

Datamate J-Tek Hi-Rel Connectors

Secure & Robust 2mm Pitch Connectors for demanding applications

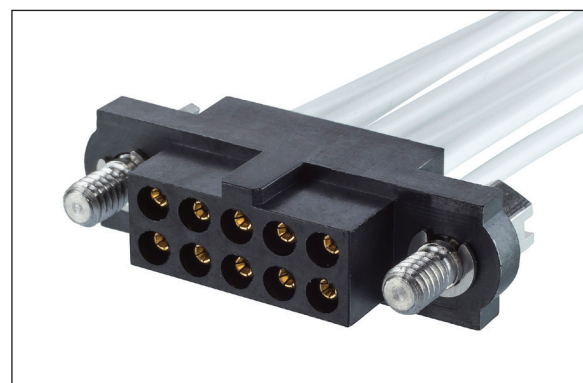
Achieve high-reliability performance in extreme conditions with the Datamate J-Tek miniature connector range. Ensure continuous signal integrity under vibration and shock conditions, with robust stainless steel jackscrews providing secure connection and maximum strain relief.

Specify your choice of Throughboard, Surface Mount or Crimp termination for all variations of board-to-board, cable-to-board or cable-to-cable. The double row design is available in sizes up to 50 contacts and gives you a low-profile connection suitable for many demanding applications.

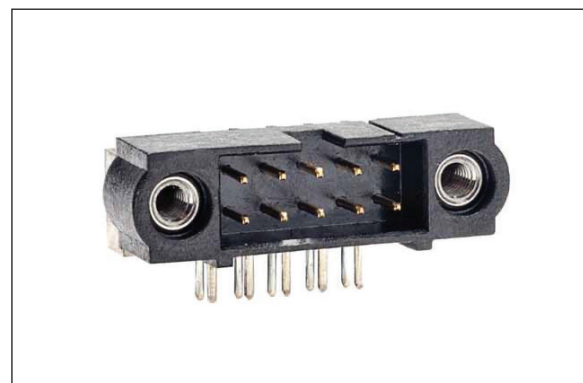
With quick delivery from stock for popular styles, take advantage of this in-depth range for all your high performance needs.



101Lok vertical 12 contact female throughboard connector: M80-4T11242FD



Female 10 contact cable connector with floating hex socket jackscrews: M80-4601005



10 pin male horizontal throughboard connector with board mount: M80-5401042

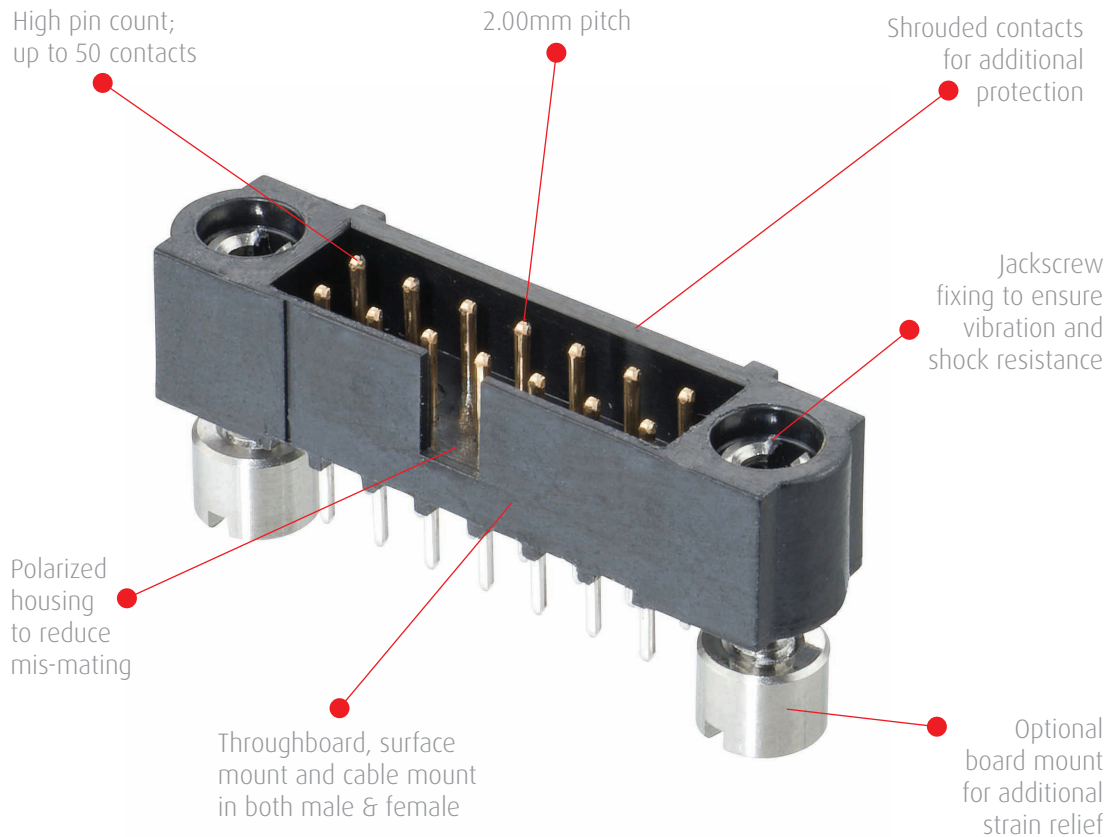
Features and Benefits

3A per signal contact (all electrically loaded; 3.3A per individual contact) at 2mm pitch	Capable of signal and low power within a compact design, saving PCB real estate
Proven 4-finger female contact design	Maintains electrical continuity through high vibration and shock environments
Beryllium Copper Contact with -55°C to +125°C temperature range	Rugged and durable connector design for demanding applications
500 Mating cycles durability	Suitable for both fit-and-forget and multiple testing & replacement cycles
World-class quality from the Original Designers of Datamate	Published test reports, proven track record, high quality requirements through the complete production cycle
Many popular products available from stock	20-day leadtimes on extended ranges, stock availability visible online

Key Applications

Aerospace, Defense & Security	Radar, avionics controls, guidance systems, UAVs, radio communications, radar and tracking, vehicle electronics
Motorsport	Sensors and telemetry, navigation, ERS controls
Space	Satellites & CubeSats, communications, launch systems
Energy	Oil & Gas, renewable energy equipment
High-end professional electronics	Robotics, automation, drives & controls
Medical	Diagnostics, instrumentation

Product Features



Specifications

Electrical		Mechanical		Physical	
Current Rating	3A per contact	Number of Mating Cycles	500	Housing	Glass filled PPS, UL94V-0
Working Voltage	800V AC/DC	Temperature Range	-55°C to +125°C	Contacts	Copper alloy, Gold or selective gold/tin plating
Maximum Voltage	1200V AC/DC	Insertion force	2.0N max	Jackscrews	Stainless steel
Contact Resistance	25 mΩ max	Withdrawal force	0.2N min		
Insulation Resistance	100MΩ min	Vibration	10G, 6 hours total		

How to Order

M80 - XXX XX XX

SERIES CODE	
TYPE	
400	Female Vertical Throughboard with hex slotted jackscrews
402	Female Vertical SMT with hex slotted jackscrews
420	Female Vertical Throughboard with hex socket jackscrews
422	Female Vertical SMT with hex socket jackscrews
460	Female Cable connector kit with hex slotted jackscrews, for 22 AWG cable (Large Bore)
461	Female Cable connector kit with hex slotted jackscrews, for 24-28 AWG cable (Small Bore)
480	Female Cable connector kit with hex socket jackscrews, for 22 AWG cable (Large Bore)
481	Female Cable connector kit with hex socket jackscrews, for 24-28 AWG cable (Small Bore)
500	Male Vertical Throughboard with jackscrews
502	Male Vertical SMT with jackscrews
510	Male Vertical Throughboard with board mount jackscrews
512	Male Vertical SMT with board mount jackscrews
530	Male Horizontal Throughboard with jackscrews
532	Male Horizontal SMT with jackscrews
540	Male Horizontal Throughboard with board mount jackscrews
542	Male Horizontal SMT with board mount jackscrews
560	Male Cable connector kit with jackscrews, for 22 AWG cable (Large Bore)
561	Male Cable connector kit with jackscrews, for 24-28 AWG cable (Small Bore)

FINISH	
05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

Other Options Available:

- Extra Small Bore contacts – suitable for 28-32AWG cable
- 3 Rows – up to 96 contacts
- T-Contact – up to 8.5A power per contact in the same 2mm pitch housing
- Metal Backshells – additional shielding for complete EMC solutions
- 101Lok fixings – quarter-turn fast assembly bayonet fixings
- Guide pin female jackscrews – for blind-mating operations
- Reverse Fix jackscrews – typically used for mating female PCB connectors to male cable connectors
- Extended Wall housings – for the application of backpotting epoxy resin at the cable exit
- Plastic Backshells/Hoods – to aid with manual assembly and external applications
- Trio-Tek – open crimp design suitable for automated crimping
- Longer termination throughboard, for PCB thicknesses up to 3.2mm



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