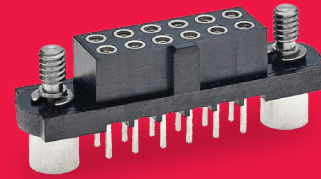
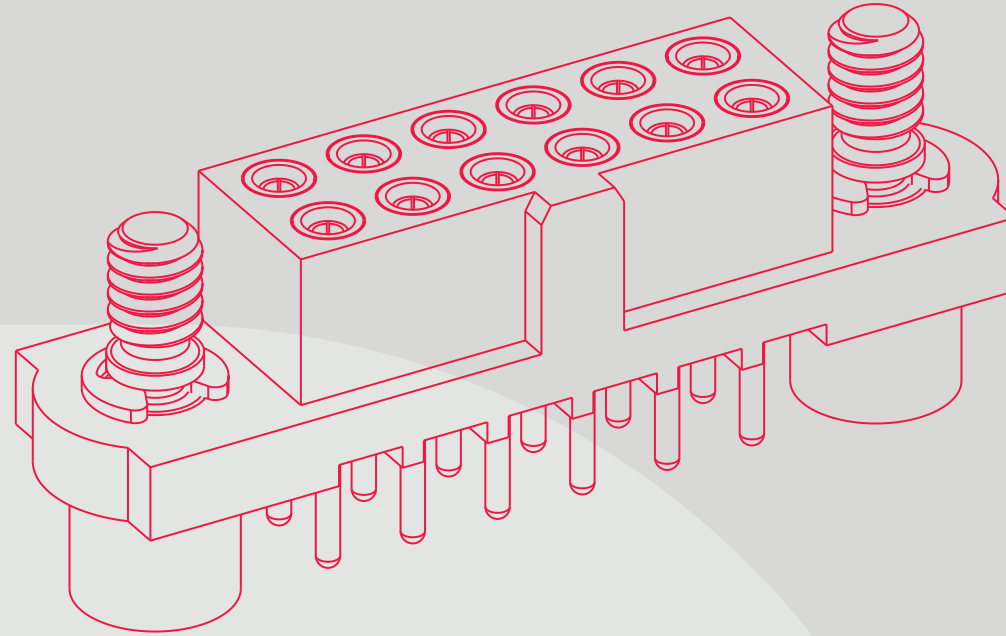


HARWIN

CONNECT TECHNOLOGY
WITH CONFIDENCE



HIGH RELIABILITY
WITH SUPREME
PERFORMANCE

 **Datamate**[®]

HIGH RELIABILITY RECTANGULAR SIGNAL

MINIATURE CONNECTORS

HRI
RANGE

HARWIN

Datamate®

HRI CONNECTORS FROM HARWIN.

Miniature Connectors for SWaP-C Optimization

For applications that must not fail, Datamate brings high-reliability connection at a miniature 2.00mm pitch. Complete flexibility with proven performance under shock/vibration and temperature.

The compact design gives space and weight savings over industry standard alternatives. Cable-to-board, board-to-board and cable-to-cable options in pin counts up to 50.

The multi-finger Beryllium Copper contacts deliver proven signal integrity under heavy vibration and shock, maintaining electrical connectivity in a variety of harsh environments. Temperature resistance covers -55°C to +125°C, and contacts can carry up to 3.3A for low power as well as signal requirements.

Stainless steel jackscrews are available in both standard or reverse-fix configurations, with panel and board mount for additional security. Latch versions save mating time and PCB real estate. Lightweight metal hoods protect cables & housings, and reduce EM/RF interference.

Cable assembly options are available from our in-house cabling experts. Just specify the length and the signal cable gauge, and we'll produce fully inspected and tested assemblies ready for your production line.

FEATURES

- Jackscrews, latches or quick-mating bayonet fixings for reliable connections
- Assured signal integrity under extreme environments – vibration, shock and temperature resistance
- Low outgassing, great for space, avionics and optronics

APPLICATIONS

- Aviation and UAVs
- New space
- Motorsport
- Defense & security



SPECIFICATIONS

| MATERIALS | ELECTRICAL | MECHANICAL | ENVIRONMENTAL |
|---|--|--|--|
| Housings: Glass-Filled Thermoplastic, UL94V-0 | Current per contact: 3.3A max | Durability: 500 mating cycles | Operating temperature: -55°C to +125°C |
| Contacts: Copper Alloy, Gold finish on contact area | Working voltage: 800V AC/DC (Connectors) 250V AC/DC (Cable assemblies) | Insertion force (per contact): 2.0N max | Environmental classification: 55/125/56 days at 95% RH |
| Latches: Beryllium Copper, Tin finish | Maximum voltage: 1,200V AC/DC | Withdrawal force (per contact): 0.2N min | Vibration resistance: 10G (196m/s²) for 6 hrs 20G (98m/s²) for 2 hrs |
| Jackscrews: Stainless Steel | Contact resistance: 25mΩ max | Contact retention in housing: 10N min | Shock resistance: 100G (981m/s²) |
| Metal Backshells: Aluminium Alloy | Insulation resistance: 100MΩ min | Pitch: 2.00mm | Compliance: RoHS Compliant REACH / CMRT statements |

Specifications are subject to change.

PRODUCT CATEGORIES

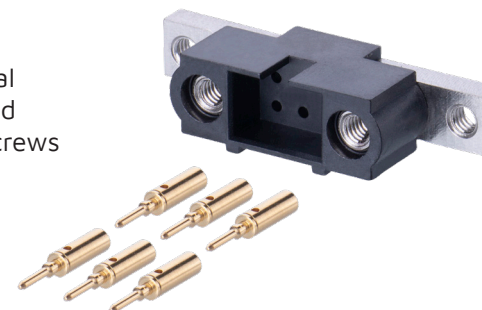
Cable Assemblies

Ready-to-use cabled connectors, single or double ended, fully inspected and tested. Latched and jackscrew versions available. Ideal for both prototyping and full production requirements.



Cable Connector Parts

Cable housings and contacts available in kits, with additional options and spare contacts sold separately. Latches and jackscrews are ready assembled to the housings.



PCB Connectors

Board-mounted connectors in male and female options. Low profile, with standard gender or reverse fix jackscrews, or latching style for reduced PCB space. Additional board mount nuts/bolts and hold-down straps.



Tooling & Accessories

Associated products and tooling to support the Datamate range.



Specifications are subject to change.

PRODUCT CATEGORIES

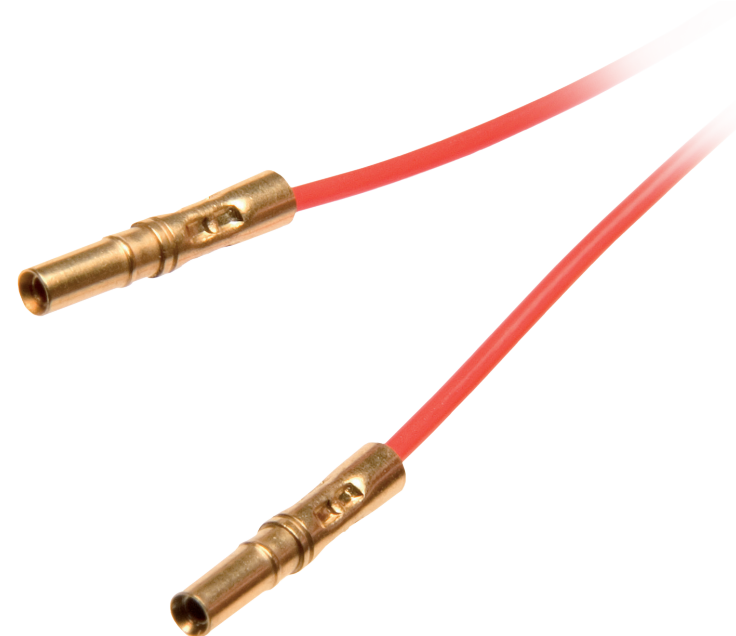
Backshells

Lightweight aluminium alloy backshells for cable and PCB mounting, compatible with male and female connectors. EMC shielding with metal braid and micro-band fixing. Robust hoods for long-term physical protection.



Pre-Cabled Contacts

Individual cable contacts pre-crimped to lengths of equipment wire. Available in single or double ended options. Eliminates the additional expense of crimp tooling – great for prototyping and volume production.



Specifications are subject to change.










DOWNLOADS

Technical Documents

Component Specification (including pin numbering system) 

Product Training

Product Training Modules (PTM):

- Range Overview 
- Metal Backshells Overview 
- Datamate J-Tek Extended Height 
- Datamate PIHR (Pin-in-Hole Reflow) 
- Panel Mount with Datamate 
- Guide to Latches, Jackscrews and 101Lok 
- Using the Strain Relief Strap M80-0030006 

Cable Assembly Instruction Video 

Test Reports

HT001 – Durability up to 10,000 cycles 

HT002 – Voltage Proof/Flashover, Insulation Resistance 

HT019 – Datamate Frequency Testing 

HT004 – Datamate J-Tek Vibration/Shock/Bump/Acceleration 

HT010 – Datamate J-Tek Horizontal SMT Contacts 


HT015 – Datamate 101Lok Vibration/Shock/Bump 

HT006 – Datamate L-Tek/J-Tek Male Crimp Retention 

HT005 – Datamate L-Tek Female Crimp Retention 


HT016 – Datamate L-Tek Female Crimp Forces 

HT011 – Datamate L-Tek Crimp High Temp. plastic material 

HT025 – Datamate L-Tek Vibration/Shock/Bump 

HT012 – Datamate L-Tek Horizontal SMT Contacts 

HT017 – Datamate L-Tek 3 and 15 years Artificial Aging 

HT044 – Datamate L-Tek number of latch operations 

HT079 – Backshells, Shielded Cables Attenuation Testing 

Specifications are subject to change.



VIEW FULL SERIES & SPECIFICATIONS [HERE](#) 

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INNOVATIVE
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BBi
RANGE

Ezi
RANGE

FOR FURTHER INFORMATION PLEASE CONTACT: SUPPORT@HARWIN.COM

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