

HARWIN

CONNECT TECHNOLOGY
WITH CONFIDENCE



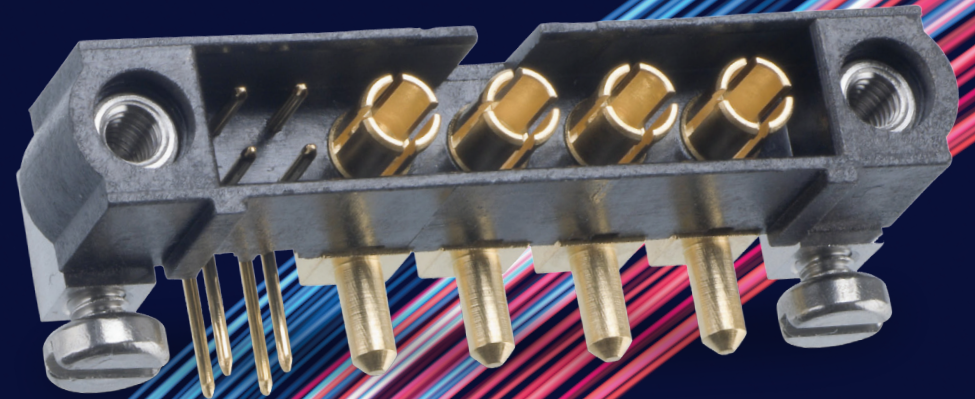
HRI

RANGE

 Datamate®

HIGH RELIABILITY SIGNAL/POWER/ COAX

MIXED CONTACT MINIATURE CONNECTORS



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





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
	Working voltage: 180V AC for coax 800V AC/DC for other connectors 250V 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
Jackscrews: Stainless Steel	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)
Metal Backshells: Aluminium Alloy	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.



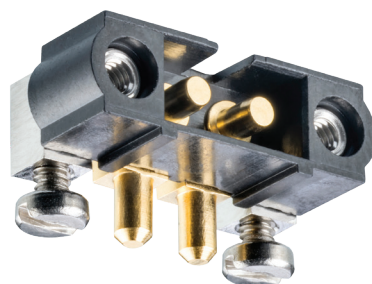
CABLE CONNECTOR PARTS

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 plug and female receptacle 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.

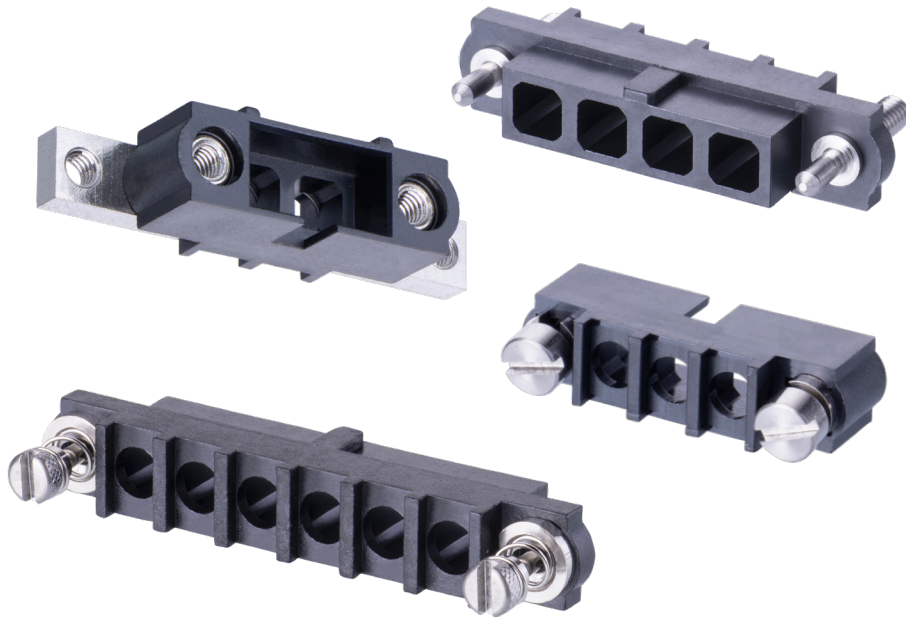


Specifications are subject to change.

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 Plug Crimp Retention 

Specifications are subject to change.



VIEW FULL SERIES & SPECIFICATIONS [HERE](#) 

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SUPPORT@HARWIN.COM

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