

## Datamate Mix-Tek Cable Housings

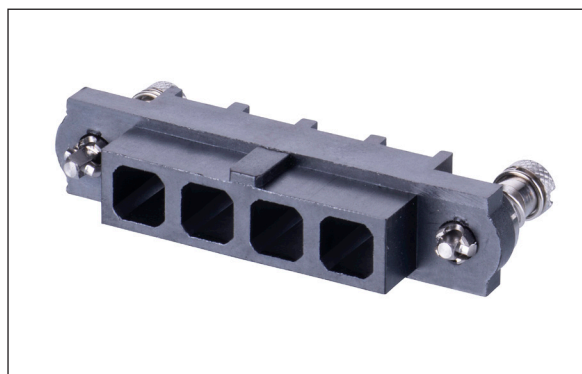
Signal, Power and Coax contacts available separately

Datamate Mix-Tek is a 2mm pitch (signal) and 4mm pitch (power/coaxial) high-reliability, high performance connector range with a proven track record for performance under extreme conditions.

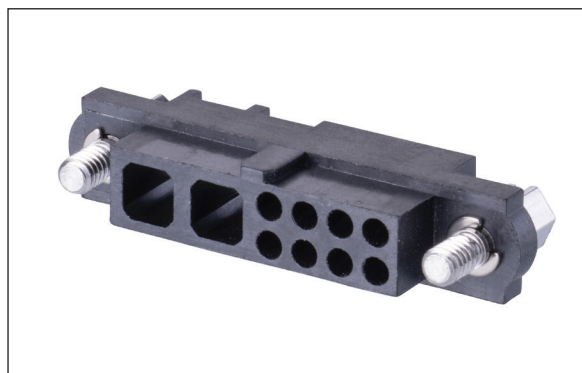
Male and Female cable connector housings can be specified in combination with signal contacts or with 4mm pitch only for a true mixed technology connector. Housings are compatible with any of the following contact options: **Standard Power (20A), High Power (40A), Coax (50Ω)**

Ideal for Commercial Off-The-Shelf (COTS) specification requirements, the range is offered in the most popular cable housings sizes, compatible with each other for cable-to-cable, or with PCB connectors for cable-to-board combinations. To meet the demanding requirements of vibration, shock and strain relief, added security is provided by jackscrews, offered in a choice of different styles for added flexibility.

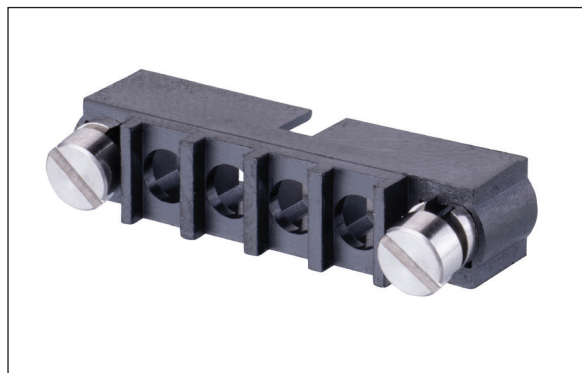
By stocking housings and cable contacts separately, a much wider variety of combinations is possible off-the shelf with no manufacturing lead-time – **the equivalent to 1,034 connector kits.**



M80-263FC04-00-00: 4 female contact housing with 101Lok fixings



M80-263F102-08-00: Female contact housing for 8 signal and 2 power or coax contacts



M80-273MA04-00-00: 4 male contact housing with reverse fix jackscrews

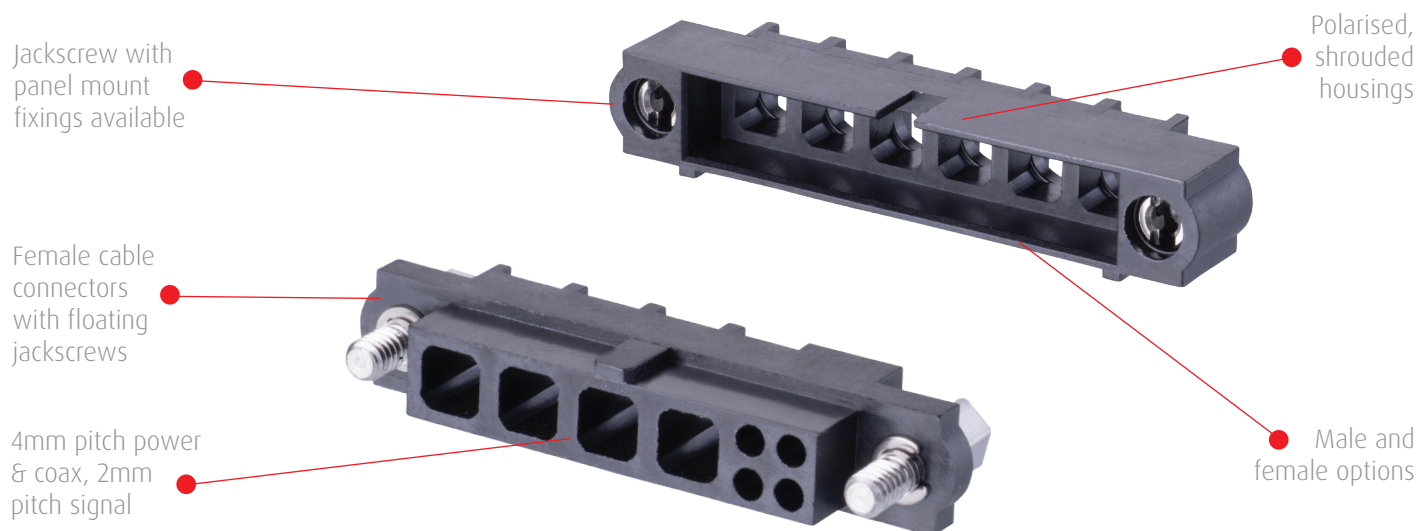
### Features and Benefits

Multiple current capacity options – 3A (signal), 20A (power), 40A (high power)	Low to high current options for maximum flexibility in a compact connector
Multipoint 50Ω, 6GHz coaxial ganged contacts	Ready-to-use cable connectors and mating cable assemblies also available
Beryllium Copper contacts with -55°C to +125°C temperature range	Rugged and durable connector design with proven track record
World-class quality from the Original Designers of Datamate	Published test reports, proven track record, high quality requirements through the complete production cycle
Thousands of combinations available from stock	Off-the-shelf without lead-time, supported by a global distributor network
Stainless steel jackscrews suitable for standard or reverse fixing	To ensure vibration and shock requirements are met, and to give maximum strain relief in cable-to-board configurations
101Lok fixing option	Fast mating bayonet fixing for simple and speedy mating and unmating

## Key Applications

Aerospace, Defense & Security	Radar, avionics controls, guidance systems, UAVs, radio communications, radar and tracking, vehicle electronics
Motorsport	Sensors and telemetry, navigation, sensor power
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 & Environmental		Physical	
Current rating	3A (signal contact), 20A (power), 40A (high power)	Number of Mating Cycles	500	Housing	Glass filled PPS, UL94V-0
Voltage rating	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 (signal), 8N max (power/coax), 15N max (high power)	Jackscrews	Stainless steel
Contact Resistance	25mΩ max	Withdrawal force	0.2N min		
Insulation Resistance	100MΩ min	Vibration	10G, 6 hours total		
Impedance (coax)	50Ω				
Frequency range (coax)	Up to 6GHz				
VSWR (coax)	1.05 + (0.04 x Frequency) GHz max				

## Power/Coax Only housing

**M80 - XXX XX XX - 00 - 00**

### SERIES CODE

### HOUSING

263	Female
273	Male

### NO. OF POWER/COAX CONTACT POSITIONS

02, 03, 04, 06, 08	All variations
10	Female with F1 jackscrew

### JACKSCREW

F1	Floating Hex Slotted, Standard Gender (for female)
F2	Floating Hex Socket, Standard Gender (for female)
F3	Guide pin with 5mm panel mount stud (for female)
F9	Reverse Fix with 5mm panel mount stud (for female)
FC	101Lok fixing (for female)
M1	Internally Threaded Jackscrew, Standard Gender (for male)
MA	Floating Slotted, Reverse Fix (for male)
MC	101Lok receptacle fixing (for male)

For any other combinations shown on the Technical Drawings, please contact our Experts on [Harwin.com/contact](http://Harwin.com/contact) for assistance and availability.

## Signal + Power/Coax housing

**M80 - 263 XX XX - XX - 00**

### SERIES CODE

### HOUSING

263	Female
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### CONTACT POSITION COMBINATIONS

02-06	2 power/coax positions, 6 signal positions
02-08	2 power/coax positions, 8 signal positions
03-08	3 power/coax positions, 8 signal positions
04-02	4 power/coax positions, 2 signal positions
04-04	4 power/coax positions, 4 signal positions
04-12	4 power/coax positions, 12 signal positions
06-02	6 power/coax positions, 2 signal positions

### JACKSCREW

F1	Floating Hex Slotted, Standard Gender (for female)
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For any other combinations shown on the Technical Drawings, please contact our Experts on [Harwin.com/contact](http://Harwin.com/contact) for assistance and availability.

## Compatible Contacts

### Standard Power (up to 20A)



**Straight Solder  
Female**

**M80-325**  
12 AWG  
**M80-326**  
14 AWG  
**M80-327**  
16 AWG



**Straight Crimp  
Female**

**M80-328**  
18 AWG  
**M80-329**  
20 AWG



**Right Angle Solder  
Female**

**M80-32A**  
12 AWG  
**M80-32B**  
14 AWG  
**M80-32C**  
16 AWG



**Straight Solder  
Male**

**M80-335**  
12 AWG  
**M80-336**  
14 AWG  
**M80-337**  
16 AWG



**Straight Crimp  
Male**

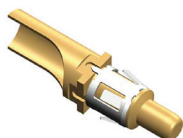
**M80-338**  
18 AWG  
**M80-339**  
20 AWG

### High Power (up to 40A)



**Straight Solder  
Female**

**M80-PF5**  
10 AWG



**Straight Solder  
Male**

**M80-PM5**  
10 AWG



**Straight Crimp  
Female**

**M80-305**  
Ø2.00mm cable  
**M80-307**  
Ø2.70mm cable



**90° Crimp  
Female**

**M80-308**  
Ø2.00mm cable  
**M80-309**  
Ø2.70mm cable



**Straight Crimp  
Male**

**M80-315**  
Ø2.00mm cable  
**M80-317**  
Ø2.70mm cable



**90° Crimp  
Male**

**M80-318**  
Ø2.00mm cable  
**M80-319**  
Ø2.70mm cable

### Signal



**Small Bore  
(24-28 AWG)**

**M80-0130001**  
Tin Shell



**Small Bore  
(24-28 AWG)**

**M80-0130005**  
Gold Shell



**Large Bore  
(22 AWG)**

**M80-0110001**  
Tin Shell



**Large Bore  
(22 AWG)**

**M80-0110005**  
Gold Shell



**Extra Small Bore  
(28-32 AWG)**

**M80-0190001**  
Tin Shell



**Extra Small Bore  
(28-32 AWG)**

**M80-0190005**  
Gold Shell

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