

Datamate Mix-Tek Cable Housings

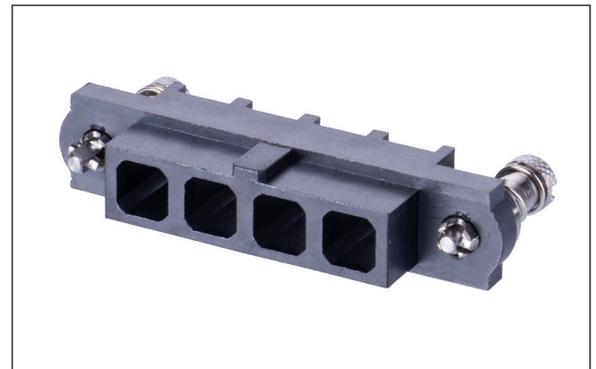
Signal, Power and Coax contacts available separately

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.

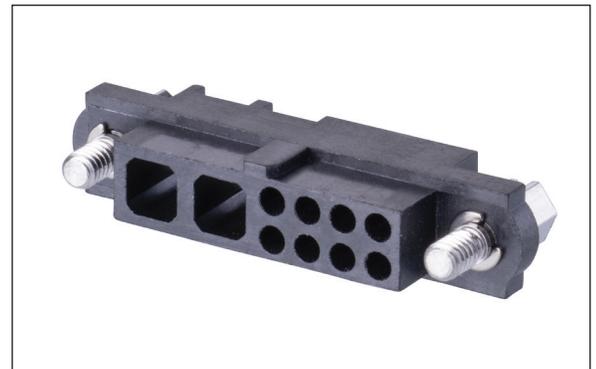
Male and Female cable connector housings can be specified in combination with 3A signal contacts or with 4mm pitch only for a true mixed technology connector. Housings are compatible with any of the following power/coax contact options: **Standard Power (20A), High Power (40A), Coax (50Ω)**.

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 1,081 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

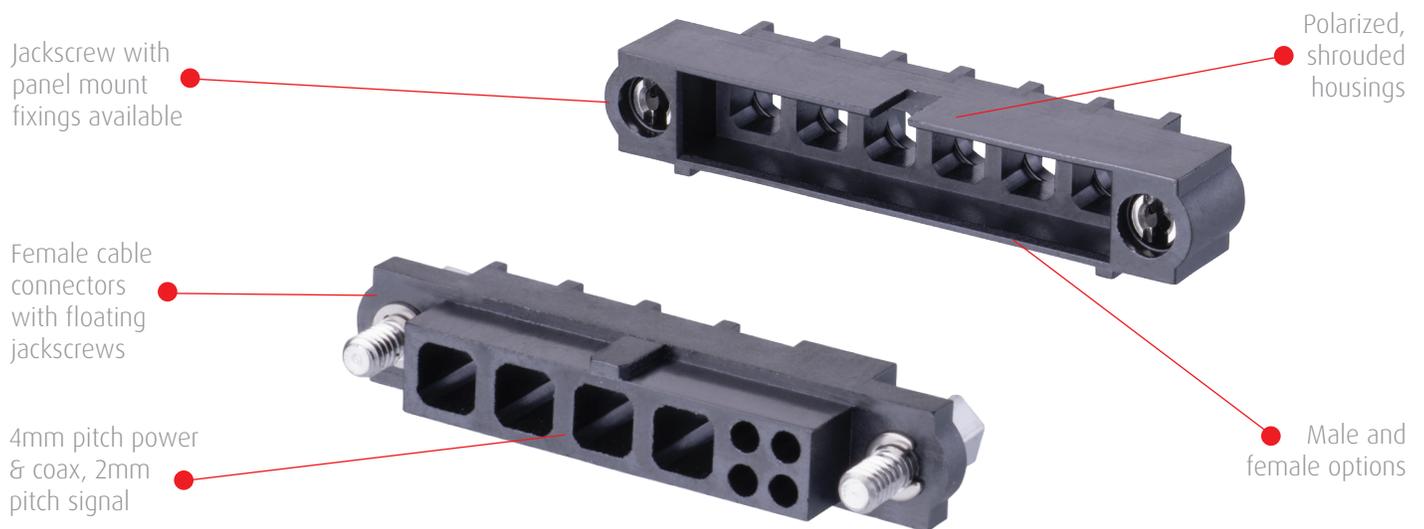
Features and Benefits

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	2N max (signal), 8N max (power), 15N max (high power), 20N max (coax)	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 front panel mount stud (for female)
F9	Reverse Fix with 5mm front 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)
MU	Internally Threaded with rear panel mount, Standard Gender (for male)

For any other combinations shown on the Technical Drawings, please contact our Experts on www.harwin.com/contact for assistance and availability.

Signal + Power/Coax housing

M80 - 263 XX XX - XX - 00

SERIES CODE

HOUSING

263	Female
-----	--------

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

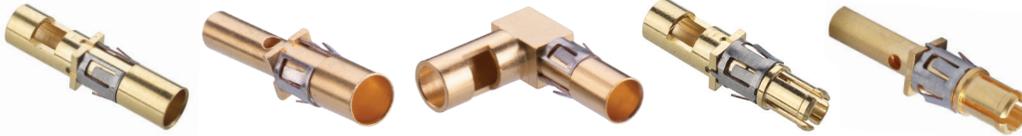
JACKSCREW

F1	Floating Hex Slotted, Standard Gender (for female)
----	--

For any other combinations shown on the Technical Drawings, please contact our Experts on www.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

Coax



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

90° Solder Female

M80-310
Semi-Rigid

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

CONTACT US

Harwin Europe
(Global Headquarters)
Portsmouth, Hampshire, UK
E: mis@harwin.co.uk
T: +44 (0)23 9231 4545

Harwin Inc (Americas)
New Albany, Indiana, USA
E: mis@harwin.com
T: +1 603 893 5376

Harwin Asia Pte Ltd
(Asia, Australasia)
Singapore
E: mis@harwinasia.com
T: +65 6 779 4909