

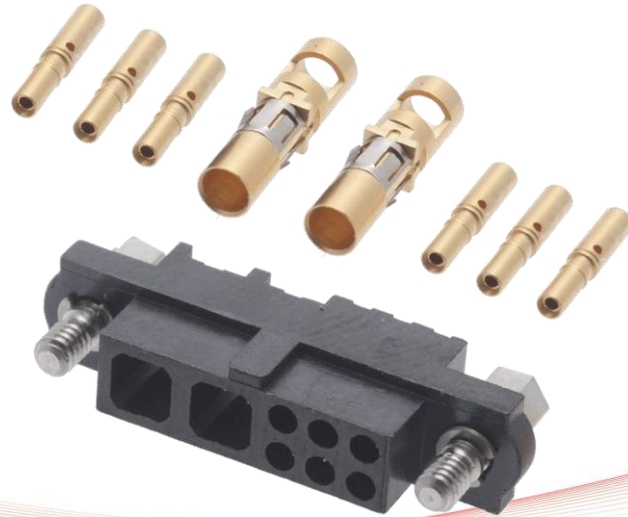
Datamate Mix-Tek Cable Housings



HARWIN

Datamate Mix-Tek Cable Housings

How are **Mix-Tek** cable connectors currently supplied?

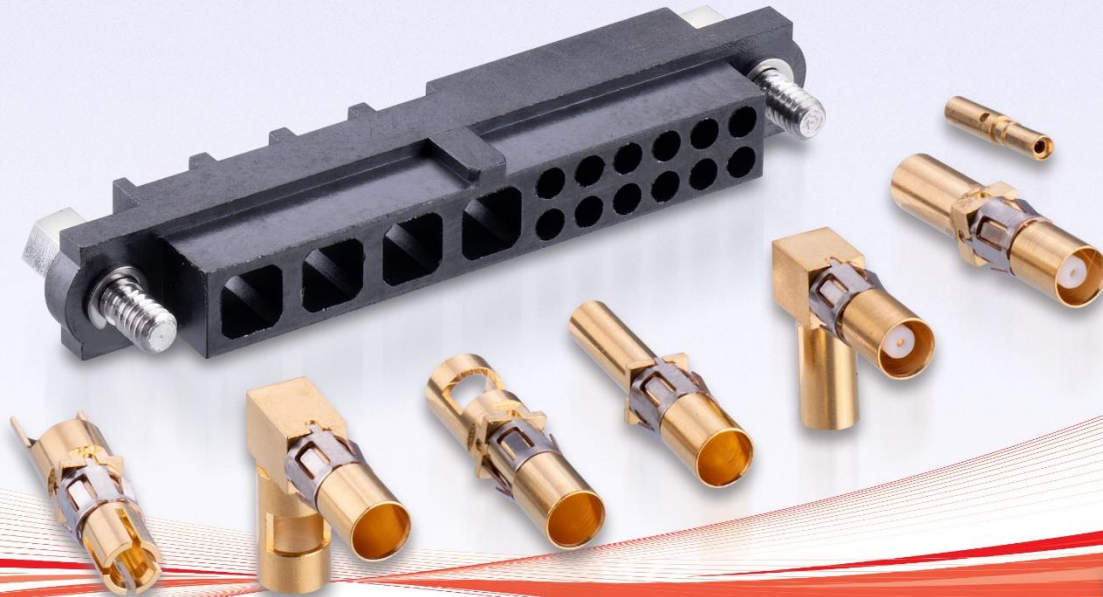
**HARWIN**

Mix-Tek connectors for cable are already available from Harwin in stocked variations. The available options are listed in the latest [Product Catalog](#), but basically consist of the following elements:

- Housings fitted with only hex slotted jackscrews – all other jackscrews are made-to-order;
- Only female connector kits are available – male connector kits are made-to-order;
- The kits include only the 325 (12AWG) or PF5 (10AWG) power contacts, and M80-0130005 signal contact (24-28AWG).

Datamate Mix-Tek **Cable Housings**

Why do we need **separate housings**?

**HARWIN**

By choosing to purchase housings and contacts separately, many more configurations are possible – the equivalent of 1,034 connectors!

- Many more choices of jackscrew and both male and female connectors are available from stock, no waiting for lead-time;
- Any contact from the full range of power, high power, coax and signal can be chosen to accompany the housing.

Datamate Mix-Tek **Cable Housings**

Power/Coax only, Standard Gender Jackscrews



Female

Hex Slotted Jackscrews

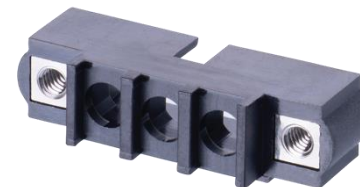
2, 3, 4, 6, 8 or 10 contacts



Female

Hex Socket Jackscrews

2, 3, 4, 6 or 8 contacts



Male

Internal Thread Jackscrews

2, 3, 4, 6 or 8 contacts

HARWIN

Standard Gender jackscrews are often used when the male connector is on the PCB. Male connectors are fitted with an internally threaded jackscrew, and the female jackscrew is externally threaded and the jacking half (usually called floating). The female floating jackscrews are free to move and screw into the male jackscrew. The choice of heads gives the option for screwdrivers or hex drives (such as Allen keys).

All contact locations are compatible with the full range of power, high power and coax contacts, and these can be mixed within the same housing. CP057/01102020

Datamate Mix-Tek **Cable Housings**

Power/Coax only, **Guide Pin** with Panel Mount



2, 3, 4, 6 or 8 contacts

HARWIN

The [guide pin jackscrew](#) is designed to mate with a standard gender internally threaded jackscrew on the male connector.

The 5mm threaded stud at the rear of the connector gives the added option of an [external panel mounting](#). Nuts for panel mount are available separately – [M80-2130000B](#) for slotted circular, [M80-2430000B](#) for hexagonal.

Datamate Mix-Tek Cable Housings

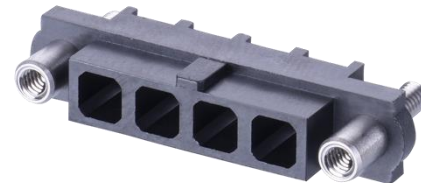
Power/Coax only, Reverse Fix



Male

Slotted Jackscrews

2, 3, 4, 6 or 8 contacts



Female

Internal Thread + Panel Mount

2, 3, 4, 6 or 8 contacts

Reverse fix flips the floating jackscrew onto the male connector, and the female connector now has the internal thread.

The 5mm threaded stud at the rear of the female connector gives the option of [external panel mounting](#). Nuts for panel mount are available separately - [M80-2130000B](#) for slotted circular, [M80-2430000B](#) for hexagonal.

HARWIN

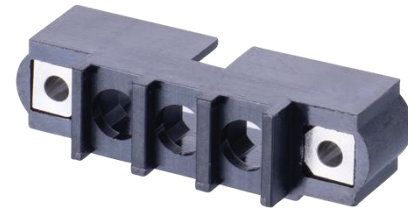
Datamate Mix-Tek **Cable Housings**

Power/Coax only, **101Lok**



Female 101Lok

2, 3, 4, 6 or 8 contacts



Male 101Lok receptacle

2, 3, 4, 6 or 8 contacts

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By using a bayonet fixing instead of a threaded jackscrew design, mating time is significantly reduced. The [101Lok style](#) allows the connectors to be fully mated, then each fixing is engaged with a simple push-and-turn action. The bayonet fixing is fitted to the female connector, with the receptacle fitted to the male.

No additional tooling is required, although the female 101Lok head has a slot for optionally using a screwdriver due to the small size.

Datamate Mix-Tek Cable Housings

Power/Coax + Signal



2 power/coax	6 signal or 8 signal
3 power/coax	8 signal
4 power/coax	2 signal, 4 signal or 12 signal
6 power/coax	2 signal

HARWIN

These connectors are the ultimate choice in connector flexibility, offering cavities for both signal and for power/coax/high-power. All female cable contacts are compatible with this range of housings. They come fitted with the hex slotted floating jackscrew, standard gender compatible with internally threaded male jackscrews.

If you require an alternative combination from the Technical Drawing, you can also [contact our Experts](#) for advice on other designs.

Datamate Mix-Tek Cable Housings

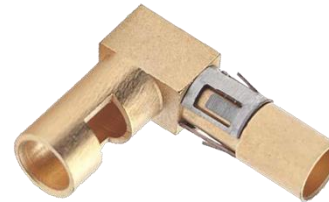
Compatible Female Contacts – Power



Solder
12, 14, 16 AWG



Crimp
18, 20 AWG



90° Solder
12, 14, 16 AWG



Solder
10 AWG

HARWIN

For the female connector a full range of power contacts are available, capable of carrying 5A at 20AWG to 40A at 10AWG:

Straight Solder:

- [M80-325](#) – 12 AWG
- [M80-326](#) – 14 AWG
- [M80-327](#) – 16 AWG

Straight Crimp:

- [M80-328](#) – 18 AWG
- [M80-329](#) – 20 AWG

Right Angle Solder:

- [M80-32A](#) – 12 AWG
- [M80-32B](#) – 14 AWG
- [M80-32C](#) – 16 AWG

Straight Solder, High Power:

- [M80-PF5](#) – 10 AWG

Datamate Mix-Tek Cable Housings

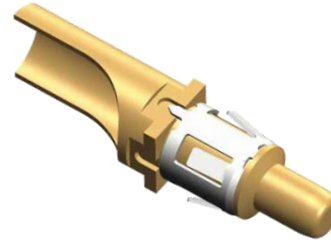
Compatible Male Contacts – Power



Solder
12, 14, 16 AWG



Crimp
18, 20 AWG



Solder
10 AWG

HARWIN

For the male connector a full range of straight power contacts are available, capable of carrying 5A at 20AWG to 40A at 10AWG:

Straight Solder:

- [M80-335](#) – 12 AWG
- [M80-336](#) – 14 AWG
- [M80-337](#) – 16 AWG

Straight Crimp:

- [M80-338](#) – 18 AWG
- [M80-339](#) – 20 AWG

Straight Solder, High Power:

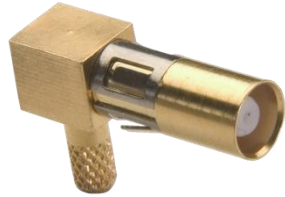
- [M80-PM5](#) – 10 AWG

Datamate Mix-Tek Cable Housings

Compatible Contacts – Coax



Female
Ø2mm, Ø2.7mm



90° Female
Ø2mm, Ø2.7mm



Male
Ø2mm, Ø2.7mm



90° Male
Ø2mm, Ø2.7mm

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Coax contacts come in two sizes - Ø2mm are compatible with RG178 coax cables, and Ø2.7mm with RG174, RG179 and RG316:

Straight Female:

- [M80-305](#) - Ø2mm
- [M80-307](#) - Ø2.7mm

Right Angle Female:

- [M80-308](#) - Ø2mm
- [M80-309](#) - Ø2.7mm

Straight Male:

- [M80-315](#) - Ø2mm
- [M80-317](#) - Ø2.7mm

Right Angle Male:

- [M80-318](#) - Ø2mm
- [M80-319](#) - Ø2.7mm

Datamate Mix-Tek Cable Housings

Compatible Contacts – Female Signal



Large Bore
22 AWG



Small Bore
24-28 AWG



Extra Small Bore
28-32 AWG

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Contact faces for signal crimps are always gold – however, on the female contacts there is a choice of outer shell finish, either gold or tin. The tin is 100% tin over a nickel undercoat to avoid tin whisker issues.

Large Bore:

- [M80-0110005](#) – Gold shell
- [M80-0110001](#) – Tin shell

Female Small Bore:

- [M80-0130005](#) – Gold shell
- [M80-0130001](#) – Tin shell

Female Extra Small Bore:

- [M80-0190005](#) – Gold shell
- [M80-0190001](#) – Tin shell

Datamate Mix-Tek Cable Housings

Performance Specification highlights

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

HARWIN

All specifications are in line with the existing connector ranges, and electrical performance will depend on the types of contacts fitted. The full specification for the Datamate Mix-Tek connector is [Component Specification C005XX](#).

Datamate Mix-Tek Cable Housings

Markets

**HARWIN**

Rugged, high-reliability connectors are always in high demand in both commercial and private sector applications, handheld and portable to large vehicle equipment. Datamate Mix-Tek gives the ultimate flexibility in one compact connection.

- Aerospace
- Autosport
- Military
- Robotics
- Industrial

Datamate Mix-Tek **Cable Housings**

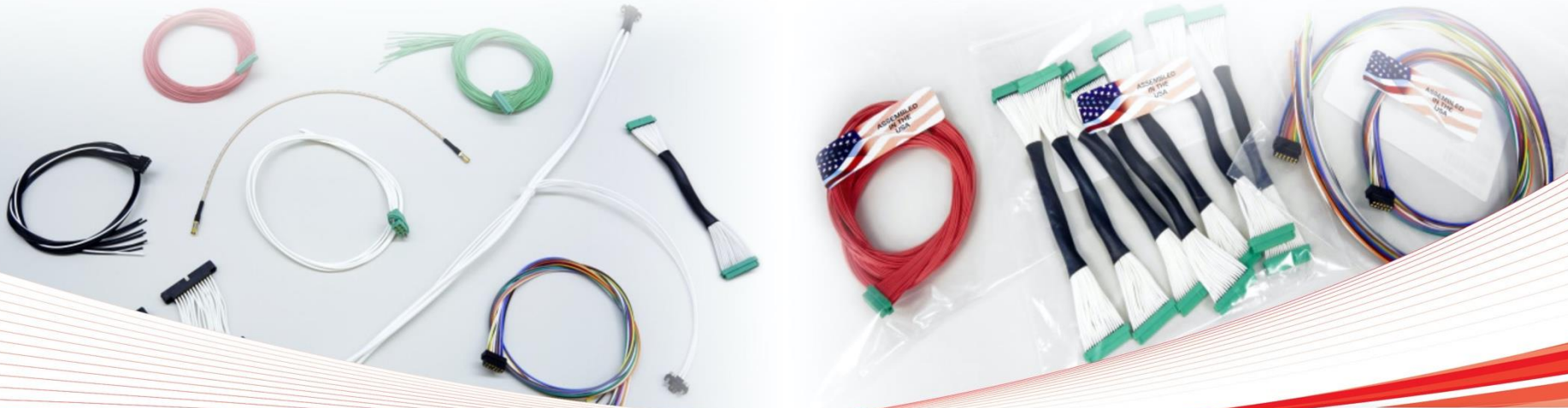
Full **Cable Assembly Service** available

**HARWIN**

If you would like Harwin to take the strain of manufacturing your shielded cable assemblies, our [Cable Assembly Service](#) is available to fulfil your requirements. Based in the USA, the facility offers small orders for low runs and prototyping, as well as full production volumes. All cables are 100% continuity tested, and can be supplied with full braiding, as well as backpotting or heatshrink application.

Datamate Mix-Tek **Cable Housings**


Full **Cable Assembly Service** available

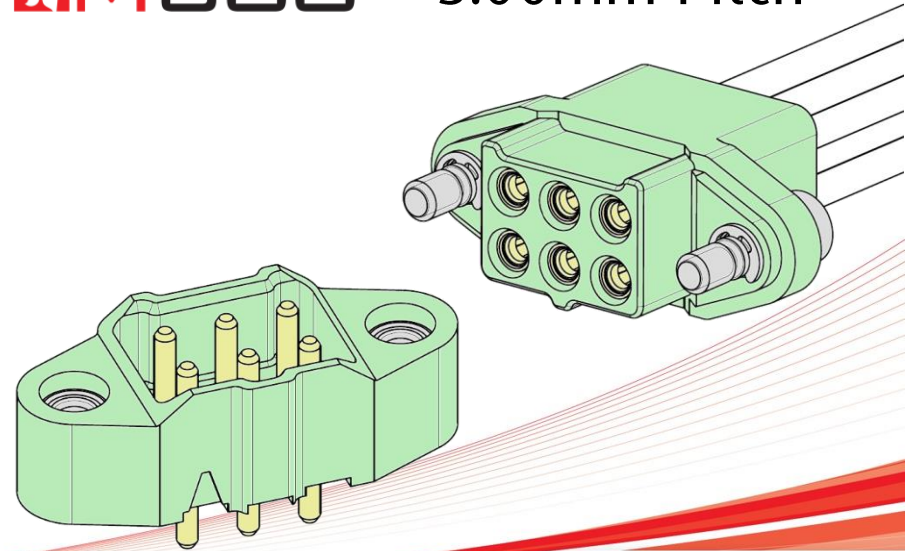
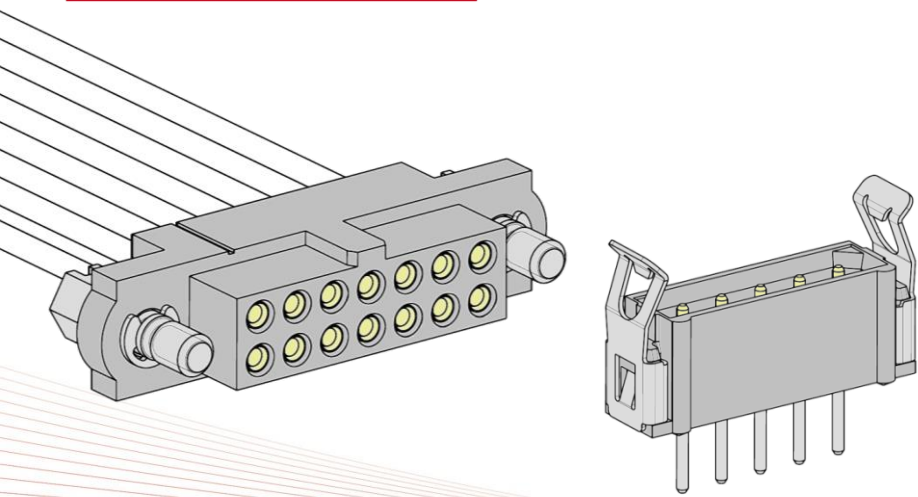
**HARWIN**

Our team can offer advice on your custom cable assembly requirements, and any Harwin cable connection products. [Contact our Experts today](#) for further assistance with your requirements.

If you like this product, try...

Datamate - 2.00mm Pitch

 **M300** - 3.00mm Pitch



- 3A per signal
- Jackscrew or latching system for strain relief
- Resists Vibration to 10G and Shock to 100G
- Temperature range -55 deg C to +125 deg C
- PCB connectors in Throughboard or SMT, Cable options

- Up to 10A per contact
- Jackscrew fixing system for strain relief
- Resists Vibration to 10G and Shock to 100G
- Temperature range -65 deg C to +175 deg C
- Vertical and Cable options

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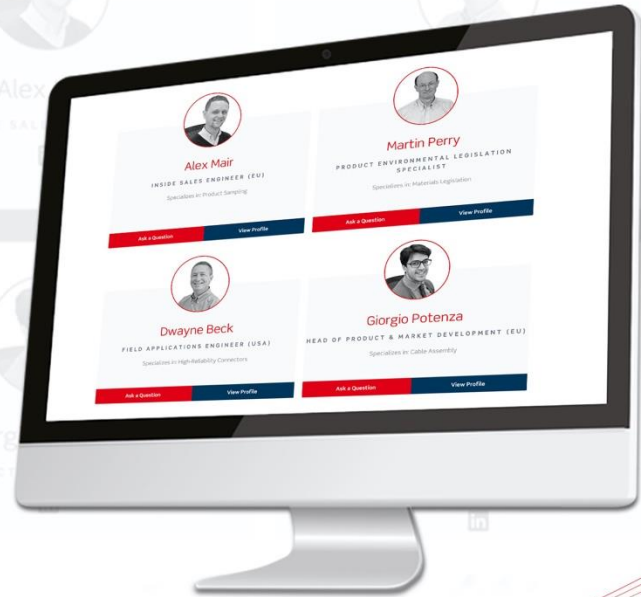
Get Help from a Harwin Expert

Our experts are specialists in their field with many years of experience in their respective roles and industries.

Find an expert that can help you with your enquiry.

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