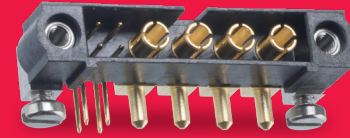
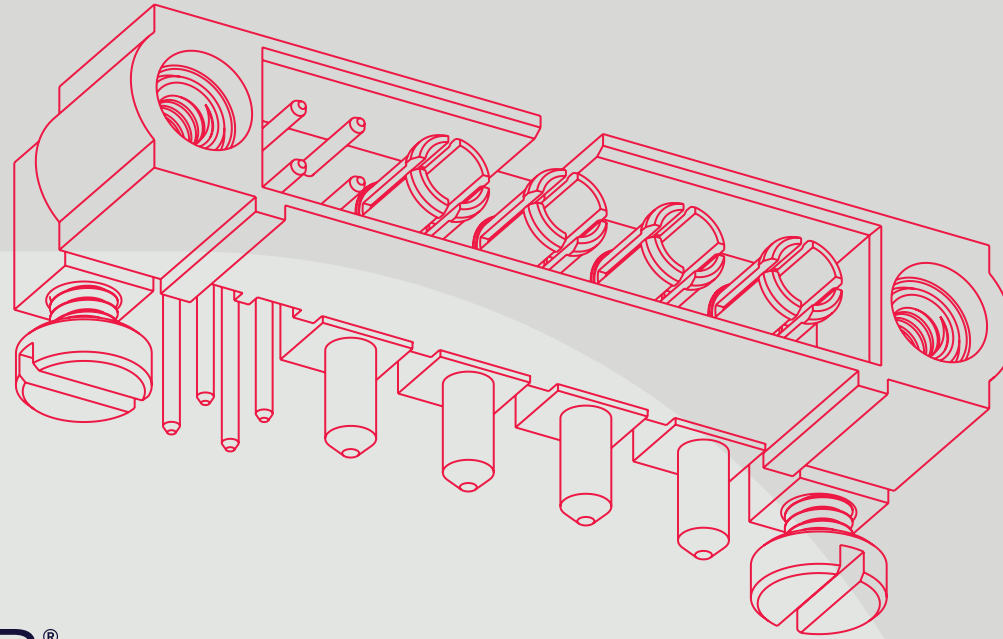


HARWIN

CONNECT TECHNOLOGY
WITH CONFIDENCE



HIGH RELIABILITY
WITH SUPREME
PERFORMANCE

 **Datamate**[®]

HIGH RELIABILITY SIGNAL/POWER/COAX

MIXED CONTACT MINIATURE CONNECTORS

HRI
RANGE

HARWIN

Datamate[®]

HRI CONNECTORS FROM HARWIN.

Miniature Connectors for SWaP-C Optimization

For applications that must not fail, Datamate Mix-Tek brings high-reliability connection at combination 2.00mm/4.00mm pitch. Ultimate 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; pin counts up to 12 power/coax or mixed with equivalent signal contacts.

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.

The power contacts are available in 5/8A crimp, up to 20A cable and PCB throughboard solder, or high power 40A

cable / PCB solder versions. Coax contacts are suitable for Semi-Rigid, RG174, RG178, RG179 and RG316 cable.

Stainless steel jackscrews are available in both standard or reverse-fix configurations, with panel and board mount for additional security.

Cable assembly options are available from our in-house cabling experts, supplying 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



VIEW DATAMATE SIGNAL/POWER POWER **HERE**



VIEW DATAMATE POWER **HERE**



VIEW DATAMATE COAX **HERE**

SPECIFICATIONS

| MATERIALS | ELECTRICAL | MECHANICAL | ENVIRONMENTAL |
|--|---|---|--|
| Housings: Glass-Filled High Temperature Thermoplastic, UL94V-0 | Current per contact: 40A max for power 3.3A max for signal | Durability: 500 mating cycles | Operating temperature: -55°C to +125°C |
| Contacts: Copper Alloy, Gold finish on contact area | Coax characteristics: 50Ω impedance 6GHz frequency range | Insertion force (per contact): 20.0N max for power/coax 2.0N max for signal | Environmental classification: 55/125/56 days at 95% RH |
| Jackscraws: Stainless Steel | Working voltage: 180V AC for coax 800V AC/DC for other connectors 300V AC/DC for cable assemblies | Withdrawal force (per contact): 0.2N min | Vibration resistance: 10G (196m/s²) for 6 hrs 20G (98m/s²) for 2 hrs |
| Metal Backshells: Aluminium Alloy | Maximum voltage: 1,200V AC/DC for power/signal 1,000V AC for coax | Contact retention in housing: 10N min | Shock resistance: 100G (981m/s²) |
| | Insulation resistance: 100MΩ min | Pitch: 4.00mm for power/coax 2.00mm for signal | 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. 20A Power, 40A Power and Coax versions available. Ideal for both prototyping and full production requirements.



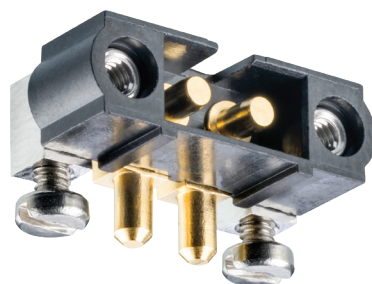
Cable Connector Parts

Cable housings and contacts available in kits, with spare contacts sold separately. Signal/power, signal/coax, 20A Power, 40A Power and Coax versions available. Jackscrews are supplied assembled to the housings.



PCB Connectors

Board-mounted connectors in male and female options. Low profile, with standard gender or reverse fix jackscrews. Signal/power, signal/coax, 20A Power, 40A Power and Coax versions available. Additional board mount nuts/bolts.



Tooling & Accessories

Associated products and tooling to support the Datamate Mix-Tek range.

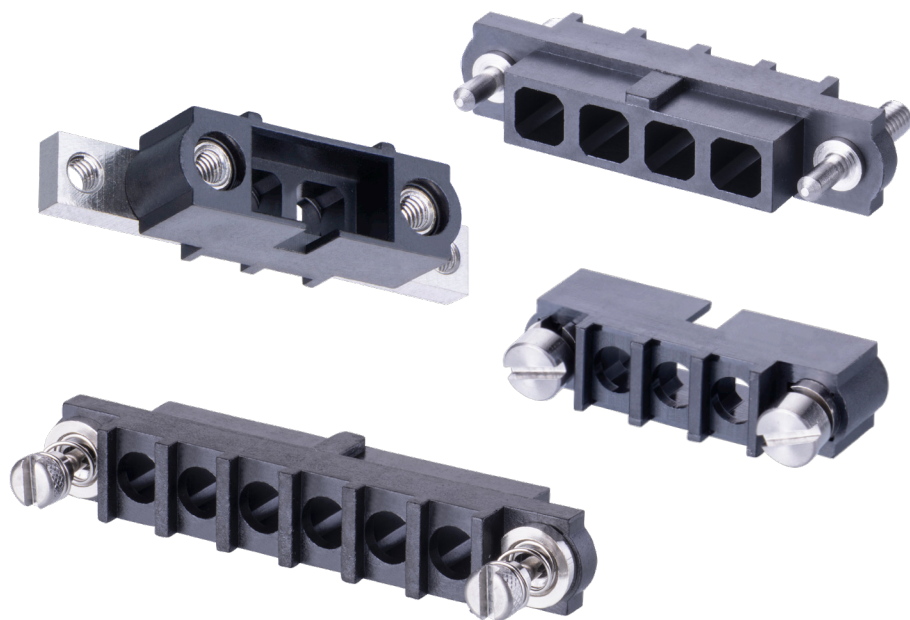


Specifications are subject to change.

PRODUCT CATEGORIES

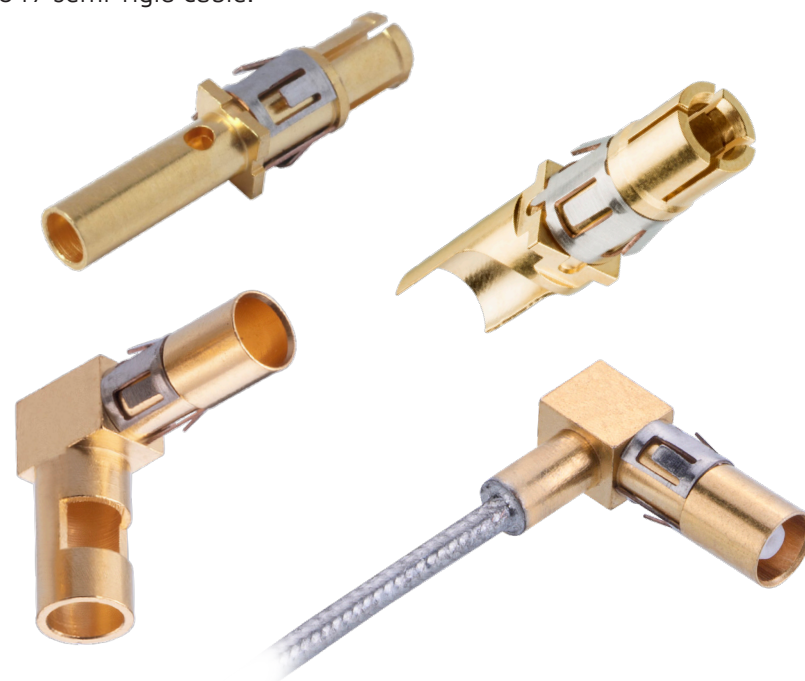
Cable Connector Housings

Cable housings supplied without contacts for mix-and match with power or coax. Choice of jackscrew fixings, supplied assembled to the housing: standard gender or reverse fixings, 101Lok fast bayonet fixings or guide pins. Free cable, front and rear panel mount options.



Power and Coax Contacts

Individual cable contacts for use with the cable housings. 40A high power contacts, 10-20A standard power with solder cups, 5/8A power with crimp. Coax contacts for use with RG178, RG174, RG179, RG316 and UT047 semi-rigid cable.



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 Coax [↗](#)
- Datamate Mix-Tek Housings [↗](#)
- Panel Mount with Datamate [↗](#)
- Guide to Latches, Jackscrews and 101Lok [↗](#)

Signal Cable Assembly Instruction Video [↗](#)

Coax Straight Cable Assembly Instruction Video [↗](#)

Coax Right-Angle Cable Assembly Instruction Video [↗](#)

Test Reports

HT078 – Datamate 20A Power Testing [↗](#)

HT035 – Datamate Power Electrical/Mechanical [↗](#)

HT040 – Datamate High Power Electrical/Mechanical [↗](#)

HT052 – Datamate Coax RF Testing [↗](#)

HT020 – Datamate Mix-Tek Contact Testing [↗](#)

HT001 – Durability up to 10,000 cycles [↗](#)

HT002 – Voltage Proof/Flashover, Insulation Resistance [↗](#)

HT019 – Datamate Signal Frequency Testing [↗](#)

HT004 – Datamate J-Tek Vibration/Shock/Bump/Acceleration [↗](#)

HT015 – Datamate 101Lok Vibration/Shock/Bump [↗](#)

HT006 – Datamate J-Tek Male Crimp Retention [↗](#)

Specifications are subject to change.



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DEPENDABLE
CONNECTIVITY
ACROSS THE BOARD



INNOVATIVE
DESIGNS FOR
EASY ASSEMBLY

HRI
RANGE

BBI
RANGE

EZI
RANGE

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