

HARWIN

Datamate®

Datamate PIHR – Pin in Hole Reflow

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INDUSTRY RECOGNISED, PROVEN PERFORMANCE

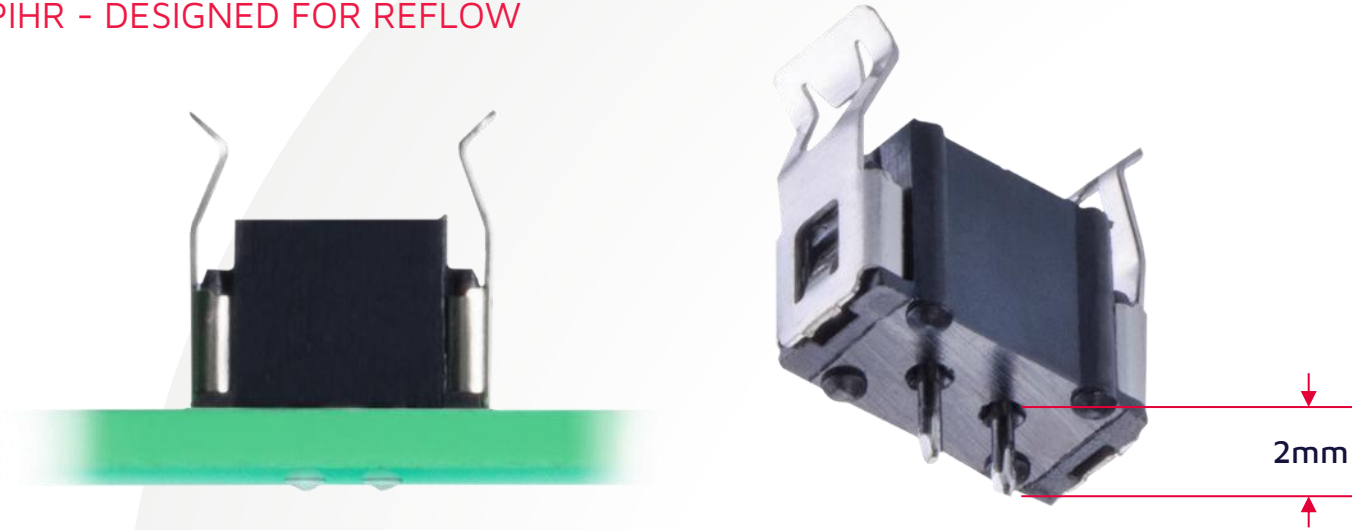


Datamate is the field-proven high-reliability range of choice for many industries.

- Complies with British Standard 9525-F0033 (1 & 2-row) and CECC 75101-008 (1, 2 & 3-row);
- Designed with aerospace, military and other "high-end" applications in mind;
- Proven in many years of successful service;
- Successfully and internationally utilized in COTS programs.

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DATAMATE PIHR - DESIGNED FOR REFLOW



Datamate connectors typically have 3mm terminations, to give robust throughboard connection with wave soldered or hand soldered joints on the underside of the PCB.

Datamate PIHR has been designed for throughboard reflow, known also as Pin-In-Hole Reflow (PIHR) or Pin-In-Paste (PIP). This enables throughboard connections to work better with automated and SMT assembly processes, while maintaining robust connection to the PCB.

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DESIGNS FOR AUTOMATED ASSEMBLY

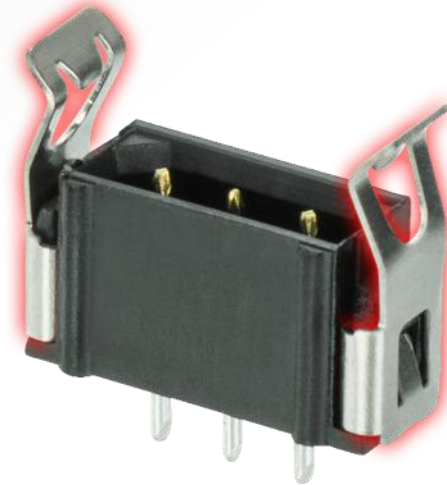


Datamate L-Tek PIHR connectors are supplied on Tape and Reel, and are fitted with Pick and Place caps. This makes them suitable for volume manufacturing and automated placement with vacuum nozzles. Product placement on the PCB is carried out at the same time as all the SMT or other reflow components on the board. No secondary operation is required to accommodate the throughboard connector.

Datamate J-Tek PIHR connectors are supplied in Tubes.



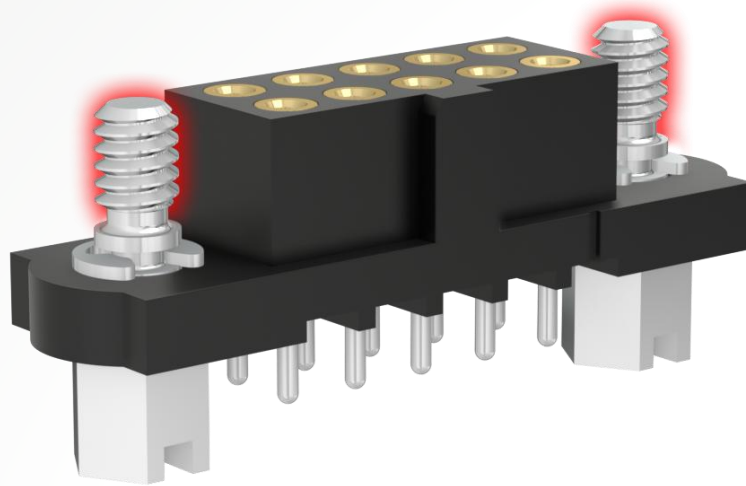
FEATURES – SECURE MATING CONNECTIONS



The [Datamate L-Tek](#) connectors use simple locking latches made from high strength Beryllium Copper. Mating is fast and simple – just push the two connectors together, and the latches snap into place. The connectors are then locked together and require manual deflection of the latches to separate.

These latches assure that the connection performs to the maximum vibration, shock, bump and acceleration, and provide cable strain relief.

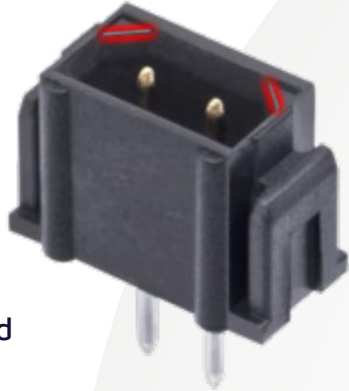
FEATURES – SECURE MATING CONNECTIONS



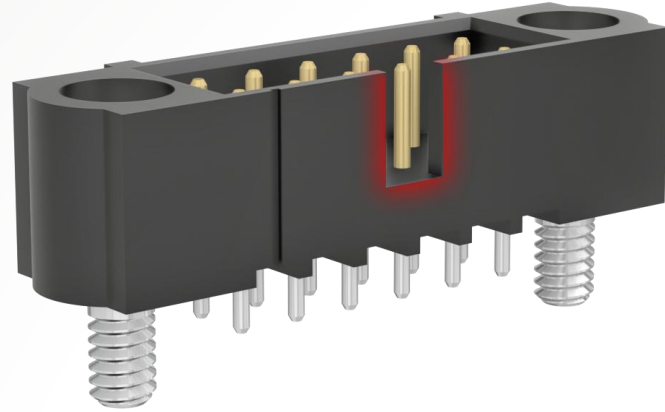
The [Datamate J-Tek](#) connectors use robust jackscrews made from corrosion-resistant Stainless Steel. The jackscrews need to be screwed together while mating. See the Product Training Module on Jackscrews and Latches for further information: [Guide to Datamate Latches and Jackscrews Overview PTM – Harwin](#).

The jackscrews, like the latches, assure that the connection performs to the maximum vibration, shock, bump and acceleration.

FEATURES – SHROUDING AND POLARISATION



Latches removed
for visibility



Connectors are shrouded, to prevent accidental damage to the miniature contacts. They also incorporate polarization, which prevents connectors being mated the wrong way round.

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CURRENT RANGE - DATAMATE L-TEK

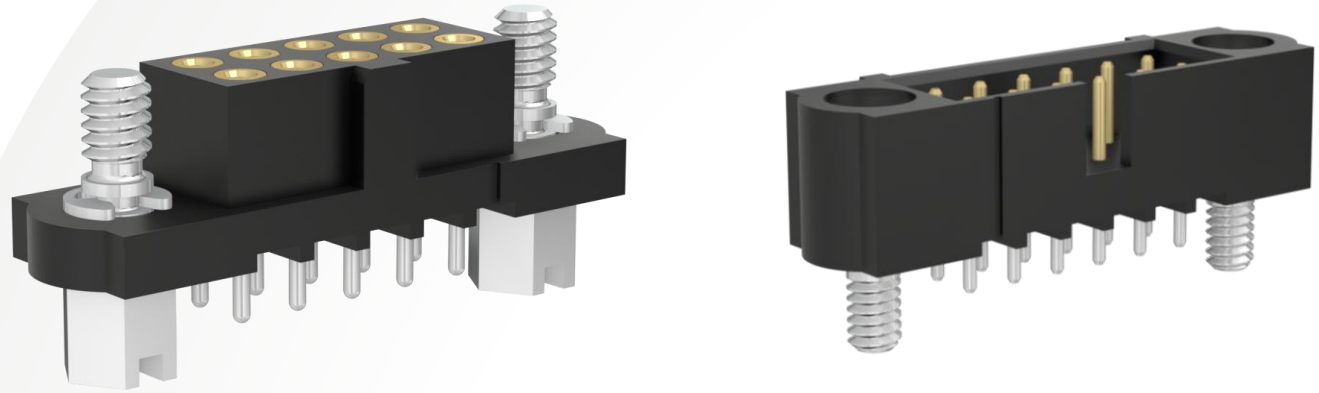


Currently 2 sizes of PIHR are available from Harwin:

- [M80-7720242R](#) – 2 contacts (with pick & place cap) or [M80-7730242R](#) – 2 contacts (with pick & place Kapton tape)
- [M80-7720342R](#) – 3 contacts

[Contact us](#) if you have other product requirements.

CURRENT RANGE - DATAMATE J-TEK



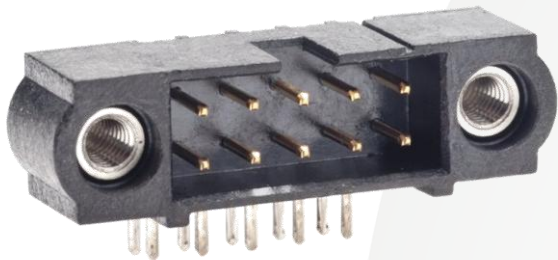
Two ranges of PIHR with jackscrews are available from Harwin:

- [M80-403](#) – Female receptacle straight connector, floating jackscrew with hex slotted head.
- [M80-509](#) – Male plug straight connector, jackscrew with 3.5mm board mount stud

Check the product range on the website to see the pin count sizes available. [Contact us](#) if you have other product requirements.

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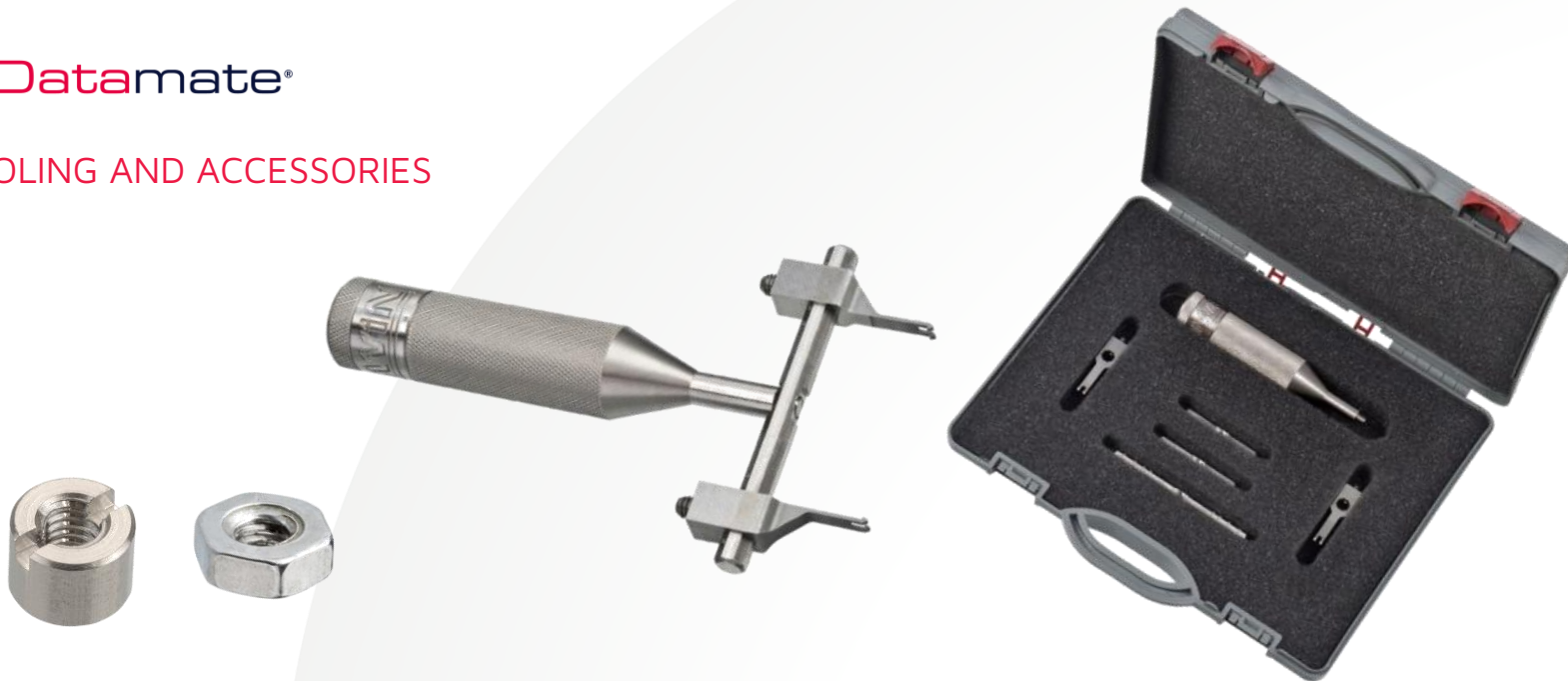
FULL COMPATIBILITY WITH DATAMATE



Datamate PIHR is compatible with connectors in the applicable [Datamate](#) sub-range, with the same contact arrangement. The 4-fingered Beryllium Copper female receptacle contact gives superb performance, for both electrical and mechanical specifications. This inner “contact clip” is stamped and plated with a durable gold finish at our UK headquarters. The spring performance of the contact gives the environmental resistance to shock and vibration, with a temperature range up to 125°C.

The mating connectors are shown in each product page – search for the specific part number on [Harwin.com](#).

TOOLING AND ACCESSORIES



The [Z80-299](#) tool is available for the Datamate L-Tek connectors, to help deflect the latches when separating the mated connectors.

Board Mount nuts [M80-2130000B](#) or [M80-2430000B](#) can be used with the M80-509 connectors, for additional board-mounting strength. Screwdriver [Z80-298](#) can help with assembly of the M80-2130000B slotted nut.

ELECTRICAL SPECIFICATIONS

Current Rating	3.3A max (single contact) 3.0A max (all contact)
Working Voltage	800V DC or AC _{peak}
Voltage Proof (Maximum Voltage)	1,200V DC or AC _{peak}

The Datamate range is a professional connector system aimed at Commercial or COTS prices. It is field-proven in tough terrains and environments, from underground to outer space. The current rating exceeds the levels normally expected from a 2mm pitch connector system.

The full [Datamate Component Specification](#) is available to download from the Harwin website.

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Vibration	10g for 6 hours; 20g for 2 hours
Shock	100g
Durability	500 mating cycles
Temperature Range	-55°C to +125°C

The above specifications secure the reputation of the Datamate range as a High-Reliability connector. Multiple Test Reports for Datamate are available from individual product pages at [Harwin.com](https://www.harwin.com).

MARKETS



Rugged, high-reliability connectors continue to be in strong demand in many varied environments. Small enough to be used in handheld and portable applications, yet high-powered enough to meet the demands of large-scale equipment, Datamate continues to find new applications and new product uses in existing and new customers.

- Aerospace
- Autosport
- Military
- Robotics
- Oil & Gas

LEARN MORE ABOUT OUR OTHER RANGES



HIGH RELIABILITY
WITH SUPREME
PERFORMANCE



DEPENDABLE
CONNECTIVITY
ACROSS THE BOARD



INNOVATIVE
DESIGNS FOR
EASY ASSEMBLY

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of inter-connection solutions at

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CAD Models and Evaluation Samples also available at www.harwin.com





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