

HARWIN

 **Datamate[®]**

Guide to Datamate Latches and Jackscrews



LATCHES AND JACKSCREWS – WHICH IS BEST?

To help with your Datamate Connector identification and selection, here is a guide to the types of fixings available in the range, covering Latches, Jackscrews and the 101Lok fixing options...



DATAMATE L-TEK – THE ORIGINAL

L-Tek is short for **Latching Technology** – mating connectors are given added separation force using a choice of latches.

Advantages

- Fast mating
- Established product, stocked in depth
- Less board real estate used than the other Datamate options
- Single row connectors available

Disadvantages

- Fast mating
- Locking latches require a specific tool to un-mate the connectors
- No board hold-down options
- Only available in a selection of pin counts:
 - 2 to 7, 17 & 22 (Single row)
 - 4 to 20, 26, 34, 44 (Double row)

DATAMATE L-TEK – THE RANGE



Locking Latch (also just referred to as Latch):

- Positively locks connectors together
- Requires a tool to un-mate the connectors ([Z80-299](#))



Friction Latch (note: no “window”):

- No tool required to separate connectors
- Adds 2-2.5N to the separation force
- **Obsolete from 7th September 2018**



No Latch assembled:

- Most commonly used on board-to-board assemblies



Female Receptacle:

- Note the bump used to mate with the latch



DATAMATE L-TEK – OTHER NOTES

All styles of connector are available in a choice of RoHS compliant finishes:

- Gold on contact area, 100% Tin on Tails/Outer Shell (over nickel)
- Gold over the complete contact

PCB mounting connectors (Through Tail and SMT) may still be available with Tin/Lead plated tails as a Non-RoHS option – check website for availability.

Use the online [Product Selector](#) to help select the parts required.



DATAMATE J-TEK – THE FLEXIBLE RANGE

J-Tek is short for **Jackscrew Technology** – this range has a wide choice of jackscrew styles, based on an M2 thread.

Advantages

- Wide range of secure fixing and locating styles possible
- Board mount, panel mount and guide pin options
- Contact count of 04 to 50 available in the majority of designs

Disadvantages

- Jacking connectors together can be time-consuming, and requires a screwdriver or hex/allen key
- Double row connectors only

DATAMATE J-TEK – HIGHLIGHTS (MALE PLUG)



Straight Jackscrew:

- Available with or without board mount fixing underneath
- Slotted screwdriver available for use with the board mount nuts ([Z80-298](#))



Right-Angle Jackscrew:

- Also available with or without board mount fixing underneath



Reverse Fix:

- For use with male plug cable connectors, when the female receptacle is on the PCB
- M2 Male thread not shown at this angle, sits inside the moulding



No Jackscrew:

- Option available for customers that do not require any fixing, but have to use J-Tek to get the right number of contacts

DATAMATE J-TEK – HIGHLIGHTS (FEMALE RECEPTACLE)



Jackscrew:

- Available in either hexagonal socket for hex/allen key (as shown), or with a screwdriver slot and hexagonal outer shape



Female Receptacle Guide Pin:

- Mates with any threaded male plug jackscrew
- Used in board-to-board for blind mating, and has board mount fixing



Reverse Fix:

- When using board mounted female receptacle with cable male plug connectors
- With board mount fixing



No Jackscrew:

- More commonly used on board-to-board layouts, where the boards are fixed by other methods



DATAMATE J-TEK – OTHER NOTES

- Other jackscrew styles are available – have a look at the online [Product Selector](#) for all the current options.
- If you need something faster than screwing together jackscrews – read on!
- As with L-Tek, all styles of connector are available in a choice of RoHS compliant finishes:
 - Gold on contact area, 100% Tin on Tails/Outer Shell (over nickel)
 - Gold over the complete contact
- And also, PCB mounting connectors (Through Tail and SMT) may still be available with Tin/Lead plated tails as a Non-RoHS option – check website for availability.



DATAMATE 101LOK – FAST, SECURE MATING

101Lok is a variant on the J-Tek, unique to Harwin. It utilises a bayonet-style design to combine the advantages of both fixing systems.

Advantages

- Fast mating and unmating – no screwing required!
- Board mount options available
- Contact count from 04 to 50 available in the majority of designs

Disadvantages

- Double row connectors only

DATAMATE 101LOK – IN PICTURES

**Male Plug 101Lok:**

- Available in Straight or Right-Angle orientations, both with or without board mount fixing

**Female Receptacle 101Lok:**

- Slotted and hex/allen key versions available



DATAMATE 101LOK – OTHER NOTES

- Samples are available on request if you want to try any of these connectors (just add to your basket from any product page, then checkout for free).
- Finish options are the same as the rest of Datamate: all styles of connector are available in a choice of RoHS compliant finishes...
 - Gold on contact area, 100% Tin on Tails/Outer Shell (over nickel)
 - Gold over the complete contact
- PCB mounting connectors (Through Tail and SMT) may still be available with Tin/Lead plated tails as a Non-RoHS option – check website for availability.

LEARN MORE ABOUT OUR OTHER RANGES



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