Datamate

Performance without Compromise

An overview of the Datamate range, its applications, features and benefits



Datamate

- 2mm pitch Connector System
- Industry recognised High Reliability
- Approved to:
 - BS9525-F0033 (1 & 2-row)
 - CECC-75101-008 (1, 2 & 3-row)
- Designed for military, aerospace and "high-end" applications
- Proven in Many Years of Successful Service
- Successfully and internationally utilised in COTS programs





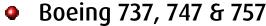




Markets and Applications

- Aerospace & Aeronautics
- Military
- Data & Telecommunications
- Medical
- Handheld Equipment
- Industrial Equipment
- Robotics
- Oil & Gas





Eurofighter Typhoon

Watchkeeper UAV

- ScanEagle UAV
- Hydroid AUV
- Delphi C³ Satellite
- "IceCube" Neutrino Telescope
- Bowman Military Radio
- Airbus A380
- Meteor Air-to-Air Missile











Design Features

- Compact design 2.00mm pitch
- Beryllium Copper 4 Finger contact
 - Tolerates extremes of temperature
 - Withstands high vibration and shock
- Extensive product range
- Optional Latches or Jackscrews for strain relief
- Polarised Mouldings
- Shrouded design
- Professional connector system for Commercial or COTS prices
- Mixed technology options for Power and Coax applications









Specification Highlights

- Current Rating = 3.3A individual, 3.0A all contacts
 - High current for reduced footprint
- Durability = 500 operations, tested up to 5,000
 - Long life whether fit & forget or high usage
- Operational Temperature = -55°C to +125°C
 - Suitable for a wide variety of harsh environments
- Vibration sensitivity = 10Hz to 2,000Hz; 10G for 6 hours
- Bump severity = 40G for 4,000 bumps
- Shock severity = 100G for 6 milliseconds
- Acceleration severity = 50G
 - Shock resistant
 - Maintains performance integrity in extreme q-force situations







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Product Families - Datamate L-Tek

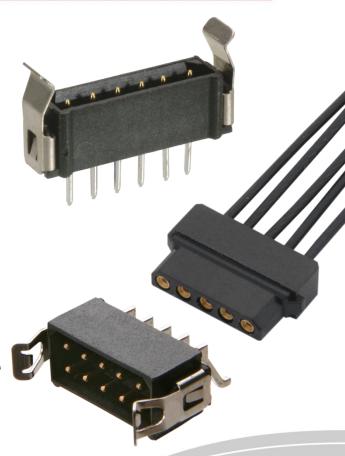
L-Tek is short for **Latching** Technology – low frequency connectors with a range of strain relief options:

- Locking Latch
- Friction Latch
- No Latch

Click here for training module on Latches

Available in Single or Double row, with the following configurations:

- Female Vertical, PC Tail or SMT, Cable
- Male Vertical or Horizontal, PC Tail or SMT, Cable
- Cable hoods for Female double row









Product Families - Datamate J-Tek

J-Tek is short for **Jackscrew** Technology – low frequency connectors with a wide range of strain relief and board fixing options:

Click here for training module on Jackscrews

- Increased security of connection
- Board Mount retention
- Male to Female fixing, or Guide Pins

Available in Double row, with the following configurations:

- Female Vertical, PC Tail or SMT, Cable
- Male Vertical or Horizontal, PC Tail or SMT, Cable
- Cable hoods for Female/Male double row











Product Families -

Datamate **3-Row**

OFF THE SHELF

J-Tek is also available in a Triple Row connector configuration, with the most popular sizes available Off-The-Shelf:

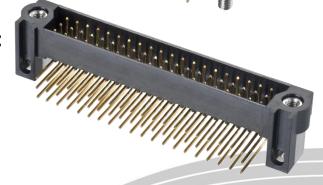
- Reduced insertion force female contact
- Up to 96 contacts available
- Male to Female fixing, with board mount for additional security

Available in with the following configurations:

- Female Vertical PC Tail or Cable
- Male Vertical or Horizontal, PC Tail













Product Families - Datamate Mix-Tek

for Brochure

OFF THE SHELF

Mix-Tek: **Mixed** Technology – Off-The-Shelf offers Signal and Power combination connectors, or Power-only, with jackscrew options from the J-Tek range:

- 3A low frequency signal contacts
- High Power up to 20A
- Stocked in depth in popular configurations
- Male to Female fixing, with board mount for additional security

Available in Double row:

- Female Cable
- Male Vertical or Horizontal PC Tail







Product Families - Datamate Mix-Tek

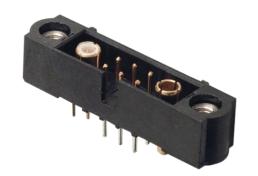
Mix-Tek: **Mixed** Technology – If Off-The-Shelf does not cover your requirements, Harwin can offer an increased range to order:

- 3A LF signal contacts and High Power to 20A
- Coax 6Ghz, 50 Ohm
- 3 connection systems in one, with the jackscrew options from the J-Tek range
- Millions of combinations

Available in Double or Triple row:

- Female Vertical, PC Tail/SMT, Cable
- Male Vertical/Horizontal, PC Tail/SMT, Cable

Contact the Technical team for assistance





Product Families - Datamate Trio-Tek

Trio-Tek is an open crimp design, performing to the same high reliability as standard barrel crimps, but with the added convenience of automated crimp processes:

Save on assembly time and process costs

Minimal contact insertion force

 Hand crimp tool available for product development/prototyping

Available in the following configurations:

- Female L-Tek Single and Double row
- Female J-Tek Double row, numerous jackscrew options

Click here for more information



Product Families - Datamate 101 Lok

101Lok is a simplified mating retention designed by Harwin: 101-degree turn of each fixing will lock or release the connectors:

- Faster mating / unmating time
- Requires no special tooling

Available as part of the Double row J-Tek, with the following configurations:

- Female Vertical, PC Tail or SMT, Cable
- Male Vertical or Horizontal, PC Tail or SMT, Cable (with or without board mount)

Click here for training module on 101Lok











Product Families – for safety-critical

Datamate **BS**

Datamate L-Tek, manufactured to British Standard 9525-F0033. 100% inspected, batch and yearly tested, ideal for safety-critical applications.

Click here for further information on Datamate BS

Datamate - Plus

Any Datamate – the same inspection and inprocess testing as Datamate BS can be offered on any product within the Datamate family. Contact Harwin for more information.













Any Questions?

The Harwin Team is happy to help, please contact us!

- Live Help (on the <u>Harwin website</u>)
- E-mail <u>technical@harwin.com</u>
- Telephone <u>click here</u> for the contact details for your region







