

# Datamate Connectors Introduction

**Datamate is a 2mm pitch High-Reliability, high performance connector range from Harwin. The range has a proven track record for performance under extreme conditions, and complies with British Standard 9525-F0033.**

Datamate provides a low-profile solution for all variations of cable-to-board, board-to-board and cable-to-cable interconnect requirements. The range has seen many developments to match customer and market demands, and now includes 1-, 2- and 3-row configurations, vertical and horizontal in both Throughboard and Surface Mount designs for PCB flexibility. To meet the demanding requirements of vibration, shock and acceleration, added security is available with the options of latches (for space-saving) or jackscrews (for maximum strain-relief).

With the addition of Datamate Mix-Tek, the 3A signal contacts can be supplied in the same connector as 20A power, 40A high power, or 6GHz coax connections, giving complete flexibility of design. Other range additions include the 101Lok fixing – designed for fast mating with a quarter-turn bayonet-style jackscrew.

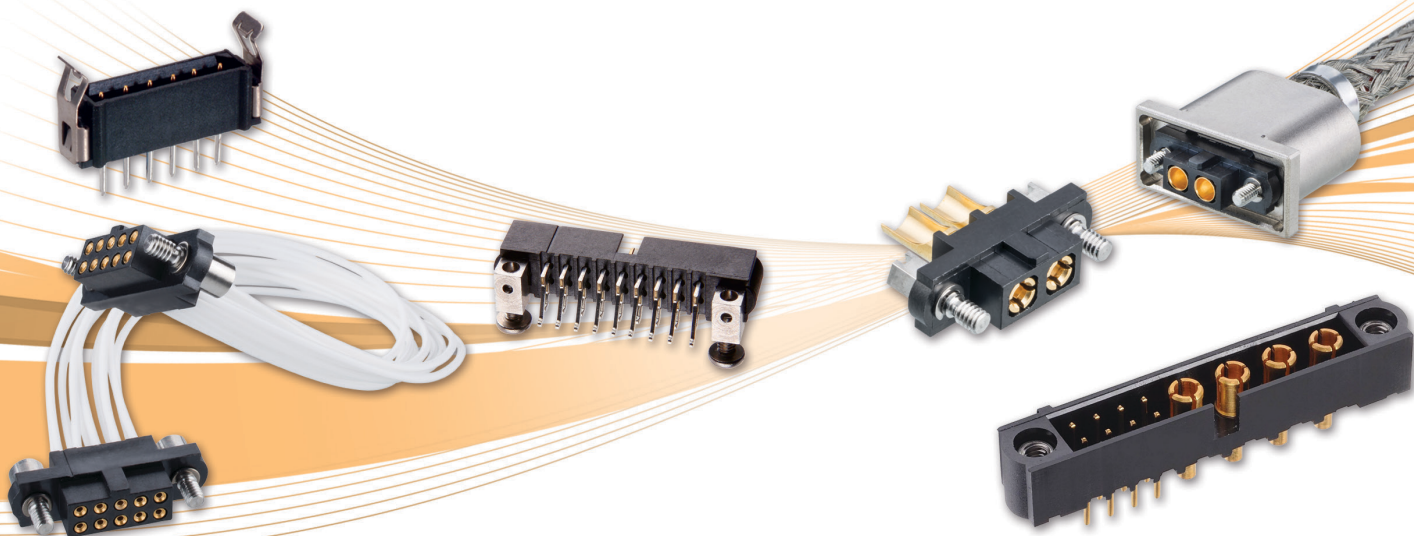
- ❖ 3A per contact (all electrically loaded; 3.3A per individual contact)
- ❖ 4-finger contact design to maintain electrical contact through high vibration and shock
- ❖ Beryllium Copper Contact for improved temperature range: -55°C to +125°C
- ❖ 500 Mating cycles durability
- ❖ Professional connector system at commercial prices
- ❖ Ongoing development program for High-Reliability connectors from Harwin
- ❖ Online videos and Cable assembly facility for assistance with cabling requirements

## Datamate Signal

- ❖ Strong stainless steel jackscrew fixings for maximum strain relief, or lightweight space-saving locking latches
- ❖ Lightweight metal and plastic hood options for shielding and additional cable protection
- ❖ Choices of pre-wired contacts or full cable assemblies from stock, for prototyping and full production

## Datamate Mix-Tek

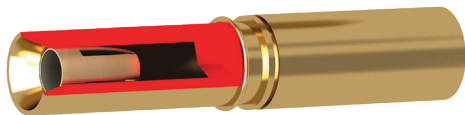
- ❖ Multiple variations of power-only, power-and-signal, or coax only variations of connectors, available from stock
- ❖ Full cable assembly options for coax and power, in 2/4/6/8 contact connectors on 4mm pitch
- ❖ Compatible with lightweight metal hoods for shielding and cable protection



# Datamate Connectors Product Features

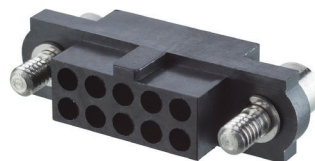
## Four Finger Beryllium Copper Contact

Proven high-reliability contact design ensures signal integrity under extremes of bump, vibration and shock. Durable to over 500 mating cycles.



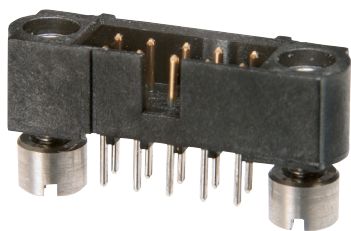
## Polarization

All Datamate designs feature polarization to prevent mis-mating in everyday use.



## Rugged construction

For use in harsh environments where high vibration, shock and temperature are a consideration.



## Innovative fast-acting bayonet fixing

101Lok utilises a 101-degree turn to quickly and simply lock mating connectors together.



## Ready-made Cable Assemblies

Wide selection of stocked single and double-ended cable assemblies, with jackscrews or latching connectors, signal or power contacts.



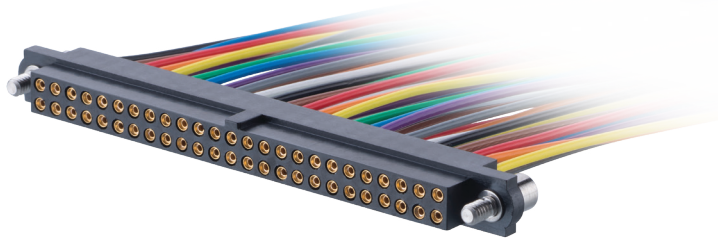
## Single piece metal Backshells for EMC Shielding

Compatible with the J-Tek and Mix-Tek connector ranges, these robust hoods provide full 360° shielding, complete with retention feature on cable exit for fixing additional braiding.



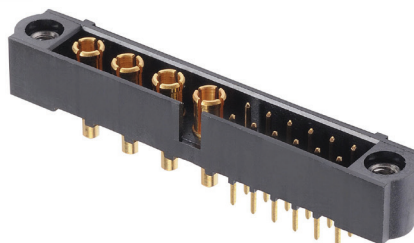
## Low outgassing emissions

Plastic housings with outgassing emissions within NASA & ESA recommendations, ready for space and low-pressure research.



## Comprehensive Operating Temperature

All connectors suitable for operational temperatures from -55°C to +125°C, due to high quality material choice.



All dimensions in mm.