

Datamate

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Datamate Introduction

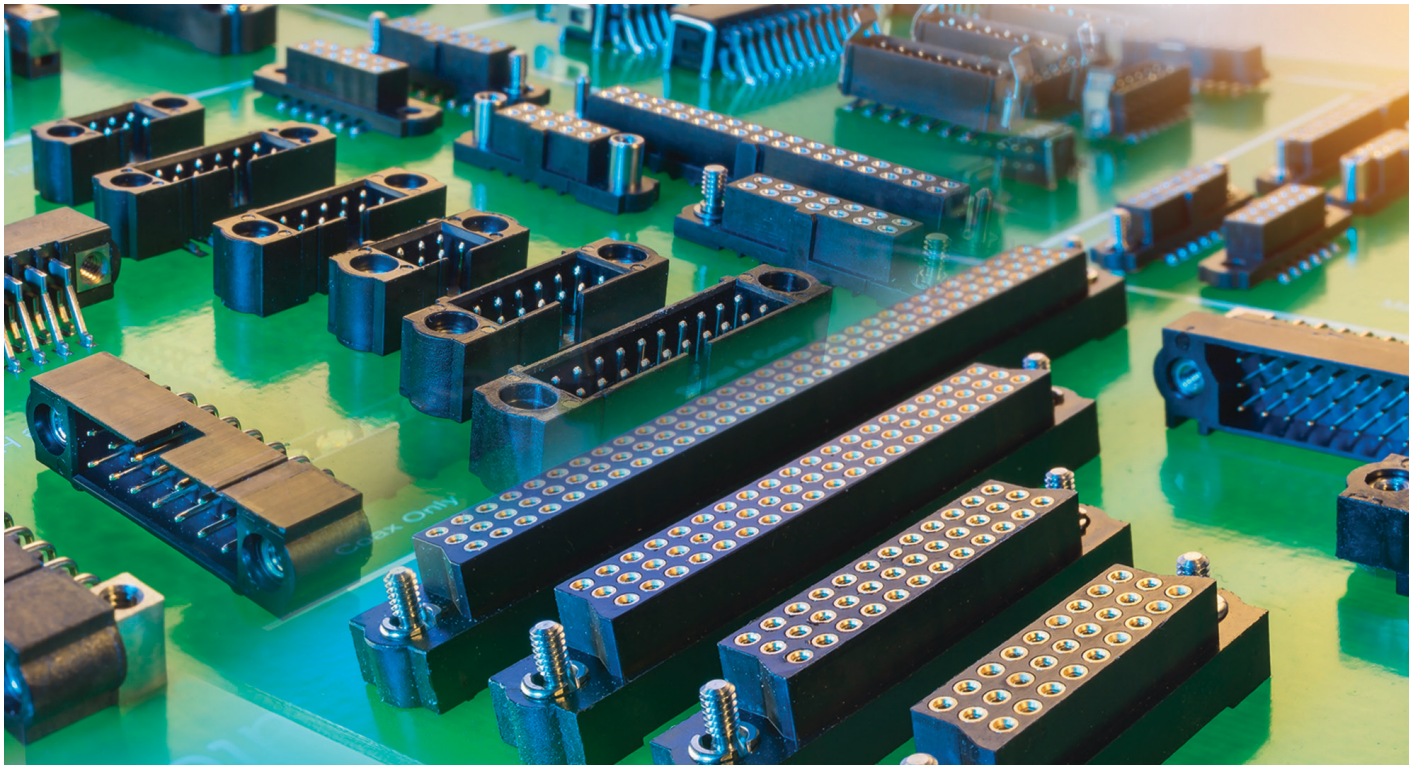
Performance without compromise

Datamate is a 2mm pitch High-Reliability, high performance connector range from Harwin. Approved to British Standard 9525-F0033, the range has a proven track record for performance under extreme conditions.

Datamate provides a low-profile solution for all variations of cable-to-board, board-to-board and cable-to-cable interconnect requirements. The range has seen many developments to match customer and market demands, and now includes 1-, 2- and 3-row configurations, vertical and horizontal in both Throughboard and Surface Mount designs for PCB flexibility. To meet the demanding requirements of vibration, shock and acceleration, added security is available with the options of latches (for space-saving) or jackscrews (for maximum strain-relief).

With the addition of Datamate Mix-Tek, the 3A signal contacts can be supplied in the same connector as 20A power, 40A high power, or 6GHz coax connections, giving complete flexibility of design. Other range additions include the 101Lok fixing – designed for fast mating with a quarter-turn bayonet-style jackscrew.

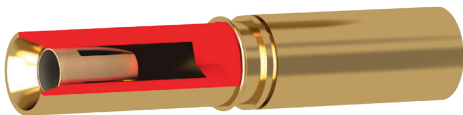
- ❖ 3A per contact (all electrically loaded; 3.3A per individual contact)
- ❖ 4-finger contact design to maintain electrical contact through high vibration and shock
- ❖ Beryllium Copper Contact for improved temperature range: -55°C to +125°C
- ❖ 500 Mating cycles durability
- ❖ Professional connector system at commercial prices
- ❖ Ongoing development program for High-Reliability connectors from Harwin
- ❖ Online videos and Cable assembly facility for assistance with cabling requirements



Datamate - Product Features

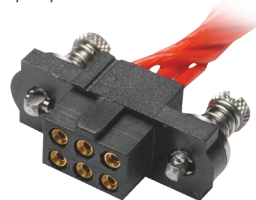
Four Finger Beryllium Copper Contact

Proven high-reliability contact design ensures signal integrity under extremes of bump, vibration and shock. Durable to over 500 mating cycles.



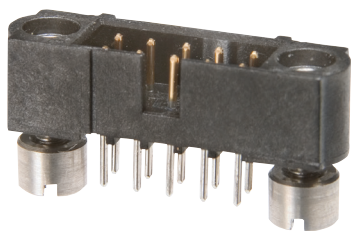
Polarisation

All Datamate designs feature polarisation to prevent mis-mating in everyday use.



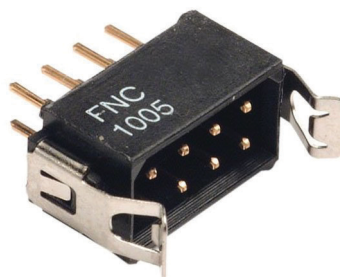
Rugged construction

For use in harsh environments where high vibration, shock and temperature are a consideration.



British Standard Specification connections

Approved to BS9525-F0033, complies with CECC 75101-008.



Field proven across the globe

Proven history in aerospace, industrial, defense, oil & gas, etc. Stocked in depth across a global distribution network.

Quality Customer Support

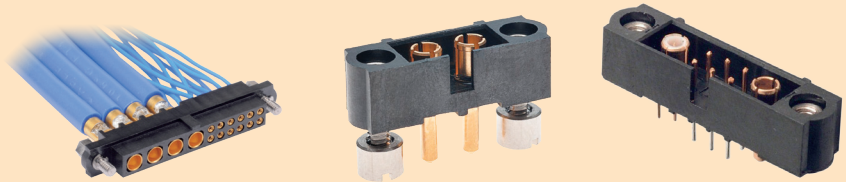
Live Help, 3D CAD models and evaluation samples all available - click on www.harwin.com/datamate.



Datamate - Product Families

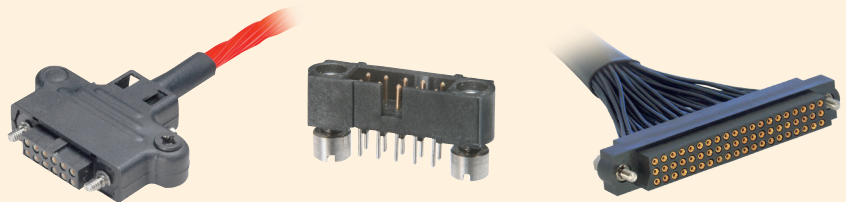
Datamate Mix-Tek

3 connector styles in one. Includes low frequency signal, power (20A), high power (40A) and coax (6GHz) options. A stocked range of coax-only, power-only, high power-only, or mixed power and signal connectors, ideal for COTS requirements.



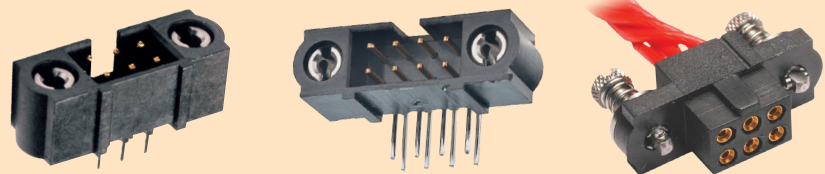
Datamate J-Tek

Datamate low frequency connectors with a variety of optional Jackscrews for increased security of connection. Includes 2-row and 3-row configurations.



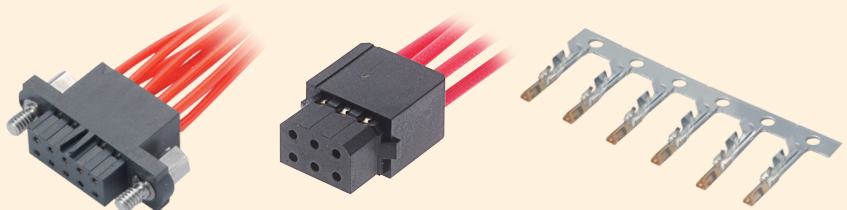
Datamate 101 Lok

101Lok hardware reduces assembly time by simplifying the mating process. The fast mate hardware requires 101-degree turn to securely mate and requires no special tooling.



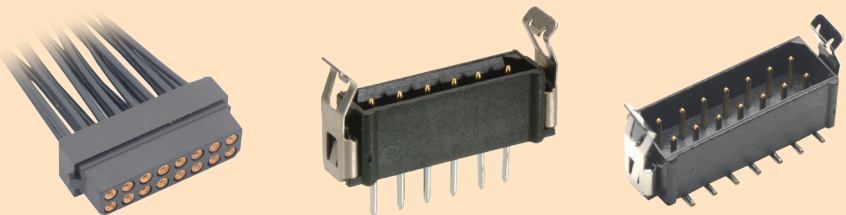
Datamate Trio-Tek

Performing to the same high-reliability standards as conventional Datamate, the Trio-Tek open barrel crimp contact automates the crimp process to significantly save on assembly time and reduce process costs.



Datamate L-Tek

Datamate low frequency connectors with 3 flexible mating options: friction latch, locking latch and no latch. Includes 1-row and 2-row configurations.



Datamate Mix-Tek Specification

Materials

Mouldings:	Glass-filled thermoplastic UL94V-0
Female contacts:	Brass shell, with Beryllium Copper inner contact
Male contacts:	Copper alloy
Finish:	See individual pages

Electrical

Current	
Individual contacts in isolation:	3.3A max (at 25°C) 2.6A max (at 85°C)
All contacts simultaneously:	3.0A max (at 25°C) 2.2A max (at 85°C)
Working voltage	
At sea level 1013 mbar:	800V DC or AC _{rms}
Voltage proof	
At sea level 1013 mbar:	1,200V DC or AC _{rms}
Contact resistance	
Initial:	20mΩ max
After conditioning:	25mΩ max
Insulation resistance	
Initial:	1,000MΩ min
After conditioning:	100MΩ min

Mechanical

Durability:	500 operations
Insertion force (max):	2.8N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 28 AWG BS 3G 210 Type A

Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity:	10Hz to 2000Hz, 0.75mm, 98m/s ² (10G), duration 6h
*Bump severity:	390m/s ² (40G), 4000 ±10 bumps
*Shock severity:	981m/s ² (100G) for 6ms
*Acceleration severity:	490m/s ² (50G)

* Tested with connectors with Jackscrews.

Power Contacts

Materials

Latching collar:	Beryllium Copper, Nickel plated
Other metallic parts:	Copper alloy, Gold plated

Electrical

Current (in isolation)	
32x, 33x:	20A max
PFX, PMx:	40A nominal, up to 80A max
Contact resistance:	6mΩ max

Mechanical

Insertion force (max)	
32x, 33x:	8N
PFX, PMx:	15N
Withdrawal force (min):	0.5N
Contact replacement in connector:	
	5 times
Power contact accommodation	
32x, 33x:	12 to 20 AWG
PFX, PMx:	10 AWG

Materials

Latching collar:	Beryllium Copper, Nickel plated
Other metallic parts:	Copper alloy, Gold plated
Insulator:	PTFE

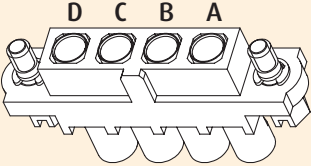
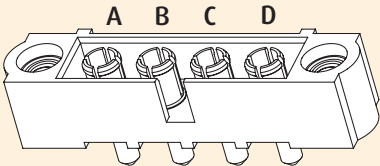
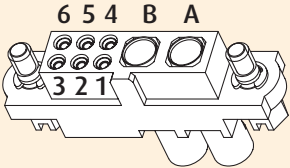
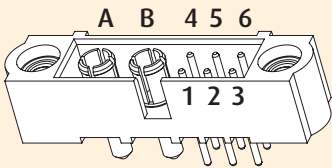
Electrical

Frequency range:	6GHz (depending on cable)
Impedance:	50Ω
VSWR:	1.05 + (0.04 x Frequency) GHz max
Operating voltage (sea level):	180V AC at 500mA
Maximum voltage (sea level):	1000V AC _{rms}
Contact resistance:	6mΩ max
Insulation resistance:	10 ⁶ MΩ at 250V AC _{rms}

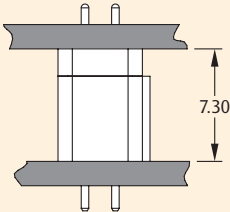
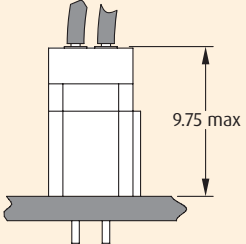
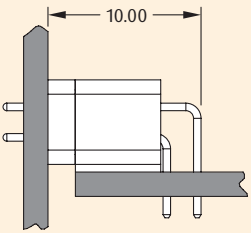
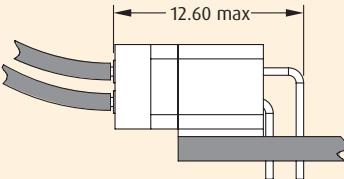
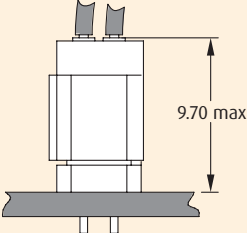
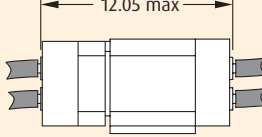
Mechanical

Insertion force (max):	8N
Withdrawal force (min):	0.5N
Contact replacement in connector:	5 times

Datamate Mix-Tek Pin Numbering

	FEMALE	MALE
POWER OR COAX ONLY		
SIGNAL AND POWER		

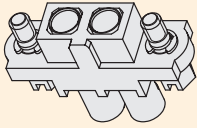
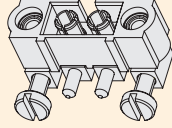
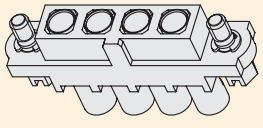
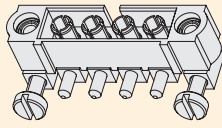
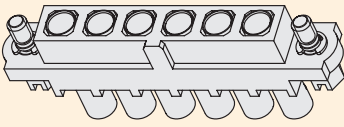
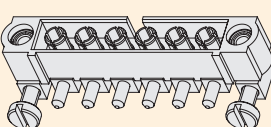
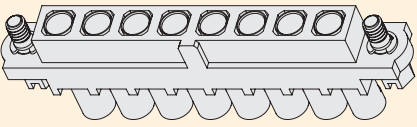
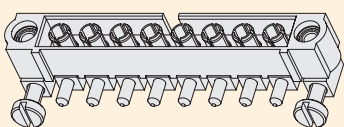
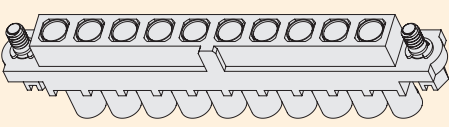
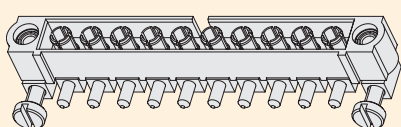
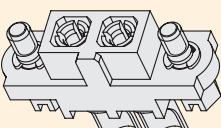
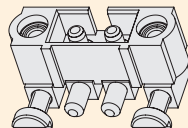
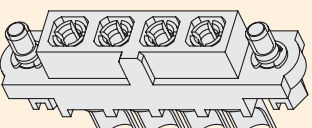
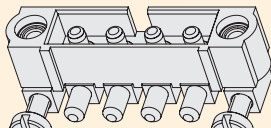
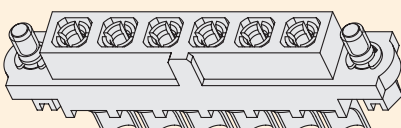
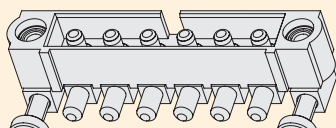
Mating Profiles

		FEMALE	
		VERTICAL PC TAIL	CRIMP
MALE	VERTICAL PC TAIL		
	HORIZONTAL PC TAIL		
	CRIMP		

All dimensions in mm.

Datamate Power Connectors

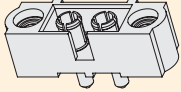
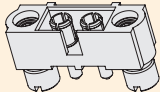
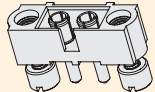
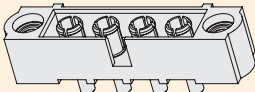
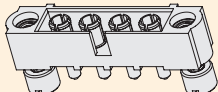
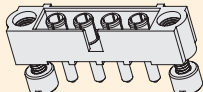
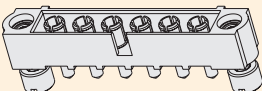
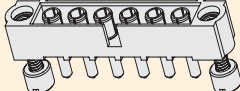
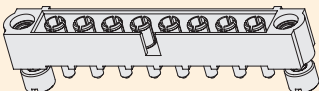
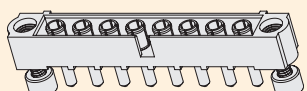
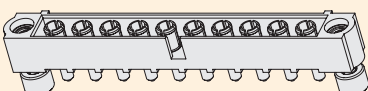
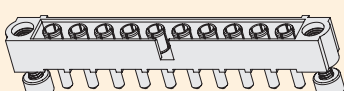
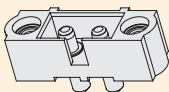
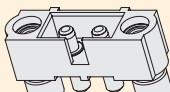
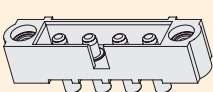
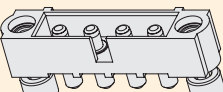
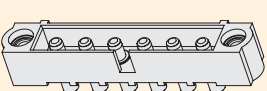
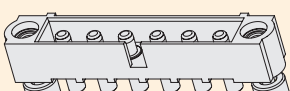
- Standard high-reliability connectors fitted with power contacts on 4mm pitch.

		TYPE	
		Female Cable - Hex Slotted Jackscrews	Male Horizontal 3.5mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	 M80-4000000F1-02-325-00-000	 M80-5000000M5-02-333-00-000
	4 Power	 M80-4000000F1-04-325-00-000	 M80-5000000M5-04-333-00-000
	6 Power	 M80-4000000F1-06-325-00-000	 M80-5000000M5-06-333-00-000
	8 Power	 M80-4000000F1-08-325-00-000	 M80-5000000M5-08-333-00-000
	10 Power	 M80-4000000F1-10-325-00-000	 M80-5000000M5-10-333-00-000
	2 High Power	 M80-4000000F1-02-PF5-00-000	 M80-5000000M5-02-PM3-00-000
	4 High Power	 M80-4000000F1-04-PF5-00-000	 M80-5000000M5-04-PM3-00-000
	6 High Power	 M80-4000000F1-06-PF5-00-000	 M80-5000000M5-06-PM3-00-000

All dimensions in mm.

Datamate Power Connectors

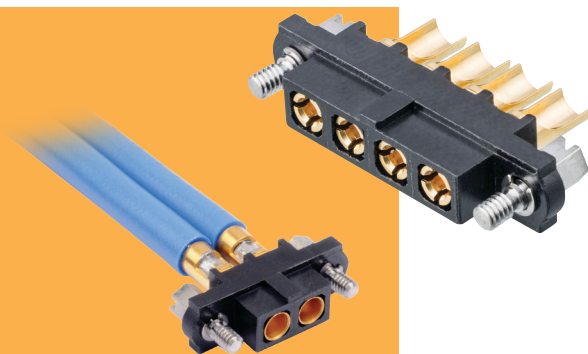
- Standard high-reliability connectors fitted with power contacts on 4mm pitch.

		TYPE		
		Male Vertical 3.5mm PC Tail - Jackscrew Fixing	Male Vertical 3.5mm PC Tail - 3.5mm Board Mount Jackcrew	Male Vertical 5mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	 M80-5000000M1-02-331-00-000	 M80-5000000M2-02-331-00-000	 M80-5000000M3-02-332-00-000
	4 Power	 M80-5000000M1-04-331-00-000	 M80-5000000M2-04-331-00-000	 M80-5000000M3-04-332-00-000
	6 Power		 M80-5000000M2-06-331-00-000	 M80-5000000M3-06-332-00-000
	8 Power		 M80-5000000M2-08-331-00-000	 M80-5000000M3-08-332-00-000
	10 Power		 M80-5000000M2-10-331-00-000	 M80-5000000M3-10-332-00-000
	2 High Power	 M80-5000000M1-02-PM1-00-000	 M80-5000000M2-02-PM1-00-000	
	4 High Power	 M80-5000000M1-04-PM1-00-000	 M80-5000000M2-04-PM1-00-000	
	6 High Power	 M80-5000000M1-06-PM1-00-000	 M80-5000000M2-06-PM1-00-000	

Datamate Power Connectors

Female Power Cable Connector Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Hexagonal slotted jackscrews are assembled where specified.
- ❖ Polarised mouldings.
- ❖ Standard Power contacts rated to 20A, High Power to 40A.

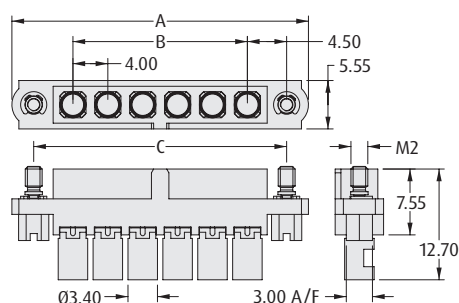


POWER CONTACTS ONLY

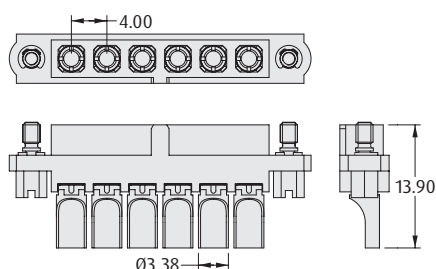
CALCULATION

A	B + 14
B	(No. of Power contacts - 1) x 4
C	B + 9

Standard Power (12 AWG)

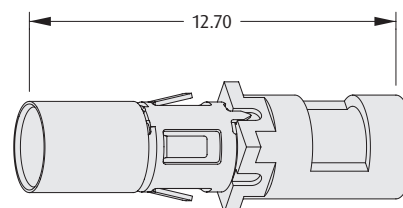


High Power (10 AWG)



SPARE SOLDER CONTACTS

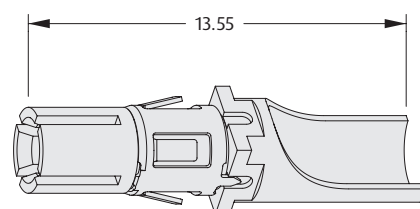
Standard Power (12 AWG)



ORDER CODE

M80-325

High Power (10 AWG)



ORDER CODE

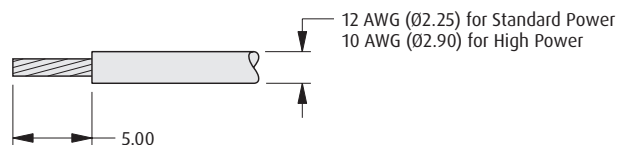
M80-PF5

TOOLS

Contact Removal Tool - Z80-290

- ❖ No special tooling required for connecting wire, other than standard soldering equipment.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 4000000F1 - XX - XXX - 00 - 000

NO. OF POWER CONTACTS

02, 04, 06, 08, 10	Standard Power
02, 04, 06	High Power

JACKSCREW

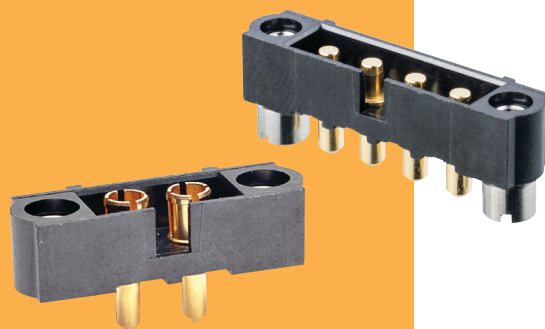
325	Standard Power
PF5	High Power

All dimensions in mm.

Datamate Power Connectors

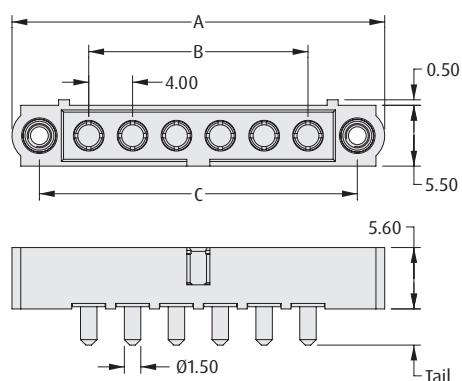
Male Vertical PC Tail

- ❖ A selection of stocked Datamate Mix-Tek solder tail standard layouts.
- ❖ Choice to suit two PCB thicknesses and two stud lengths.
- ❖ Standard Power contacts rated to 20A.
- ❖ High Power rated to 40A nominal, up to 80A max.

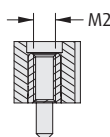


DATAMATE POWER

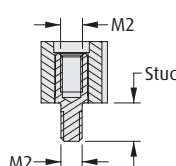
STANDARD POWER



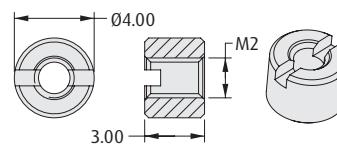
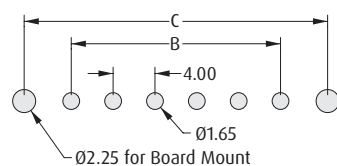
Jackscrew fixing



Jackscrew with Board Mount



Recommended PC Board Pattern

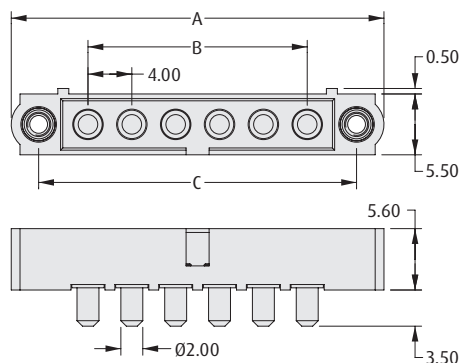


Board Mount Nut, 2 per connector

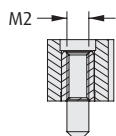
CALCULATION

A	$B + 14$
B	$(\text{No. of Power contacts} - 1) \times 4$
C	$B + 9$

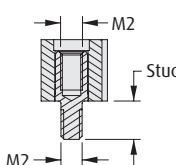
HIGH POWER



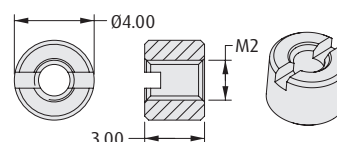
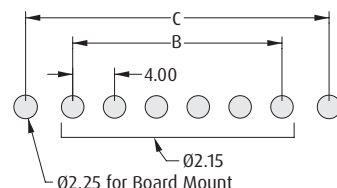
Jackscrew fixing



Jackscrew with Board Mount



Recommended PC Board Pattern



Board Mount Nut, 2 per connector

HOW TO ORDER

M80 - 5000000 XX - XX - XXX - 00 - 000

JACKSCREW

M1	Jackscrew only
M2	With 3.5mm Board Mount stud
M3	With 5mm Board Mount stud

Check image chart to confirm Off-The-Shelf sizes available

NO. OF POWER CONTACTS

02, 04	Standard Power (M1 Jackscrews)
02, 04, 06, 08, 10	Standard Power (M2/M3 Jackscrews)
02, 04, 06	High Power (M1/M2 Jackscrews)

POWER CONTACTS PART NO.

331	3.5mm Tail Standard Power
332	5mm Tail Standard Power
PM1	3.5mm Tail High Power

All dimensions in mm.

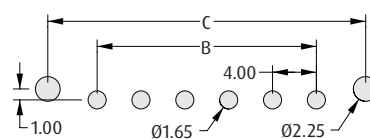
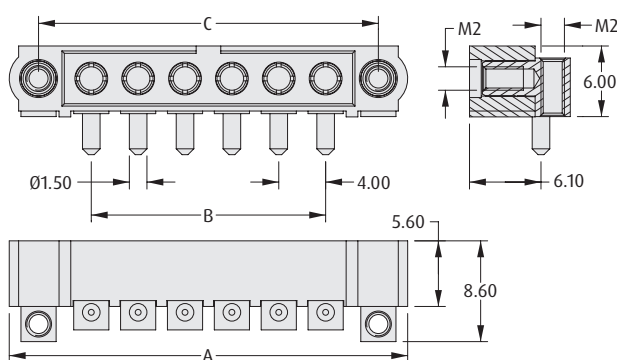
Datamate Power Connectors

Male Horizontal PC Tail

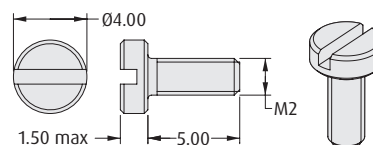
- Choice to suit two PCB thicknesses and two stud lengths.
- Standard Power contacts rated to 20A.
- High Power rated to 40A nominal, up to 80A max.



STANDARD POWER



Recommended PC Board Pattern

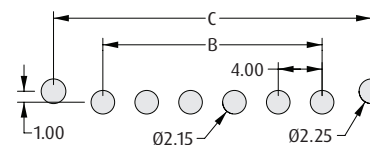
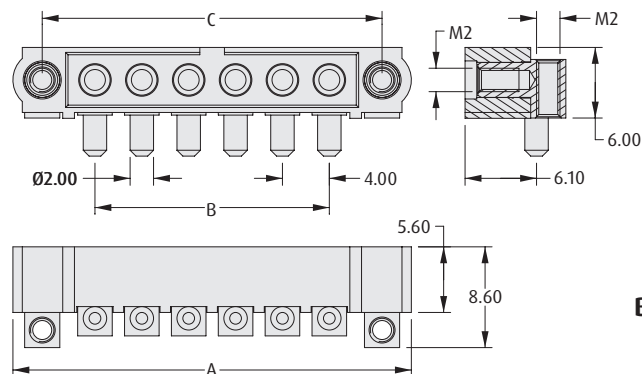


Board Mount Bolt,
2 per connector

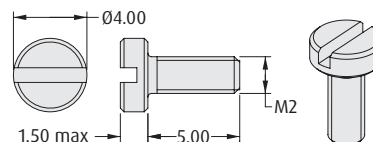
CALCULATION

A	$B + 14$
B	$(\text{No. of Power contacts} - 1) \times 4$
C	$B + 9$

HIGH POWER



Recommended PC Board Pattern



Board Mount Bolt,
2 per connector

HOW TO ORDER

M80 - 5000000 M5 - XX - XXX - 00 - 000

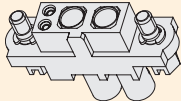
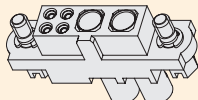
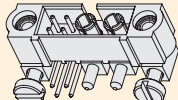
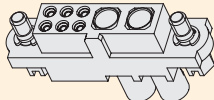
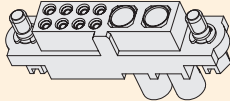
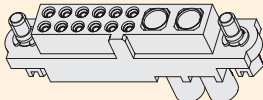
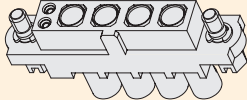
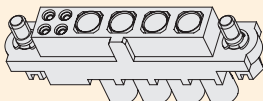
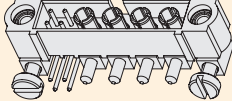
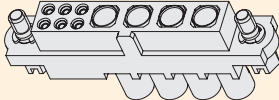
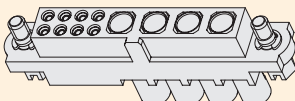
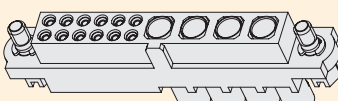
NO. OF POWER CONTACTS	
02, 04, 06, 08, 10	Standard Power
02, 04, 06,	High Power

POWER CONTACTS PART NO.	
333	3.5mm Tail Standard Power
PM3	3.5mm Tail High Power

All dimensions in mm.

Datamate Power/Signal Connectors

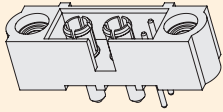
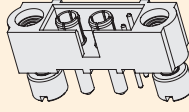
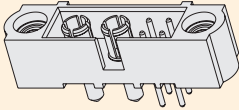
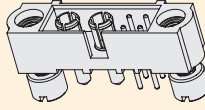
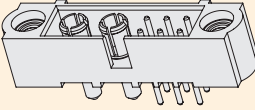
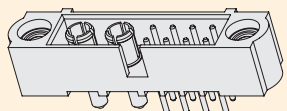
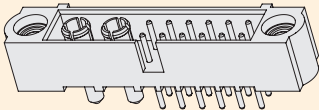
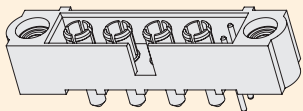
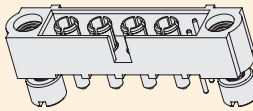
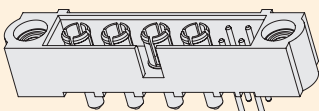
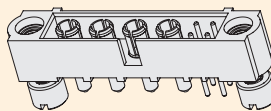
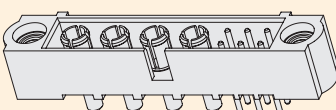
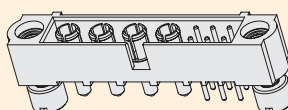
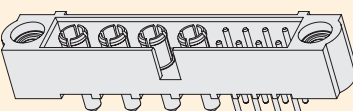
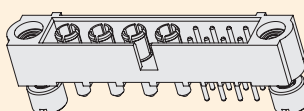
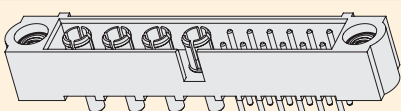
- Standard high-reliability connectors fitted with a combination of signal and 20A power contacts.

		TYPE	
		Female Cable - Hex Slotted Jackscrews	Male Horizontal 3mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	 M80-4C10205F1-02-325-00-000	
	4 Signal	 M80-4C10405F1-02-325-00-000	 M80-5L10405M5-02-333-00-000
	6 Signal	 M80-4C10605F1-02-325-00-000	
	8 Signal	 M80-4C10805F1-02-325-00-000	
	12 Signal	 M80-4C11205F1-02-325-00-000	
	4 Power	 M80-4C10205F1-04-325-00-000	
	4 Signal	 M80-4C10405F1-04-325-00-000	 M80-5L10405M5-04-333-00-000
	6 Signal	 M80-4C10605F1-04-325-00-000	
	8 Signal	 M80-4C10805F1-04-325-00-000	
	12 Signal	 M80-4C11205F1-04-325-00-000	

All dimensions in mm.

Datamate Power/Signal Connectors

- Standard high-reliability connectors fitted with a combination of signal and 20A power contacts.

		TYPE	
		Male Vertical 3mm PC Tail - Jackscrew fixing	Male Vertical 3mm PC Tail - 3.5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	 M80-5T10205M1-02-331-00-000	 M80-5T10205M2-02-331-00-000
		 M80-5T10405M1-02-331-00-000	 M80-5T10405M2-02-331-00-000
		 M80-5T10605M1-02-331-00-000	
		 M80-5T10805M1-02-331-00-000	
		 M80-5T11205M1-02-331-00-000	
	4 Power	 M80-5T10205M1-04-331-00-000	 M80-5T10205M2-04-331-00-000
		 M80-5T10405M1-04-331-00-000	 M80-5T10405M2-04-331-00-000
		 M80-5T10605M1-04-331-00-000	 M80-5T10605M2-04-331-00-000
		 M80-5T10805M1-04-331-00-000	 M80-5T10805M2-04-331-00-000
		 M80-5T11205M1-04-331-00-000	

All dimensions in mm.

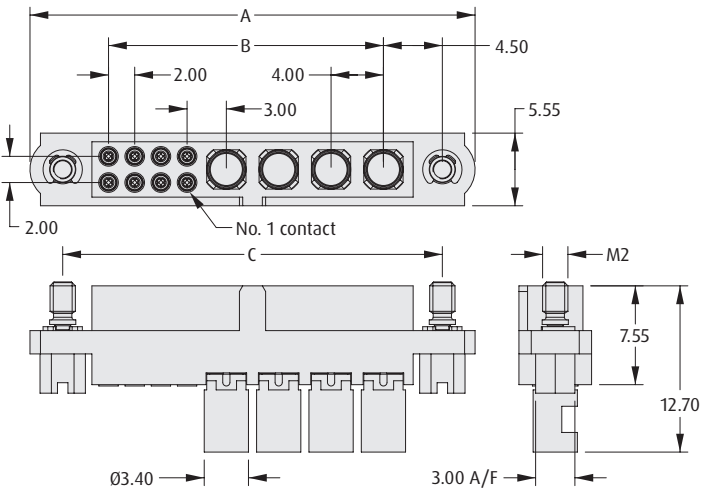
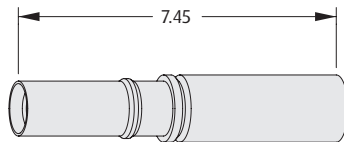
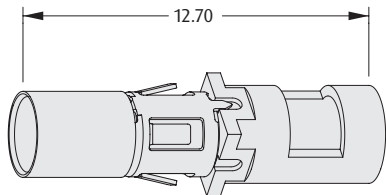
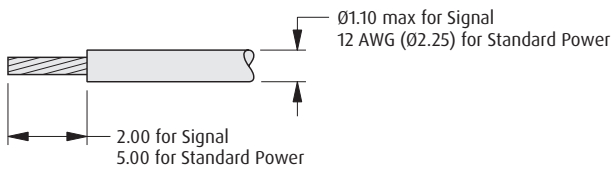
Datamate Power/Signal Connectors

Female Power/Signal Cable Connector Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Hexagonal slotted jackscrews are assembled.
- ❖ Polarised mouldings.
- ❖ Standard Power contacts rated to 20A, signal to 3A.



DATAMATE POWER/SIGNAL

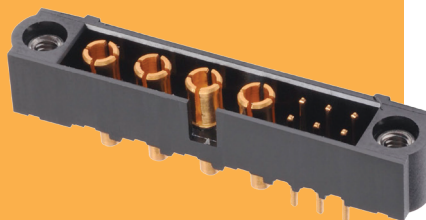
SIGNAL AND POWER		CALCULATION		SPARE CONTACTS	
		A	B + 13	Signal (24 to 28 AWG)  Indent Groove ORDER CODE M80-0130005	
		B	(No. of Power contacts - 1) x 4 + Total no. of Signal contacts +1		
		C	B + 8		
				Standard Power (12 AWG)  ORDER CODE M80-325	
TOOLS		WIRE STRIPPING DETAILS			
Recommended Crimp Tool (Signal) - M22520/2-01 Positioner (Signal) - T5747 Contact Insertion/Removal Tool (Signal) - Z80-280 Contact Removal Tool (Power) - Z80-290 ❖ No special tooling required for connecting Power wire, other than standard soldering equipment. ❖ Instruction sheets available at www.harwin.com/instructions.					
HOW TO ORDER					
M80 - 4C1 XX 05F1 - XX - 325 - 00 - 000					
NO. OF SIGNAL CONTACTS				NO. OF POWER CONTACTS	
02, 04, 06, 08, 12				02, 04	
Check image chart to confirm Off-The-Shelf sizes available					

All dimensions in mm.

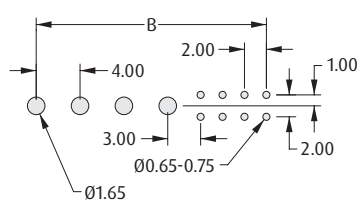
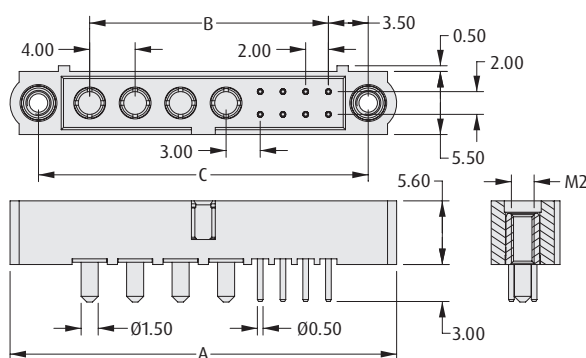
Datamate Power/Signal Connectors

Male Power/Signal Vertical PC Tail

- ❑ A selection of stocked Datamate Mix-Tek solder tail standard layouts.
- ❑ Choice to suit two PCB thicknesses and two stud lengths.
- ❑ Polarised mouldings.
- ❑ Standard Power contacts rated to 20A, signal to 3A.



JACKSCREW ONLY

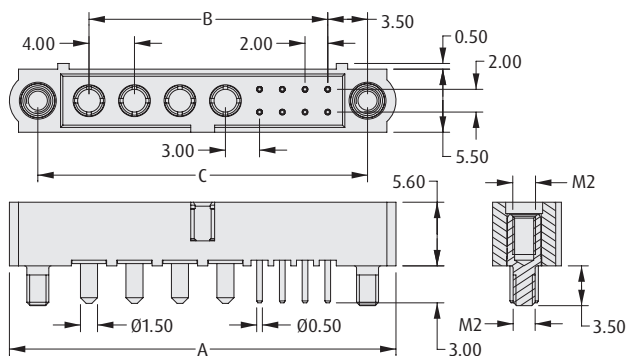


Recommended PC Board Pattern

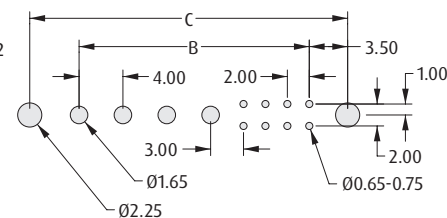
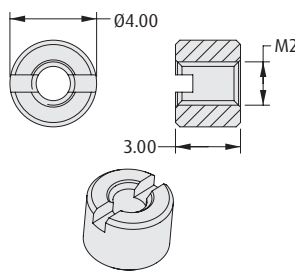
CALCULATION

A	$B + 13$
B	(No. of Power contacts - 1) x 4 + Total no. of Signal contacts + 1
C	$B + 8$

WITH BOARD MOUNT



Board Mount Nut,
2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 5T1 XX 05 XX - XX - 331 - 00 - 000

NO. OF SIGNAL CONTACTS

02, 04, 06, 08, 12

NO. OF POWER CONTACTS

02, 04

JACKSCREW

M1	Jackscrew only
M2	With 3.5mm Board Mount stud

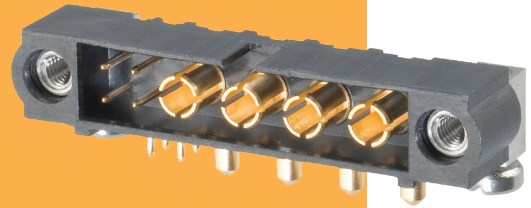
Check image chart to confirm Off-The-Shelf sizes available

All dimensions in mm.

Datamate Power/Signal Connectors

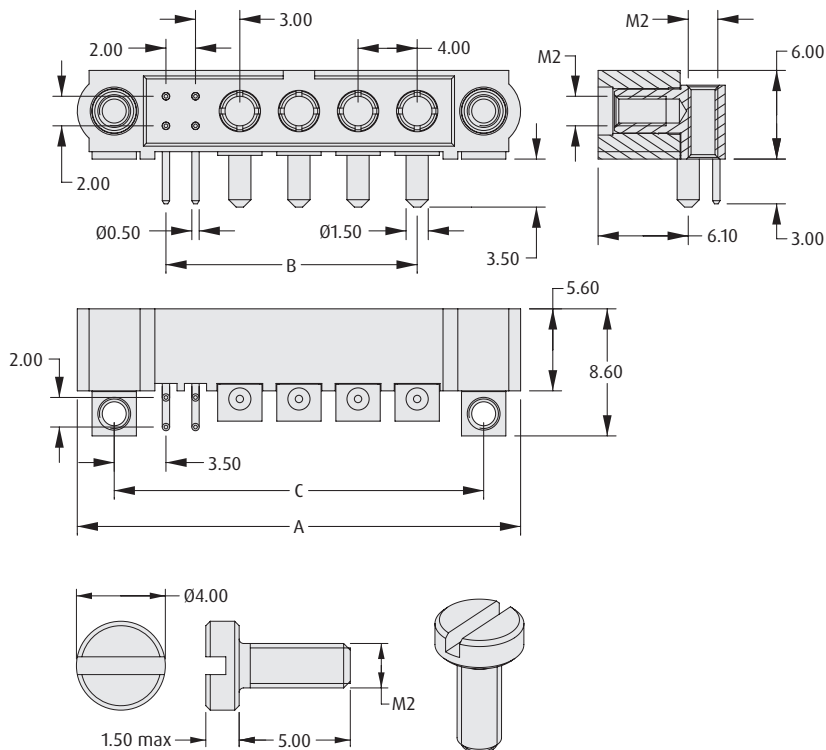
Male Power/Signal Horizontal PC Tail

- ❖ A selection of stocked Datamate Mix-Tek solder tail standard layouts.
- ❖ Choice to suit two PCB thicknesses and two stud lengths.
- ❖ Polarised mouldings.
- ❖ Standard Power contacts rated to 20A, signal to 3A.



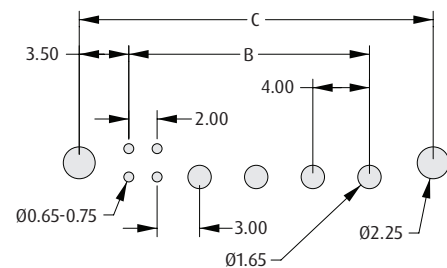
DATAMATE POWER/SIGNAL

SIGNAL AND POWER



CALCULATION

A	B + 13
B	(No. of Power contacts - 1) x 4 + Total no. of Signal contacts +1
C	B + 8



Recommended PC Board Pattern

Board Mount Bolt, 2 per connector

HOW TO ORDER

M80 - 5L1 04 05 M5 - XX - 333 - 00 - 000

NO. OF SIGNAL CONTACTS

04

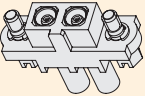
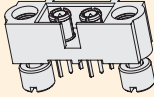
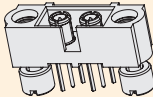
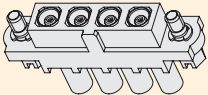
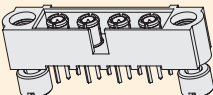
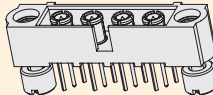
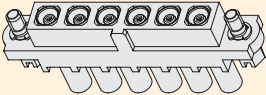
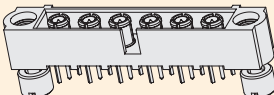
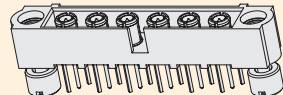
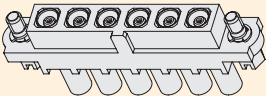
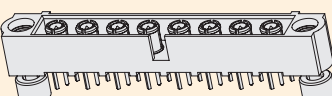
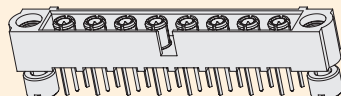
NO. OF POWER CONTACTS

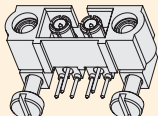
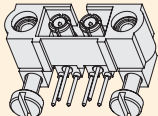
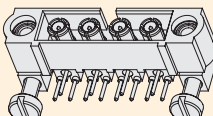
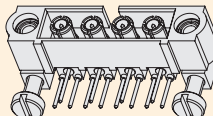
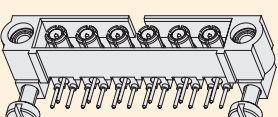
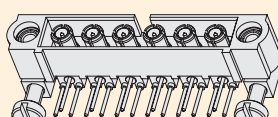
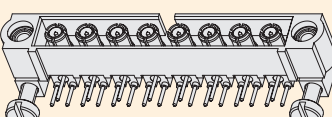
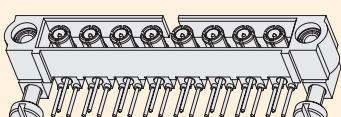
02, 04

All dimensions in mm.

Datamate Coax Connectors

- Standard high-reliability connectors fitted with coax contacts on 4mm pitch.

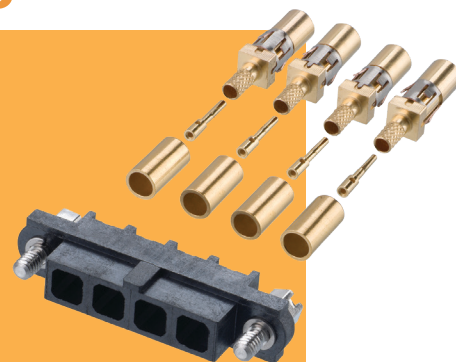
		TYPE		
		Female Cable Connectors - Hex Slotted Jackscrews	Male Vertical 3mm PC Tail - 3.5mm Board Mount Jackcrew	Male Vertical 4.5mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Coax	 M80-FC305F1-02	 M80-MV311M2-02	 M80-MV312M3-02
	4 Coax	 M80-FC305F1-04	 M80-MV311M2-04	 M80-MV312M3-04
	6 Coax	 M80-FC305F1-06	 M80-MV311M2-06	 M80-MV312M3-06
	8 Coax	 M80-FC305F1-08	 M80-MV311M2-08	 M80-MV312M3-08

		TYPE		
		Female Cable Assemblies - Hex Slotted Jackscrews	Male Horizontal 3mm PC Tail - 5mm Board Mount Jackcrew	Male Horizontal 4.5mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Coax	Single Ended (Female to Cut End) M80-FC305F1-02-0150L Double Ended (Female to Female) M80-FC305F1-02-0150F1	 M80-MH313M5-02	 M80-MH314M5-02
	4 Coax	Single Ended (Female to Cut End) M80-FC305F1-04-0150L Double Ended (Female to Female) M80-FC305F1-04-0150F1	 M80-MH313M5-04	 M80-MH314M5-04
	6 Coax	Single Ended (Female to Cut End) M80-FC305F1-06-1050L Double Ended (Female to Female) M80-FC305F1-06-0150F1	 M80-MH313M5-06	 M80-MH314M5-06
	8 Coax	Single Ended (Female to Cut End) M80-FC305F1-08-0150L Double Ended (Female to Female) M80-FC305F1-08-0150F1	 M80-MH313M5-08	 M80-MH314M5-08

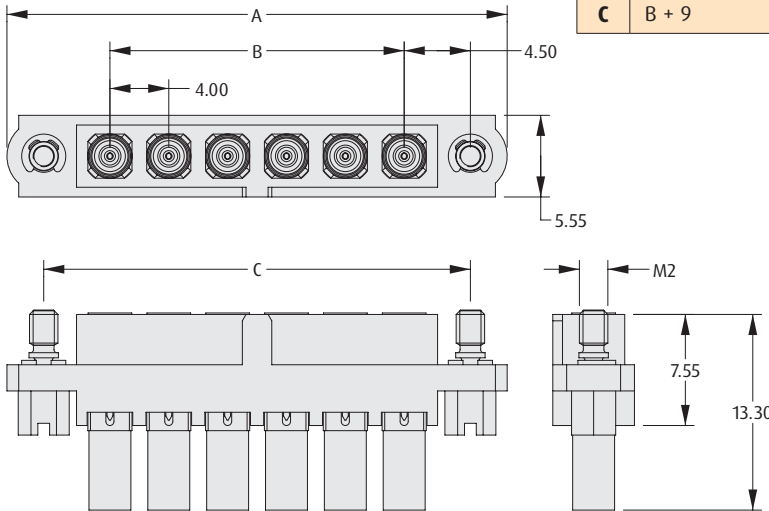
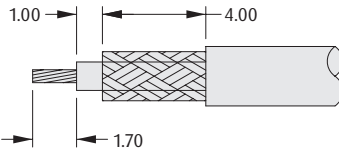
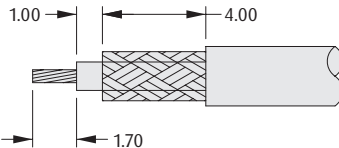
Datamate Coax Connectors

Jack (Female) Crimp Kit

- ❖ A selection of stocked jack cable connectors in standard layouts.
- ❖ 6GHz, 50Ω Coax contacts, suitable for RG178 cable.
- ❖ Product supplied as a complete kit; housing with jackscrews assembled, and the applicable number of coax contacts supplied loose, not assembled.
- ❖ Polarised mouldings.
- ❖ Hexagonal slotted jackscrew style.



DATAMATE COAX

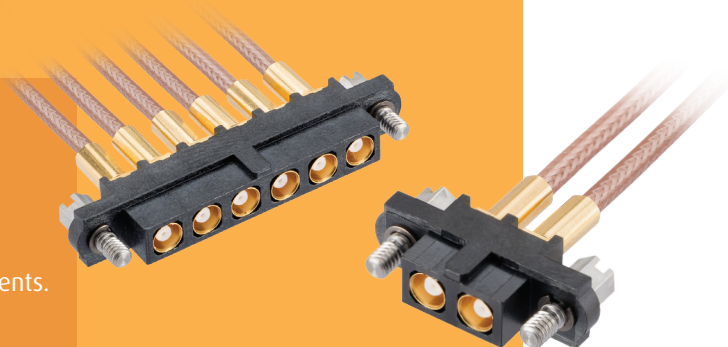
CABLE		CALCULATION		SPARE COAX CONTACTS	
		A	$B + 14$		
		B	$(\text{No. of Coax contacts} - 1) \times 4$		
		C	$B + 9$		
				ORDER CODE M80-305	
TOOLS		WIRE STRIPPING DETAILS			
Recommended Inner Contact Crimp Tool – Z80-292 Positioner for Inner Contact – Z80-291 Recommended Outer Sleeve Crimp Tool – Z80-293 Contact Removal Tool – Z80-290 ❖ Instruction sheets available at www.harwin.com/instructions.					
HOW TO ORDER					
COAX CONTACT TYPE 305 Ø2.00mm cable M80 - FC 305 F1 - XX NO. OF COAX CONTACTS 02, 04, 06, 08					

All dimensions in mm.

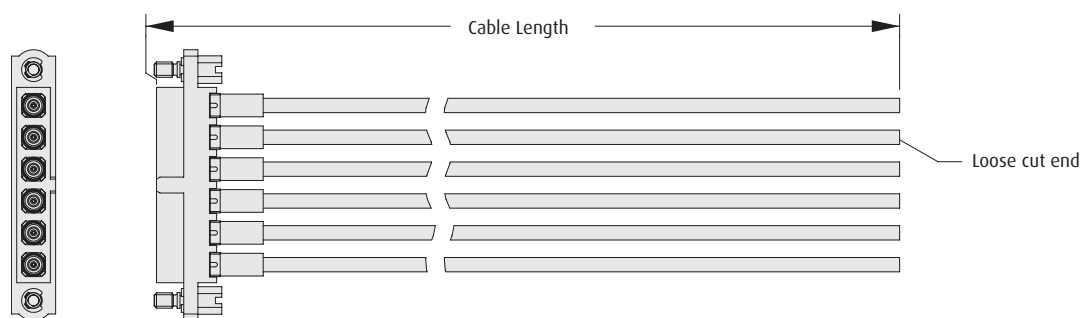
Datamate Coax Connectors

Jack (Female) Cable Assemblies

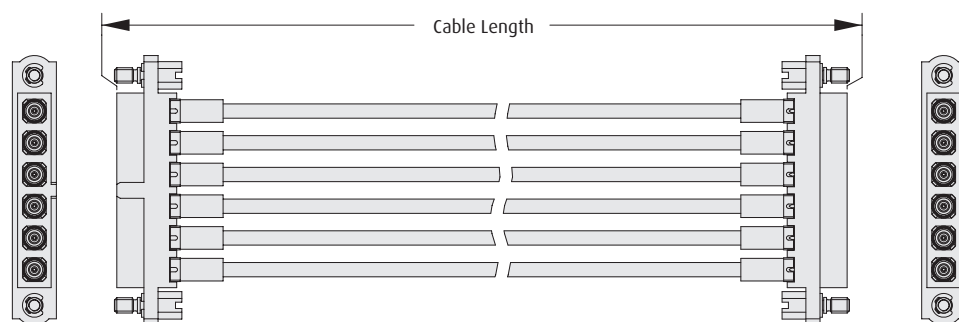
- ❖ A selection of stocked ganged multiport coax cable assemblies in standard layouts.
- ❖ 6GHz, 50Ω Coax contacts, assembled with RG178 cable.
- ❖ Hexagonal slotted jackscrew style.
- ❖ For non-standard cable lengths, please visit harwin.com/cable-assemblies and fill in your requirements.



FEMALE SINGLE ENDED



FEMALE - FEMALE



HOW TO ORDER

M80 - FC305F1 - XX - 0150 X

SERIES CODE

NO. OF POWER CONTACTS

02, 04, 06, 08

TERMINATION - SECOND END

L	Loose cut end
F1	Female connector

CABLE LENGTH

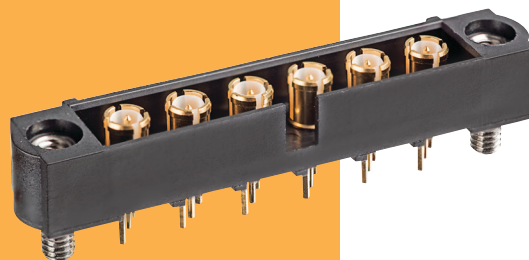
0150	150mm
0300	300mm
0450	450mm

All dimensions in mm.

Datamate Coax Connectors

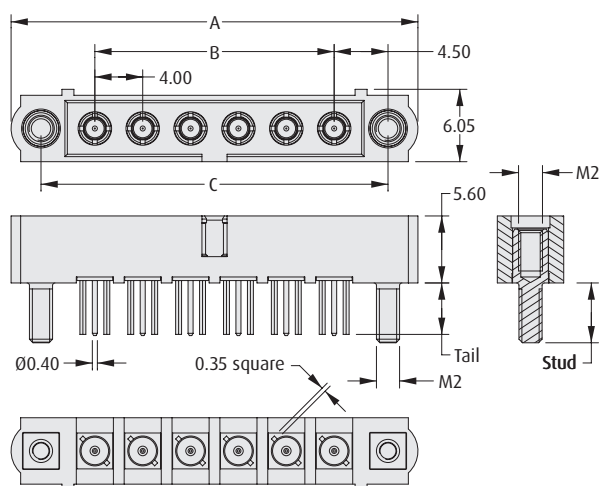
Plug (Male) Vertical PC Tail

- ❑ Stocked coax connectors in vertical orientation, with board-mount jackscrews for added security.
- ❑ 6GHz, 50Ω Coax contacts.
- ❑ Choice to suit two PCB thicknesses.
- ❑ Order board mount nuts separately.
- ❑ Screwdriver **Z80-298** available for assembling slotted jackscrew nuts.



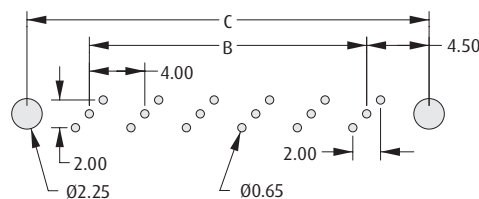
DATAMATE COAX

VERTICAL



CALCULATION

A	$B + 14$
B	$(\text{No. of Coax contacts} - 1) \times 4$
C	$B + 9$



Recommended PCB Board Pattern

HOW TO ORDER

M80 - MV 3XX MX - XX

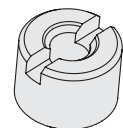
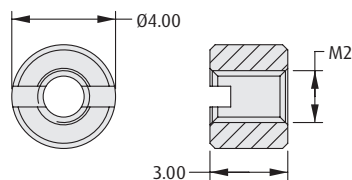
TYPE	
311M2	3mm Tail with 3.5mm Board Mount Stud
312M3	4.5mm Tail with 5mm Board Mount Stud

NO. OF COAX CONTACTS
02, 04, 06, 08

REQUIRED HARDWARE

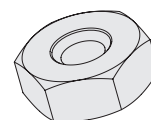
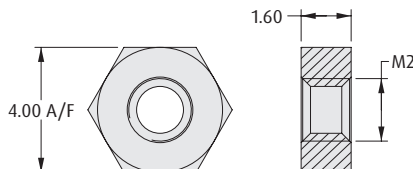
Order separately from connector

Slotted Board Mount Nut



ORDER CODE
M80-2130000B

Hexagonal Board Mount Nut



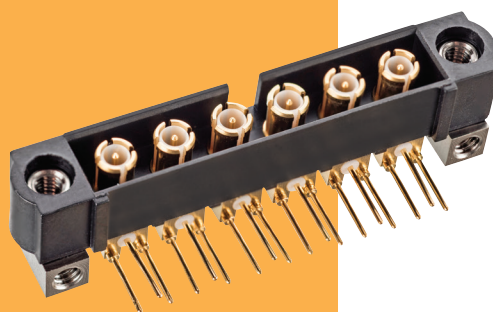
ORDER CODE
M80-2430000B

All dimensions in mm.

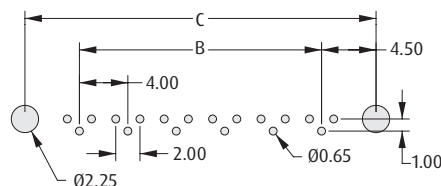
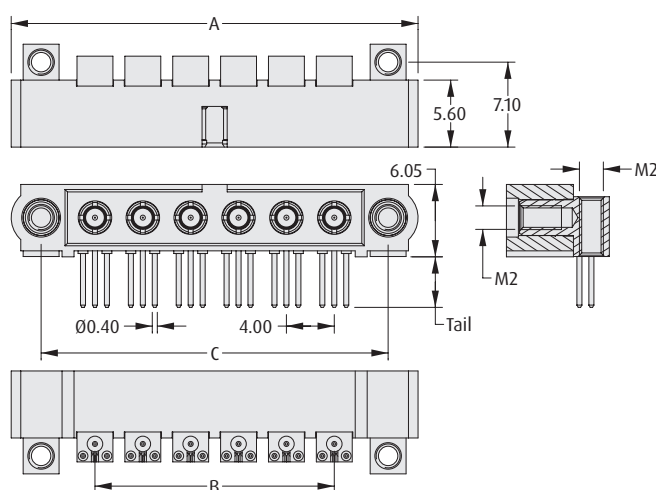
Datamate Coax Connectors

Plug (Male) Horizontal PC Tail

- ❖ Stocked coax connectors in horizontal orientation, with board-mount jackscrews for added security.
- ❖ 6GHz, 50Ω Coax contacts.
- ❖ Choice to suit two PCB thicknesses.
- ❖ Order board mount bolts separately.



HORIZONTAL



Recommended PCB Board Pattern

CALCULATION

A	$B + 14$
B	$(\text{No. of Coax contacts} - 1) \times 4$
C	$B + 9$

HOW TO ORDER

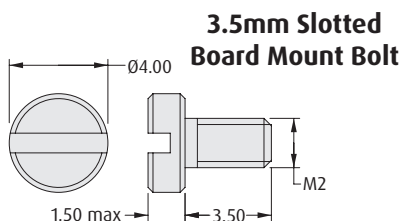
M80 - MH 3XX M5 - XX

TYPE	
313	3mm PC Tail
314	4.5mm PC Tail

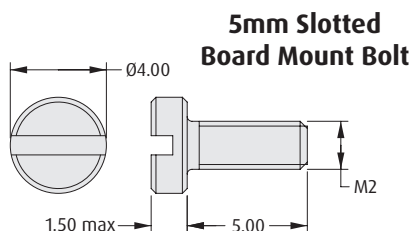
NO. OF COAX CONTACTS
02, 04, 06, 08

REQUIRED HARDWARE

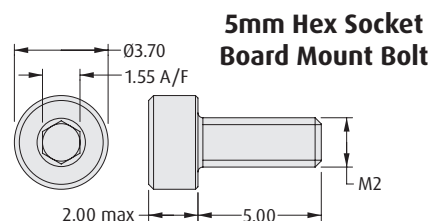
Order separately from connector



ORDER CODE
M80-2260000B



ORDER CODE
M80-2270000B



ORDER CODE
M80-2320000B

All dimensions in mm.

Datamate Mix-Tek Connectors

Metal Backshell Accessories

- ❖ Metal Backshells that can be used with any female cable connector (up to 12AWG), or male connectors with board mount jackscrews.
- ❖ Female backshells come with jackscrews - any existing jackscrews can be removed by removing the e-clip.
- ❖ Suitable for new designs, or in-production addition to enhance existing designs.



DATAMATE MIX-TEK

PART NUMBERING SYSTEM

M80 - 9 XX XX 02

SERIES CODE

FINISH

02 Nickel

TYPE

06	Male
45	Female with Slotted Jackscrews
46	Female with Hex Socket Jackscrews

EQUIVALENT NO. OF SIGNAL CONTACTS	NO. OF POWER ONLY OR COAX ONLY CONTACTS	NO. OF CONTACTS IN POWER/SIGNAL COMBINATION
08	2 contacts	-
10	-	2 Power, 2 Signal
12	3 contacts	2 Power, 4 Signal
14	-	2 Power, 6 Signal
16	4 contacts	2 Power, 8 Signal
18	-	4 Power, 2 Signal
20	5 contacts	2 Power, 12 Signal or 4 Power, 4 Signal
22	-	4 Power, 6 Signal
24	6 contacts	4 Power, 8 Signal
28	7 contacts	4 Power, 12 Signal
32	8 contacts	-

All dimensions in mm.

Datamate Mix-Tek Connectors

Female Metal Backshell

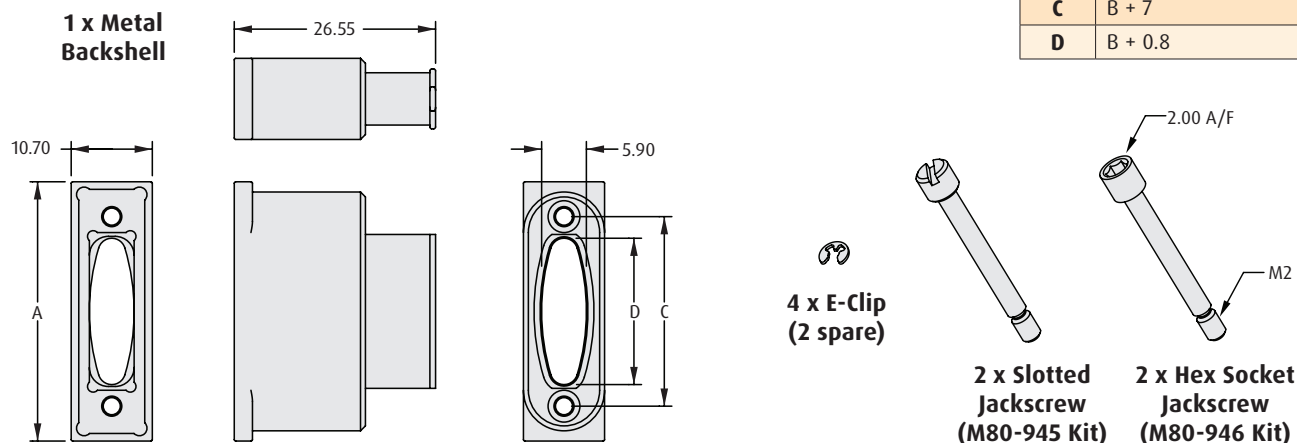
- ❖ Supplied as an accessory kit, including metal backshell, e-clips and the applicable jackscrews.
- ❖ To be used with the appropriate size of Female Cable connector kit without jackscrews (existing jackscrews can be removed).
- ❖ Gives 360 degree shielding when used with conductive braid and mated to a compatible male connector with metal backshell.
- ❖ Instruction sheets available at www.harwin.com/instructions.



FEMALE

CALCULATION

A	$B + 16.2$
B	Equivalent no. of contacts - 2
C	$B + 7$
D	$B + 0.8$



E-CLIP TOOL



- ❖ For assembling E-Clips supplied with kit.

ORDER CODE

Z80-300

BAND-IT TIE



- ❖ For fixing braid to rear collar (requires Tie Dex II A30199 Micro Band tool).

ORDER CODE

M80-9470000

HOW TO ORDER

SERIES CODE		M80	-	94	X	XX	02	FINISH	
TYPE								02	Nickel
5	With Slotted Jackscrews							EQUIVALENT NO. OF SIGNAL CONTACTS	
6	With Hex Socket Jackscrews							08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32	

All dimensions in mm.

Datamate Mix-Tek Connectors

Male Metal Backshell

- ❖ Supplied as an accessory, to be used with existing male connectors.
- ❖ Can be fitted to either male vertical PCB connectors with board mount, or male cable connectors with panel mount jackscrews.
- ❖ Gives 360 degree shielding when mounted to a conductive panel and mated to a compatible female connector with metal backshell.

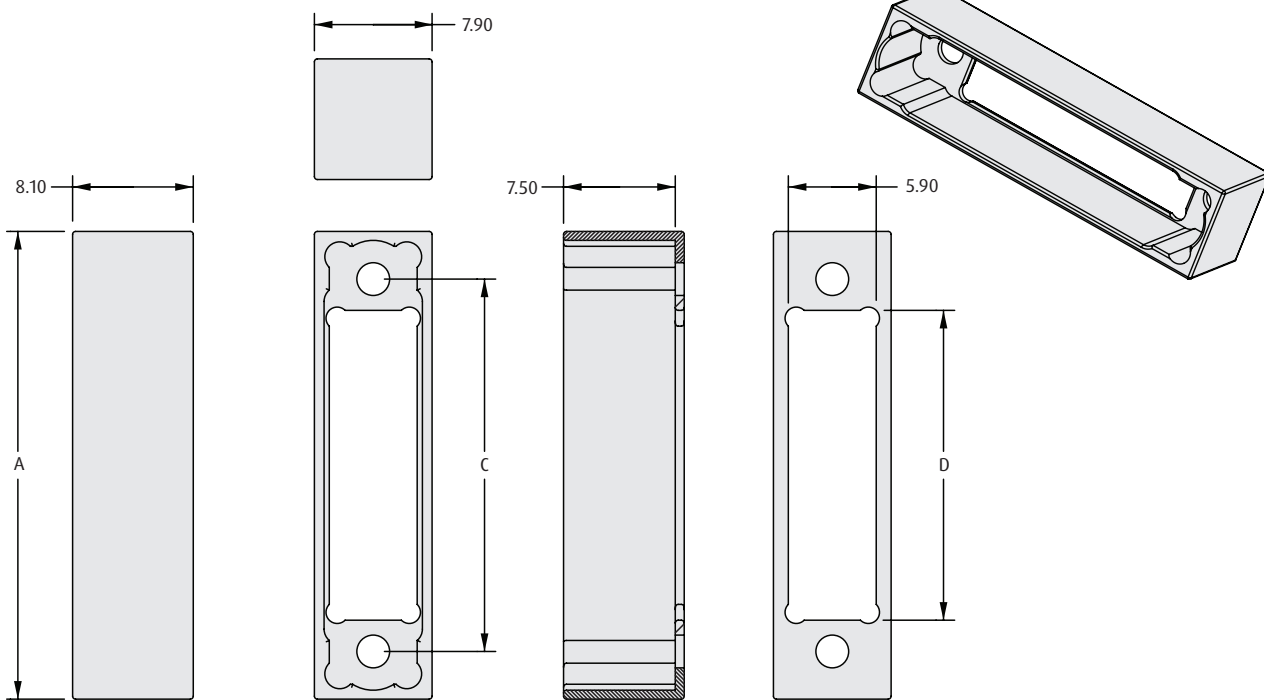


DATAMATE MIX-TEK

MALE

CALCULATION

A	$B + 13.7$
B	Equivalent no. of contacts - 2
C	$B + 7$
D	$B + 2.8$



HOW TO ORDER

M80 - 906 XX 02

SERIES CODE

FINISH

02

Nickel

EQUIVALENT NO. OF SIGNAL CONTACTS

08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32

All dimensions in mm.

Datamate J-Tek Specification

Materials

Mouldings:	Glass-filled thermoplastic UL94V-0
Female contacts	
Standard J-Tek:	Brass shell, with Beryllium Copper inner contact
T-Contact:	Beryllium Copper
Trio-Tek:	Beryllium Copper
Male contacts:	Copper alloy
Finish:	See individual pages

Electrical

Current - Standard J-Tek, Trio-Tek	
Individual contacts in isolation:	3.3A max (at 25°C) 2.6A max (at 85°C)
All contacts simultaneously:	3.0A max (at 25°C) 2.2A max (at 85°C)
Current - T-Contact	
Individual contacts in isolation:	8.5A max (at 25°C) 6.5A max (at 85°C)
All contacts simultaneously:	3.5A max (at 25°C) 2.6A max (at 85°C)
Working voltage	
At sea level 1013 mbar:	800V DC or AC peak
Voltage proof	
At sea level 1013 mbar:	1,200V DC or AC peak
Contact resistance	
Initial:	20mΩ max
After conditioning:	25mΩ max
Insulation resistance	
Initial:	1,000MΩ min
After conditioning:	100MΩ min

Mechanical

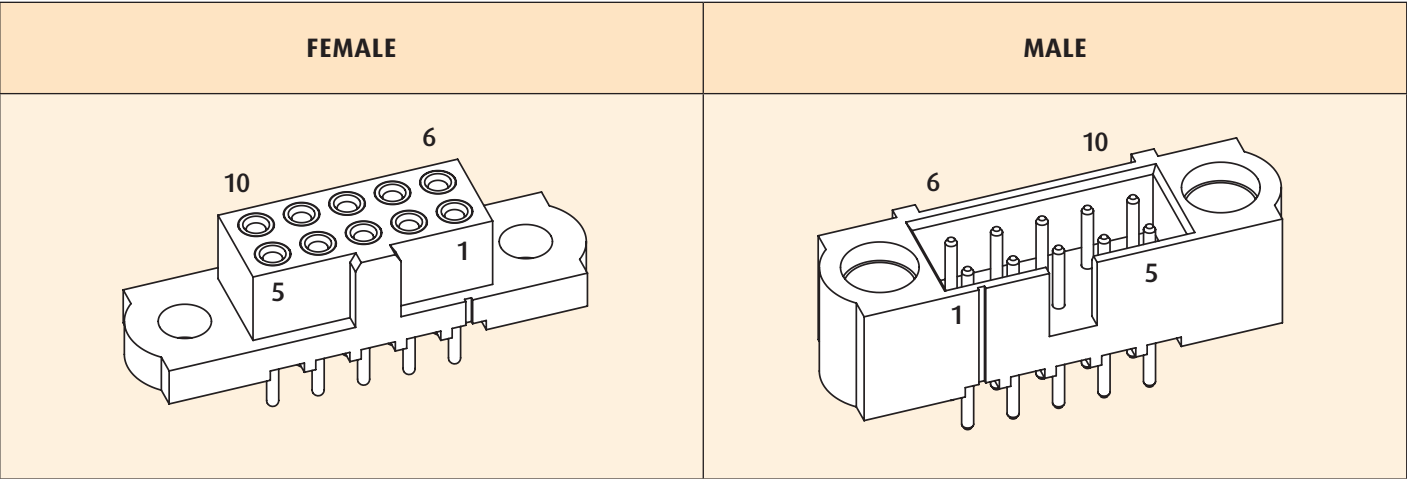
Durability	
Standard J-Tek:	500 operations
T-Contact:	1,000 operations
Trio-Tek:	400 operations
Insertion force (max)	
Standard J-Tek:	2.8N
T-Contact:	4.0N
Trio-Tek:	2.8N
Withdrawal force (min)	
Standard J-Tek:	0.2N
T-Contact:	0.5N
Trio-Tek:	0.2N
Signal crimp accommodation:	22 AWG to 32 AWG BS 3G 210 Type A, MIL-W-16878

Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity	
Standard J-Tek, Trio-Tek:	10Hz to 2000Hz, 0.75mm, 98m/s ² (10G), duration 6 hours
T-Contact:	10Hz to 2000Hz, 0.75mm, 390m/s ² (40G), duration 6 hours
*Bump severity:	390m/s ² (40G), 4000 ±10 bumps
*Shock severity:	981m/s ² (100G) for 6ms
*Acceleration severity:	490m/s ² (50G)

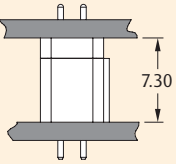
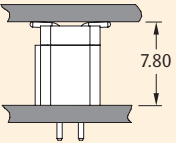
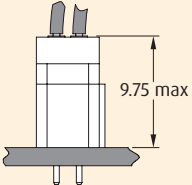
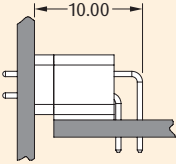
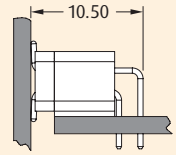
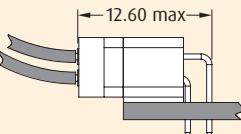
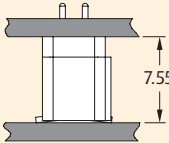
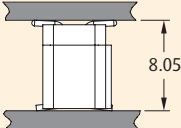
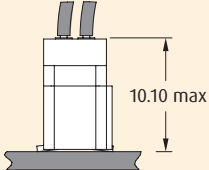
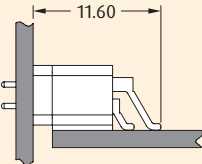
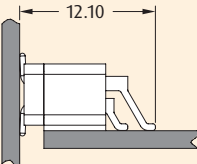
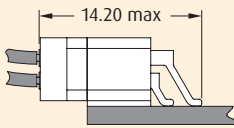
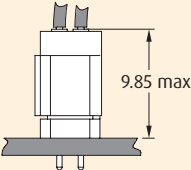
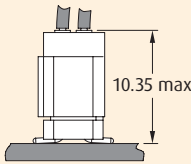
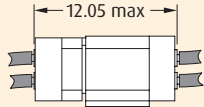
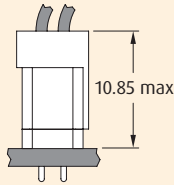
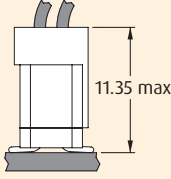
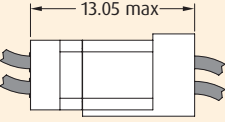
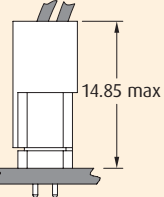
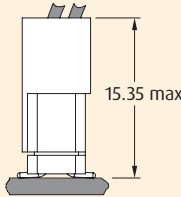
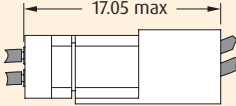
* Tested with connectors with Jackscrews.

Pin Numbering



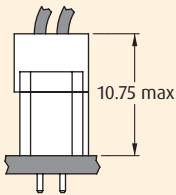
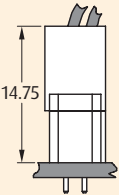
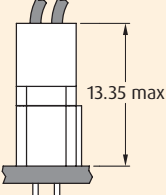
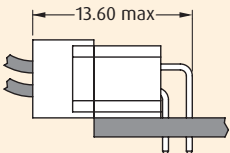
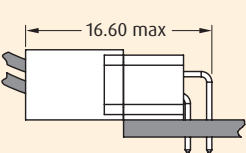
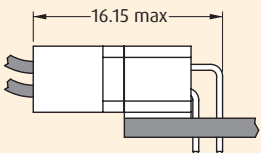
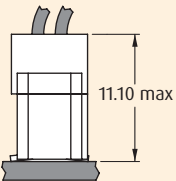
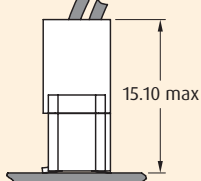
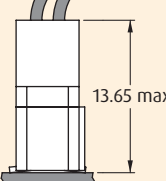
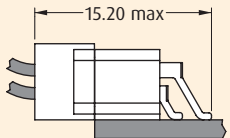
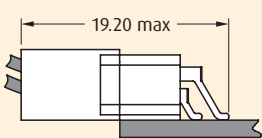
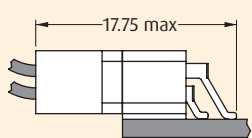
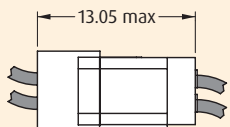
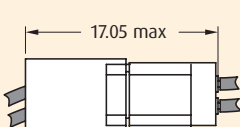
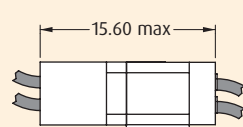
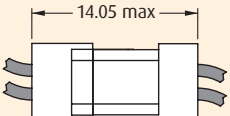
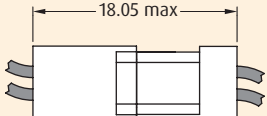
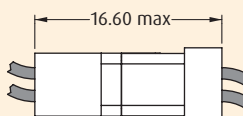
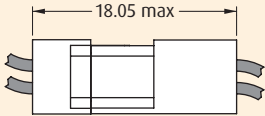
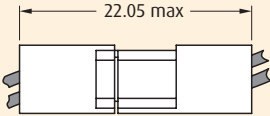
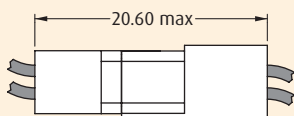
All dimensions in mm.

Datamate J-Tek Mating Profiles

		FEMALE		
		VERTICAL PC TAIL	VERTICAL SMT	CRIMP
MALE	VERTICAL PC TAIL			
	HORIZONTAL PC TAIL			
	VERTICAL SMT			
	HORIZONTAL SMT			
	CRIMP			
	CRIMP 1mm EXTENDED WALL			
	CRIMP 5mm EXTENDED WALL			

All dimensions in mm.

Mating Profiles

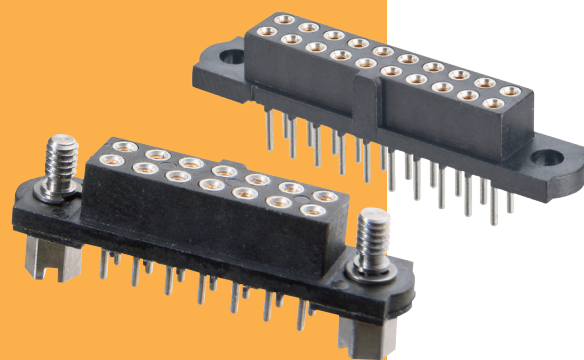
		FEMALE		
		CRIMP 1mm EXTENDED WALL	CRIMP 5mm EXTENDED WALL	CRIMP TRIO-TEK
MALE	VERTICAL PC TAIL			
	HORIZONTAL PC TAIL			
	VERTICAL SMT			
	HORIZONTAL SMT			
	CRIMP			
	CRIMP 1mm EXTENDED WALL			
	CRIMP 5mm EXTENDED WALL			

All dimensions in mm.

Datamate J-Tek Connectors

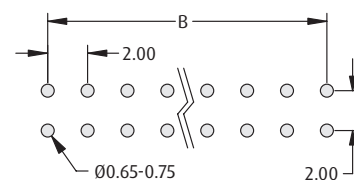
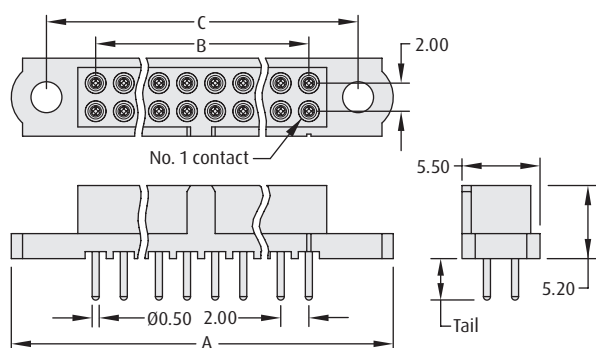
Female Vertical PC Tail

- ❖ Fully shrouded contacts.
- ❖ Polarised mouldings.
- ❖ Mates with all Datamate J-Tek male connectors with compatible jackscrews.



DATAMATE J-TEK

WITHOUT JACKSCREWS

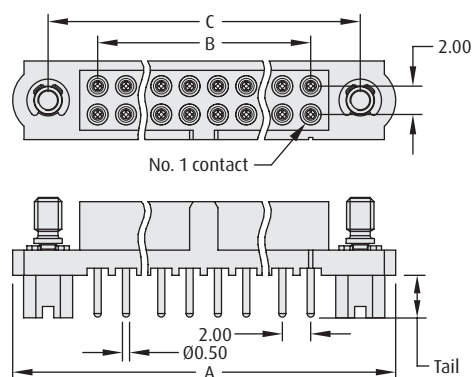


Recommended PC Board Pattern

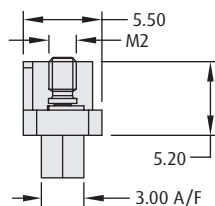
CALCULATION

A	B + 12
B	Total no. of contacts - 2
C	B + 7

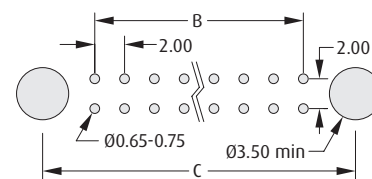
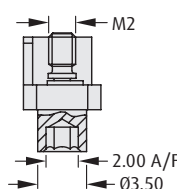
WITH JACKSCREWS



Hex Slotted Jackscrew



Hex Socket Jackscrew



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4 X X XX XX

SERIES CODE

0	With Hex Slotted Jackscrews
1	Without Jackscrews
2	With Hex Socket Jackscrews

0	3mm Tails
1	4.5mm Tails

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

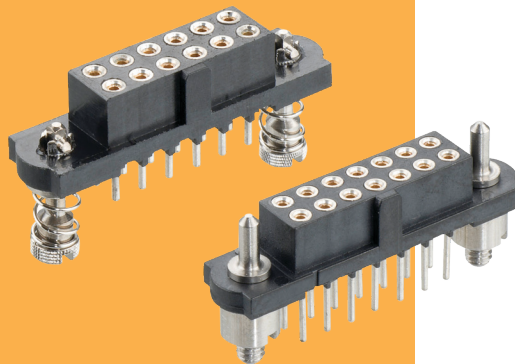
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

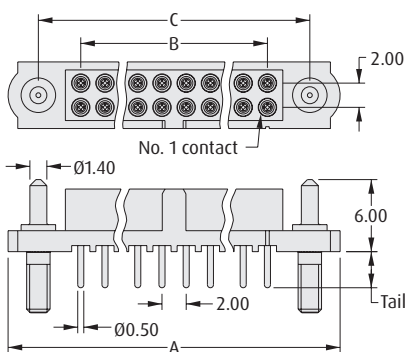
Datamate J-Tek Connectors

Female Vertical PC Tail Guide Pin, 101Lok

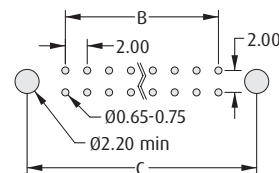
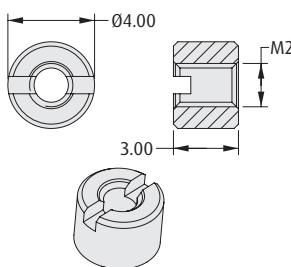
- Guide pin style includes board mount fixing, and mates with Datamate J-Tek male connectors with compatible jackscrews.
- 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- 101Lok style mates with Datamate J-Tek male connectors with compatible 101Lok fixings.



GUIDE PIN JACKSCREWS



Board Mount Nut, 2 per connector

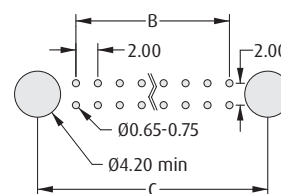
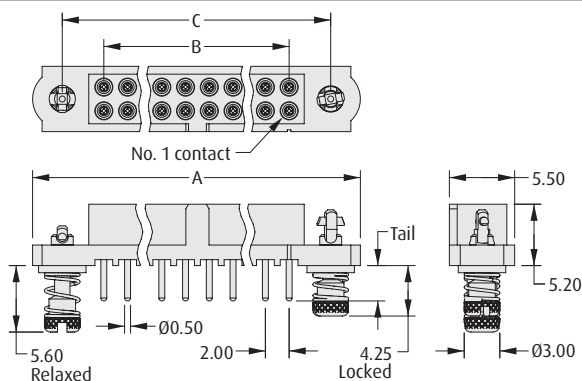


Recommended PC Board Pattern

CALCULATION

A	B + 12
B	Total no. of contacts - 2
C	B + 7

101LOK



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4 TX XX XX FX

SERIES CODE

TYPE

T1	3mm Tails
T2	4.5mm Tails

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

F3	Guide Pin
FC	101Lok

FINISH

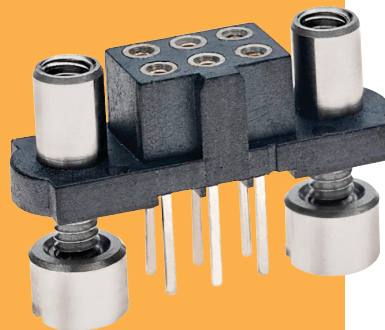
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Female Vertical PC Tail Reverse Fix

- ❖ Fully shrouded contacts.
- ❖ Polarised mouldings.
- ❖ Includes board mount fixing.
- ❖ Mates with male Datamate J-Tek connectors with compatible Reverse Fix jackscrews.

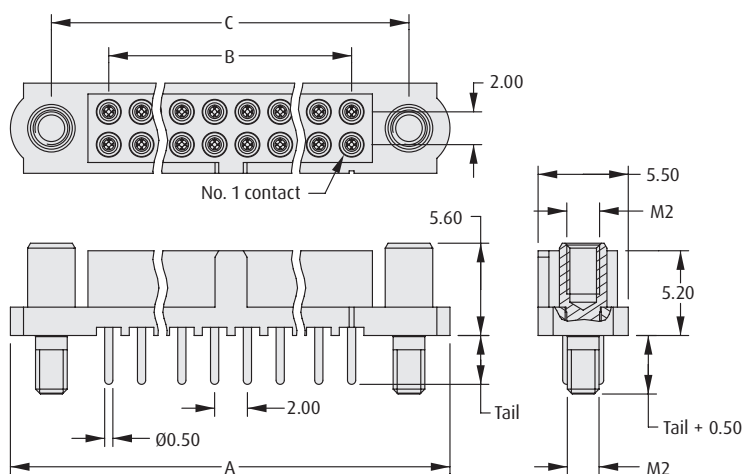


DATAMATE J-TEK

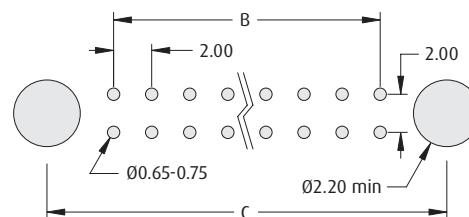
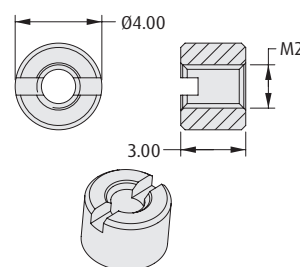
REVERSE FIX

CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



Board Mount Nut, 2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 40 X XX XX

SERIES CODE

TYPE

5	3mm Tails
6	4.5mm Tails

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

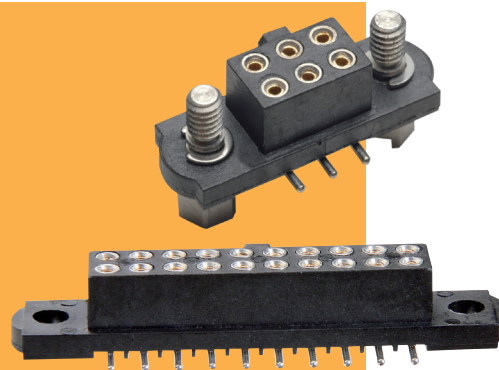
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

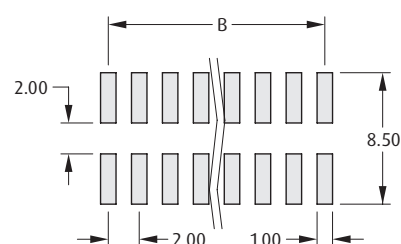
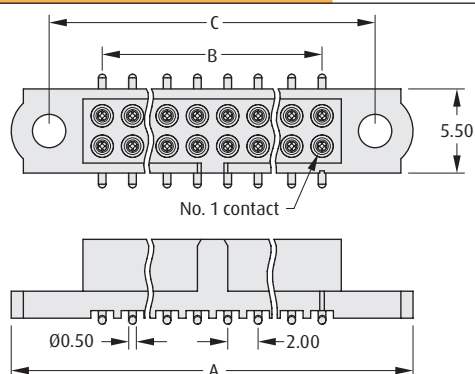
Datamate J-Tek Connectors

Female Vertical Surface Mount

- ❑ Mates with all Datamate J-Tek male connectors with compatible jackscrews.
- ❑ Gull wing SMT tails simplify inspection process.
- ❑ Optional pick and place cap.
- ❑ Contact datamate@harwin.com for tape and reel options.



WITHOUT JACKSCREWS

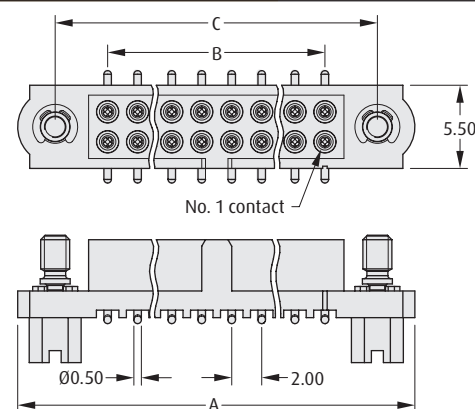


Recommended PC Board Pattern

CALCULATION

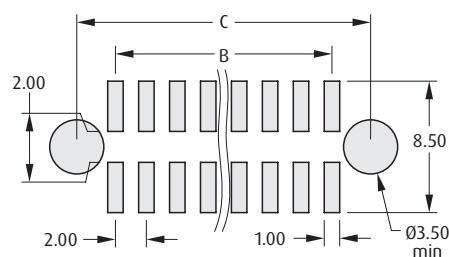
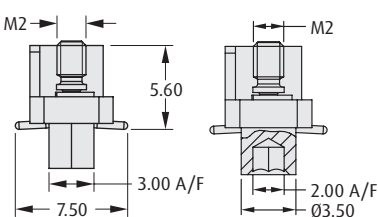
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WITH JACKSCREWS



Hex Slotted Jackscrew

Hex Socket Jackscrew



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4 X 2 XX XX P

SERIES CODE

TYPE

0	With Hex Slotted Jackscrews
1	Without Jackscrews
2	With Hex Socket Jackscrews

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

PICK AND PLACE CAP

BLANK	No cap
P	Pick and place cap

FINISH

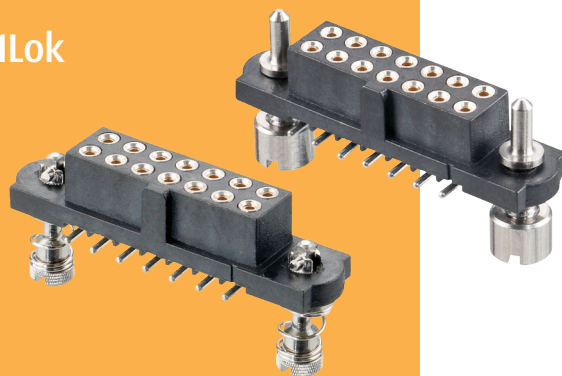
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

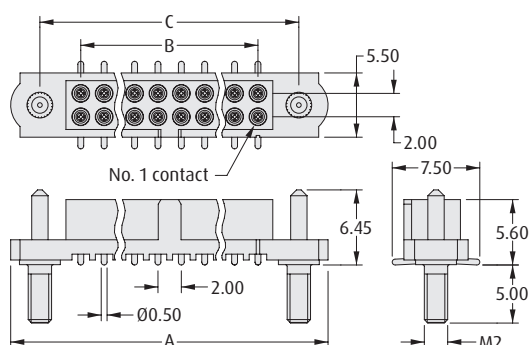
Female Vertical Surface Mount Guide Pin, 101Lok

- ❖ Guide pin style includes board mount fixing, and mates with Datamate J-Tek male connectors with compatible jackscrews.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ 101Lok style mates with Datamate J-Tek male connectors with compatible 101Lok fixings.

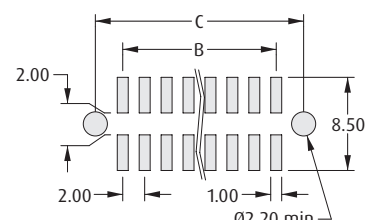
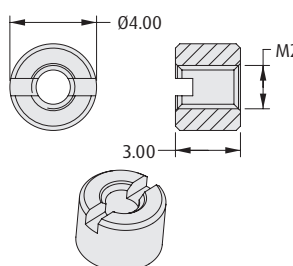


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



Board Mount Nut, 2 per connector

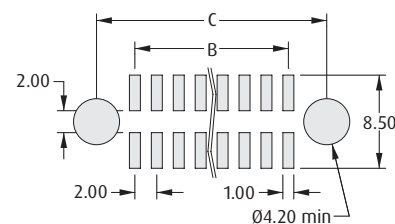
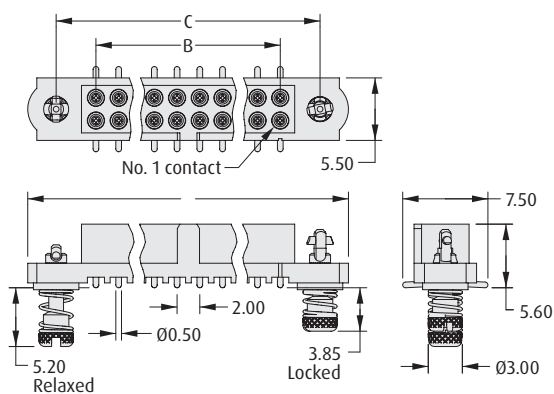


Recommended PC Board Pattern

CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

101LOK



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4S1 XX XX FX

SERIES CODE

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

F3	Guide Pin
FC	101Lok

FINISH

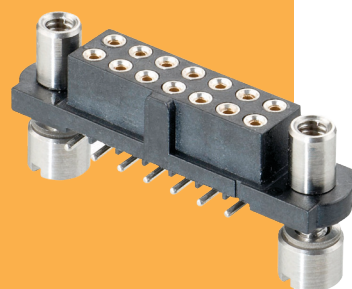
05	Gold
42	Gold + Tin

All dimensions in mm.

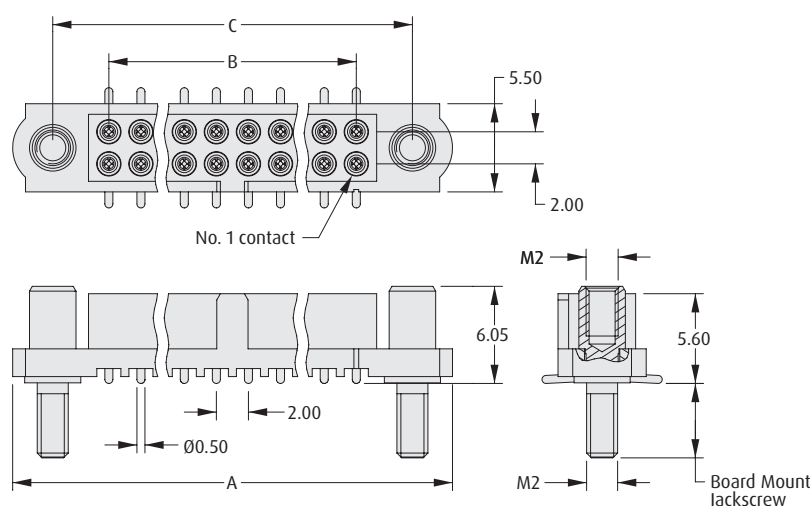
Datamate J-Tek Connectors

Female Vertical Surface Mount Reverse Fix

- Fully shrouded contacts.
- Polarised mouldings.
- Includes Board Mount fixing.
- Mates with male Datamate J-Tek connectors with compatible Reverse Fix jackscrews.



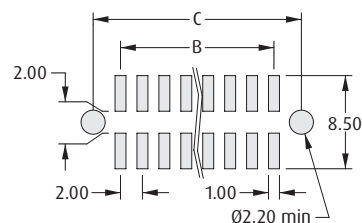
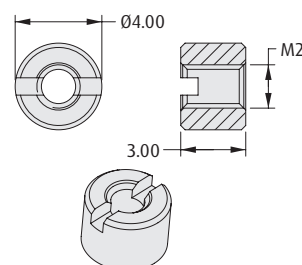
REVERSE FIX



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

Board Mount Nut, 2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4S1 XX XX FX

SERIES CODE

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

TYPE

F8	3.5mm Board Mount Jackscrew
F9	5mm Board Mount Jackscrew

FINISH

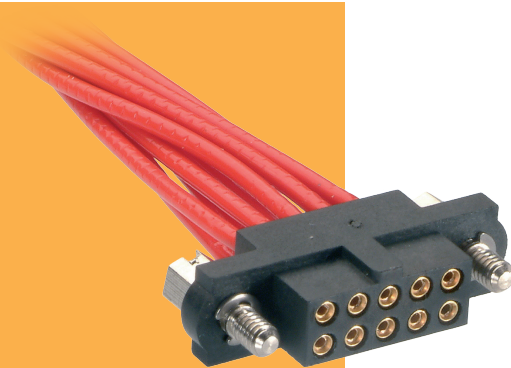
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Jackscrews are assembled where specified.
- ❖ Crimp contacts are rear insertable.
- ❖ Version also available for 28 – 32 AWG cable – see the following page.
- ❖ Spare contacts are available.



DATAMATE J-TEK

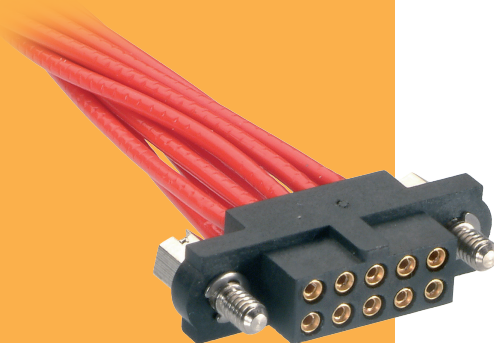
WITHOUT JACKSCREWS		WITH JACKSCREWS																	
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>		CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7										
CALCULATION																			
A	B + 12																		
B	Total no. of contacts - 2																		
C	B + 7																		
TOOLS		WIRE STRIPPING DETAILS																	
Recommended Crimp Tool – M22520/2-01 Positioner – T5747 Contact Insertion/Removal Tool – Z80-280 ❖ Spare and pre-cabled contacts shown on following pages. ❖ Instruction sheets available at www.harwin.com/instructions.																			
HOW TO ORDER																			
		M80 - 4XX XX XX																	
<table><tr><th colspan="2">SERIES CODE</th></tr><tr><th>LARGE BORE (22 AWG)</th><th>SMALL BORE (24-28 AWG)</th></tr><tr><td>470</td><td>471</td></tr><tr><td>460</td><td>461</td></tr><tr><td>480</td><td>481</td></tr></table>		SERIES CODE		LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)	470	471	460	461	480	481	<table><tr><th colspan="2">FINISH</th></tr><tr><td>05</td><td>Gold</td></tr><tr><td>42</td><td>Gold + Tin</td></tr></table>		FINISH		05	Gold	42	Gold + Tin
SERIES CODE																			
LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)																		
470	471																		
460	461																		
480	481																		
FINISH																			
05	Gold																		
42	Gold + Tin																		
<table><tr><th colspan="2">TOTAL NO. OF CONTACTS</th></tr><tr><td colspan="2">04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50</td></tr></table>		TOTAL NO. OF CONTACTS		04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50															
TOTAL NO. OF CONTACTS																			
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50																			

All dimensions in mm.

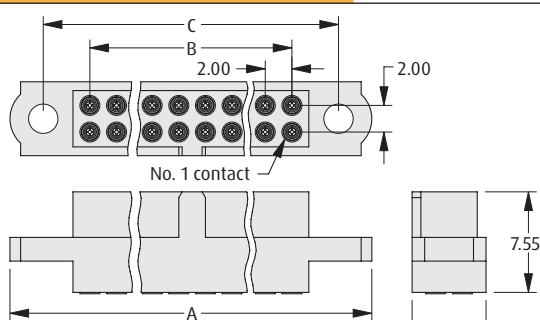
Datamate J-Tek Connectors

Female Crimp Kit - Extra Small Bore

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Jackscrews are assembled where specified.
- ❖ Crimp contacts are rear insertable.
- ❖ Versions also available for 22 – 28 AWG cable – see the previous page.
- ❖ Spare contacts are available.



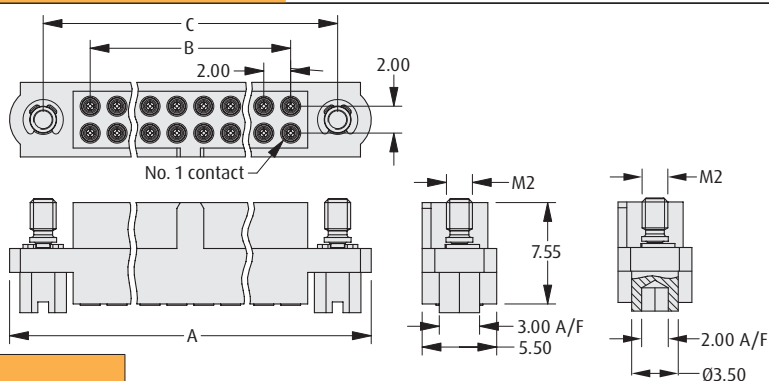
WITHOUT JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WITH JACKSCREWS



Hex Slotted Jackscrew

Hex Socket Jackscrew

TOOLS

Recommended Crimp Tool - M22520/2-01

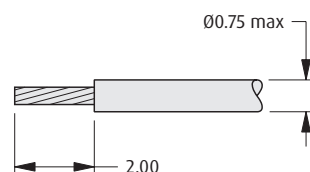
Positioner - T5747

Contact Insertion/Removal Tool - Z80-280

❖ Spare and pre-cabled contacts shown on following pages.

❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 4 E1 XX XX FX

SERIES CODE

TYPE

E1 Extra Small Bore 28-32 AWG

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

00	Without Jackscrews
F1	With Hex Slotted Jackscrews
F2	With Hex Socket Jackscrews

FINISH

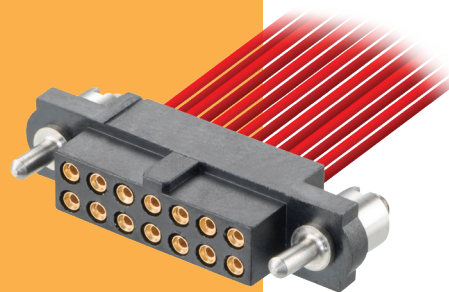
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

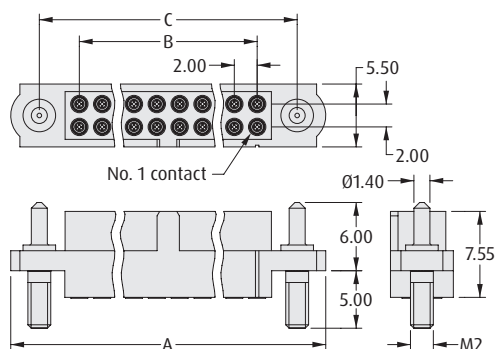
Female Crimp Kit - Guide Pin, 101Lok

- ❖ Guide pin style includes board mount fixing.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek male connectors with applicable jackscrews or 101Lok fixings.
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.

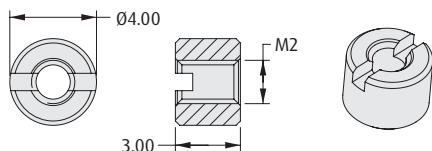


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



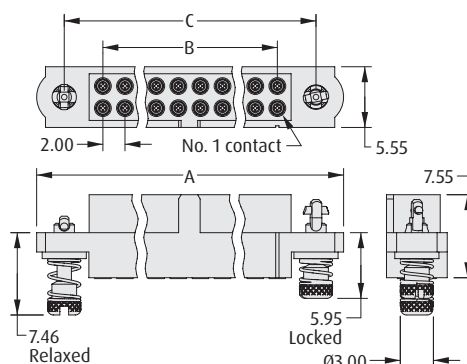
Board Mount Nut, 2 per connector



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

101LOK



TOOLS

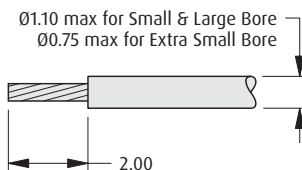
Recommended Crimp Tool - M22520/2-01

Positioner - T5747

Contact Insertion/Removal Tool - Z80-280

- ❖ Spare and pre-cabled contacts shown on following pages.
- ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 4 X1 XX XX FX

SERIES CODE

TYPE

C1	Small Bore (24-28 AWG)
D1	Large Bore (22 AWG)
E1	Extra Small Bore (28-32 AWG)

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

F3	Guide Pin
FC	101Lok

FINISH

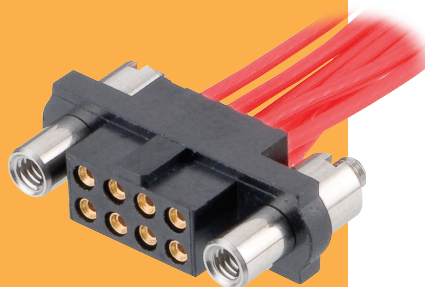
05	Gold
42	Gold + Tin

All dimensions in mm.

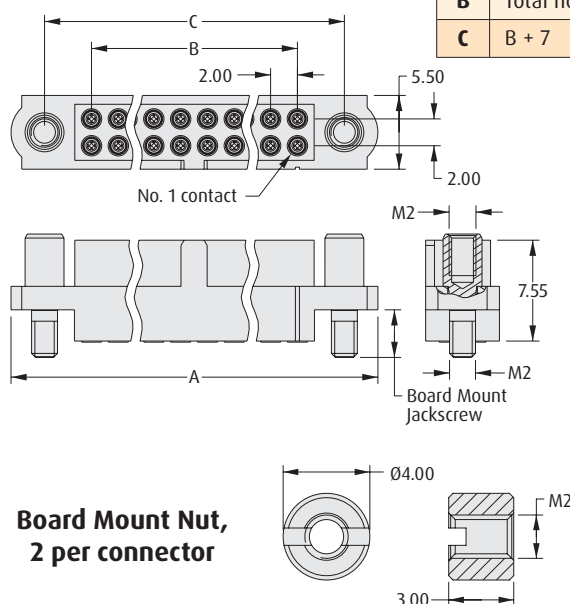
Datamate J-Tek Connectors

Female Crimp Kit - Reverse Fix

- ❖ Allows for further flexibility in system design.
- ❖ Crimp contacts supplied loose and are inserted from rear.
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Jackscrews are assembled.
- ❖ Mates with male Datamate J-Tek connectors with compatible Reverse Fix jackscrews.



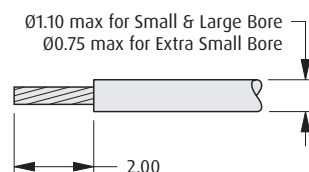
WITH JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WIRE STRIPPING DETAILS



TOOLS

Recommended Crimp Tool - M22520/2-01

Positioner - T5747

Contact Insertion/Removal Tool - Z80-280

- ❖ Spare and pre-cabled contacts shown on following pages.

- ❖ Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

M80 - 4XX XX XX

SERIES CODE

TYPE

462	Large Bore (22 AWG)
463	Small Bore (24-28 AWG)

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

FINISH

05	Gold
42	Gold + Tin

3.5mm Board Mount Jackscrews only

M80 - 4 X1 XX XX FX

SERIES CODE

TYPE

C1	Small Bore (24-28 AWG)
D1	Large Bore (22 AWG)
E1	Extra Small Bore (28-32 AWG)

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

FINISH

05	Gold
42	Gold + Tin

JACKSCREW

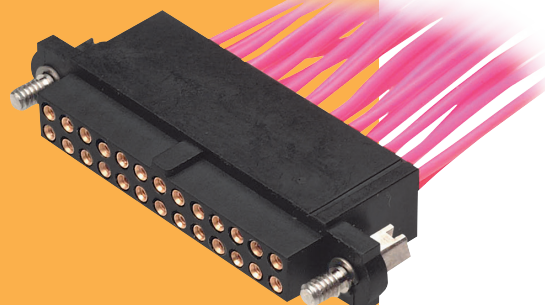
F8	3.5mm Board Mount
F9	5mm Board Mount

All dimensions in mm.

Datamate J-Tek Connectors

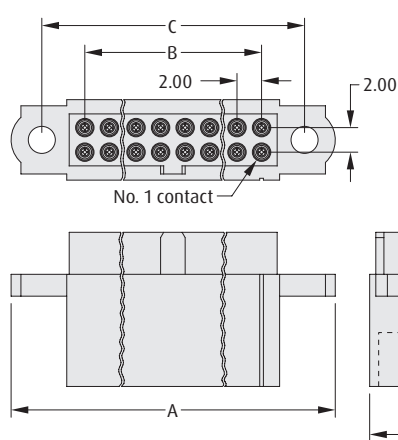
Female Crimp Kit - Extended Wall

- ❖ Extended Wall Datamate allows back potting to be performed.
- ❖ Polarised mouldings.
- ❖ Crimp contacts are rear insertable.
- ❖ Large bore 22 AWG, small bore 24 – 28 AWG.
- ❖ Part numbers are for a housing and the equivalent number of contacts.



DATAMATE J-TEK

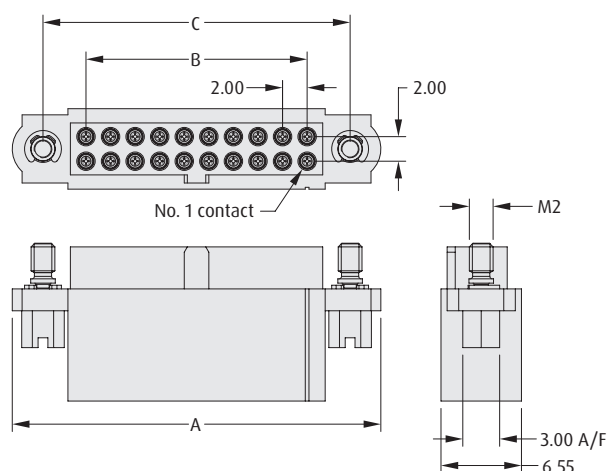
WITHOUT JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WITH JACKSCREWS



TOOLS

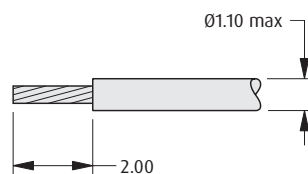
Recommended Crimp Tool - M22520/2-01

Positioner - T5747

Contact Insertion/Removal Tool - Z80-280

- ❖ Spare and pre-cabled contacts shown on following pages.
- ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - XXX XX XX

SERIES CODE

LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)	
475	476	Without Jackscrews
465	466	With Hex Slotted Jackscrews
485	486	With Hex Socket Jackscrews

WALL SIZE

BLANK	Wall = 5mm
A	Wall = 1mm

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

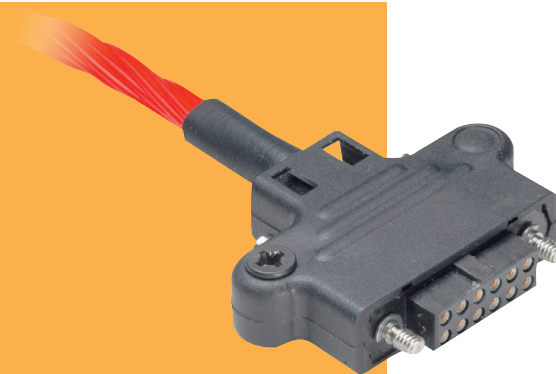
06, 10, 12, 14, 18, 20, 26, 34, 42, 50

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Kit with Hood

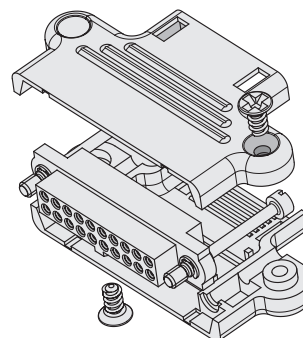
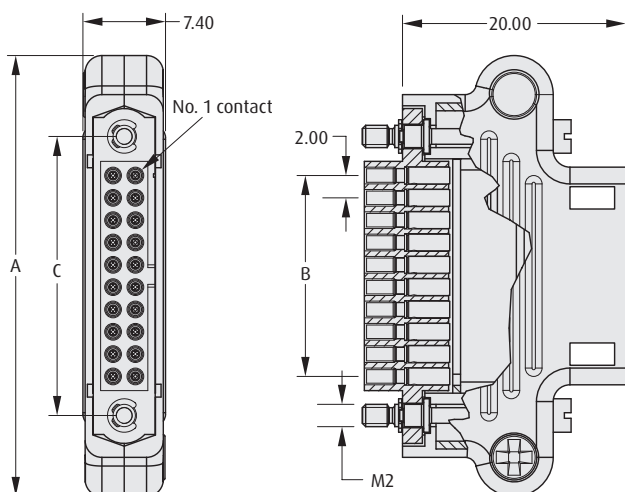
- ❖ Supplied as a complete kit: jackscrews assembled to housing; hood, contacts and assembly screws supplied loose.
- ❖ Provides strain relief by preventing cable bending at the rear of the connector, and also has the option of inserting a cable tie to reduce pull strain.



FEMALE

CALCULATION

A	$B + 21.5$
B	Total no. of contacts - 2
C	$B + 7$



TOOLS

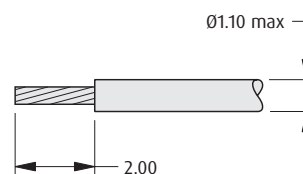
Recommended Crimp Tool - M22520/2-01

Positioner - T5747

Contact Insertion/Removal Tool - Z80-Z80

- ❖ Spare and pre-cabled contacts shown on following pages.
- ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 94 X XX XX

SERIES CODE

TYPE

0	Small Bore (24-28 AWG)
1	Large Bore (22 AWG)

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

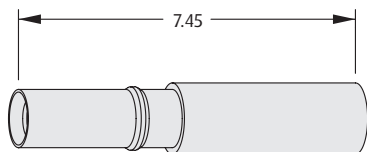
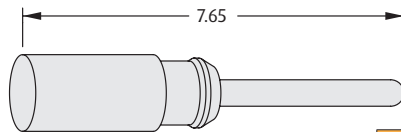
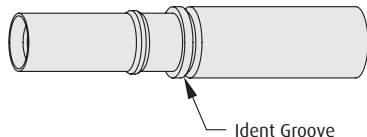
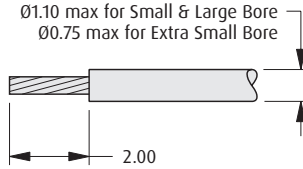
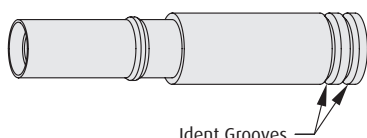
Datamate J-Tek Connectors

Spare Female Crimp Contacts

- ❖ Barrel Crimp Contacts are supplied with the connectors - see previous page. Use the order code for extra spare crimps.



DATAMATE J-TEK

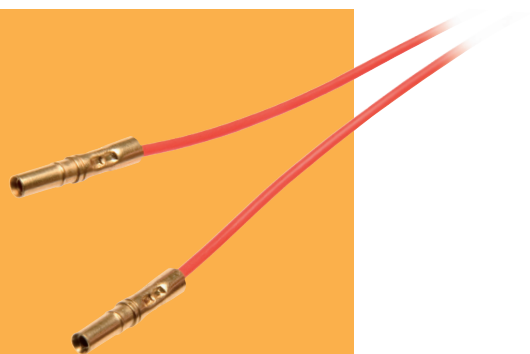
CRIMP CONTACTS		DUMMY CONTACT															
Large Bore (22 AWG) 		 ORDER CODE M80-023															
Small Bore (24 to 28 AWG) 		WIRE STRIPPING DETAILS 															
Extra Small Bore (28 to 32 AWG) 		TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280 ❖ Pre-cabled contacts shown on following page. ❖ Instruction sheets available at www.harwin.com/instructions.															
HOW TO ORDER																	
M80 - 0XX 00 XX																	
SERIES CODE																	
<table><tr><th colspan="2">TYPE</th></tr><tr><td>011</td><td>Large Bore (22 AWG)</td></tr><tr><td>013</td><td>Small Bore (24-28 AWG)</td></tr><tr><td>019</td><td>Extra Small Bore (28-32 AWG)</td></tr></table>		TYPE		011	Large Bore (22 AWG)	013	Small Bore (24-28 AWG)	019	Extra Small Bore (28-32 AWG)	<table><tr><th colspan="2">FINISH</th></tr><tr><td>01</td><td>Gold + Tin</td></tr><tr><td>05</td><td>Gold</td></tr></table>		FINISH		01	Gold + Tin	05	Gold
TYPE																	
011	Large Bore (22 AWG)																
013	Small Bore (24-28 AWG)																
019	Extra Small Bore (28-32 AWG)																
FINISH																	
01	Gold + Tin																
05	Gold																

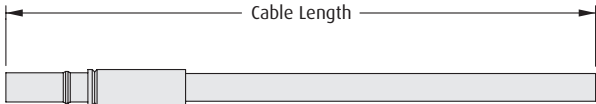
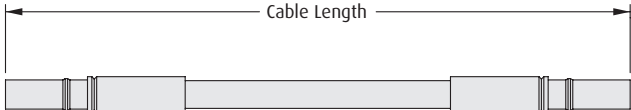
All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Contacts – Pre-Crimped Wires

- ❖ Female crimp contacts pre-assembled with a choice of BS 3G 210 Type A cable at selected lengths.
- ❖ PTFE-insulated, multi-strand silver-plated copper conductor equipment wire.
- ❖ Ideal for prototype and pre-production applications.
- ❖ For non-standard cable lengths, please visit harwin.com/cable-assemblies and fill in your requirements.



FEMALE SINGLE ENDED		FEMALE - FEMALE																											
																													
TOOLS																													
Contact Insertion/Removal Tool – Z80-Z80		❖ Full crimp connector kits and spare crimp contacts shown on previous pages. ❖ Instruction sheets available at www.harwin.com/instructions.																											
HOW TO ORDER																													
M80 - 9XX 00 99		<table><tr><th colspan="2">CABLE COLOUR</th></tr><tr><td>99</td><td>Red</td></tr></table>		CABLE COLOUR		99	Red																						
CABLE COLOUR																													
99	Red																												
SERIES CODE		<table><tr><th>SINGLE ENDED</th><th>FEMALE-FEMALE</th></tr><tr><td>910</td><td>918</td></tr><tr><td>911</td><td>919</td></tr><tr><td>912</td><td>920</td></tr><tr><td>913</td><td>921</td></tr><tr><td>914</td><td>922</td></tr><tr><td>915</td><td>923</td></tr><tr><td>916</td><td>924</td></tr><tr><td>917</td><td>925</td></tr></table>	SINGLE ENDED	FEMALE-FEMALE	910	918	911	919	912	920	913	921	914	922	915	923	916	924	917	925	<table><tr><td>22 AWG Cable, 150mm length</td></tr><tr><td>24 AWG Cable, 150mm length</td></tr><tr><td>26 AWG Cable, 150mm length</td></tr><tr><td>28 AWG Cable, 150mm length</td></tr><tr><td>22 AWG Cable, 300mm length</td></tr><tr><td>24 AWG Cable, 300mm length</td></tr><tr><td>26 AWG Cable, 300mm length</td></tr><tr><td>28 AWG Cable, 300mm length</td></tr></table>	22 AWG Cable, 150mm length	24 AWG Cable, 150mm length	26 AWG Cable, 150mm length	28 AWG Cable, 150mm length	22 AWG Cable, 300mm length	24 AWG Cable, 300mm length	26 AWG Cable, 300mm length	28 AWG Cable, 300mm length
SINGLE ENDED	FEMALE-FEMALE																												
910	918																												
911	919																												
912	920																												
913	921																												
914	922																												
915	923																												
916	924																												
917	925																												
22 AWG Cable, 150mm length																													
24 AWG Cable, 150mm length																													
26 AWG Cable, 150mm length																													
28 AWG Cable, 150mm length																													
22 AWG Cable, 300mm length																													
24 AWG Cable, 300mm length																													
26 AWG Cable, 300mm length																													
28 AWG Cable, 300mm length																													

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp T-Contact

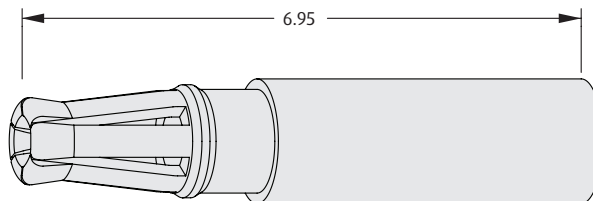
- ❖ Advanced single-piece contact design using Beryllium Copper for a 6-finger contact with improved capabilities.
- ❖ Current carrying capacity up to 8.5 Amps per contact.
- ❖ Improved mating durability to 1,000 operations.
- ❖ Suitable for use with 22AWG cable, Ø1.1mm maximum insulation diameter.
- ❖ Compatible cable housings showing on the following pages - order contact and housings separately.



DATAMATE J-TEK

CRIMP CONTACTS

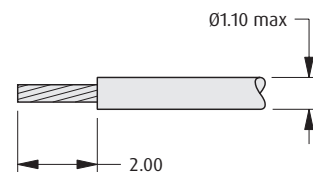
Large Bore (22 AWG)



TOOLS

Recommended Crimp Tool - M22520/2-01
Positioner - Z80-444
Contact insertion/Removal Tool - Z80-280
 ❖ Instruction sheets available at
www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 206 00 05

SERIES CODE

FINISH

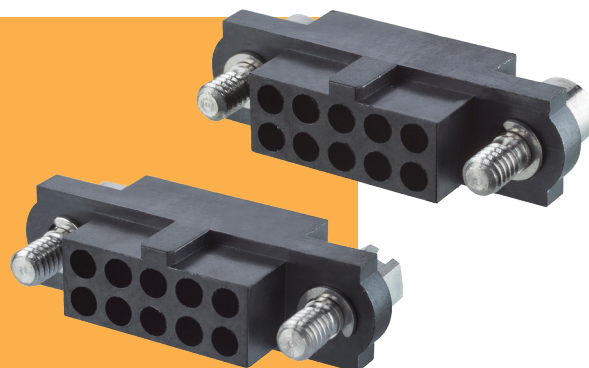
05 Gold

All dimensions in mm.

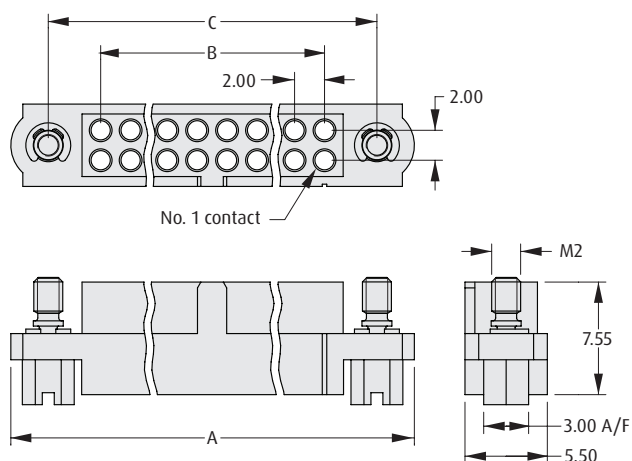
Datamate J-Tek Connectors

Female Crimp Housing

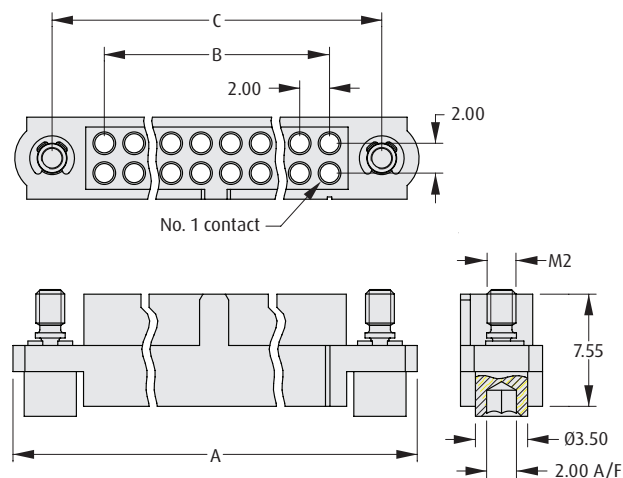
- ❖ Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- ❖ Use insertion tool to insert crimped contacts into rear of connector housing: **order code Z80-Z80**.
- ❖ Connectors mate with Datamate J-Tek male connectors with applicable jackscrews.
- ❖ Jackscrews are supplied already assembled to housing.



HEX SLOTTED JACKSCREWS



HEX SOCKET JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

HOW TO ORDER

M80 - 41 X XX 98

SERIES CODE

JACKSCREW TYPE

3	Hex Slotted Jackscrews
4	Hex Socket Jackscrews

TOTAL NO. OF CONTACTS

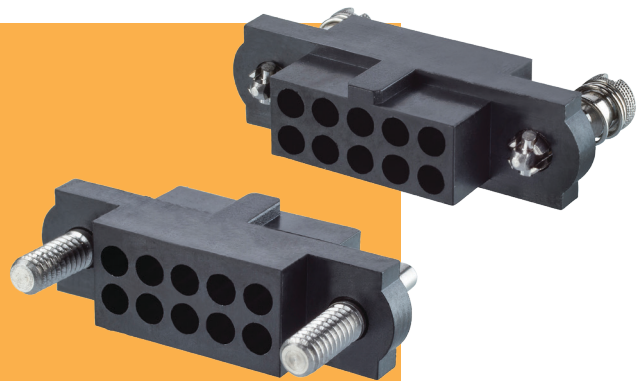
04 to 50

All dimensions in mm.

Datamate J-Tek Connectors

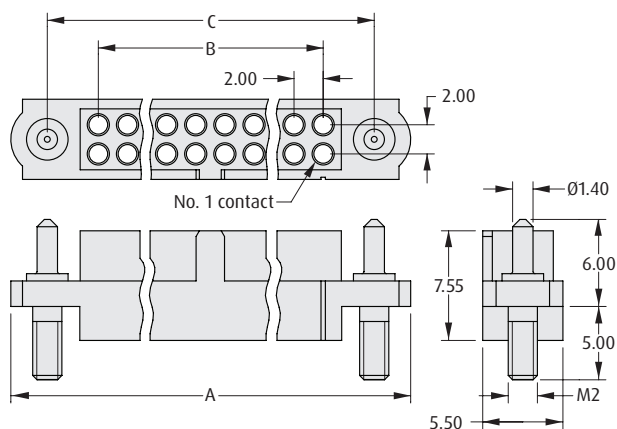
Female Crimp Housing - Guide Pin, 101Lok

- ❖ Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- ❖ Guide pin style includes board mount fixing.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek male connectors with applicable jackscrews or 101Lok fixings.

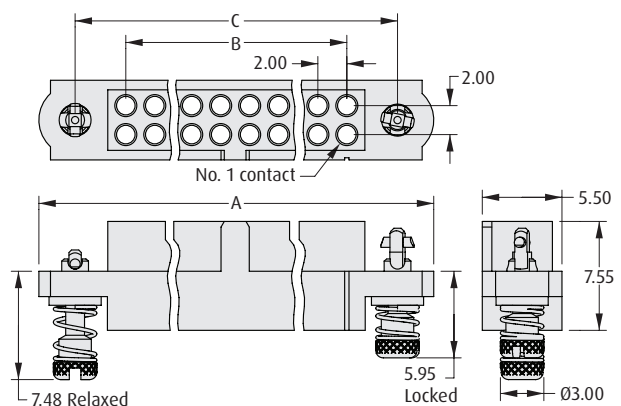


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



101LOK



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

HOW TO ORDER

M80 - 41 X XX 98

SERIES CODE

JACKSCREW TYPE

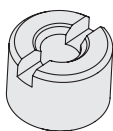
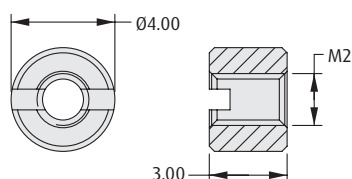
7	Guide Pin Jackscrews
8	101Lok

TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR GUIDE PIN STUD

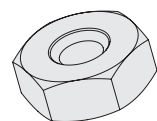
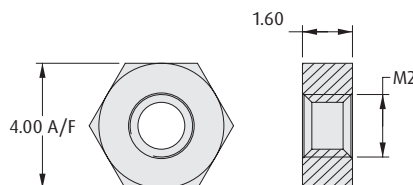
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

M80-2430000B

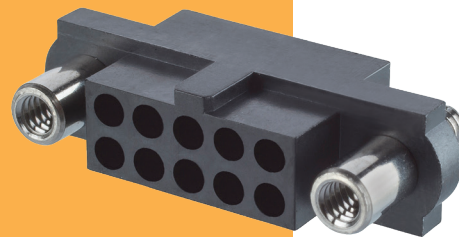
Order separately from connector

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Housing - Reverse Fix

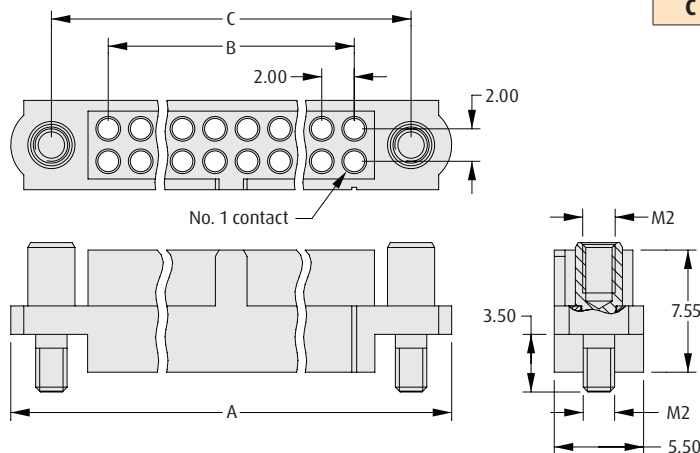
- Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- Use insertion tool to insert crimped contacts into rear of connector housing: **order code Z80-280**.
- Jackscrews are supplied already assembled to housing.
- Connectors mate with Datamate J-Tek male connectors with compatible Reverse Fix jackscrews.



REVERSE FIX JACKSCREWS

CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



HOW TO ORDER

M80 - 41 5 XX 98

SERIES CODE

JACKSCREW TYPE

5

Reverse Fix Jackscrew

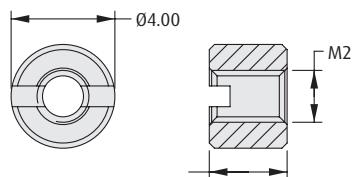
TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR PANEL MOUNT STUD

Order separately from connector

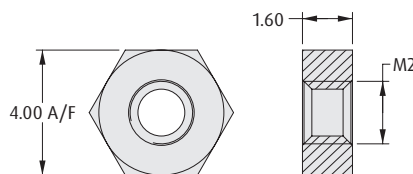
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

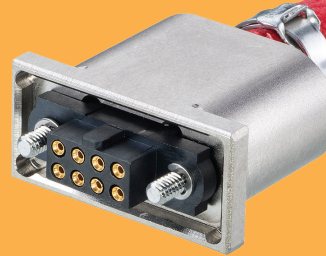
M80-2430000B

All dimensions in mm.

Datamate J-Tek Connectors

Female Metal Backshell

- ❖ Supplied as an accessory kit, including metal backshell, e-clips and the applicable jackscrews.
- ❖ To be used with the appropriate size of Female Crimp Kit without jackscrews.
- ❖ Gives 360 degree shielding when used with conductive braid and mated to a compatible male connector with metal backshell.
- ❖ Instruction sheets available at www.harwin.com/instructions.



DATAMATE J-TEK

FEMALE		CALCULATION							
1 x Metal Backshell 10.70 A 26.55 5.90 D C 4 x E-Clip (2 spare) 2 x Slotted Jackscrew (M80-945 Kit) 2 x Hex Socket Jackscrew (M80-946 Kit) <tr><td>A</td><td>B + 16.2</td></tr> <tr><td>B</td><td>Equivalent no. of contacts - 2</td></tr> <tr><td>C</td><td>B + 7</td></tr> <tr><td>D</td><td>B + 0.8</td></tr>		A	B + 16.2	B	Equivalent no. of contacts - 2	C	B + 7	D	B + 0.8
		A	B + 16.2						
		B	Equivalent no. of contacts - 2						
		C	B + 7						
D	B + 0.8								

E-CLIP TOOL	BAND-IT TIE
 ❖ For assembling E-Clips supplied with kit. ORDER CODE Z80-300	 ❖ For fixing braid to rear collar (requires Tie Dex II A30199 Micro Band tool). ORDER CODE M80-9470000

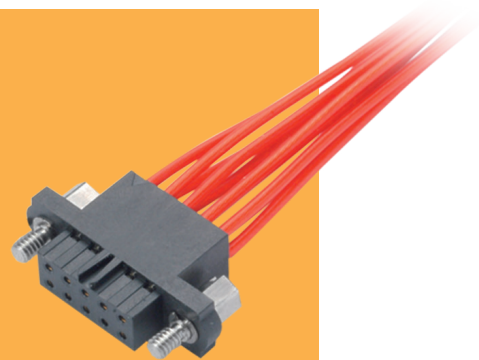
HOW TO ORDER			
M80 - 94 X XX 02			
SERIES CODE		FINISH	
TYPE		EQUIVALENT NO. OF SIGNAL CONTACTS	
5	With Slotted Jackscrews	02	Nickel
6	With Hex Socket Jackscrews	08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32	

All dimensions in mm.

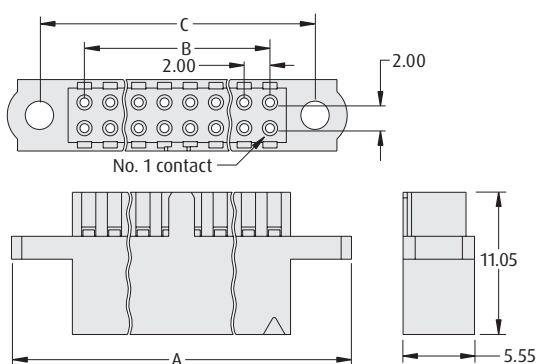
Datamate J-Tek Connectors

Female Crimp Trio-Tek Housings

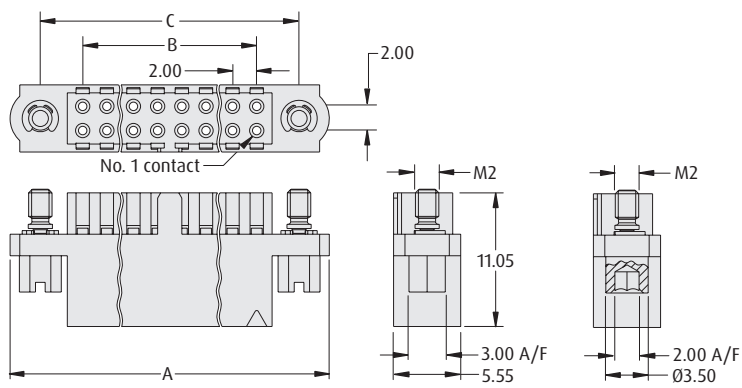
- ❖ Part numbers are for housings only, see following page for Trio-Tek contacts.
- ❖ Contacts are rear insertable.
- ❖ Crimp inspection window in housing.
- ❖ Mates with all standard Datamate J-Tek male connectors.
- ❖ Ideal for volume applications.



WITHOUT JACKSCREWS



WITH JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

Hex Slotted Jackscrew

Hex Socket Jackscrew

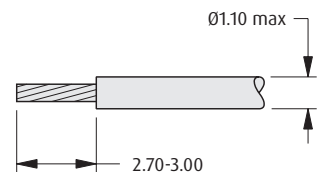
TOOLS

Recommended Hand Crimp Tool - Z80-255

Contact Removal Tool - Z80-258

- ❖ Open crimp contacts shown on following page.
- ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 45X XX 98

SERIES CODE

TYPE

454	Without Jackscrews
455	With Hex Slotted Jackscrews
456	With Hex Socket Jackscrews

FINISH

98	Housings
-----------	----------

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Trio-Tek - 101Lok

- ❖ Part numbers are for housings only, see following page for Trio-Tek contacts.
- ❖ Ideal for volume applications.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek male connectors with 101Lok fixings.



DATAMATE J-TEK

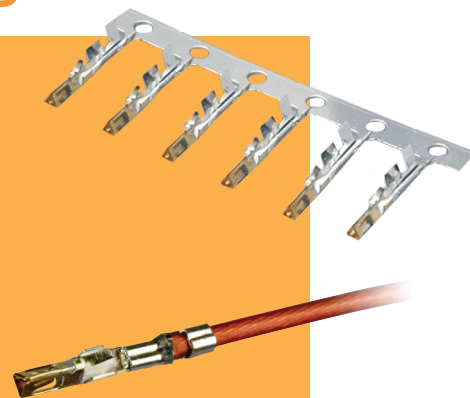
101LOK		CALCULATION	
		A	B + 12
		B	Total no. of contacts - 2
		C	B + 7
TOOLS		WIRE STRIPPING DETAILS	
Recommended Hand Crimp Tool – Z80-255 Contact Removal Tool – Z80-258 ❖ Open crimp contacts shown on following page. ❖ Instruction sheets available at www.harwin.com/instructions.			
HOW TO ORDER			
M80 - 459 XX 98			
SERIES CODE		FINISH 98 Housings	
TYPE 459 101Lok		TOTAL NO. OF CONTACTS 04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50	

All dimensions in mm.

Datamate J-Tek Connectors

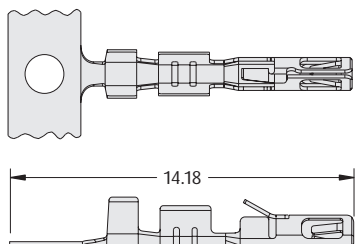
Female Crimp Contacts Trio-Tek

- ❖ Trio-Tek contacts must be ordered separately, see previous pages for applicable housings.
- ❖ Crimp contacts are available loose, or in continuous reeled format for automated crimping.

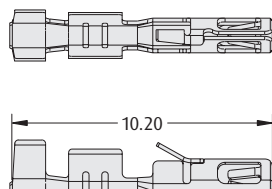


CRIMP CONTACTS

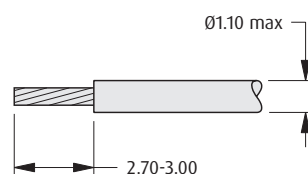
Reeled



Loose



WIRE STRIPPING DETAILS



TOOLS

Recommended Hand Crimp Tool – Z80-255

- ❖ Crimp housings shown on previous page.
- ❖ Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

M80 - XXX 00 XX

SERIES CODE

TYPE	
253	Trio-Tek Crimp 22-24 AWG, Reeled
254	Trio-Tek Crimp 26-28 AWG, Reeled
283	Trio-Tek Crimp 22-24 AWG, Loose
284	Trio-Tek Crimp 26-28 AWG, Loose

FINISH

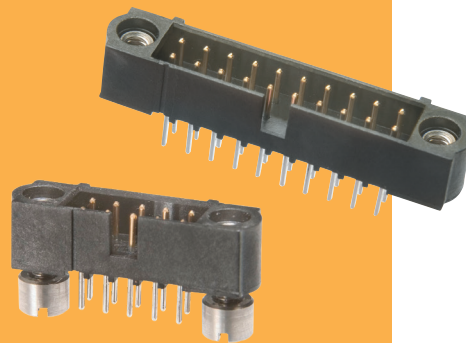
42	Gold + Tin
45	Gold

All dimensions in mm.

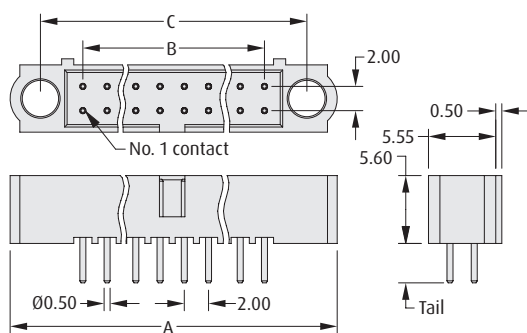
Datamate J-Tek Connectors

Male Vertical PC Tail

- Polarised mouldings.
- Fully shrouded contacts.
- Jackscrews are assembled where specified.
- Choice of PC tail length.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.

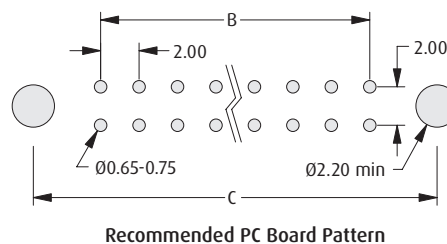


WITHOUT JACKSCREWS

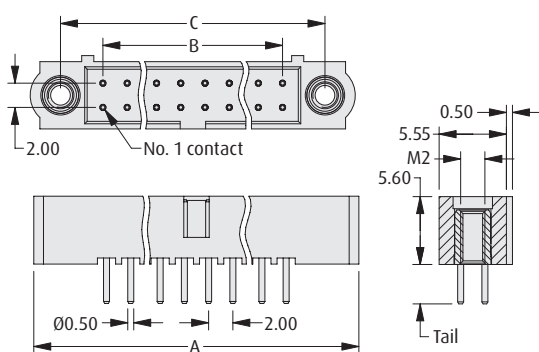


CALCULATION

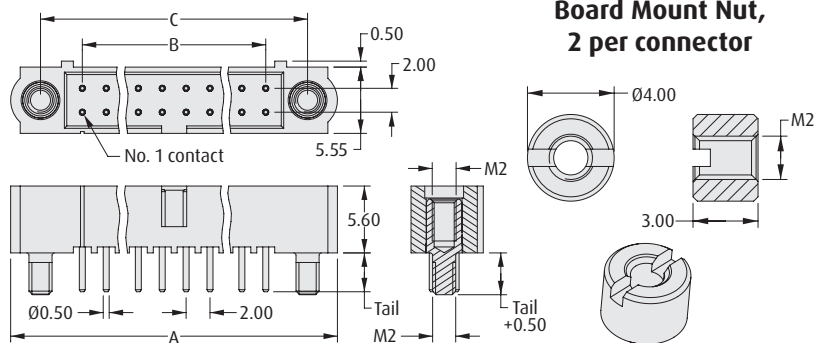
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 X X XX XX

SERIES CODE

0	With Jackscrews
1	With Board Mount
2	Without Jackscrews

0	3mm Tails
1	4.5mm Tails

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

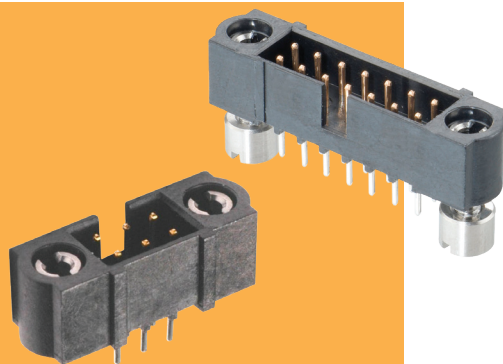
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

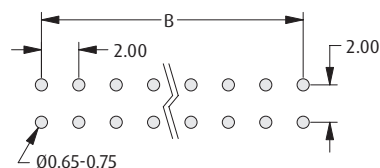
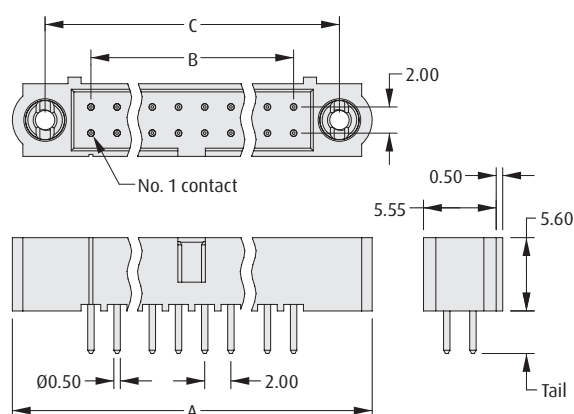
Datamate J-Tek Connectors

Male Vertical PC Tail 101Lok

- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors with applicable 101Lok fixings.
- ❖ Board Mount provides PCB strain relief.
- ❖ Choice of PC tail length.



101LOK

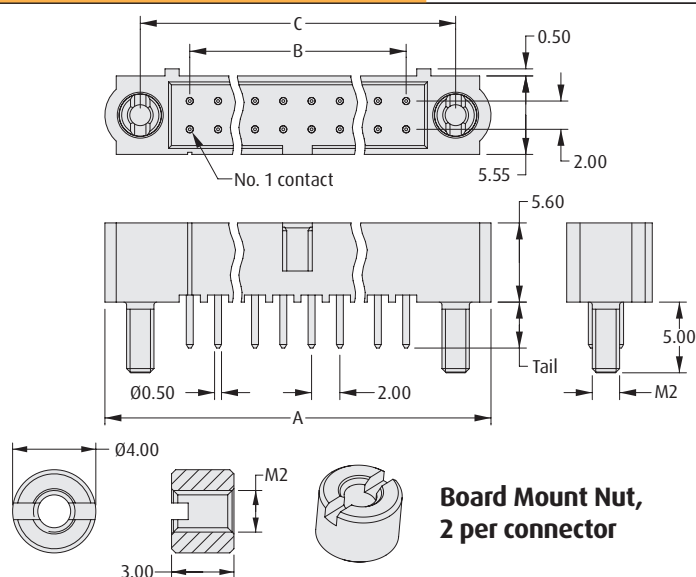


Recommended PC Board Pattern

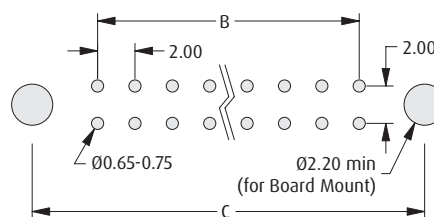
CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

101LOK WITH BOARD MOUNT



Board Mount Nut,
2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 5 TX XX XX MX

SERIES CODE

TYPE

T1	3mm Tails
T2	4.5mm Tails

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

MC	101Lok
ME	101Lok with Board Mount

FINISH

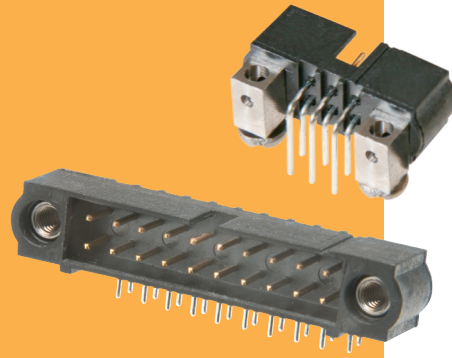
05	Gold
42	Gold + Tin

All dimensions in mm.

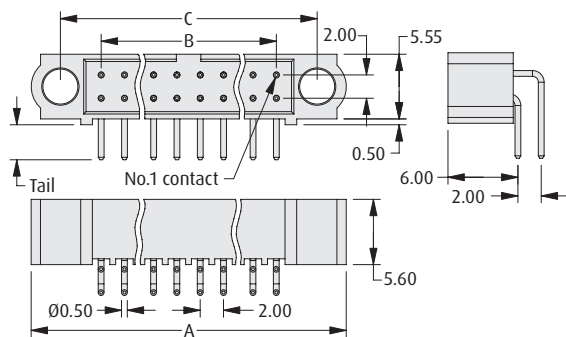
Datamate J-Tek Connectors

Male Horizontal PC Tail

- ❏ Polarised mouldings.
- ❏ Fully shrouded contacts.
- ❏ Jackscrews are assembled where specified.
- ❏ Choice of PC tail length.
- ❏ Board Mount provides PCB strain relief.
- ❏ Mates with female Datamate J-Tek connectors with compatible jackscrews.

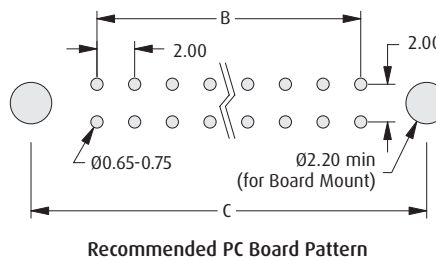


WITHOUT JACKSCREWS

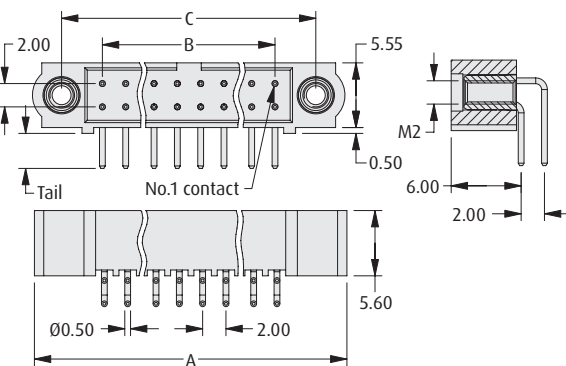


CALCULATION

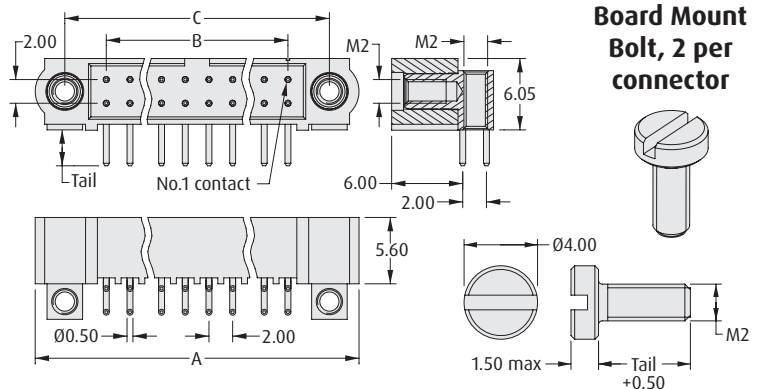
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 X X XX XX

SERIES CODE

3	With Jackscrews
4	With Board Mount
5	Without Jackscrews

0	3mm Tails
1	4.5mm Tails

FINISH

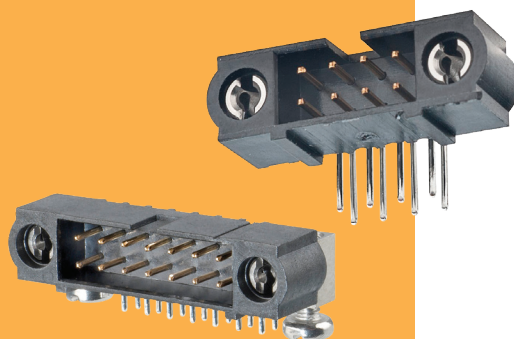
05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

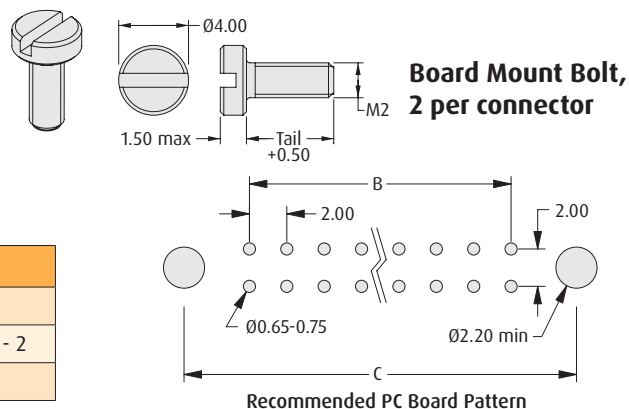
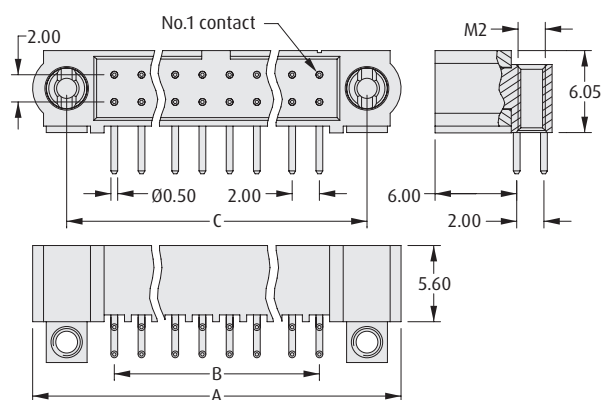
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

DATA-MATE J-TEK



101LOK WITH BOARD MOUNT



A	B + 12
B	Total no. of contacts - 2
C	B + 7

HOW TO ORDER

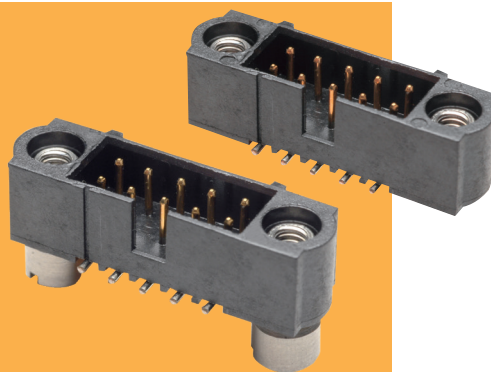
05	Gold
42	Gold

HARWIN

Datamate J-Tek Connectors

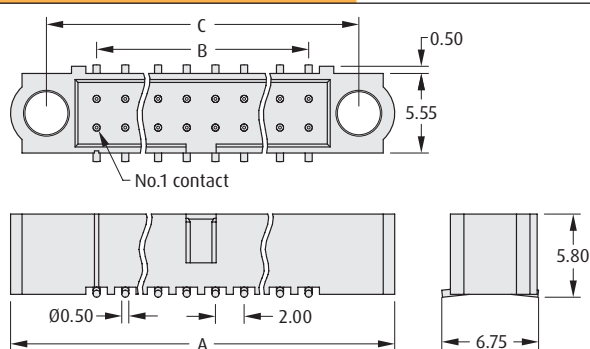
Male Vertical Surface Mount

- ❖ Gull wing SMT tails simplify inspection process.
- ❖ Board Mount provides PCB strain relief.
- ❖ Optional pick and place cap.
- ❖ Mates with female Datamate J-Tek connectors with compatible jackscrews.
- ❖ Contact datamate@harwin.com for tape and reel options.



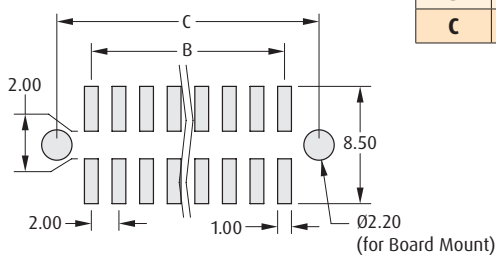
DATAMATE J-TEK

WITHOUT JACKSCREWS



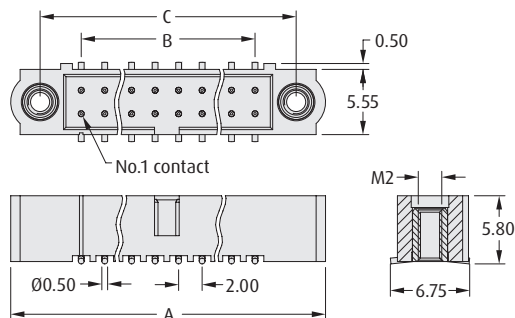
CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

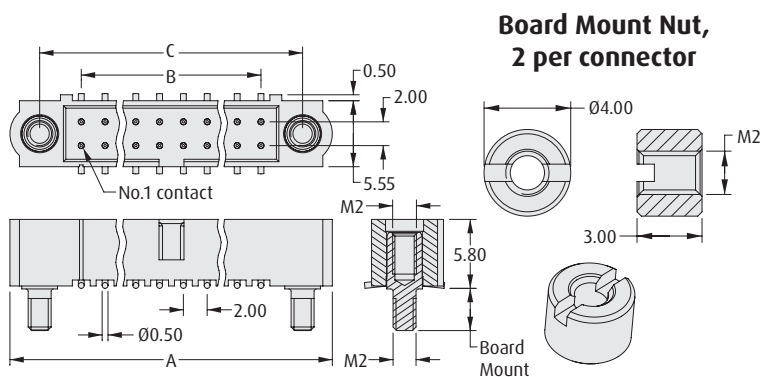


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 XX XX XX P

SERIES CODE

TYPE

02	With Jackscrews
12	With 3.5mm Board Mount
13	With 5mm Board Mount
22	Without Jackscrews

PICK AND PLACE CAP

BLANK	No Cap
P	Pick & Place Cap

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

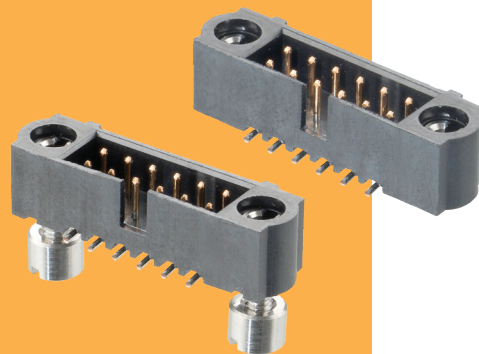
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

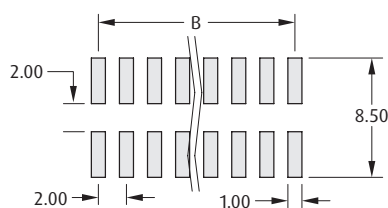
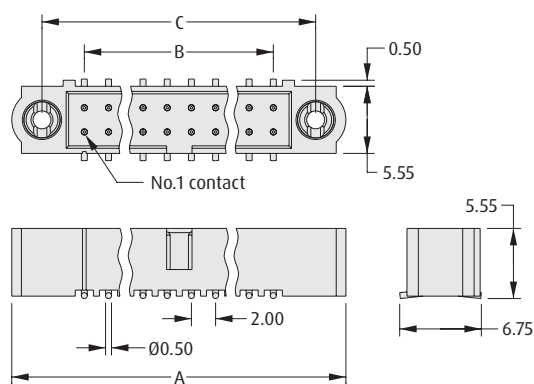
Datamate J-Tek Connectors

Male Vertical Surface Mount 101Lok

- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors with applicable 101Lok fixings.
- ❖ Board Mount provides PCB strain relief.
- ❖ Gull wing SMT tails simplify inspection process.
- ❖ Contact datamate@harwin.com for tape and reel options.



101LOK

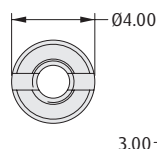
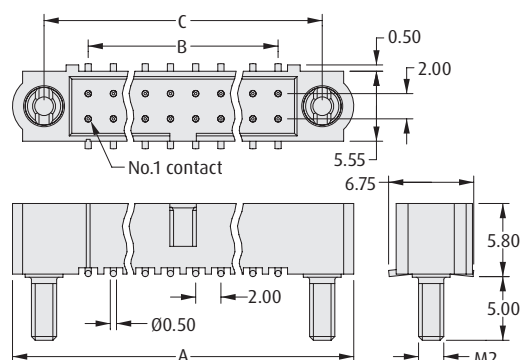


Recommended PC Board Pattern

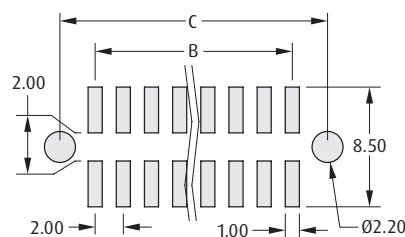
CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

101LOK WITH BOARD MOUNT



Board Mount Nut,
2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 5S1 XX XX MX

SERIES CODE

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

MC	101Lok
ME	101Lok with 5mm Board Mount

FINISH

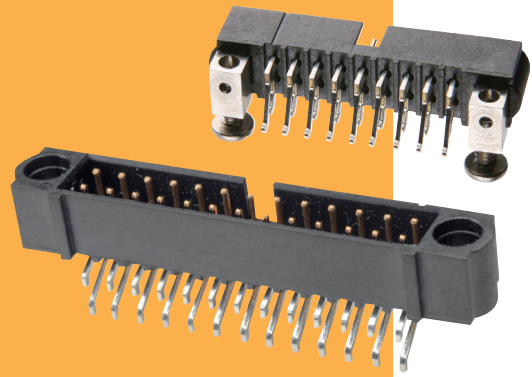
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

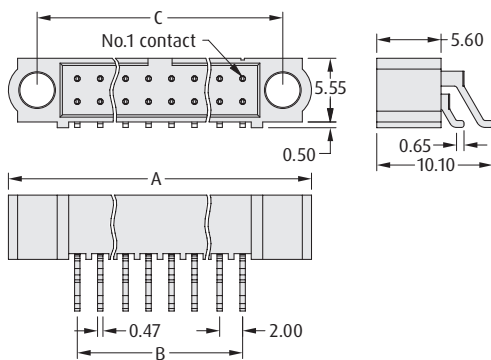
Male Horizontal Surface Mount

- ❑ Stamped contact ensures co-planarity.
- ❑ Board Mount provides PCB strain relief.
- ❑ Mates with female Datamate J-Tek connectors with compatible jackscrews.
- ❑ Contact datamate@harwin.com for tape and reel options.



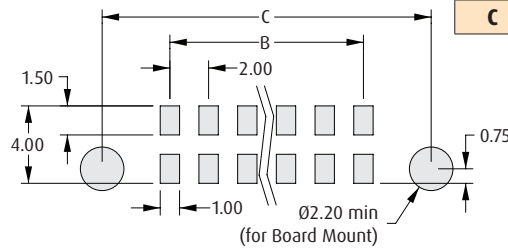
DATAMATE J-TEK

WITHOUT JACKSCREWS



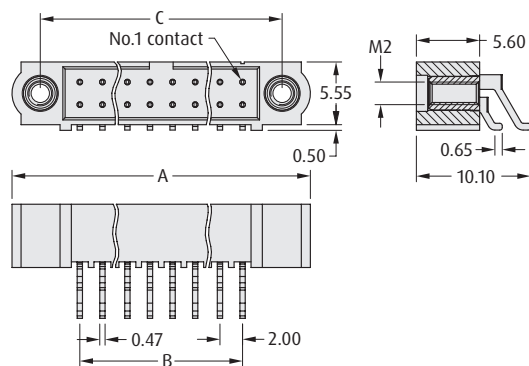
CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

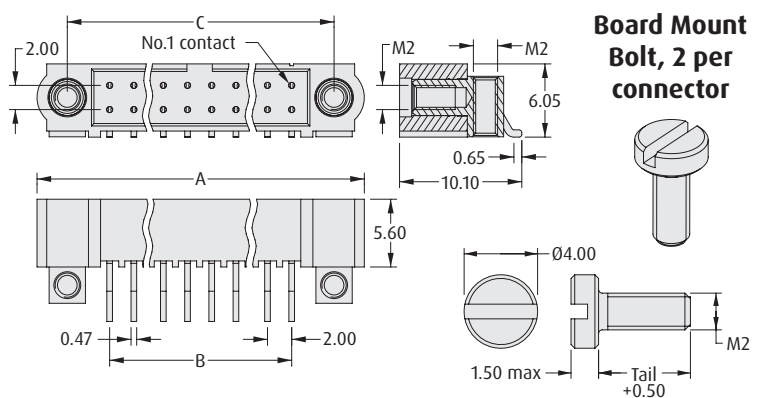


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



Board Mount Bolt, 2 per connector

HOW TO ORDER

M80 - 5 XX XX XX

SERIES CODE

TYPE	
32	With Jackscrews
42	With 3.5mm Board Mount
43	With 5mm Board Mount
52	Without Jackscrews

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

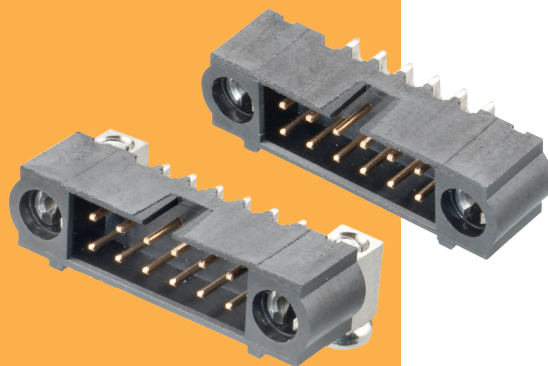
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

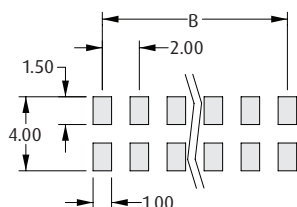
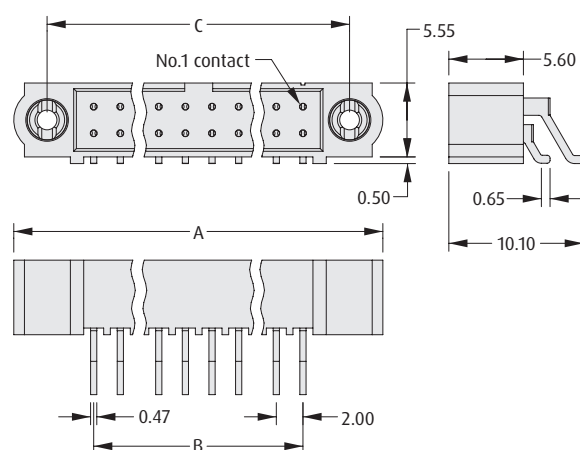
Datamate J-Tek Connectors

Male Horizontal Surface Mount 101Lok

- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors with applicable 101Lok fixings.
- ❖ Board Mount provides PCB strain relief.
- ❖ Stamped contact ensures co-planarity.
- ❖ Contact datamate@harwin.com for tape and reel options.



101LOK

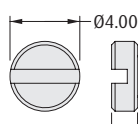
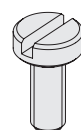
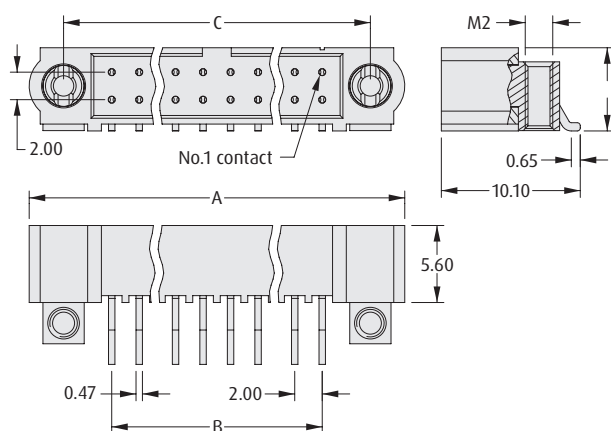


Recommended PC Board Pattern

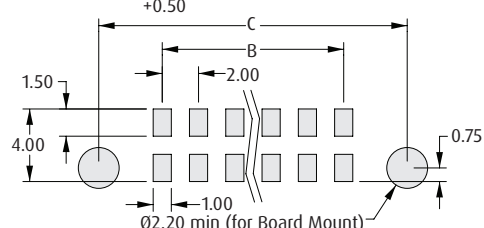
CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

101LOK WITH BOARD MOUNT



Board Mount Bolt, 2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M80 - 5S2 XX XX MX

SERIES CODE

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

MC	101Lok
MD	101Lok with Board Mount

FINISH

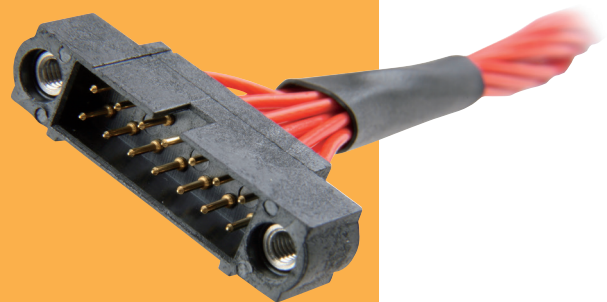
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Male Crimp Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Jackscrews are assembled where specified.
- ❖ Crimp contacts supplied loose.
- ❖ Crimp contacts are rear insertable and replaceable.
- ❖ Spare contacts are available.



DATAMATE J-TEK

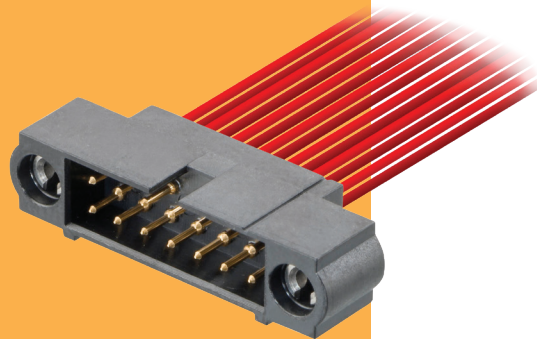
WITHOUT JACKSCREWS		WITH JACKSCREWS															
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>				CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7						
CALCULATION																	
A	B + 12																
B	Total no. of contacts - 2																
C	B + 7																
TOOLS		WIRE STRIPPING DETAILS															
Recommended Crimp Tool - M22520/2-01 Positioner - Z80-193 Contact Insertion/Removal Tool - Z80-280 ❖ Spare contacts shown on following pages. ❖ Instruction sheets available at www.harwin.com/instructions.																	
HOW TO ORDER																	
M80 - 5XX XX 05																	
<table><tr><th colspan="2">SERIES CODE</th></tr><tr><td>570</td><td>Large Bore (22 AWG), without Jackscrews</td></tr><tr><td>571</td><td>Small Bore (24-28 AWG), without Jackscrews</td></tr><tr><td>560</td><td>Large Bore (22 AWG), with Jackscrews</td></tr><tr><td>561</td><td>Small Bore (24-28 AWG), with Jackscrews</td></tr></table>		SERIES CODE		570	Large Bore (22 AWG), without Jackscrews	571	Small Bore (24-28 AWG), without Jackscrews	560	Large Bore (22 AWG), with Jackscrews	561	Small Bore (24-28 AWG), with Jackscrews	<table><tr><th colspan="2">FINISH</th></tr><tr><td>05</td><td>Gold</td></tr></table>		FINISH		05	Gold
SERIES CODE																	
570	Large Bore (22 AWG), without Jackscrews																
571	Small Bore (24-28 AWG), without Jackscrews																
560	Large Bore (22 AWG), with Jackscrews																
561	Small Bore (24-28 AWG), with Jackscrews																
FINISH																	
05	Gold																
		<table><tr><th>TOTAL NO. OF CONTACTS</th></tr><tr><td>04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50</td></tr></table>		TOTAL NO. OF CONTACTS	04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50												
TOTAL NO. OF CONTACTS																	
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50																	

All dimensions in mm.

Datamate J-Tek Connectors

Male Crimp Kit 101Lok

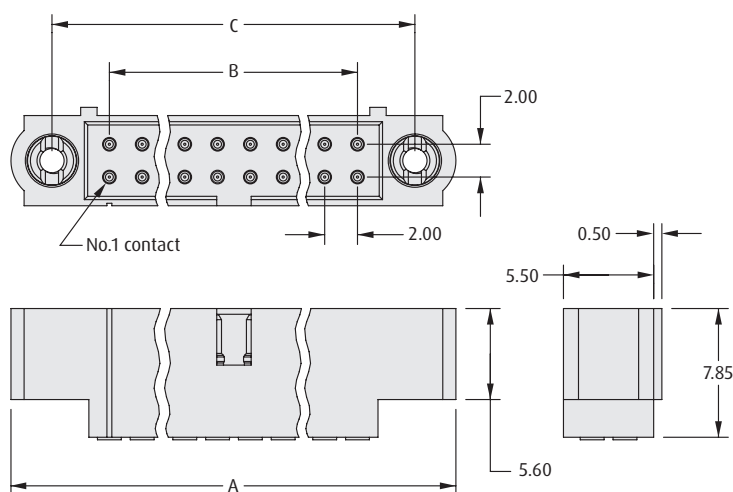
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors with applicable 101Lok fixings.
- ❖ Crimp contacts supplied loose.



101LOK

CALCULATION

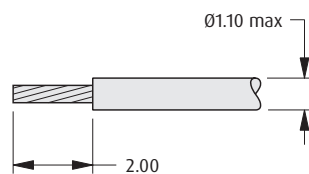
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



TOOLS

- Recommended Crimp Tool** - M22520/2-01
Positioner - Z80-193
Contact Insertion/Removal Tool - Z80-280
- ❖ Spare contacts shown on following pages.
 - ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 5 X1 XX 05 MC

SERIES CODE

TYPE

C1	Small Bore (24-28 AWG)
D1	Large Bore (22 AWG)

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

JACKSCREW

MC 101Lok

FINISH

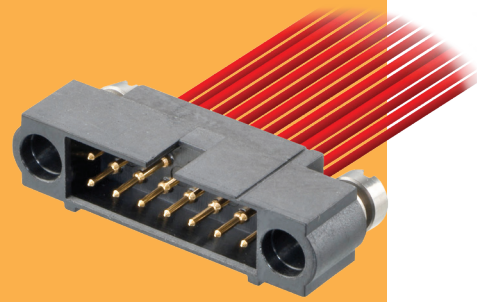
05 Gold

All dimensions in mm.

Datamate J-Tek Connectors

Male Crimp Kit Reverse Fix

- ❖ Allows for further flexibility in system design.
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Crimp contacts are rear insertable and replaceable.
- ❖ Mates with female Datamate J-Tek connectors with compatible Reverse Fix jackscrews.



DATAMATE J-TEK

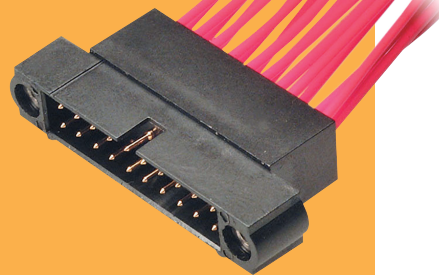
REVERSE FIX		CALCULATION													
		A	B + 12												
		B	Total no. of contacts - 2												
		C	B + 7												
TOOLS		WIRE STRIPPING DETAILS													
Recommended Crimp Tool - M22520/2-01 Positioner - Z80-193 Contact Insertion/Removal Tool - Z80-280 ❖ Spare contacts shown on following pages. ❖ Instruction sheets available at www.harwin.com/instructions.															
HOW TO ORDER															
M80 - 5XX XX 05															
SERIES CODE <table><tr><th colspan="2">TYPE</th></tr><tr><td>562</td><td>Large Bore (22 AWG), Slotted Jackscrew</td></tr><tr><td>563</td><td>Small Bore (24-28 AWG), Slotted Jackscrew</td></tr><tr><td>582</td><td>Large Bore (22 AWG), Hex Socket Jackscrew</td></tr><tr><td>583</td><td>Small Bore (24-28 AWG), Hex Socket Jackscrew</td></tr></table>		TYPE		562	Large Bore (22 AWG), Slotted Jackscrew	563	Small Bore (24-28 AWG), Slotted Jackscrew	582	Large Bore (22 AWG), Hex Socket Jackscrew	583	Small Bore (24-28 AWG), Hex Socket Jackscrew	FINISH <table><tr><td>05</td><td>Gold</td></tr></table>		05	Gold
TYPE															
562	Large Bore (22 AWG), Slotted Jackscrew														
563	Small Bore (24-28 AWG), Slotted Jackscrew														
582	Large Bore (22 AWG), Hex Socket Jackscrew														
583	Small Bore (24-28 AWG), Hex Socket Jackscrew														
05	Gold														
		TOTAL NO. OF CONTACTS 04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50													

All dimensions in mm.

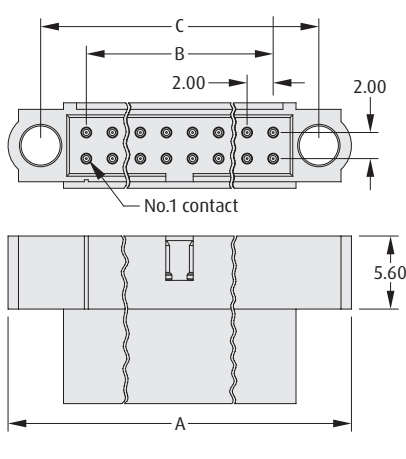
Datamate J-Tek Connectors

Male Crimp Kit Extended Wall

- Extended Wall Datamate allows back potting to be performed.
- Fully shrouded contacts.
- Large Bore 22 AWG, Small Bore 24 – 28 AWG.
- Part numbers are for a complete kit of a housing and the applicable number of contacts.
- Crimp contacts are rear insertable and replaceable.
- Crimp contacts supplied loose.



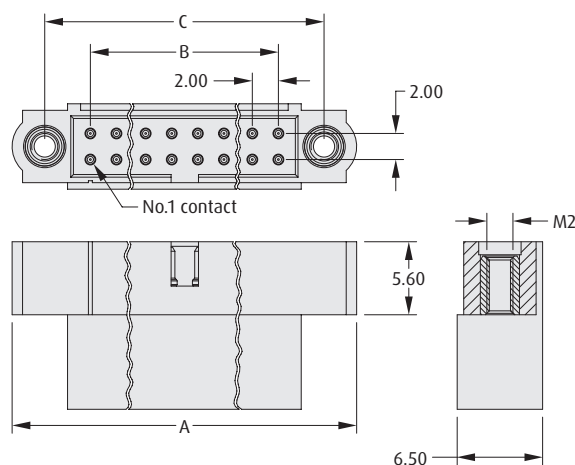
WITHOUT JACKSCREWS



CALCULATION

A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WITH JACKSCREWS

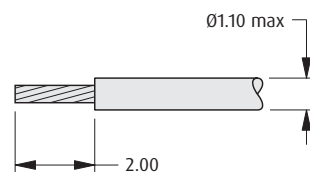


TOOLS

Recommended Crimp Tool - M22520/2-01
Positioner - Z80-193
Contact Insertion/Removal Tool - Z80-280

- Spare contacts shown on following pages.
- Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

SERIES CODE

TYPE

575	Large Bore (22 AWG), without Jackscrews
576	Small Bore (24-28 AWG), without Jackscrews
565	Large Bore (22 AWG), with Jackscrews
566	Small Bore (24-28 AWG), with Jackscrews

M80 - 5XX XX 05 X

WALL SIZE

BLANK	Wall = 5mm
A	Wall = 1mm

FINISH

05	Gold
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TOTAL NO. OF CONTACTS

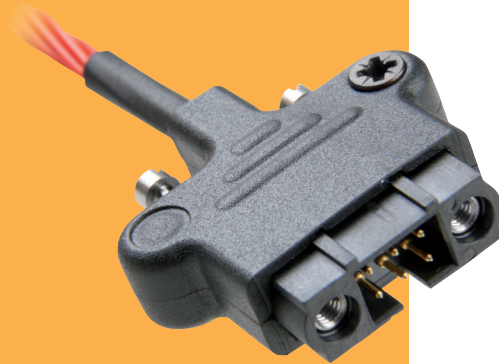
06, 10, 14, 20, 26, 34

All dimensions in mm.

Datamate J-Tek Connectors

Male Crimp with Hood

- ❖ Supplied as a complete kit: jackscrews assembled to housing; hood, contacts and assembly screws supplied loose.
- ❖ Provides strain relief by preventing cable bending at the rear of the connector, and also the option of inserting a cable tie to reduce pull strain.

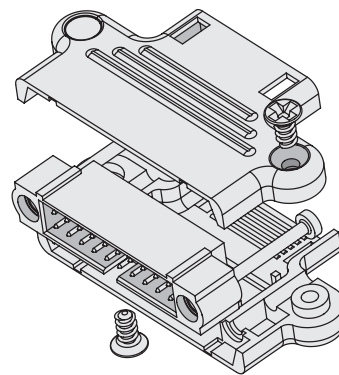
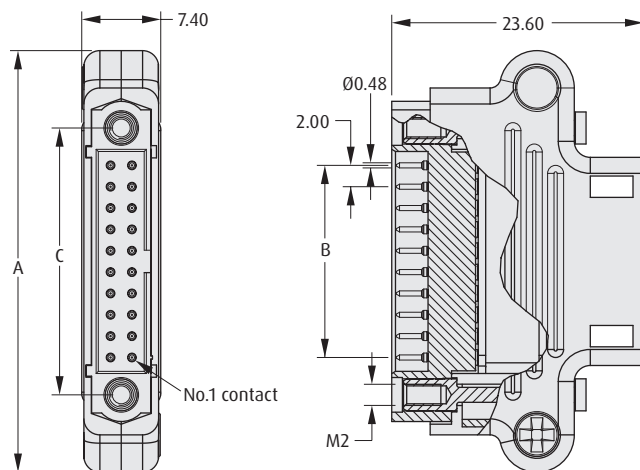


DATAMATE J-TEK

MALE

CALCULATION

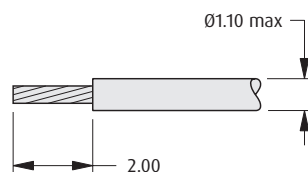
A	$B + 21.5$
B	Total no. of contacts - 2
C	$B + 7$



TOOLS

Recommended Crimp Tool - M22520/2-01
Positioner - Z80-193
Contact Insertion/Removal Tool - Z80-280
 ❖ Spare contacts shown on following pages.
 ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 94 X XX 05

SERIES CODE

TYPE

2	Small Bore (24-28 AWG)
3	Large Bore (22 AWG)

FINISH

05	Gold
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TOTAL NO. OF CONTACTS

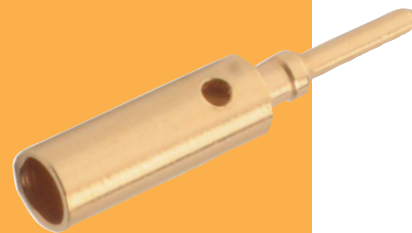
06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

Datamate J-Tek Connectors

Spare Male Crimp Contacts

- Barrel Crimp Contacts are supplied with the connectors - see previous page. Use the order code for extra spare crimps.



CRIMP CONTACTS	WIRE STRIPPING DETAILS								
Large Bore (22 AWG)									
Small Bore (24 to 28 AWG)	TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - Z80-193 Contact Insertion/Removal Tool - Z80-280 ❖ Instruction sheets available at www.harwin.com/instructions.								
HOW TO ORDER									
M80 - 19 X 00 05 SERIES CODE <table border="1"> <thead> <tr> <th colspan="2">TYPE</th></tr> </thead> <tbody> <tr> <td>4</td><td>Large Bore (22 AWG)</td></tr> <tr> <td>5</td><td>Small Bore (24-28 AWG)</td></tr> </tbody> </table> FINISH <table border="1"> <tbody> <tr> <td>05</td><td>Gold</td></tr> </tbody> </table>		TYPE		4	Large Bore (22 AWG)	5	Small Bore (24-28 AWG)	05	Gold
TYPE									
4	Large Bore (22 AWG)								
5	Small Bore (24-28 AWG)								
05	Gold								

All dimensions in mm.

Datamate J-Tek Connectors

Male Metal Backshell

- ❖ Supplied as an accessory, to be used with existing male connectors.
- ❖ Can be fitted to either male vertical PCB connectors with board mount, or male cable connectors with panel mount jackscrews.
- ❖ Gives 360 degree shielding when mounted to a conductive panel and mated to a compatible female connector with metal backshell.

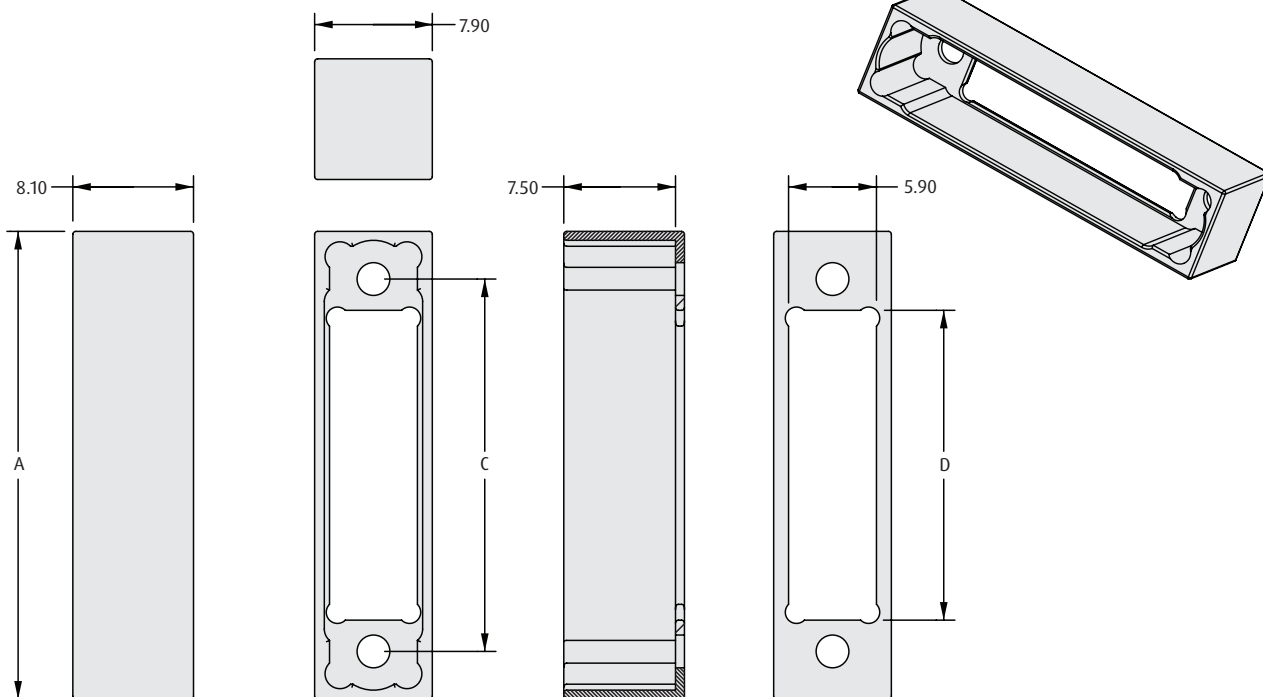


DATAMATE J-TEK

MALE

CALCULATION

A	$B + 13.7$
B	Equivalent no. of contacts - 2
C	$B + 7$
D	$B + 2.8$



HOW TO ORDER

M80 - 906 XX 02

SERIES CODE

FINISH

02 Nickel

EQUIVALENT NO. OF SIGNAL CONTACTS

08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32

All dimensions in mm.

Datamate J-Tek 3-Row Specification

Materials

Mouldings:	Glass-filled thermoplastic UL94V-0
Female contacts:	Brass shell, with Beryllium Copper inner contact
Male contacts:	Phosphor bronze
Finish:	Gold

Electrical

Current

Individual contacts in isolation:	3.3A max (at 25°C)
	2.6A max (at 85°C)
All contacts simultaneously:	3.0A max (at 25°C)
	2.2A max (at 85°C)

Working voltage

At sea level 1013 mbar:	800V DC or AC _{rms}
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Voltage proof

At sea level 1013 mbar:	1200V DC or AC _{rms}
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Contact resistance

Initial:	20mΩ max
After conditioning:	25mΩ max

Insulation resistance

Initial:	1000MΩ min
After conditioning:	100MΩ min

Mechanical

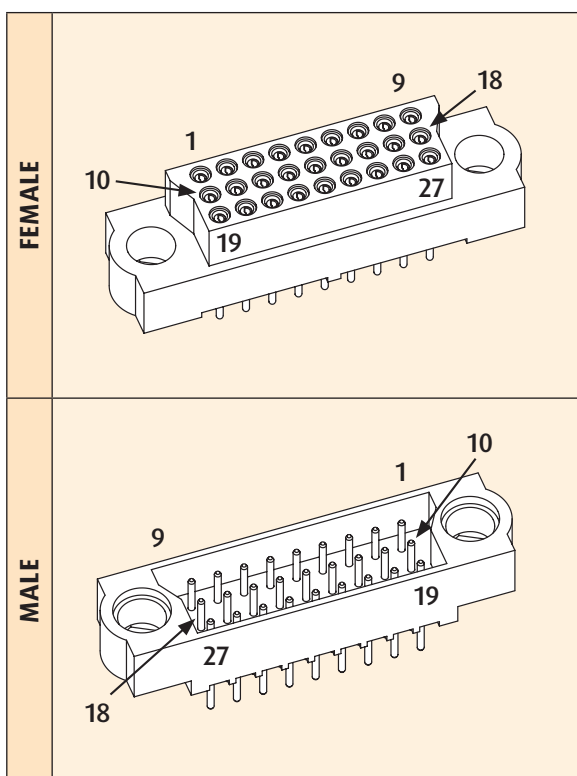
Durability:	500 operations
Insertion force (max):	1.0N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 28 AWG BS 3G 210 Type A or MIL-DTL-16878/6 Type ET

Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity:	10Hz to 2000Hz, 0.75mm, 98m/s ² (10G), duration 6h
*Bump severity:	390m/s ² (40G), 4000 ±10 bumps
*Shock severity:	981m/s ² (100G) for 6ms
*Acceleration severity:	490m/s ² (50G)

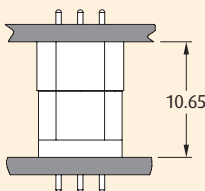
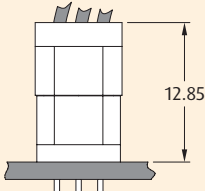
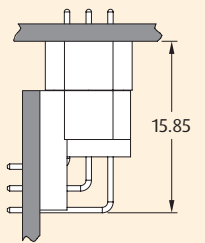
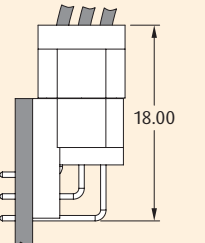
* Tested with connectors with Jackscrews.

Pin Numbering



All dimensions in mm.

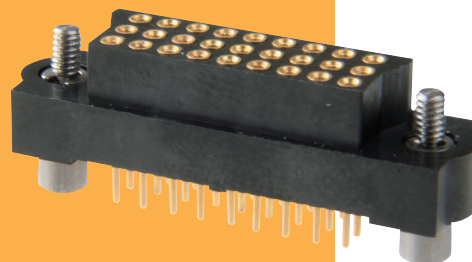
Mating Profiles

		FEMALE	
		VERTICAL PC TAIL	CRIMP
MALE	VERTICAL PC TAIL		
	HORIZONTAL PC TAIL		

Datamate J-Tek 3-Row Connectors

Female Vertical PC Tail

- ❖ Low-force 4-finger Beryllium Copper contact clip.
- ❖ Fully shrouded contacts.
- ❖ Polarised mouldings.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ Mates with all Datamate 3-Row male connectors with compatible jackscrews.

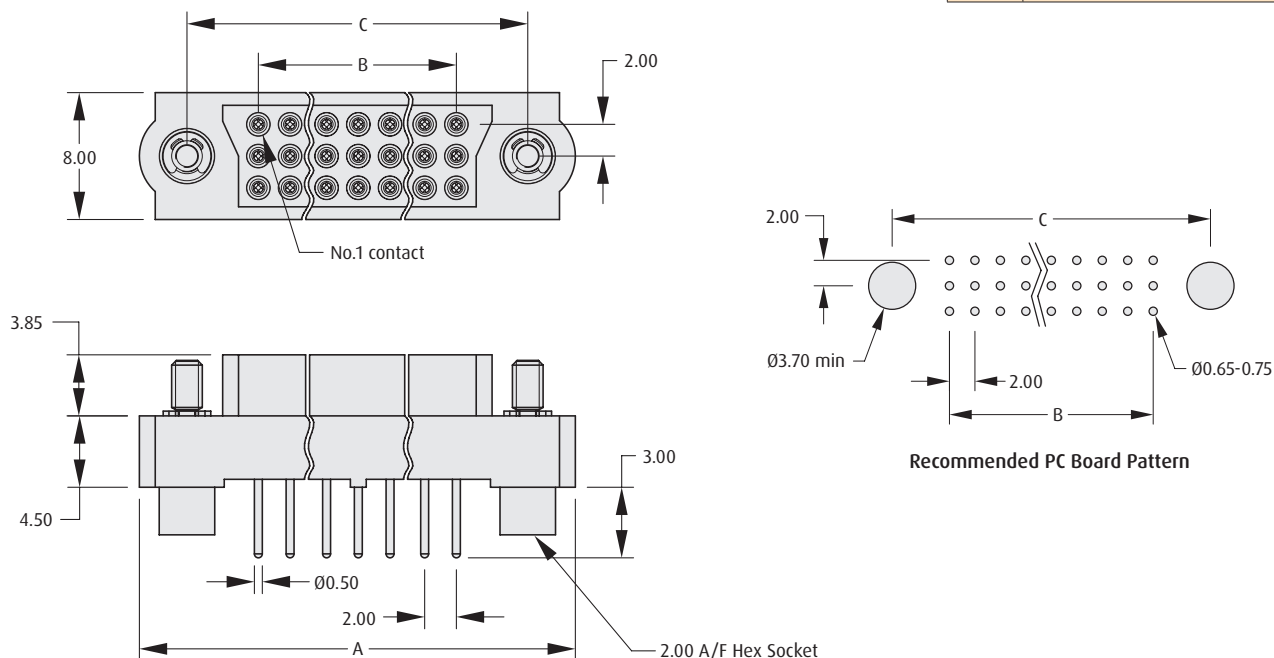


DATAMATE J-TEK 3-ROW

REVERSE FIX

CALCULATION

A	$B + 15$
B	$(\text{Total no. of contacts} - 3) \times 2/3$
C	$B + 9$



HOW TO ORDER

M83 - LF T1 F2 N XX - 0000 - 000

SERIES CODE

TYPE

T1 3mm Tail

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

JACKSCREW

F2

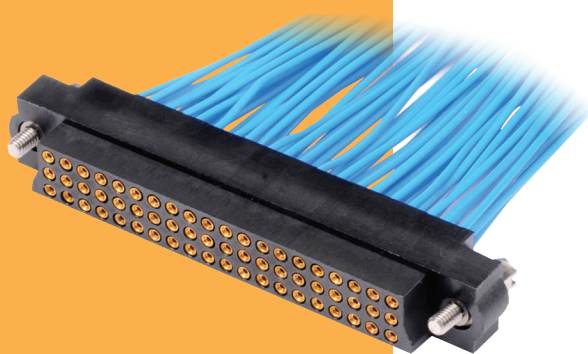
Hex Socket Jackscrew

All dimensions in mm.

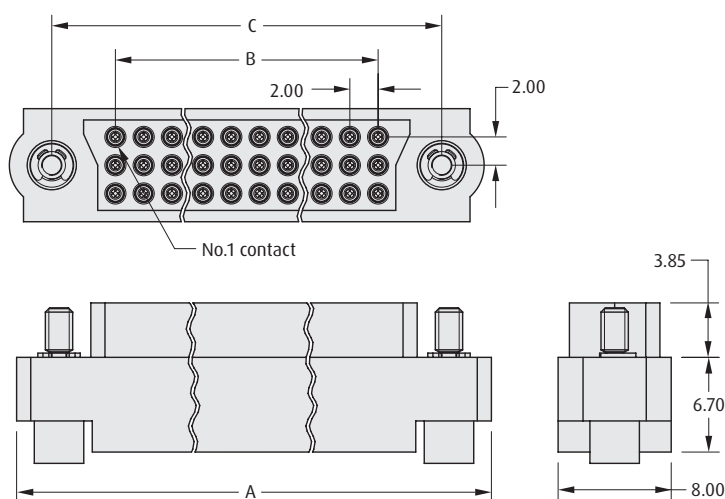
Datamate J-Tek 3-Row Connectors

Female Crimp Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Jackscrews are assembled where specified.
- ❖ Crimp contacts are rear insertable.
- ❖ Low-force 4-finger Beryllium Copper contact clip.
- ❖ Spare contacts are available.



FEMALE CRIMP



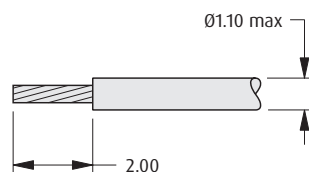
CALCULATION

A	B + 15
B	(Total no. of contacts - 3) x 2/3
C	B + 9

TOOLS

Recommended Crimp Tool - M22520/2-01
Positioner - T5747
Contact Insertion/Removal Tool - Z80-280
 ❖ Spare contacts shown on following pages.
 ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M83 - LF X1 F2 N XX - 0000 - 000

SERIES CODE

TYPE

C1	Small Bore (24-28 AWG)
D1	Large Bore (22 AWG)

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

JACKSCREW

F2 Hex Socket Jackscrew

All dimensions in mm.

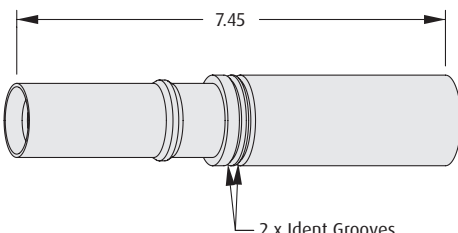
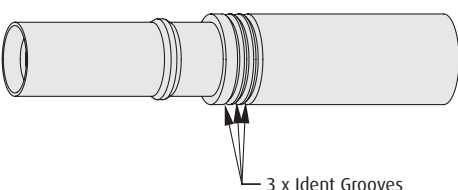
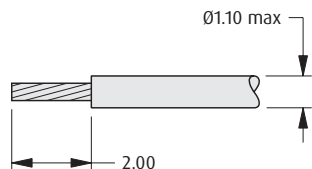
Datamate J-Tek 3-Row Connectors

Spare Female Crimp Contacts

- ❖ Barrel Crimp Contacts are supplied with the connectors - see previous page. Use the order code for extra spare crimps.



DATAMATE J-TEK 3-ROW

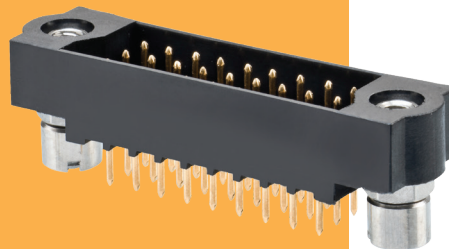
CRIMP CONTACTS	WIRE STRIPPING DETAILS								
Large Bore (22 AWG)  7.45 2 x Ident Grooves Small Bore (24 to 28 AWG)  3 x Ident Grooves	 Ø1.10 max 2.00 TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280 ❖ Instruction sheets available at www.harwin.com/instructions.								
HOW TO ORDER									
SERIES CODE <table border="1" data-bbox="146 1684 470 1801"> <thead> <tr> <th colspan="2">TYPE</th></tr> </thead> <tbody> <tr> <td>011</td><td>Large Bore (22 AWG)</td></tr> <tr> <td>013</td><td>Small Bore (24-28 AWG)</td></tr> </tbody> </table>	TYPE		011	Large Bore (22 AWG)	013	Small Bore (24-28 AWG)	M83 - 01X 00 05 FINISH <table border="1" data-bbox="1318 1667 1471 1745"> <tbody> <tr> <td>05</td><td>Gold</td></tr> </tbody> </table>	05	Gold
TYPE									
011	Large Bore (22 AWG)								
013	Small Bore (24-28 AWG)								
05	Gold								

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

Male Vertical PC Tail

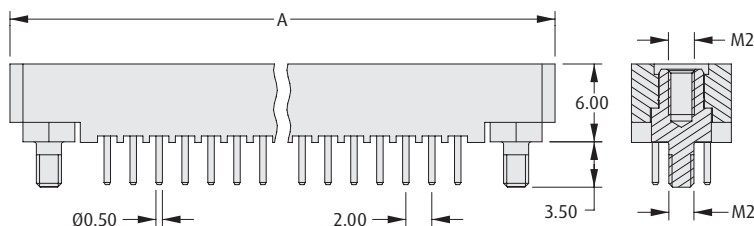
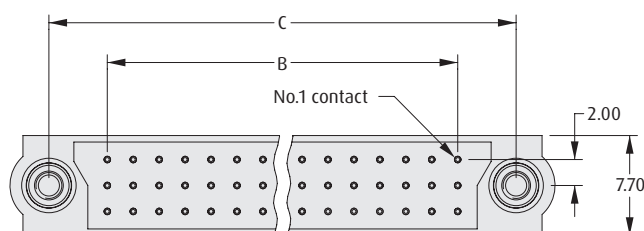
- Board Mount nuts to be tightened to a maximum torque of 23cmN.
- Fully shrouded contacts.
- Polarised mouldings.
- All contacts are gold finish for full RoHS compliance.
- Mates with all Datamate 3-Row female connectors with compatible jackscrews.



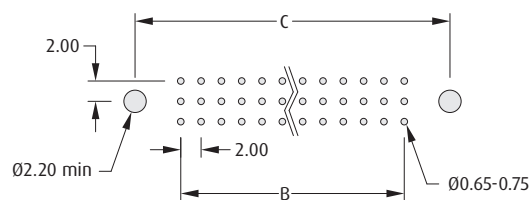
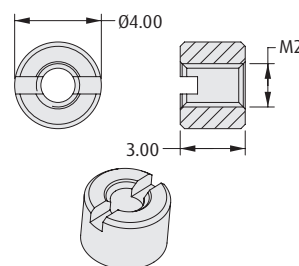
MALE VERTICAL

CALCULATION

A	B + 15
B	(Total no. of contacts - 3) x 2/3
C	B + 9



Board Mount Nut, 2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M83 - LM T1 M2 N XX - 0000 - 000

SERIES CODE

TYPE

T1 3mm Tail

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

JACKSCREW

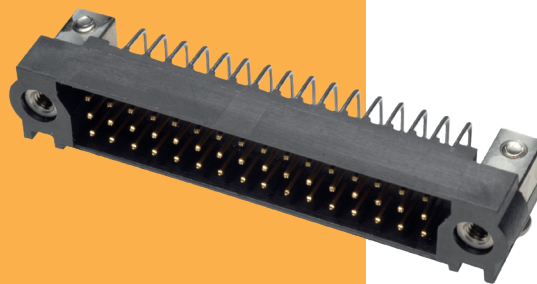
M2 Board Mount Jackscrew

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

Male Horizontal PC Tail

- ❖ Board Mount screws to be tightened to a maximum torque of 23cmN.
- ❖ Suitable for motherboard/daughterboard configurations.
- ❖ Fully shrouded contacts, polarised mouldings.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ Mates with all Datamate 3-Row female connectors with compatible jackscrews.

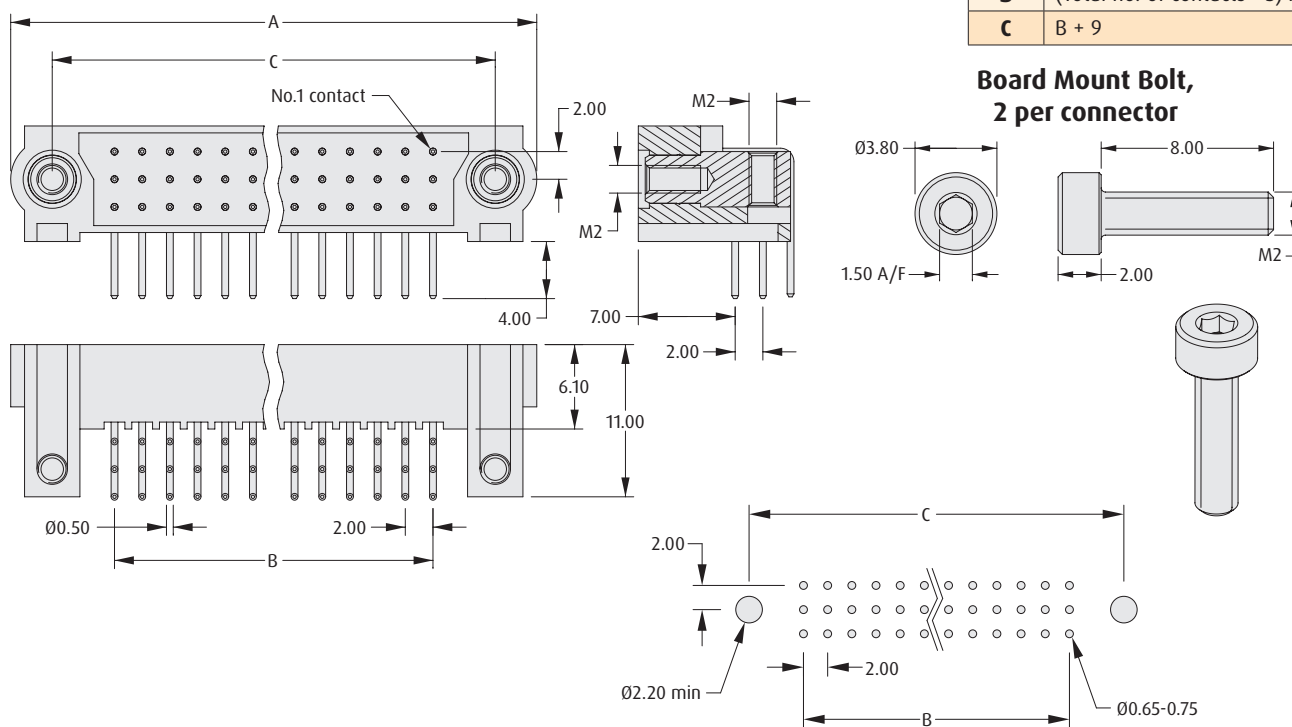


DATAMATE J-TEK 3-ROW

MALE HORIZONTAL

CALCULATION

A	B + 15
B	(Total no. of contacts - 3) x 2/3
C	B + 9



**Board Mount Bolt,
2 per connector**

Recommended PC Board Pattern

HOW TO ORDER

M83 - LM L3 M7 N XX - 0000 - 000

SERIES CODE

TYPE

L3

4mm Tail

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

JACKSCREW

M7

Hex Socket Board Mount

All dimensions in mm.

Datamate L-Tek Specification

Materials

Mouldings:	Glass-filled thermoplastic UL94V-0
Female contacts:	Brass shell, with Beryllium Copper inner contact
Male contacts:	Copper alloy
Finish:	See individual pages

Electrical

Current	
Individual contacts in isolation:	3.3A max (at 25°C) 2.6A max (at 85°C)
All contacts simultaneously:	3.0A max (at 25°C) 2.2A max (at 85°C)

Working voltage	
At sea level 1013 mbar:	800V DC or AC _{rms}

Voltage proof	
At sea level 1013 mbar:	1,200V DC or AC _{rms}

Contact resistance	
Initial:	20mΩ max
After conditioning:	25mΩ max

Insulation resistance	
Initial:	1,000MΩ min
After conditioning:	100MΩ min

Mechanical

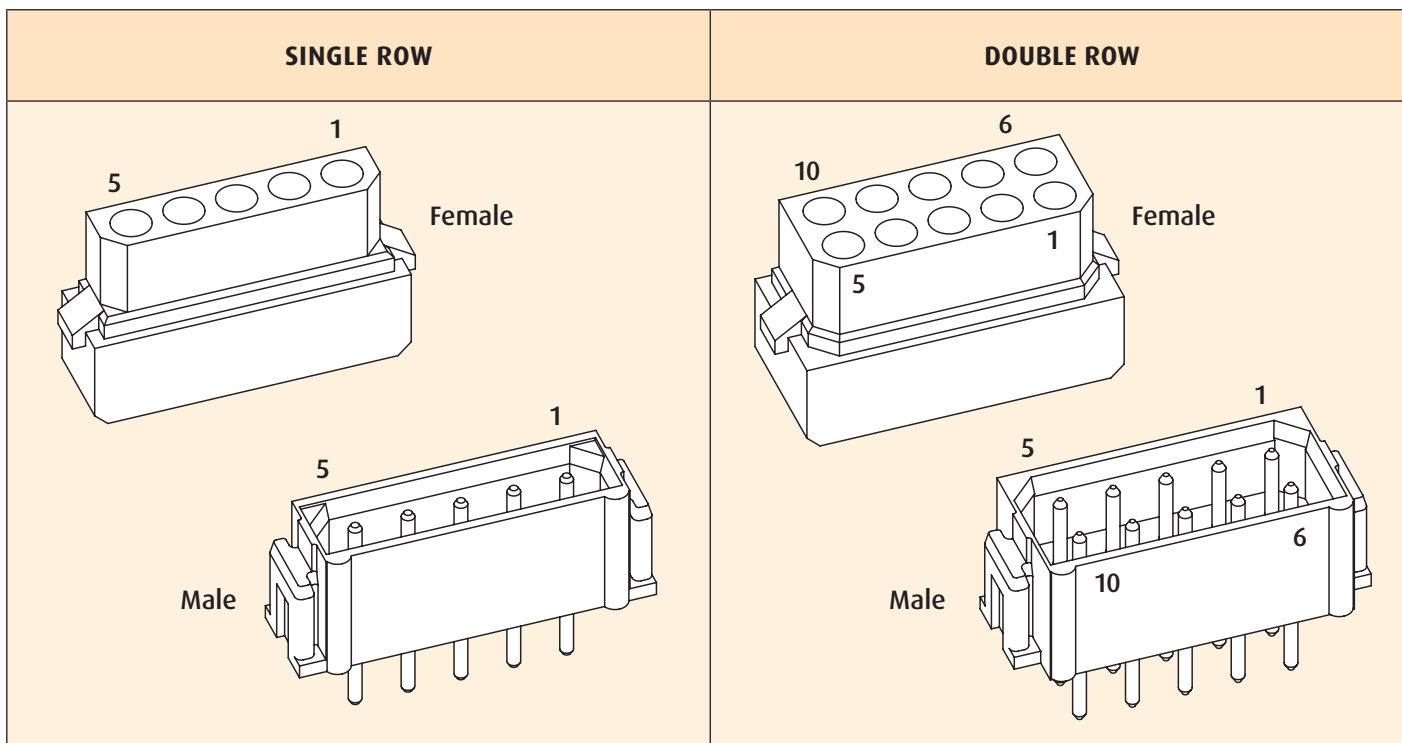
Durability	
Standard L-Tek:	500 operations
Trio-Tek:	400 operations
Insertion force (max):	2.8N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 32 AWG BS 3G 210 Type A, MIL-W-16878

Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity:	10Hz to 2000Hz, 0.75mm, 98m/s ² (10G), duration 6h
*Bump severity:	390m/s ² (40G), 4000 ±10 bumps
*Shock severity:	981m/s ² (100G) for 6ms
*Acceleration severity:	490m/s ² (50G)

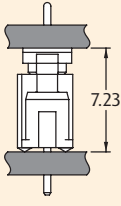
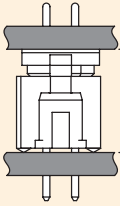
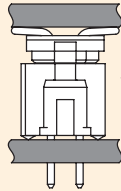
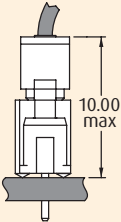
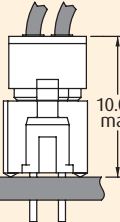
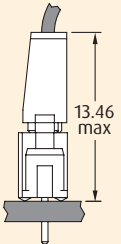
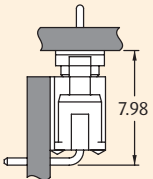
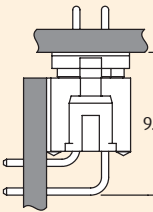
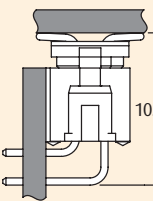
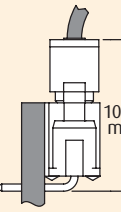
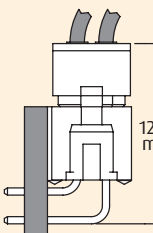
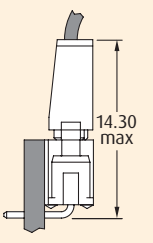
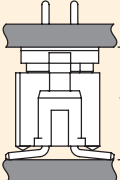
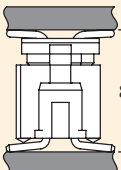
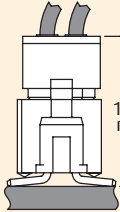
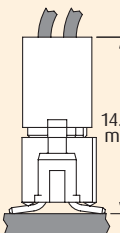
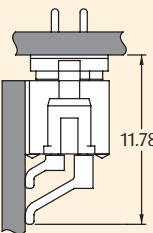
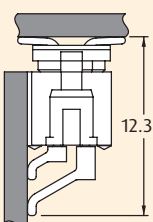
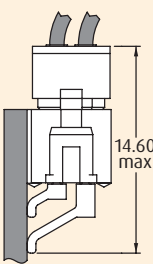
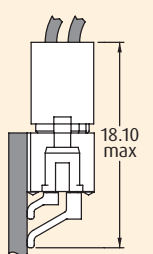
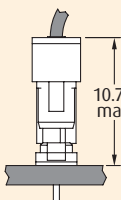
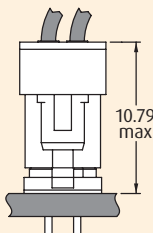
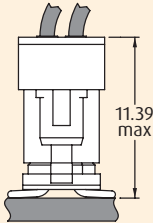
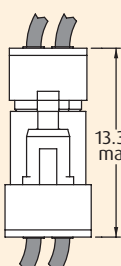
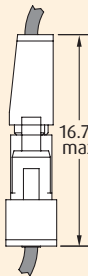
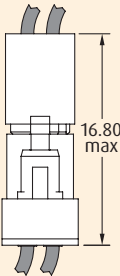
* Tested with latched connectors.

Pin Numbering



All dimensions in mm.

Datamate L-Tek Mating Profiles

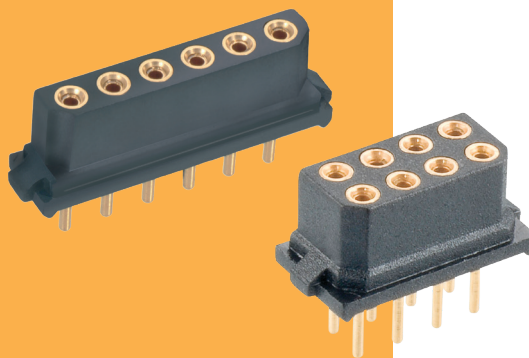
		FEMALE					
		VERTICAL PC TAIL		VERTICAL SMT	CRIMP		CRIMP (TRIO-TEK)
		SIL	DIL	DIL	SIL	DIL	SIL
MALE	VERTICAL PC TAIL	 7.23	 7.23	 7.83	 10.00 max	 10.00 max	 13.46 max
	HORIZONTAL PC TAIL	 7.98	 9.98	 10.58	 10.85 max	 12.95 max	 14.30 max
	VERTICAL SMT		 7.93	 8.53		 10.75 max	 14.25 max
	HORIZONTAL SMT		 11.78	 12.38		 14.60 max	 18.10 max
	CRIMP	 10.79 max	 10.79 max	 11.39 max	 13.30 max	 13.30 max	 16.75 max
							 16.80 max

All dimensions in mm.

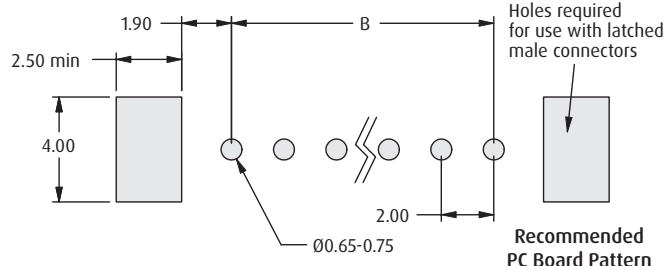
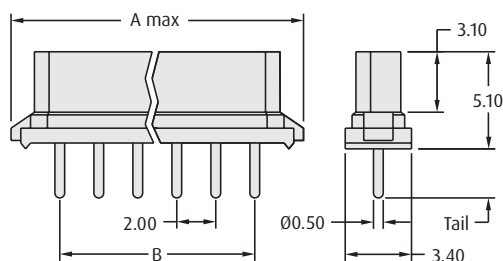
Datamate L-Tek Connectors

Female Vertical PC Tail

- Polarised mouldings.
- Dummy contacts are available for additional polarisation, use **order code M80-023**.



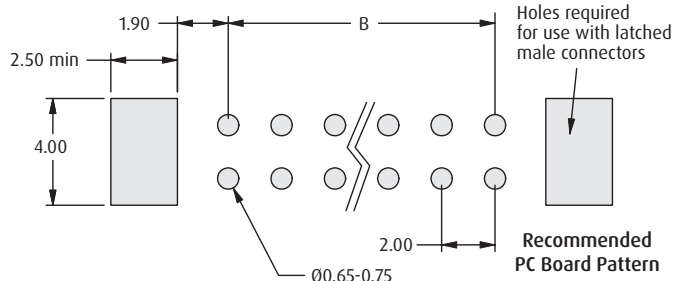
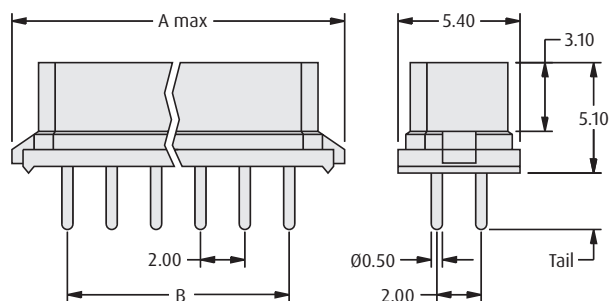
SINGLE ROW



CALCULATION

A	$B + 5.15$
B	$(\text{Total no. of contacts} - 1) \times 2$

DOUBLE ROW



CALCULATION

A	$B + 5.15$
B	$\text{Total no. of contacts} - 2$

HOW TO ORDER

M80 - XXX XX XX

SERIES CODE

TYPE

840	Single Row (3mm tail)
850	Double Row (3mm tail)
790	Single Row (4.5mm tail)
770	Double Row (4.5mm tail)

FINISH

42	Gold + Tin
45	Gold

TOTAL NO. OF CONTACTS

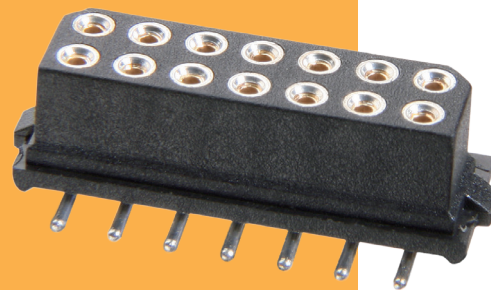
02 to 07, 17, 22	Single Row
04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44	Double Row

All dimensions in mm.

Datamate L-Tek Connectors

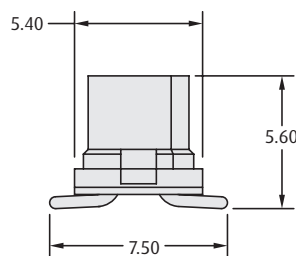
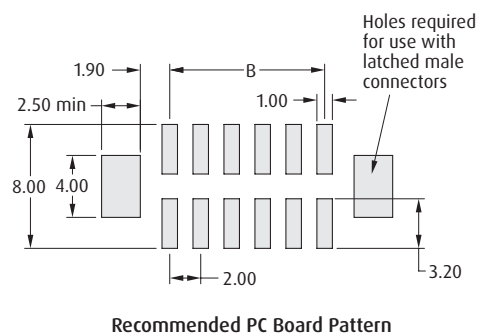
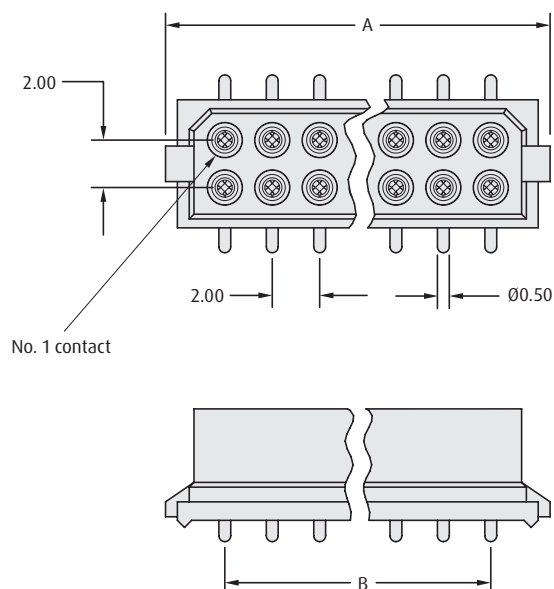
Female Vertical Surface Mount

- ❖ Optional pick and place cap.
- ❖ Contact datamate@harwin.com for tape & reel options.
- ❖ Gull wing SMT tails simplify inspection process.



DATAMATE L-TEK

DOUBLE ROW



CALCULATION

A	$B + 5.15$
B	Total no. of contacts - 2

HOW TO ORDER

M80 - 681 XX XX P

SERIES CODE

TOTAL NO. OF CONTACTS

04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44

PICK AND PLACE CAP

BLANK	No cap
P	Pick and place cap

FINISH

42	Gold + Tin
45	Gold

All dimensions in mm.

Datamate L-Tek Connectors

Female Crimp Kit

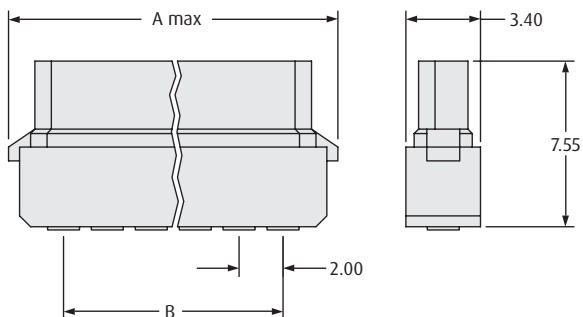
- Part numbers are for a complete kit of a housing and the applicable number of contacts.
- Contacts are rear insertable.
- Spare contacts are available – see the following page.



SINGLE ROW

CALCULATION

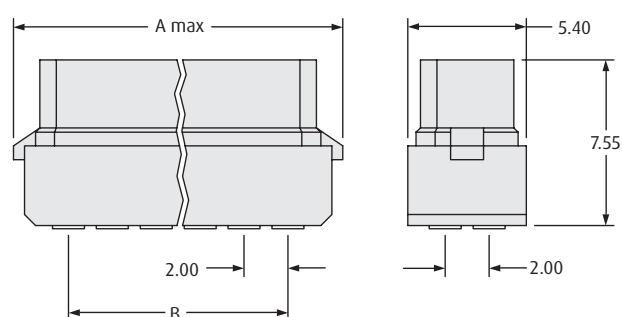
A	$B + 5.15$
B	$(\text{Total no. of contacts} - 1) \times 2$



DOUBLE ROW

CALCULATION

A	$B + 5.15$
B	$\text{Total no. of contacts} - 2$



TOOLS

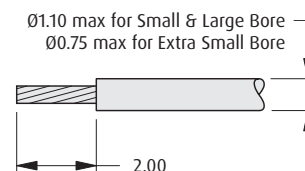
Recommended Crimp Tool – M22520/2-01

Positioner – T5747

Contact Insertion/Removal Tool – Z80-280

- Spare and pre-cabled contacts shown on following pages.
- Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - XXX XX XX

SERIES CODE

TYPE	
798	Single Row, Extra Small Bore (28-32 AWG)
898	Single Row, Small Bore (24-28 AWG)
899	Single Row, Large Bore (22 AWG)
788	Double Row, Extra Small Bore (28-32 AWG)
888	Double Row, Small Bore (24-28 AWG)
889	Double Row, Large Bore (22 AWG)

FINISH

01	Gold + Tin
05	Gold

TOTAL NO. OF CONTACTS

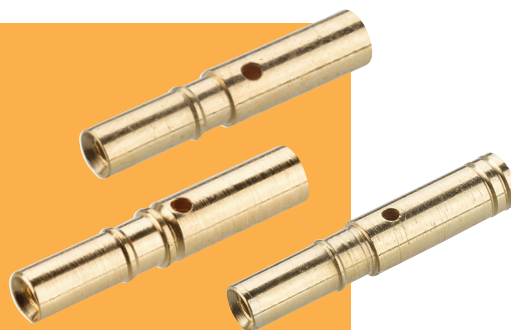
02 to 07, 17	Single Row
04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34	Double Row

All dimensions in mm.

Datamate L-Tek Connectors

Spare Female Crimp Contacts

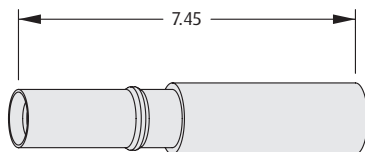
- ❖ Barrel Crimp Contacts are supplied with the connectors - see previous page. Use the order code for extra spare crimps.



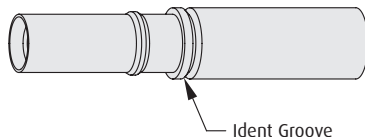
DATAMATE L-TEK

CRIMP CONTACTS

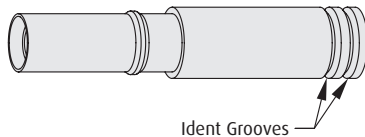
Large Bore (22 AWG)



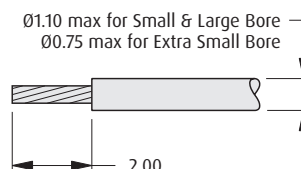
Small Bore (24 to 28 AWG)



Extra Small Bore (28 to 32 AWG)



WIRE STRIPPING DETAILS



TOOLS

Recommended Crimp Tool - M22520/2-01

Positioner - T5747

Contact Insertion/Removal Tool - Z80-280

❖ Pre-cabled contacts shown on following page.

❖ Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

SERIES CODE

TYPE	
011	Large Bore (22 AWG)
013	Small Bore (24-28 AWG)
019	Extra Small Bore (28-32 AWG)

M80

-

OXX

00

XX

FINISH

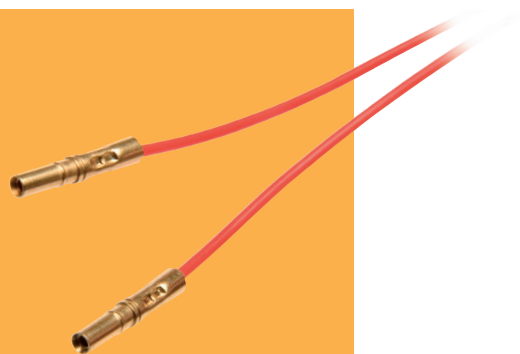
01	Gold + Tin
05	Gold

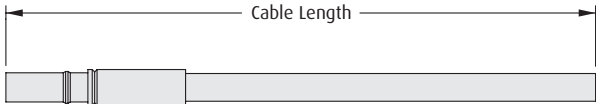
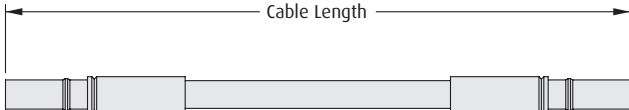
All dimensions in mm.

Datamate L-Tek Connectors

Female Crimp Contacts – Pre-Crimped Wires

- ❖ Female crimp contacts pre-assembled with a choice of BS 3G 210 Type A cable at selected lengths.
- ❖ PTFE-insulated, multi-strand silver-plated copper conductor equipment wire.
- ❖ Ideal for prototype and pre-production applications.
- ❖ For non-standard cable lengths, please visit harwin.com/cable-assemblies and fill in your requirements.



FEMALE SINGLE ENDED		FEMALE - FEMALE																											
																													
TOOLS																													
Contact Insertion/Removal Tool – Z80-Z80		❖ Full crimp connector kits and spare crimp contacts shown on previous pages. ❖ Instruction sheets available at www.harwin.com/instructions.																											
HOW TO ORDER																													
M80 - 9XX 00 99		<table><tr><th colspan="2">CABLE COLOUR</th></tr><tr><td>99</td><td>Red</td></tr></table>		CABLE COLOUR		99	Red																						
CABLE COLOUR																													
99	Red																												
SERIES CODE		<table><tr><th>SINGLE ENDED</th><th>FEMALE-FEMALE</th></tr><tr><td>910</td><td>918</td></tr><tr><td>911</td><td>919</td></tr><tr><td>912</td><td>920</td></tr><tr><td>913</td><td>921</td></tr><tr><td>914</td><td>922</td></tr><tr><td>915</td><td>923</td></tr><tr><td>916</td><td>924</td></tr><tr><td>917</td><td>925</td></tr></table>	SINGLE ENDED	FEMALE-FEMALE	910	918	911	919	912	920	913	921	914	922	915	923	916	924	917	925	<table><tr><td>22 AWG Cable, 150mm length</td></tr><tr><td>24 AWG Cable, 150mm length</td></tr><tr><td>26 AWG Cable, 150mm length</td></tr><tr><td>28 AWG Cable, 150mm length</td></tr><tr><td>22 AWG Cable, 300mm length</td></tr><tr><td>24 AWG Cable, 300mm length</td></tr><tr><td>26 AWG Cable, 300mm length</td></tr><tr><td>28 AWG Cable, 300mm length</td></tr></table>	22 AWG Cable, 150mm length	24 AWG Cable, 150mm length	26 AWG Cable, 150mm length	28 AWG Cable, 150mm length	22 AWG Cable, 300mm length	24 AWG Cable, 300mm length	26 AWG Cable, 300mm length	28 AWG Cable, 300mm length
SINGLE ENDED	FEMALE-FEMALE																												
910	918																												
911	919																												
912	920																												
913	921																												
914	922																												
915	923																												
916	924																												
917	925																												
22 AWG Cable, 150mm length																													
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28 AWG Cable, 150mm length																													
22 AWG Cable, 300mm length																													
24 AWG Cable, 300mm length																													
26 AWG Cable, 300mm length																													
28 AWG Cable, 300mm length																													

All dimensions in mm.

Datamate L-Tek Connectors

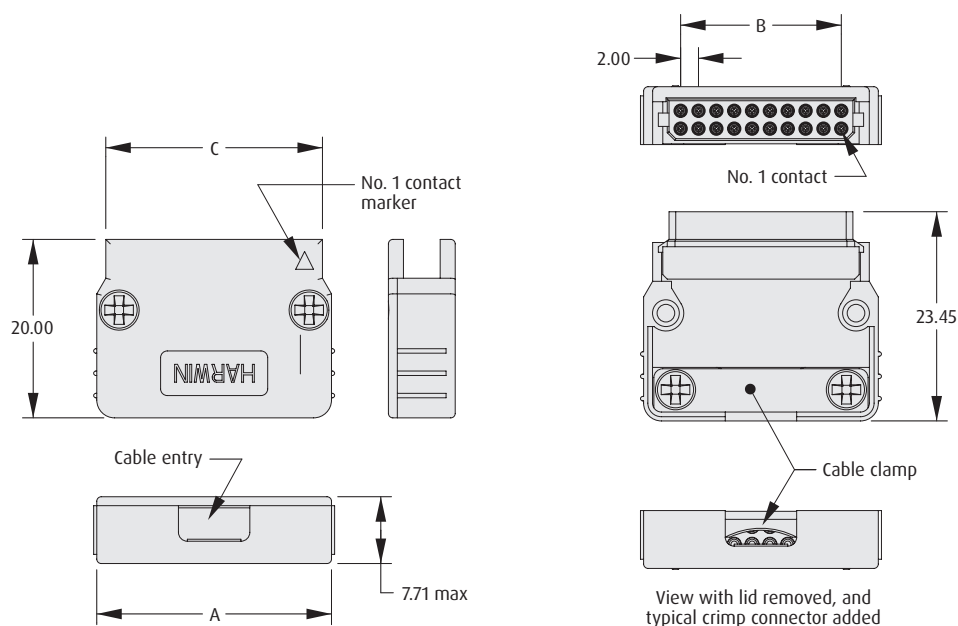
Female Accessories

- ❖ Crimp Hood is supplied as a kit of parts, including body, lid, cable clamp and 4 screws.
- ❖ For use with double row female crimp connectors.
- ❖ Mates with unlatched male connectors.
- ❖ Dummy contact can be used for additional polarisation or keying of multiple connectors.
- ❖ Fits both female PC Tail and Crimp housings.



DATAMATE L-TEK

CRIMP HOOD



CALCULATION

A	$B + 8.3$
B	Total no. of contacts - 2
C	$B + 6.3$

HOW TO ORDER

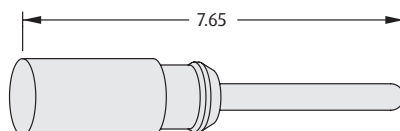
M80 - 880 XX 98

SERIES CODE

TOTAL NO. OF CONTACTS

10, 12, 14, 16, 18, 20, 26, 34

DUMMY CONTACT



ORDER CODE

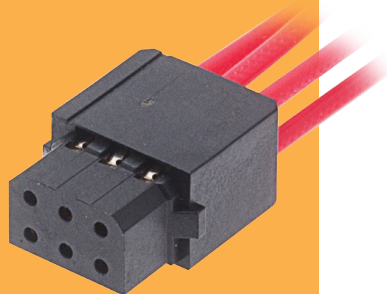
M80-023

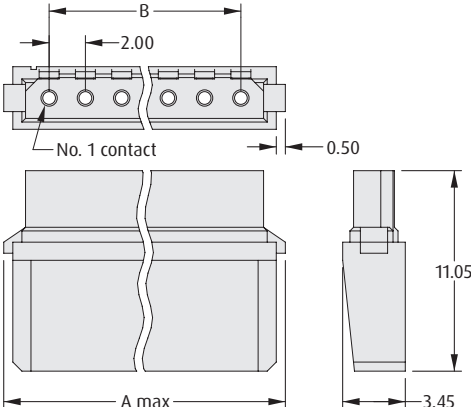
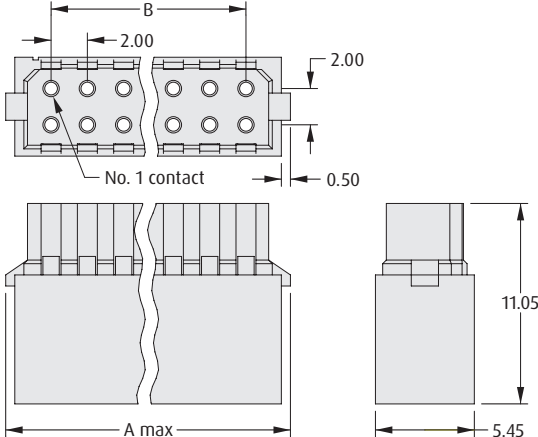
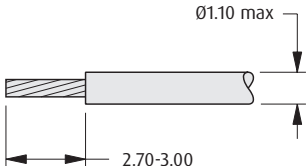
All dimensions in mm.

Datamate L-Tek Connectors

Female Crimp Housings Trio-Tek

- ❖ Part numbers are for housings only, see following page for Trio-Tek contacts.
- ❖ Contacts are rear-insertable.
- ❖ Crimp inspection window in housing.
- ❖ Mates with all standard Datamate L-Tek male connectors.
- ❖ Ideal for volume applications.



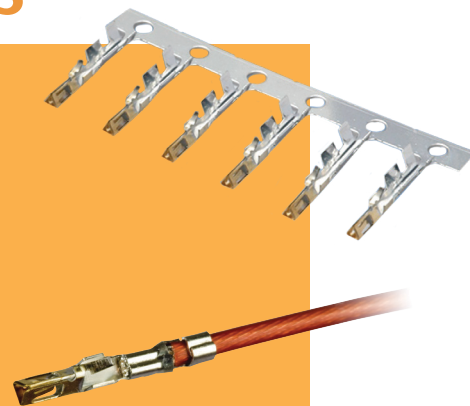
SINGLE ROW		CALCULATION		DOUBLE ROW		CALCULATION	
		A	$B + 5.15$			A	$B + 5.15$
		B	$(\text{Total no. of contacts} - 1) \times 2$			B	$\text{Total no. of contacts} - 2$
TOOLS		WIRE STRIPPING DETAILS					
Recommended Hand Crimp Tool – Z80-255 Contact Removal Tool – Z80-258 ❖ Open crimp contacts shown on following page. ❖ Instruction sheets available at www.harwin.com/instructions.							
HOW TO ORDER							
M80 - 69 X XX 98							
SERIES CODE						FINISH	
						98 Housing	
TYPE						TOTAL NO. OF CONTACTS	
0 Single Row						02 to 07, 17 Single Row	
1 Double Row						04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44 Double Row	

All dimensions in mm.

Datamate L-Tek Connectors

Female Crimp Contacts Trio-Tek

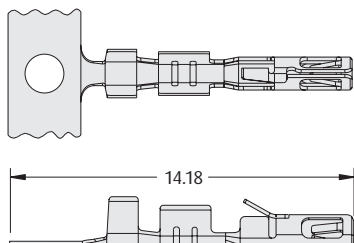
- ❖ Trio-Tek contacts must be ordered separately, see previous page for applicable housings.
- ❖ Crimp contacts are available loose, or in continuous reeled format for automated crimping.



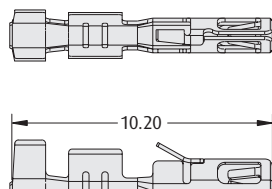
DATAMATE L-TEK

CRIMP CONTACTS

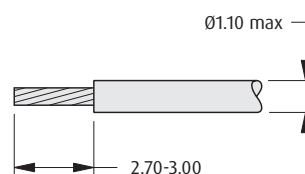
Reeled



Loose



WIRE STRIPPING DETAILS



TOOLS

Recommended Hand Crimp Tool - Z80-255

Contact Removal Tool - Z80-258

- ❖ Crimp housings shown on previous page.
- ❖ Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

M80 - 2XX 00 XX

SERIES CODE

TYPE	
253	Trio-Tek Crimp 22-24 AWG, Reeled
254	Trio-Tek Crimp 26-28 AWG, Reeled
283	Trio-Tek Crimp 22-24 AWG, Loose
284	Trio-Tek Crimp 26-28 AWG, Loose

FINISH

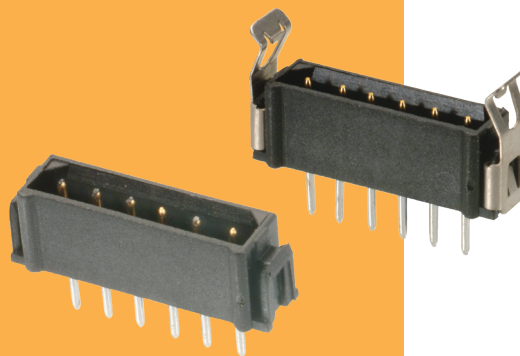
42	Gold + Tin
45	Gold

All dimensions in mm.

Datamate L-Tek Connectors

Male Single Row Vertical PC Tail

- Polarised mouldings.
- Fully shrouded contacts.
- Mates with standard Datamate L-Tek female connectors.
- Can be used with optional Strain Relief straps, available to order separately: **order code M80-0030006**.



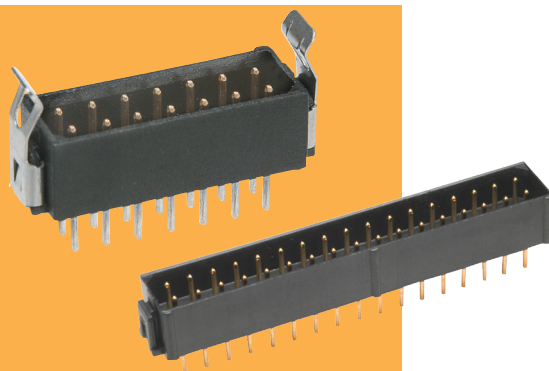
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	(Total no. of contacts - 1) x 2			B	(Total no. of contacts - 1) x 2
STRAIN RELIEF STRAP		Order separately from connector				Recommended PC Board Pattern	
		View of Strain Relief strap in place				ORDER CODE M80-0030006	
HOW TO ORDER							
SERIES CODE		M80		XXX		XX XX	
TYPE		852		882		782	
		No Latches, 3mm Tail		Locking Latch, 3mm Tail		Locking Latch, 4.5mm Tail	
						FINISH	
						42 Gold + Tin	
						45 Gold	
						TOTAL NO. OF CONTACTS	
						02 to 07, 17, 22	

All dimensions in mm.

Datamate L-Tek Connectors

Male Double Row Vertical PC Tail

- ❖ Polarised mouldings.
- ❖ Fully shrouded contacts.
- ❖ Mates with standard Datamate L-Tek female connectors.
- ❖ Can be used with optional Strain Relief straps, available to order separately: **order code M80-0030006**.



DATAMATE L-TEK

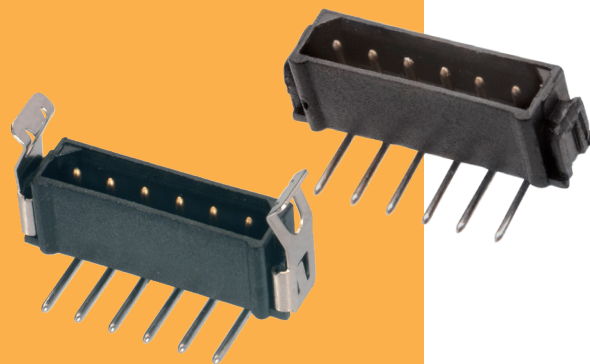
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Order separately from connector				Recommended PC Board Pattern	
		View of Strain Relief strap in place				4 x Ø0.90 min (optional) for Strain Relief Straps	
		ORDER CODE					
		M80-0030006					
HOW TO ORDER							
SERIES CODE		M80		- XXX		XX XX	
3mm TAIL		4.5mm TAIL		No Latches		FINISH	
854		754		Locking Latch		42 Gold + Tin	
853		753				45 Gold	
				TOTAL NO. OF CONTACTS			
				04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44			

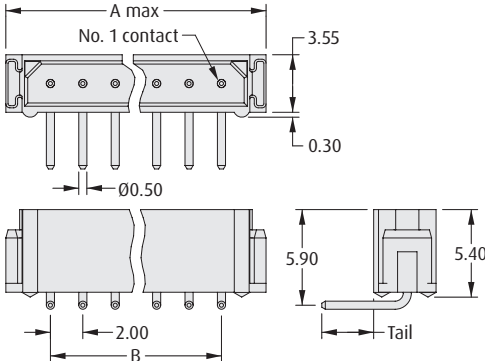
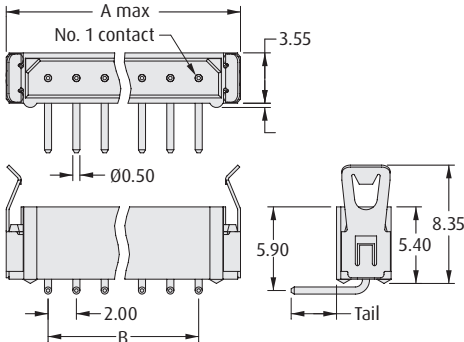
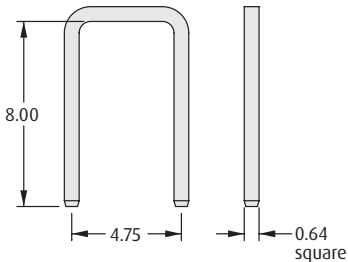
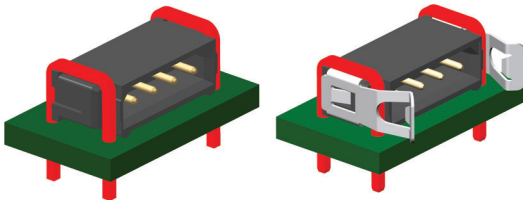
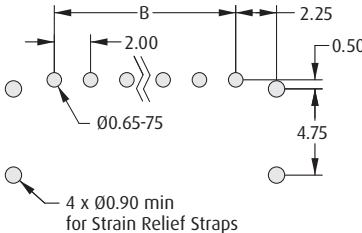
All dimensions in mm.

Datamate L-Tek Connectors

Male Single Row Horizontal PC Tail

- Polarised mouldings.
- Fully shrouded contacts.
- Mates with standard Datamate L-Tek female connectors.
- Supplied with two Strain Relief straps per connector; spares available under **order code M80-0030006**.



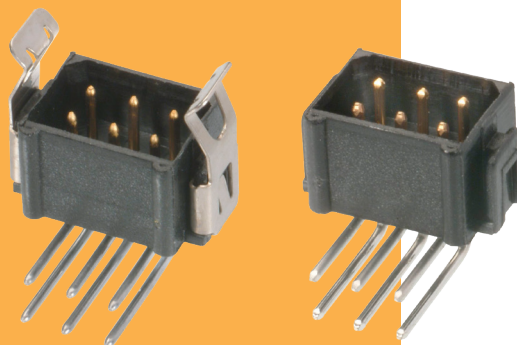
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	(Total no. of contacts - 1) x 2			B	(Total no. of contacts - 1) x 2
							
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
		 View of Strain Relief strap in place				 4 x Ø0.90 min for Strain Relief Straps	
HOW TO ORDER							
SERIES CODE		M80 -		XXX	XX	XX	
TYPE						FINISH	
843	No Latches, 3mm Tail					42	Gold + Tin
842	Locking Latch, 3mm Tail					45	Gold
792	Locking Latch, 4.5mm Tail					TOTAL NO. OF CONTACTS	
						02 to 07, 17, 22	

All dimensions in mm.

Datamate L-Tek Connectors

Male Double Row Horizontal PC Tail

- ❖ Polarised mouldings.
- ❖ Fully shrouded contacts.
- ❖ Mates with standard Datamate L-Tek female connectors.
- ❖ Supplied with two Strain Relief straps per connector; spares available under **order code M80-0030006**.



DATAMATE L-TEK

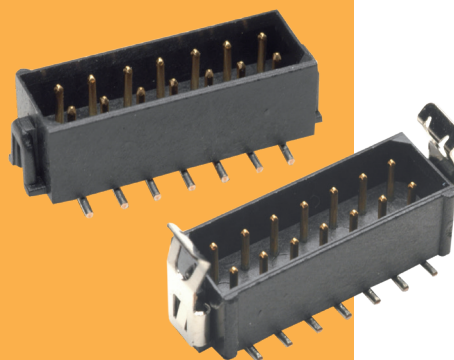
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	$B + 5.6$			A	$B + 6.1$
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
		View of Strain Relief strap in place					
HOW TO ORDER							
SERIES CODE		M80		- XXX		XX XX	
TYPE		841		No Latches, 3mm Tail		FINISH	
851		Locking Latch, 3mm Tail				42 Gold + Tin	
771		Locking Latch, 4.5mm Tail				45 Gold	
				TOTAL NO. OF CONTACTS		04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44	

All dimensions in mm.

Datamate L-Tek Connectors

Male Vertical Surface Mount

- Mates with standard Datamate L-Tek female connectors.
- Can be used with optional Strain Relief straps, available to order separately: **order code M80-0030006**.
- Contact datamate@harwin.com for tape & reel options.
- Optional pick and place cap.
- Gull wing SMT tails simplify inspection process.



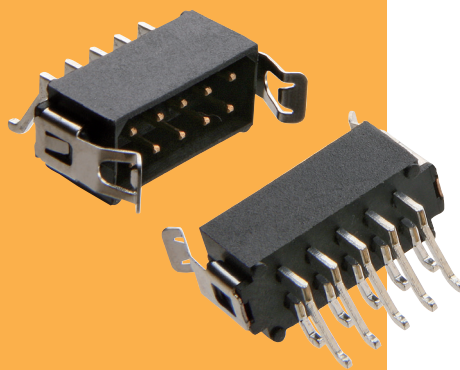
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP				Order separately from connector			
				ORDER CODE M80-0030006			
Recommended PC Board Pattern							
HOW TO ORDER							
M80 - 82X XX XX P							
SERIES CODE		PICK AND PLACE CAP					
TYPE		BLANK No cap					
		P Pick and place cap					
826 No Latches		TOTAL NO. OF CONTACTS					
828 Locking Latch							
		04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34					
		FINISH					
		42 Gold + Tin					
		45 Gold					

All dimensions in mm.

Datamate L-Tek Connectors

Male Horizontal Surface Mount

- ❖ Mates with standard Datamate L-Tek female connectors.
- ❖ Supplied with two Strain Relief straps per connector; spares available under **order code M80-0030006**.
- ❖ Stamped contact ensures co-planarity.
- ❖ Contact datamate@harwin.com for tape & reel options.



DATAMATE L-TEK

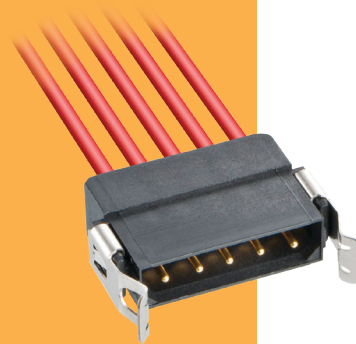
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	$B + 5.6$			A	$B + 6.1$
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
View of Strain Relief strap in place							
HOW TO ORDER							
SERIES CODE		M80 - 66X XX 42				FINISH	
TYPE						42 Gold + Tin	
665 No Latches						TOTAL NO. OF CONTACTS	
666 Locking Latch						04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44	

All dimensions in mm.

Datamate L-Tek Connectors

Male Crimp Kit

- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ Contacts are rear insertable.
- ❖ Spare contacts are available - see the following page.
- ❖ Back potting & cable assembly service available, contact cables@harwin.com.

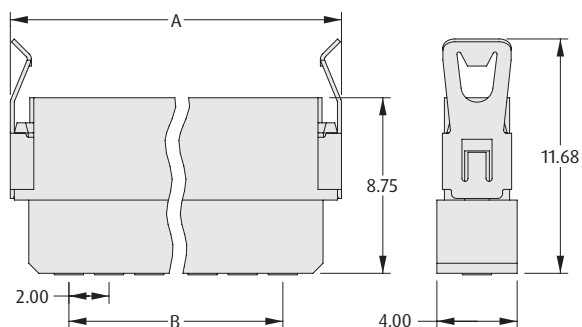


SINGLE ROW

CALCULATION

A	$B + 5.6$
B	$(\text{Total no. of contacts} - 1) \times 2$

Latches (when fitted) add 0.5mm to overall length 'A'

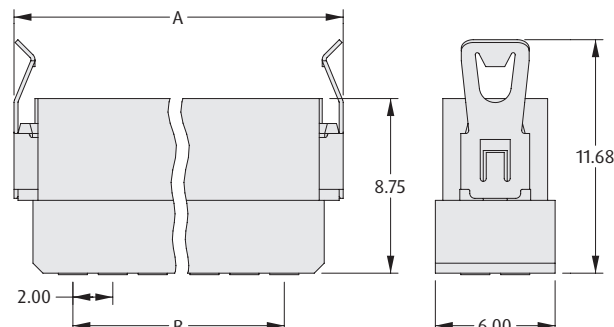


DOUBLE ROW

CALCULATION

A	$B + 5.6$
B	$\text{Total no. of contacts} - 2$

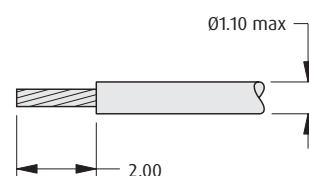
Latches (when fitted) add 0.5mm to overall length 'A'



TOOLS

- Recommended Crimp Tool** - M22520/2-01
Positioner - T5747
Contact Insertion/Removal Tool - Z80-280
- ❖ Spare contacts shown on following page.
 - ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 8XX XX 05

SERIES CODE

SINGLE ROW	DOUBLE ROW	
806	810	Small Bore (24-28 AWG), No Latches
807	811	Large Bore (22 AWG), No Latches
808	812	Small Bore (24-28 AWG), Locking Latch
809	813	Large Bore (22 AWG), Locking Latch

FINISH

05	Gold
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TOTAL NO. OF CONTACTS

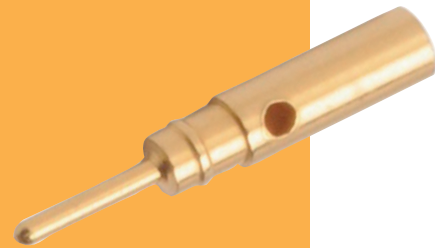
02, 03, 04, 05, 06, 07	Single Row
04, 06, 08, 10, 12	Double Row

All dimensions in mm.

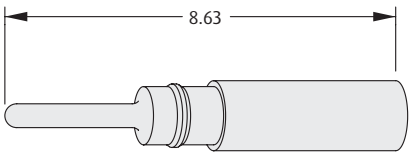
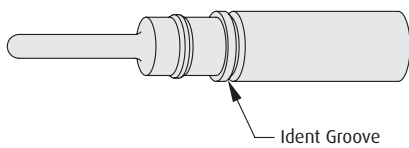
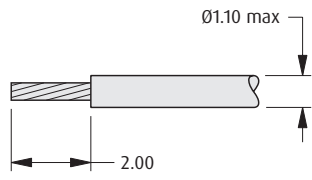
Datamate L-Tek Connectors

Spare Male Crimp Contacts

- ❖ Barrel Crimp Contacts are supplied with the connectors - see previous page. Use the order code for extra Spare crimps.



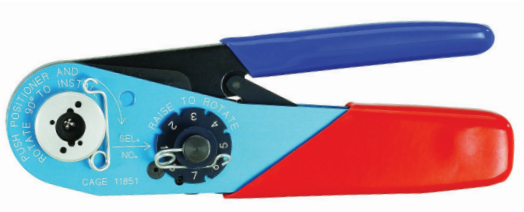
DATAMATE L-TEK

CRIMP CONTACTS	WIRE STRIPPING DETAILS								
Large Bore (22 AWG)  Small Bore (24 to 28 AWG) 	 TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280 ❖ Instruction sheets available at www.harwin.com/instructions.								
HOW TO ORDER									
M80 - 04X 00 05 SERIES CODE <table border="1" style="margin-top: 10px;"> <thead> <tr> <th colspan="2">TYPE</th> </tr> </thead> <tbody> <tr> <td>040</td> <td>Large Bore (22 AWG)</td> </tr> <tr> <td>041</td> <td>Small Bore (24-28 AWG)</td> </tr> </tbody> </table> FINISH <table border="1" style="margin-top: 10px;"> <tbody> <tr> <td>05</td> <td>Gold</td> </tr> </tbody> </table>		TYPE		040	Large Bore (22 AWG)	041	Small Bore (24-28 AWG)	05	Gold
TYPE									
040	Large Bore (22 AWG)								
041	Small Bore (24-28 AWG)								
05	Gold								

All dimensions in mm.

Datamate Tooling

- ❖ Instruction sheets can be accessed at www.harwin.com/instructions.
- ❖ A Datamate Crimping Instruction video is available at www.harwin.com/harwintv.

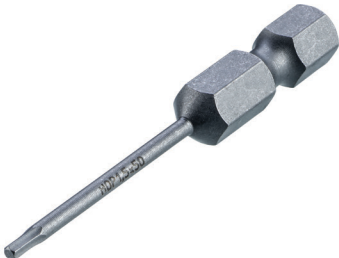
HAND CRIMP TOOL	HAND CRIMP TOOL														
❖ Standard circular crimp tool BS5210-3A-300 and MIL specification M22520/2-01. ❖ Precision tool with ratchet mechanism and 8-indent form. ❖ Must be used with applicable positioner shown below. ❖ Instruction sheet available.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th></tr> </thead> <tbody> <tr> <td>Signal contacts, L-Tek, J-Tek & Mix-Tek</td><td>M22520/2-01</td></tr> </tbody> </table>	ORDER CODE		Signal contacts, L-Tek, J-Tek & Mix-Tek	M22520/2-01	❖ Standard circular crimp tool. ❖ Precision tool with ratchet mechanism and 8-indent form. ❖ Must be used with applicable positioner shown below. ❖ Instruction sheet available.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th></tr> </thead> <tbody> <tr> <td>Inner contact of Mix-Tek coax contacts</td><td>Z80-292</td></tr> </tbody> </table>	ORDER CODE		Inner contact of Mix-Tek coax contacts	Z80-292						
ORDER CODE															
Signal contacts, L-Tek, J-Tek & Mix-Tek	M22520/2-01														
ORDER CODE															
Inner contact of Mix-Tek coax contacts	Z80-292														
HAND CRIMP TOOL	POSITIONER														
❖ Standard coax crimp tool for crimping the outer sleeve of Mix-Tek coax contacts. ❖ Instruction sheet available.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th></tr> </thead> <tbody> <tr> <td>Outer sleeve of Mix-Tek coax contacts</td><td>Z80-293</td></tr> </tbody> </table>	ORDER CODE		Outer sleeve of Mix-Tek coax contacts	Z80-293	❖ Used with applicable hand crimp tool.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th></tr> </thead> <tbody> <tr> <td>Female Signal Barrel Crimp, Male L-Tek Crimp</td><td>T5747</td></tr> <tr> <td>Male J-Tek, Mix-Tek Signal Crimp</td><td>Z80-193</td></tr> <tr> <td>Inner contact of Mix-Tek coax contacts</td><td>Z80-291</td></tr> <tr> <td>Female T-Contact</td><td>Z80-444</td></tr> </tbody> </table>	ORDER CODE		Female Signal Barrel Crimp, Male L-Tek Crimp	T5747	Male J-Tek, Mix-Tek Signal Crimp	Z80-193	Inner contact of Mix-Tek coax contacts	Z80-291	Female T-Contact	Z80-444
ORDER CODE															
Outer sleeve of Mix-Tek coax contacts	Z80-293														
ORDER CODE															
Female Signal Barrel Crimp, Male L-Tek Crimp	T5747														
Male J-Tek, Mix-Tek Signal Crimp	Z80-193														
Inner contact of Mix-Tek coax contacts	Z80-291														
Female T-Contact	Z80-444														

DATA

- | <div data-label="Section-Header"> <h2>INSERTION/REMOVAL TOOL</h2> </div> <div data-bbox="136 428 730 569"> <ul style="list-style-type: none"> ❖ For inserting crimped contacts into the rear of mouldings. ❖ Instruction sheet available. ❖ Suitable for all Datamate signal Barrel crimp contacts. </div> <div data-bbox="157 585 751 987"> </div> <div data-bbox="464 1003 800 1106"> <table> <tr> <th colspan="2">ORDER CODE</th></tr> <tr> <td>Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek</td><td>Z80-280</td></tr> </table> </div> | ORDER CODE | | Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek | Z80-280 | <div data-label="Section-Header"> <h2>REMOVAL TOOL</h2> </div> <div data-bbox="834 428 1344 491"> <ul style="list-style-type: none"> ❖ To aid removal of special cable contacts from Mix-Tek connectors. </div> <div data-bbox="842 537 1395 963"> </div> <div data-bbox="1219 1003 1485 1106"> <table> <tr> <th colspan="2">ORDER CODE</th></tr> <tr> <td>Mix-Tek special cable connectors</td><td>Z80-290</td></tr> </table> </div> | ORDER CODE | | Mix-Tek special cable connectors | Z80-290 |
|--|----------------|--|---|----------------|--|------------|--|----------------------------------|----------------|
| ORDER CODE | | | | | | | | | |
| Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek | Z80-280 | | | | | | | | |
| ORDER CODE | | | | | | | | | |
| Mix-Tek special cable connectors | Z80-290 | | | | | | | | |
| <div data-label="Section-Header"> <h2>SEPARATOR TOOL</h2> </div> <div data-bbox="136 1215 743 1373"> <ul style="list-style-type: none"> ❖ Recommended for unplugging L-Tek latched connectors (tool releases the latches prior to disengagement). ❖ Can also be used with unlatched and friction latched connectors. ❖ Suitable for all sizes. </div> <div data-bbox="233 1396 673 1759"> </div> <div data-bbox="631 1814 800 1894"> <table> <tr> <th colspan="2">ORDER CODE</th></tr> <tr> <td>L-Tek</td><td>Z80-299</td></tr> </table> </div> | ORDER CODE | | L-Tek | Z80-299 | <div data-label="Section-Header"> <h2>SCREWDRIVER</h2> </div> <div data-bbox="834 1215 1456 1310"> <ul style="list-style-type: none"> ❖ Recommended for use on J-Tek board mount nuts. ❖ Board mount nuts and bolts to be tightened to a torque of $21 \pm 2 \text{ cmN}$. </div> <div data-bbox="862 1365 1443 1736"> </div> <div data-bbox="1219 1814 1485 1894"> <table> <tr> <th colspan="2">ORDER CODE</th></tr> <tr> <td>J-Tek screwdriver</td><td>Z80-298</td></tr> </table> </div> | ORDER CODE | | J-Tek screwdriver | Z80-298 |
| ORDER CODE | | | | | | | | | |
| L-Tek | Z80-299 | | | | | | | | |
| ORDER CODE | | | | | | | | | |
| J-Tek screwdriver | Z80-298 | | | | | | | | |

Datamate Tooling

❖ Technical drawings can be accessed from the individual product pages at www.harwin.com - just search for the part number.

HEX DRIVE BIT ❖ 1.5mm A/F Hex end for board mount Hex Socket bolts. ❖ For use with torque tooling or similar equipment.  ORDER CODE Z9950-00	HEX DRIVE BIT ❖ 2mm A/F Hex end for Hex Socket floating jackscrews (Female jackscrews or Male Reverse fix jackscrews). ❖ For use with torque tooling or similar equipment.  ORDER CODE Z9951-00
BALL HEX DRIVER ❖ 1.5mm A/F Hex end for board mount Hex Socket bolts. ❖ Ball-shaped end can be used at a wide range of angles.  ORDER CODE Z9952-00	BALL HEX DRIVER ❖ 2mm A/F Hex end for Hex Socket floating jackscrews (Female jackscrews or Male Reverse fix jackscrews). ❖ Ball-shaped end can be used at a wide range of angles.  ORDER CODE Z9953-00

Datamate Tooling

- ❖ Tooling suitable for Datamate Trio-Tek contacts and housings.
- ❖ Instruction sheets can be accessed at www.harwin.com/instructions.

HAND CRIMP TOOL ❖ ‘Rigidus’ crimp tool design. ❖ Precision parallel action crimp tool with ratchet mechanism. ❖ Supplied with locator and die-set – spares available. ❖ Instruction sheet available.  ORDER CODE Z80-255	REMOVAL TOOL ❖ For removal of crimped contacts from mouldings. ❖ Instruction sheet available.  ORDER CODE Z80-258
SPARE DIE-SET ❖ Spare die-set for use with hand crimp tool shown above.  ORDER CODE Z80-244	SPARE LOCATOR ❖ Used with hand crimp tool shown above.  ORDER CODE Z80-259