lok (Male) |

TERMINATION - SECOND END

| | |
|-----------|---------------------------------------|
| L | Loose cut end |
| F0 | Female, No Screw-Lok |
| F1 | Female, Hex Socket Floating Screw-Lok |
| M1 | Male, Screw-Lok |

CABLE LENGTH

| | |
|-------------|----------------------|
| 0150 | 150mm |
| 0300 | 300mm (double-ended) |
| 0450 | 450mm (single-ended) |

Note: Male-to-Female cables should be specified with the Male as the first end.

Specifications

| Electrical | | Mechanical & Environmental | | Physical | |
|-----------------------|----------------|----------------------------|--------------------|------------|--------------------------------------|
| Current Rating | 2A per contact | Mating Cycles | 1,000 | Housing | Glass filled PA4T, UL94V-0 |
| Voltage Rating | 450V AC/DC | Temperature Range | -65°C to +150°C | Contacts | Copper alloy, Gold plating |
| Maximum Voltage | 600V AC/DC | Insertion force | 2.8N max | Screw-loks | Stainless steel |
| Contact Resistance | 25mΩ max | Withdrawal force | 0.2N min | Cable | White 26AWG PTFE to BS 3G 210 Type A |
| Insulation Resistance | 1GΩ min | Vibration | 20G, 6 hours total | | |



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