

Datamate

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Datamate Connectors Introduction

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.

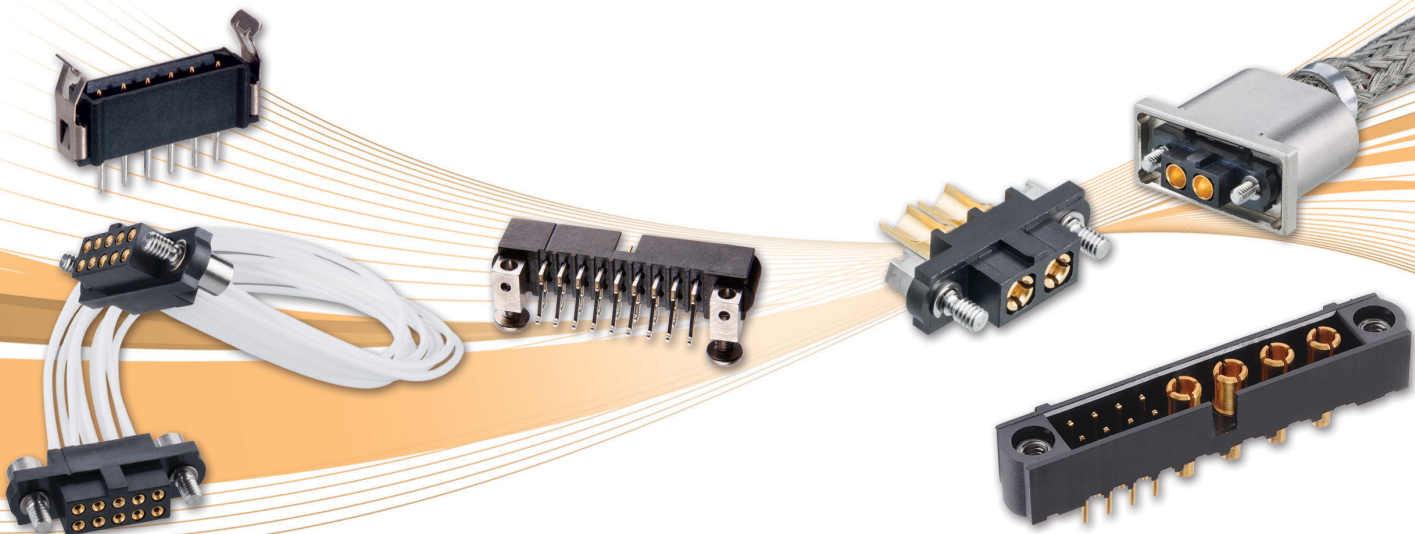
- ❖ 3A per contact (all electrically loaded; 3.3A per individual contact)
- ❖ 4-finger contact design to maintain electrical contact through high vibration and shock
- ❖ Beryllium Copper Contact for improved temperature range: -55°C to +125°C
- ❖ 500 Mating cycles durability
- ❖ Professional connector 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 Signal

- ❖ Strong stainless steel jackscrew fixings for maximum strain relief, or lightweight space-saving locking latches
- ❖ Lightweight metal and plastic hood options for shielding and additional cable protection
- ❖ Choices of pre-wired contacts or full cable assemblies from stock, for prototyping and full production

Datamate Mix-Tek

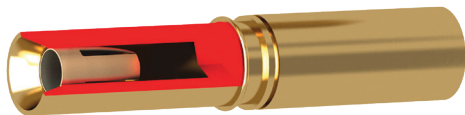
- ❖ Multiple variations of power-only, power-and-signal, or coax only variations of connectors, available from stock
- ❖ Full cable assembly options for coax and power, in 2/4/6/8 contact connectors on 4mm pitch
- ❖ Compatible with lightweight metal hoods for shielding and cable protection



Datamate Connectors Product Features

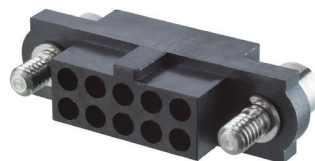
Four Finger Beryllium Copper Contact

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



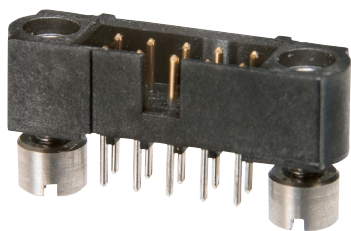
Polarization

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



Rugged construction

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



Innovative fast-acting bayonet fixing

101Lok utilises a 101-degree turn to quickly and simply lock mating connectors together.



Ready-made Cable Assemblies

Wide selection of stocked single and double-ended cable assemblies, with jackscrews or latching connectors, signal or power contacts.



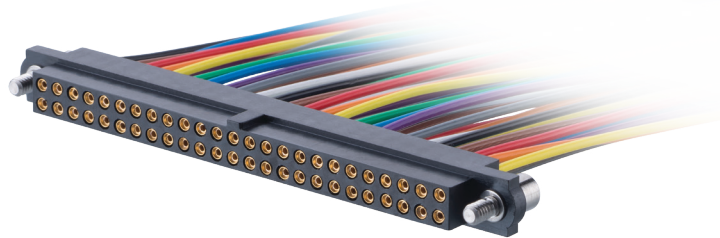
Single piece metal Backshells for EMC Shielding

Compatible with the J-Tek and Mix-Tek connector ranges, these robust hoods provide full 360° shielding, complete with retention feature on cable exit for fixing additional braiding.



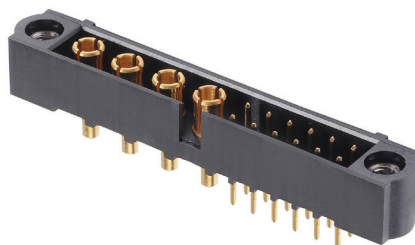
Low outgassing emissions

Plastic housings with outgassing emissions within NASA & ESA recommendations, ready for space and low-pressure research.



Comprehensive Operating Temperature

All connectors suitable for operational temperatures from -55°C to +125°C, due to high quality material choice.



All dimensions in mm.

Datamate Mix-Tek Specification

Materials

Housings:	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

Coax Contacts

Materials

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

Electrical

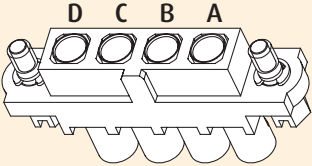
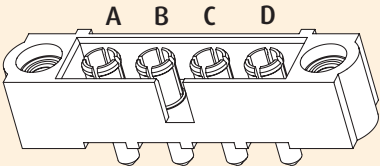
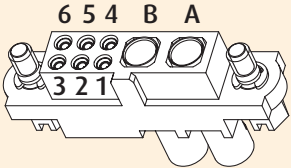
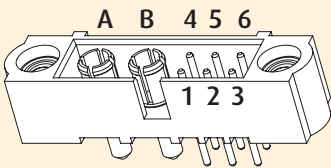
Frequency range:	6GHz (depending on cable)
Impedance:	50Ω
VSWR:	1.05 + (0.04 x Frequency) GHz max
Operating voltage (sea level):	180V AC at 500mA
Maximum voltage (sea level):	1000V AC _{rms}
Contact resistance:	6mΩ max
Insulation resistance:	10 ⁶ MΩ at 250V AC _{rms}

Mechanical

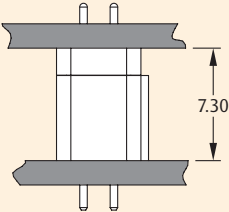
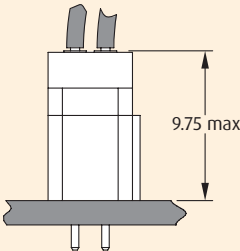
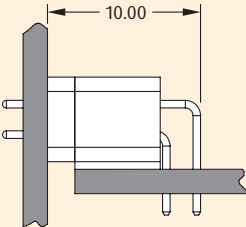
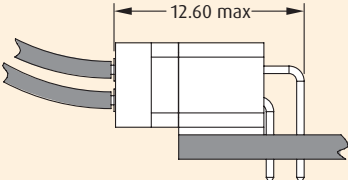
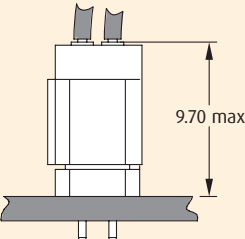
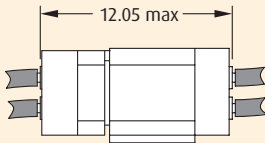
Insertion force (max):	8N
Withdrawal force (min):	0.5N
Contact replacement in connector:	5 times

All dimensions in mm.

Datamate Mix-Tek Pin Numbering

	FEMALE	MALE
POWER OR COAX ONLY		
SIGNAL AND POWER		

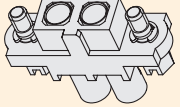
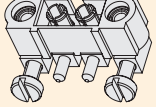
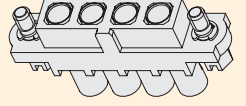
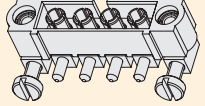
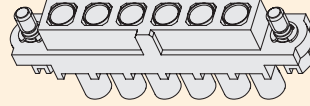
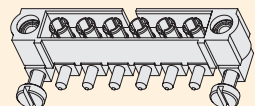
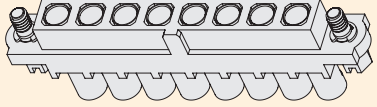
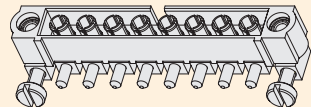
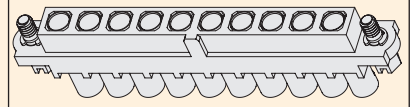
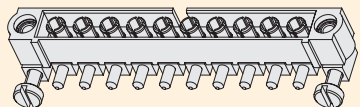
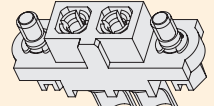
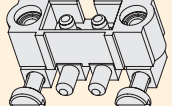
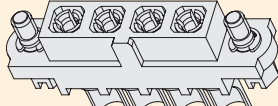
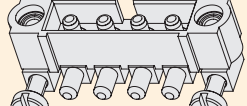
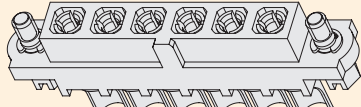
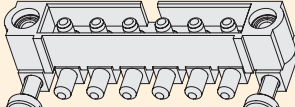
Mating Profiles

		FEMALE	
		VERTICAL THROUGHBOARD	CRIMP
MALE	VERTICAL THROUGHBOARD		
	HORIZONTAL THROUGHBOARD		
	CRIMP		

All dimensions in mm.

Datamate Power Connectors

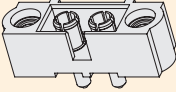
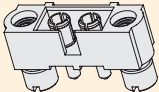
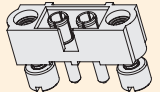
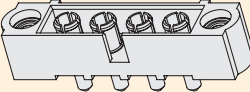
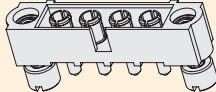
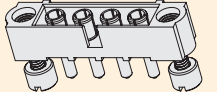
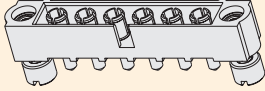
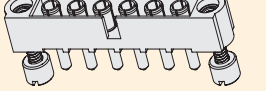
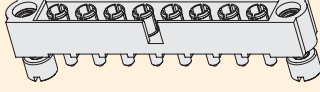
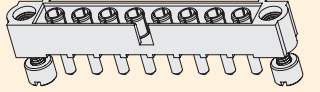
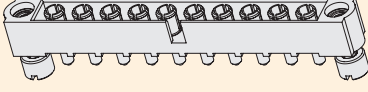
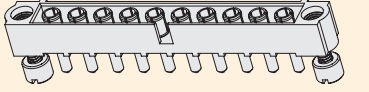
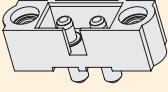
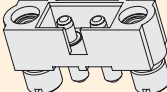
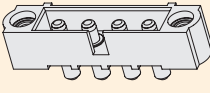
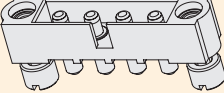
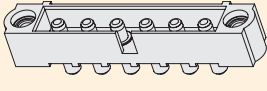
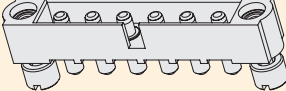
- Standard high-reliability connectors fitted with power contacts on 4mm pitch.

		TYPE		
		Cable Assemblies	Female Cable - Hex Slotted Jackscrews	Male Horizontal 3.5mm PC Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FC325F1-02-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MC335M1-02-0150L	 M80-4000000F1-02-325-00-000	 M80-5000000M5-02-333-00-000
	4 Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FC325F1-04-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MC335M1-04-0150L	 M80-4000000F1-04-325-00-000	 M80-5000000M5-04-333-00-000
	6 Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FC325F1-06-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MC335M1-06-0150L	 M80-4000000F1-06-325-00-000	 M80-5000000M5-06-333-00-000
	8 Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FC325F1-08-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MC335M1-08-0150L	 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	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FCPF5F1-02-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MCPM5M1-02-0150L	 M80-4000000F1-02-PF5-00-000	 M80-5000000M5-02-PM3-00-000
	4 High Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FCPF5F1-04-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MCPM5M1-04-0150L	 M80-4000000F1-04-PF5-00-000	 M80-5000000M5-04-PM3-00-000
	6 High Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FCPF5F1-06-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MCPM5M1-06-0150L	 M80-4000000F1-06-PF5-00-000	 M80-5000000M5-06-PM3-00-000
	8 High Power	Female Single Ended (Female to Cut End) Hex Socket Jackscrews M80-FCPF5F1-08-0150L Male Single Ended (Male to Cut End) Jackscrew Fixing M80-MCPM5M1-08-0150L		

All dimensions in mm.

Datamate Power Connectors

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

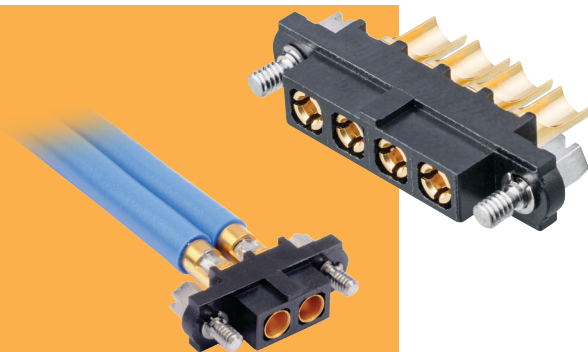
		TYPE		
		Male Vertical 3.5mm Tail - Jackscrew Fixing	Male Vertical 3.5mm Tail - 3.5mm Board Mount Jackcrew	Male Vertical 5mm Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Power	 M80-5000000M1-02-331-00-000	 M80-5000000M2-02-331-00-000	 M80-5000000M3-02-332-00-000
	4 Power	 M80-5000000M1-04-331-00-000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

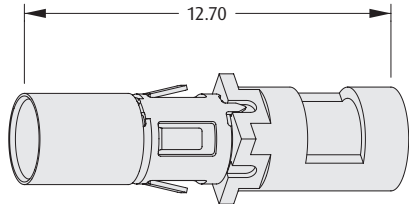
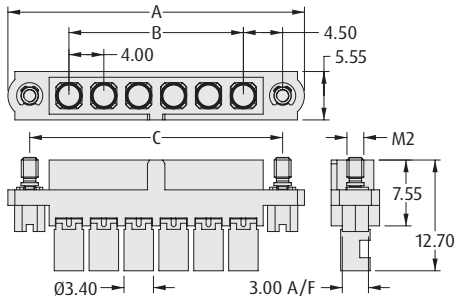
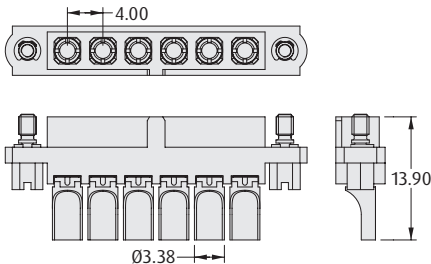
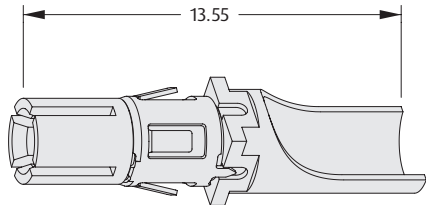
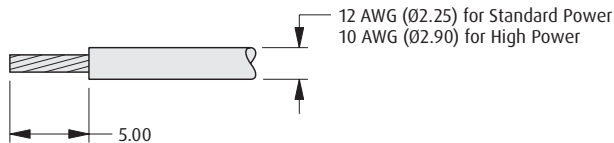
All dimensions in mm.

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.
- ❖ Polarized housings.
- ❖ Standard Power contacts rated to 20A, High Power to 40A.



POWER CONTACTS ONLY		CALCULATION		SPARE SOLDER CONTACTS	
Standard Power (12 AWG)		A	$B + 14$		
		B	$(\text{No. of Power contacts} - 1) \times 4$		
		C	$B + 9$		
				ORDER CODE M80-325	
High Power (10 AWG)				High Power (10 AWG)	
					
				ORDER CODE M80-PF5	
TOOLS			WIRE STRIPPING DETAILS		
Contact Removal Tool - Z80-290 ❖ No special tooling required for connecting wire, other than standard soldering equipment.					
HOW TO ORDER					
M80 - 4000000F1 - XX - XXX - 00 - 000					
NO. OF POWER CONTACTS			POWER CONTACTS PART NO.		
02, 04, 06, 08, 10 Standard Power			325 Standard Power		
02, 04, 06 High Power			PF5 High Power		

All dimensions in mm.

Datamate Power Connectors

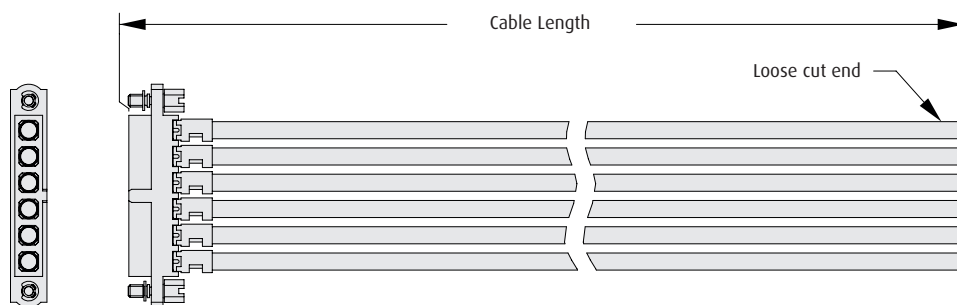
Female Cable Assemblies

- ❑ Fully assembled connectors, fixings and cable in standard configurations.
- ❑ Standard Power contacts are rated to 20A, and are fitted with 12AWG, white PTFE-insulated cables.
- ❑ High Power are rated to 40A nominal, up to 80A max. Fitted with 10AWG, white PTFE-insulated cables.

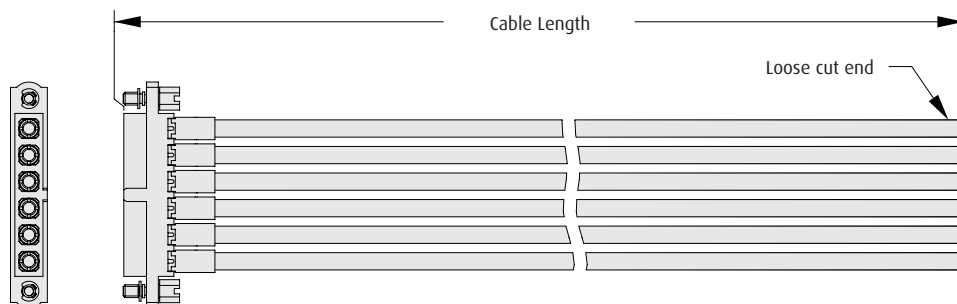


DATAMATE POWER

STANDARD POWER



HIGH POWER



HOW TO ORDER

M80 - FC XXX F1 - XX - 0150 L

SERIES CODE

POWER CONTACTS PART NO.

325	Standard Power
PF5	High Power

JACKSCREW

F1	Hex Slotted Jackscrews
-----------	------------------------

TERMINATION - SECOND END

L	Loose cut end
----------	---------------

CABLE LENGTH

0150	150mm
-------------	-------

NO. OF POWER CONTACTS

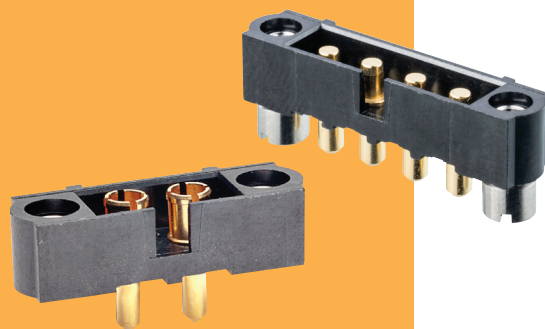
02, 04, 06, 08

All dimensions in mm.

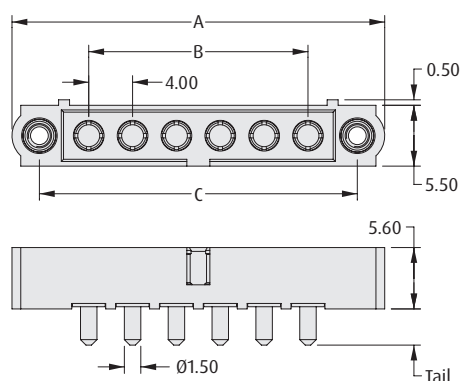
Datamate Power Connectors

Male Vertical Throughboard

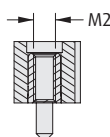
- ❖ A selection of stocked Datamate Mix-Tek solder tail standard layouts.
- ❖ Choice to suit two PCB thicknesses and two stud lengths.
- ❖ Standard Power contacts rated to 20A.
- ❖ High Power rated to 40A nominal, up to 80A max.



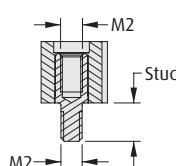
STANDARD POWER



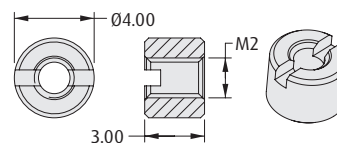
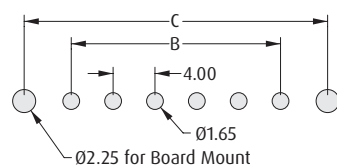
Jackscrew fixing



Jackscrew with Board Mount



Recommended PC Board Pattern

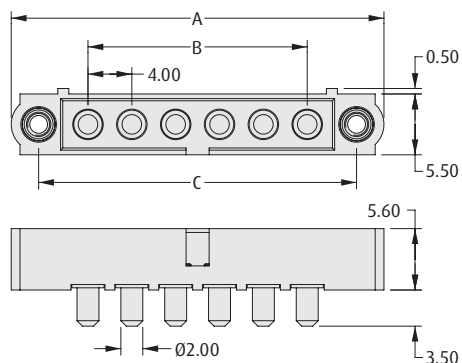


Board Mount Nut, 2 per connector

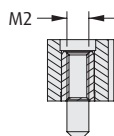
CALCULATION

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

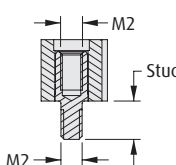
HIGH POWER



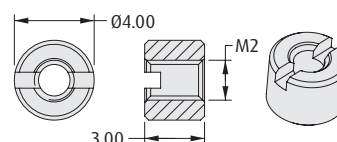
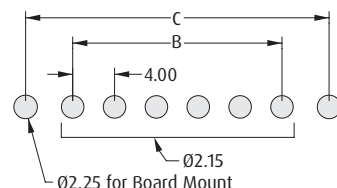
Jackscrew fixing



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.

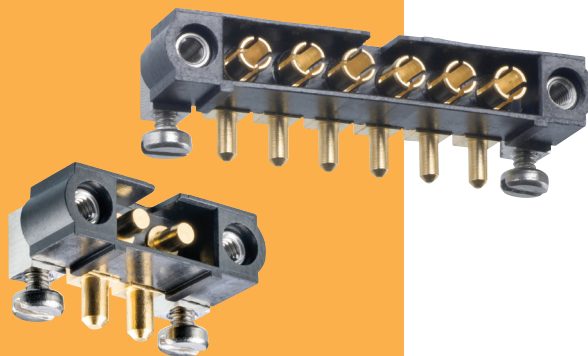
331	3.5mm Tail Standard Power
332	5mm Tail Standard Power
PM1	3.5mm Tail High Power

All dimensions in mm.

Datamate Power Connectors

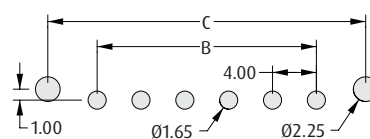
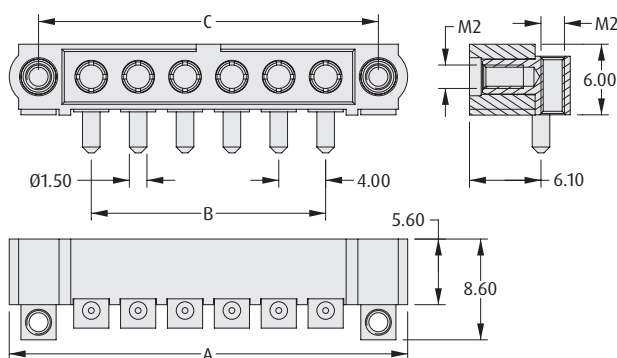
Male Horizontal Throughboard

- 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.

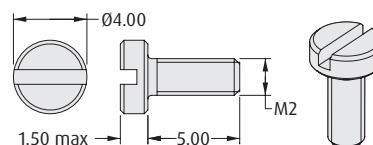


DATAMATE POWER

STANDARD POWER



Recommended PC Board Pattern

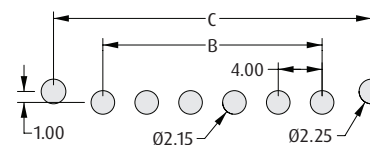
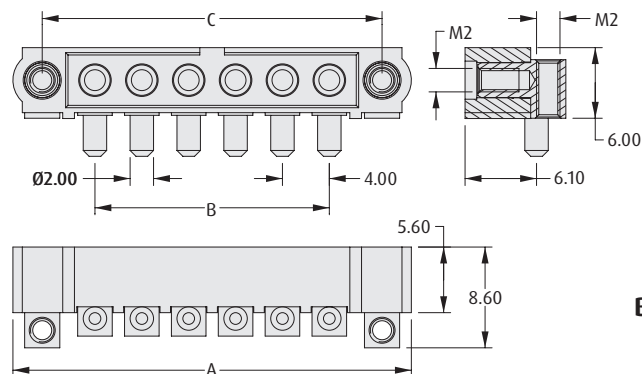


Board Mount Bolt,
2 per connector

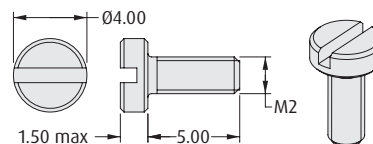
CALCULATION

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.

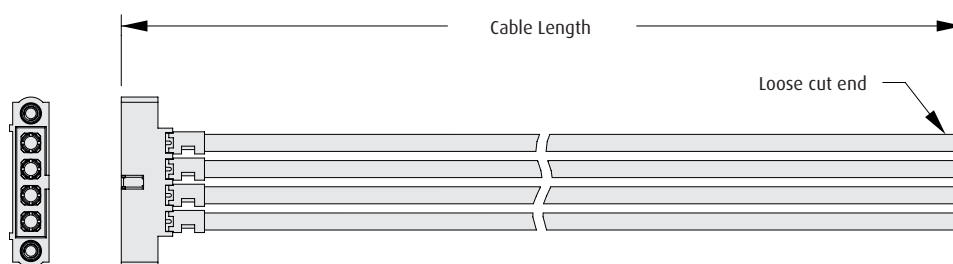
Datamate Power Connectors

Male Cable Assemblies

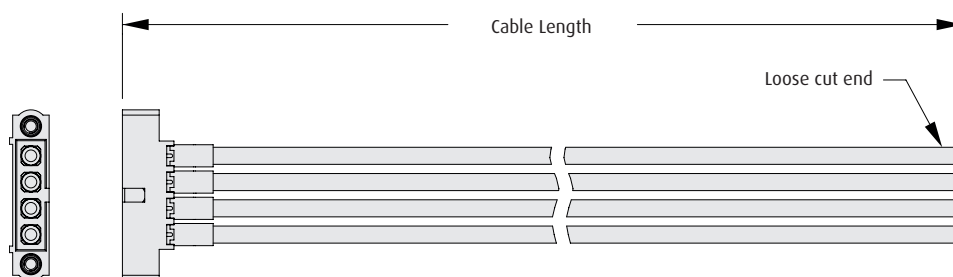
- ❖ Fully assembled connectors, fixings and cable in standard configurations.
- ❖ Standard Power contacts are rated to 20A, and are fitted with 12AWG, white PTFE-insulated cables.
- ❖ High Power are rated to 40A nominal, up to 80A max. Fitted with 10AWG, white PTFE-insulated cables.



STANDARD POWER



HIGH POWER



HOW TO ORDER

M80 - MC XXX M1 - XX - 0150 L

SERIES CODE

POWER CONTACTS PART NO.

335	Standard Power
PM5	High Power

JACKSCREW

M1	Internal Jackscrews
-----------	---------------------

TERMINATION - SECOND END

L	Loose cut end
----------	---------------

CABLE LENGTH

0150	150mm
-------------	-------

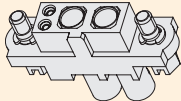
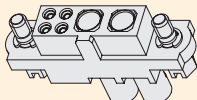
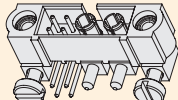
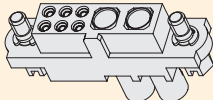
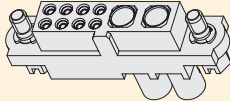
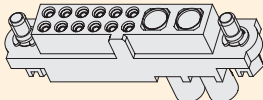
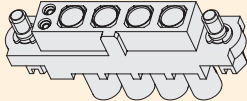
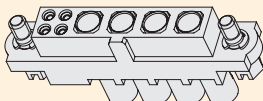
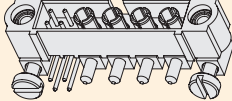
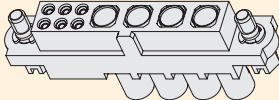
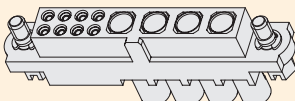
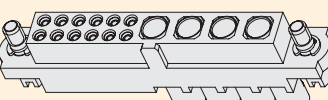
NO. OF POWER CONTACTS

02, 04, 06, 08

All dimensions in mm.

Datamate Power/Signal Connectors

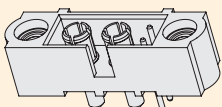
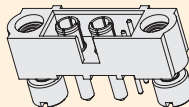
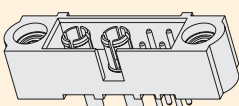
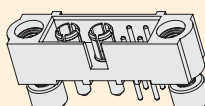
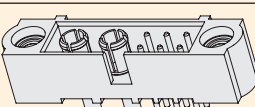
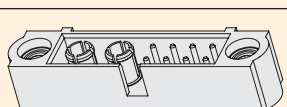

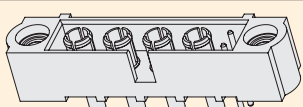
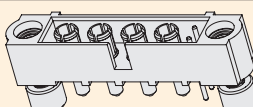
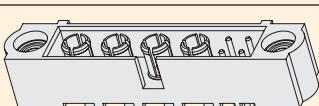
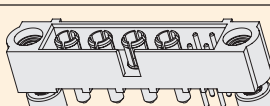
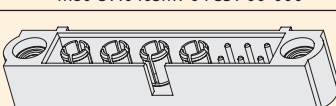
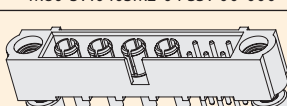
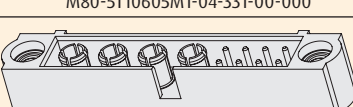
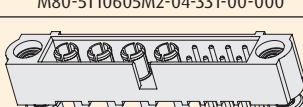
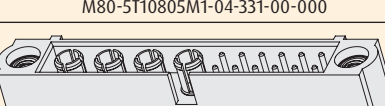
❖ Standard high-reliability connectors fitted with a combination of signal and 20A power contacts.

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

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 Tail - Jackscrew fixing	Male Vertical 3mm 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.

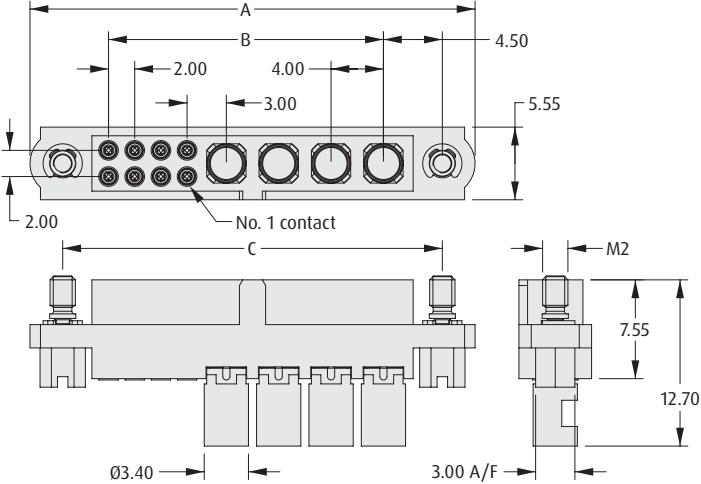
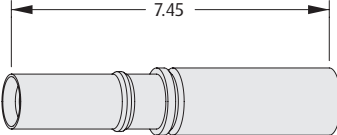
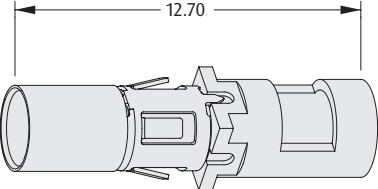
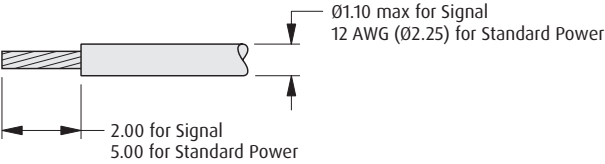
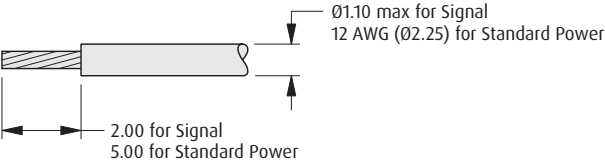
Datamate Power/Signal Connectors

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.
- ❖ Polarized housings.
- ❖ Standard Power contacts rated to 20A, signal to 3A.



DATAMATE POWER/SIGNAL

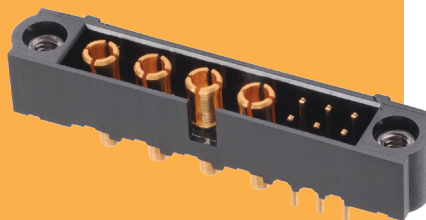
SIGNAL AND POWER		CALCULATION		SPARE CONTACTS	
		A	B + 13	 Signal (24 to 28 AWG)  Standard Power (12 AWG)  Wire Stripping Details	
		B	(No. of Power contacts - 1) x 4 + Total no. of Signal contacts +1		
		C	B + 8		
				<div>ORDER CODE</div> <div>M80-0130005</div>	
				<div>ORDER CODE</div> <div>M80-325</div>	
TOOLS		WIRE STRIPPING DETAILS			
<div>Recommended Crimp Tool (Signal) - M22520/2-01</div> <div>Positioner (Signal) - T5747</div> <div>Contact Insertion/Removal Tool (Signal) - Z80-280</div> <div>Contact Removal Tool (Power) - Z80-290</div> <div>❖ No special tooling required for connecting Power wire, other than standard soldering equipment.</div> <div>❖ Instruction sheets available at www.harwin.com/instructions.</div>					
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.

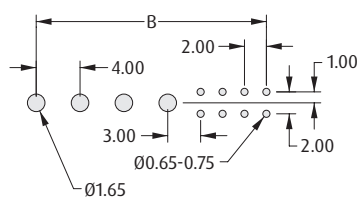
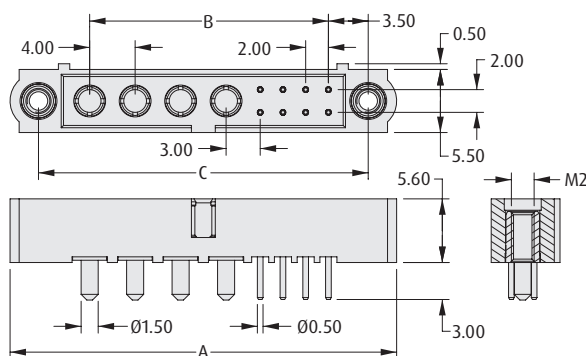
Datamate Power/Signal Connectors

Male Power/Signal Vertical Throughboard

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



JACKSCREW ONLY

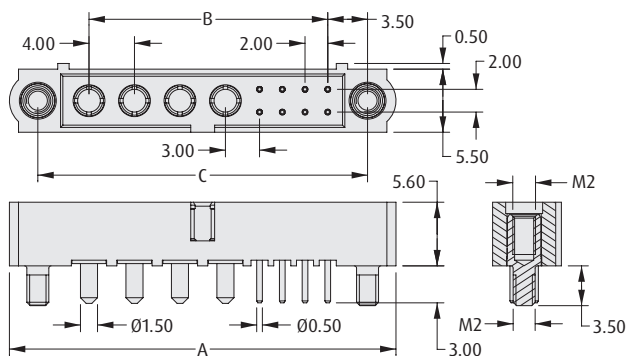


Recommended PC Board Pattern

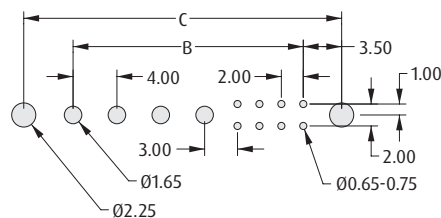
CALCULATION

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

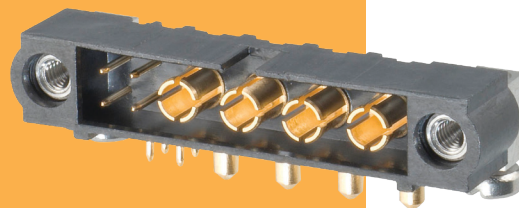
Check image chart to confirm Off-The-Shelf sizes available

All dimensions in mm.

Datamate Power/Signal Connectors

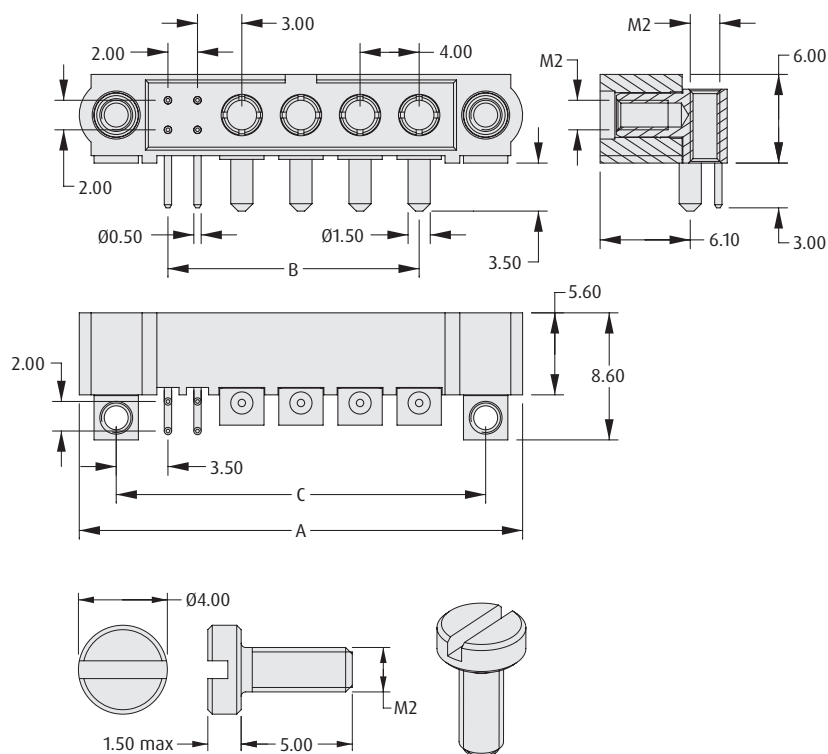
Male Power/Signal Horizontal Throughboard

- ❖ A selection of stocked Datamate Mix-Tek solder tail standard layouts.
- ❖ Polarized housings.
- ❖ Standard Power contacts rated to 20A, signal to 3A.



DATAMATE POWER/SIGNAL

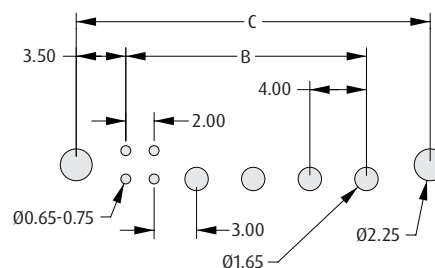
SIGNAL AND POWER



Board Mount Bolt, 2 per connector

CALCULATION

A	$B + 13$
B	$(\text{No. of Power contacts} - 1) \times 4$ + Total no. of Signal contacts +1
C	$B + 8$



Recommended PC Board Pattern

HOW TO ORDER

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

NO. OF SIGNAL CONTACTS

04

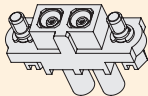
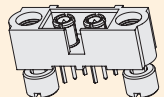
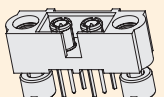
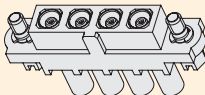
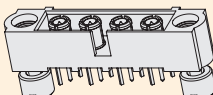
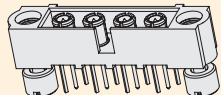
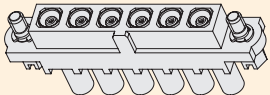
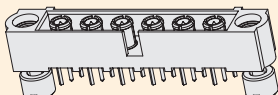
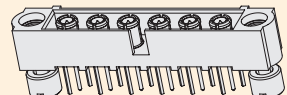
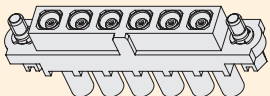
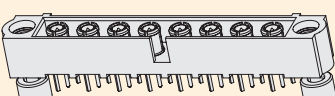
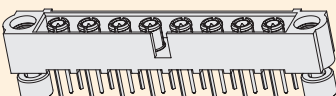
NO. OF POWER CONTACTS

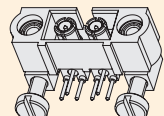
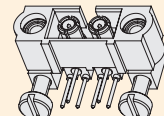
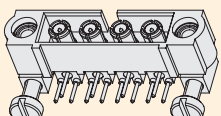
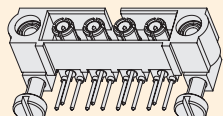
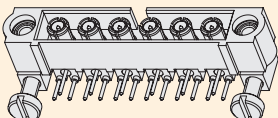
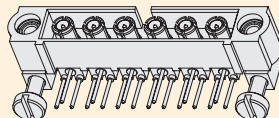
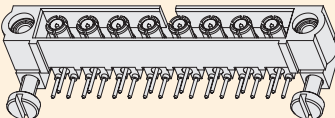
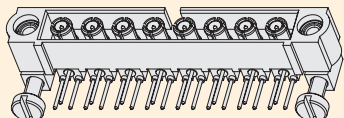
02, 04

All dimensions in mm.

Datamate Coax Connectors

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

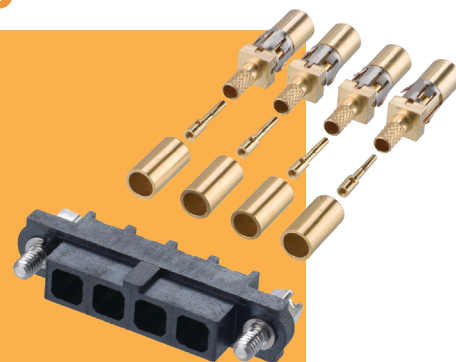
		TYPE		
		Female Cable Connectors - Hex Slotted Jackscrews	Male Vertical 3mm Tail - 3.5mm Board Mount Jackcrew	Male Vertical 4.5mm Tail - 5mm Board Mount Jackcrew
TOTAL NO. OF CONTACTS	2 Coax	 M80-FC305F1-02	 M80-MV311M2-02	 M80-MV312M3-02
	4 Coax	 M80-FC305F1-04	 M80-MV311M2-04	 M80-MV312M3-04
	6 Coax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

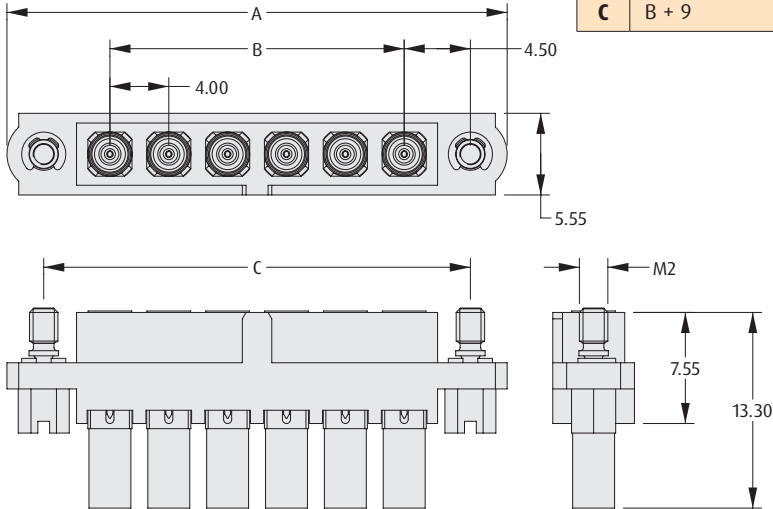
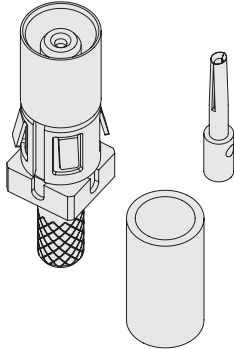
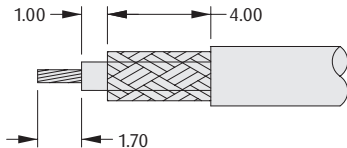
Datamate Coax Connectors

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.
- ❖ Polarized housings.
- ❖ Hexagonal slotted jackscrew style.



DATAMATE COAX

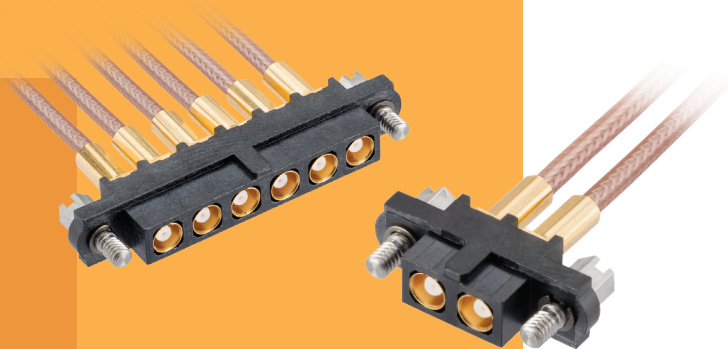
CABLE		CALCULATION		SPARE COAX CONTACTS	
		A	B + 14	 <div>ORDER CODE M80-305</div>	
		B	(No. of Coax contacts - 1) x 4		
		C	B + 9		
TOOLS		WIRE STRIPPING DETAILS			
<p>Recommended Inner Contact Crimp Tool – Z80-292</p> <p>Positioner for Inner Contact – Z80-291</p> <p>Recommended Outer Sleeve Crimp Tool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

All dimensions in mm.

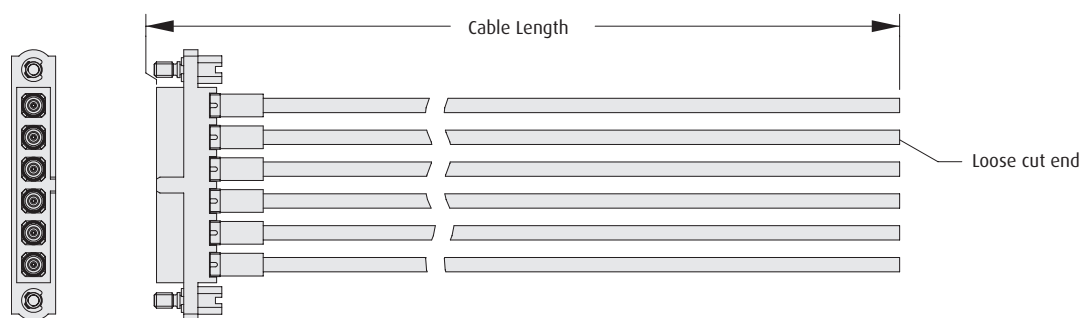
Datamate Coax Connectors

Jack (Female) Cable Assemblies

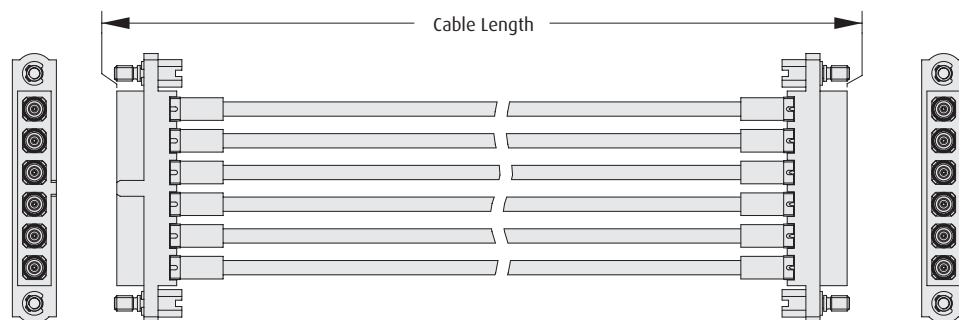
- ❑ A selection of stocked ganged multiport coax cable assemblies in standard layouts.
- ❑ 6GHz, 50Ω Coax contacts, assembled with RG178 cable.
- ❑ Hexagonal slotted jackscrew style.



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

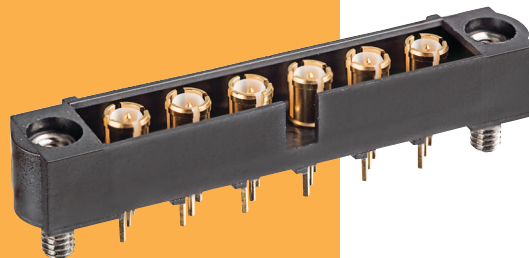
0150	150mm
0300	300mm
0450	450mm

All dimensions in mm.

Datamate Coax Connectors

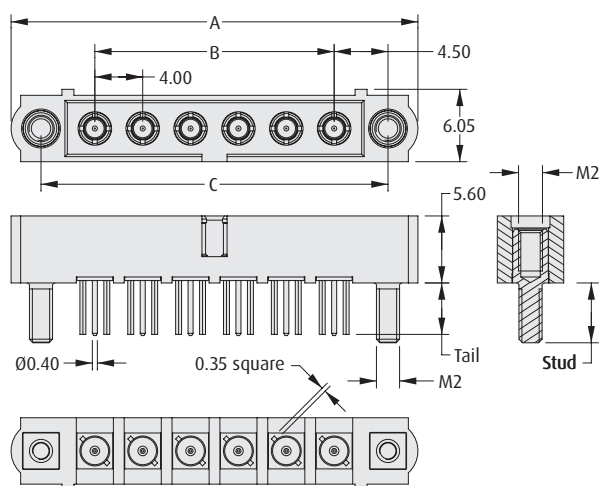
Plug (Male) Vertical Throughboard

- ❑ 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.



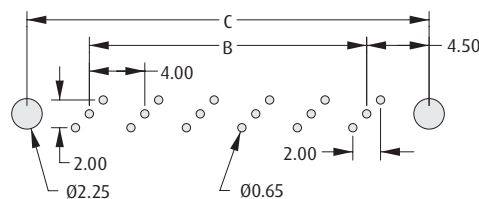
DATAMATE COAX

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

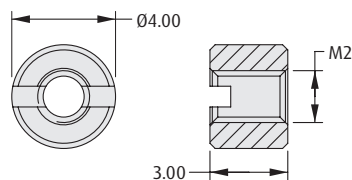
TYPE	
311M2	3mm Tail with 3.5mm Board Mount Stud
312M3	4.5mm Tail with 5mm Board Mount Stud

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

REQUIRED HARDWARE

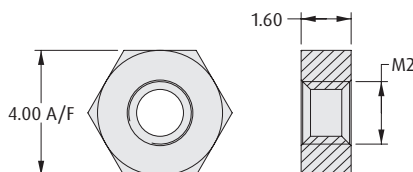
Order separately from connector

Slotted Board Mount Nut



ORDER CODE
M80-2130000B

Hexagonal Board Mount Nut



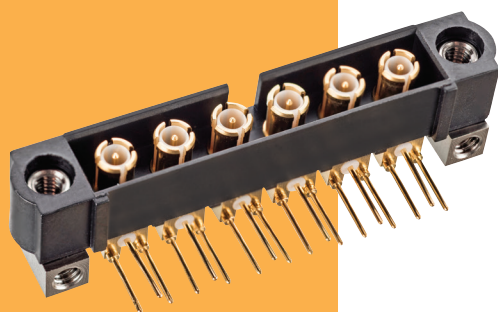
ORDER CODE
M80-2430000B

All dimensions in mm.

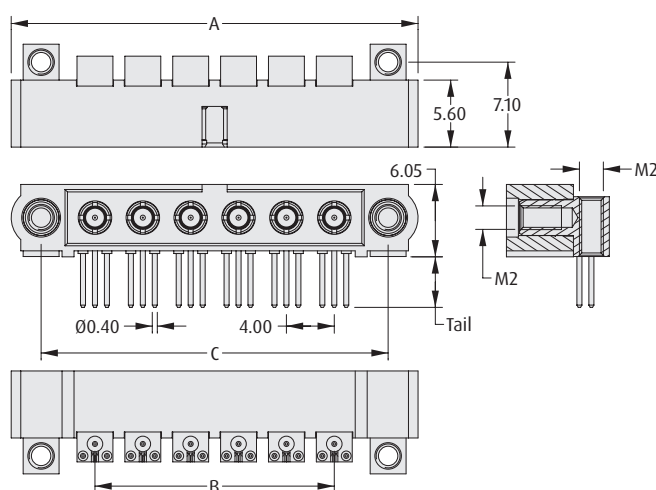
Datamate Coax Connectors

Plug (Male) Horizontal Throughboard

- ❖ 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.

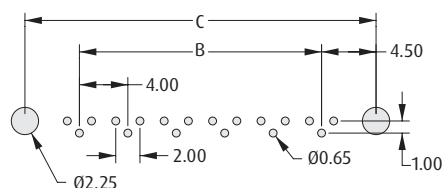


HORIZONTAL



CALCULATION

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



Recommended PCB Board Pattern

HOW TO ORDER

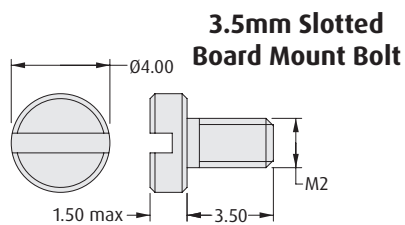
M80 - MH 3XX M5 - XX

TYPE	
313	3mm Tail
314	4.5mm Tail

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

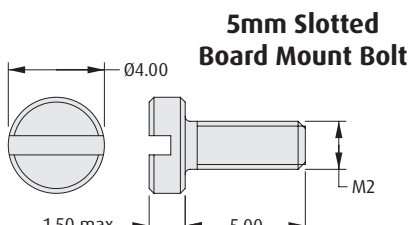
REQUIRED HARDWARE

Order separately from connector



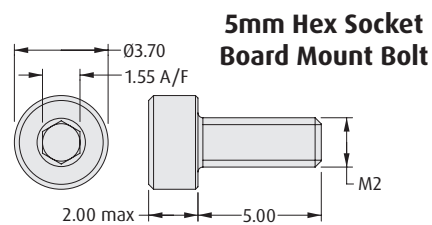
ORDER CODE

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

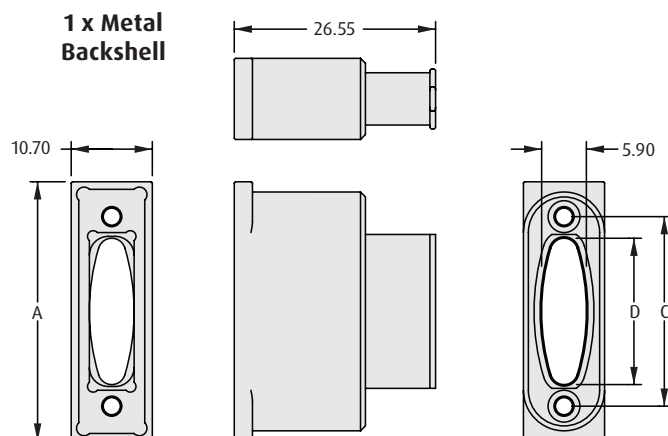
- ❖ Supplied as an accessory kit, including metal backshell, e-clips and the applicable jackscrews.
- ❖ To be used with the appropriate size of Female Cable connector kit without jackscrews (existing jackscrews can be removed).
- ❖ Gives 360 degree shielding when used with conductive braid and mated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



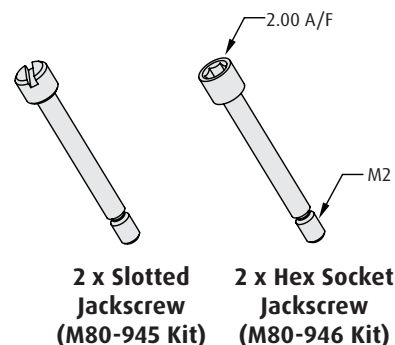
FEMALE

CALCULATION

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



4 x E-Clip
(2 spare)



2 x Slotted
Jackscrew
(M80-945 Kit)

2 x Hex Socket
Jackscrew
(M80-946 Kit)

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	Length = 206.8mm
M80-9480000	Length = 362.0mm

HOW TO ORDER

SERIES CODE	M80 - 94 X XX 02	FINISH
TYPE		02 Nickel
5 With Slotted Jackscrews		
6 With Hex Socket Jackscrews		
	EQUIVALENT NO. OF SIGNAL CONTACTS	
	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.

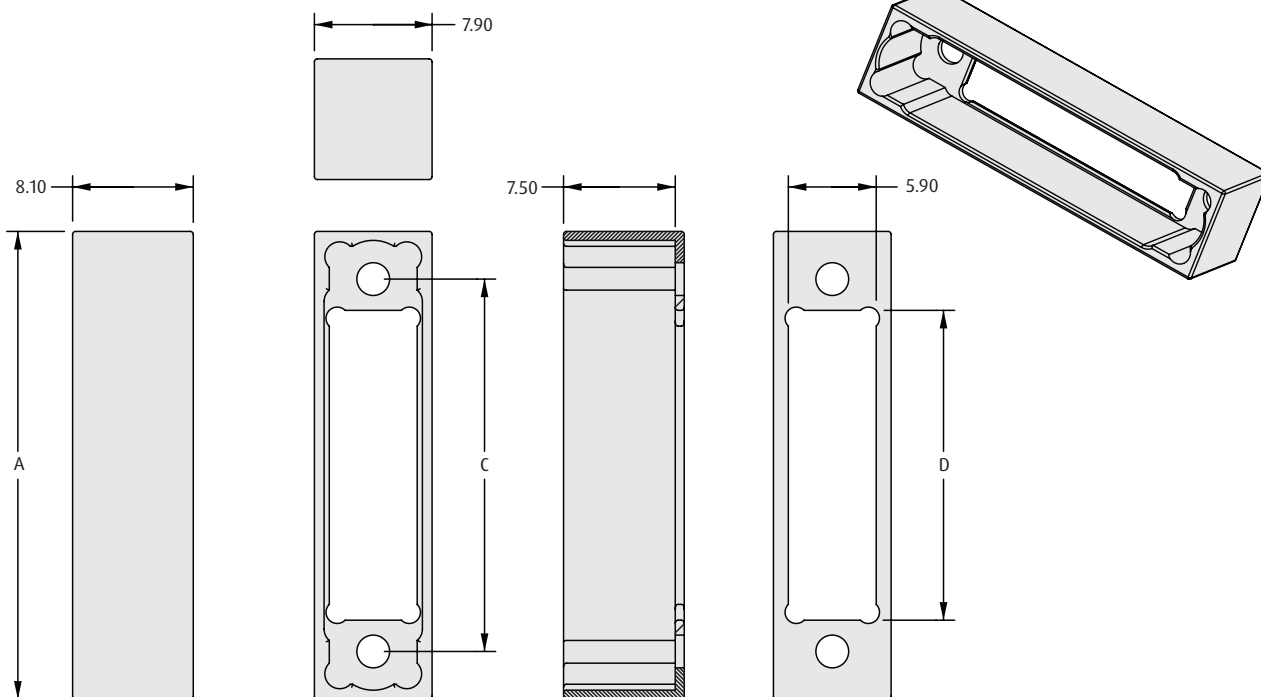


DATAMATE MIX-TEK

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

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

Electrical

Current - Standard J-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

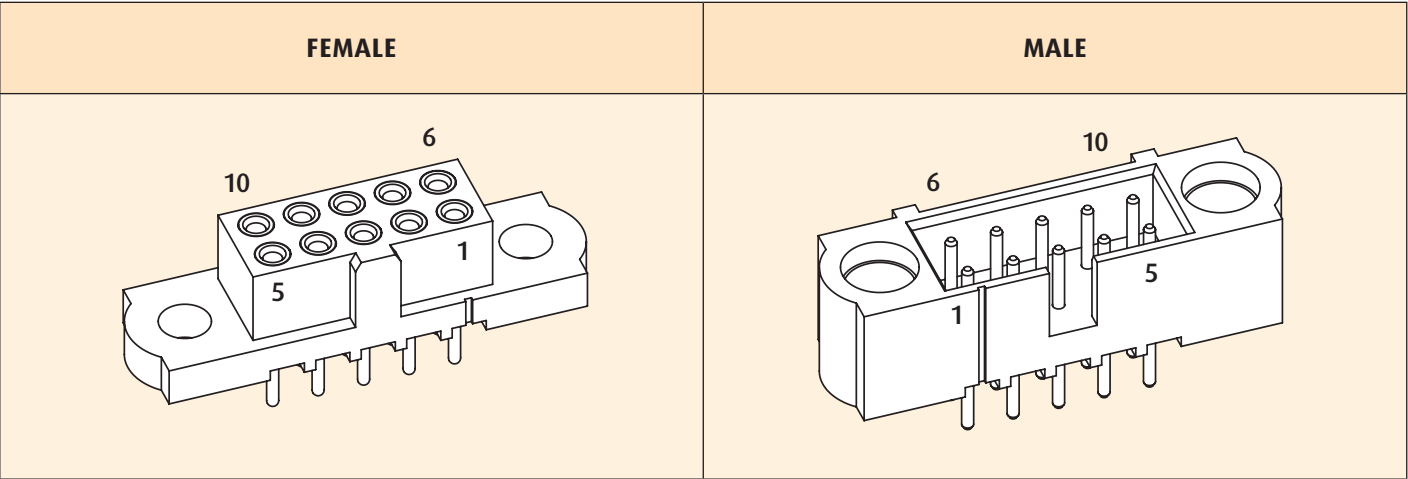
Durability	
Standard J-Tek:	500 operations
T-Contact:	1,000 operations
Insertion force (max)	
Standard J-Tek:	2.8N
T-Contact:	4.0N
Withdrawal force (min)	
Standard J-Tek:	0.2N
T-Contact:	0.5N
Signal crimp accommodation:	
	22 AWG to 32 AWG BS 3G 210 Type A, MIL-W-16878

Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity	
Standard J-Tek:	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)

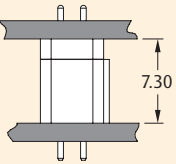
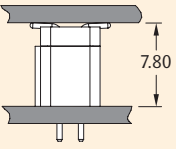
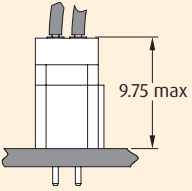
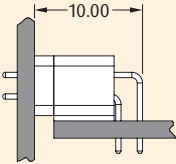
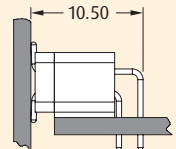
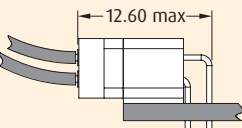
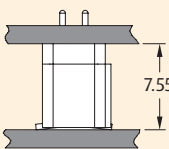
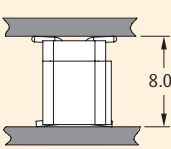
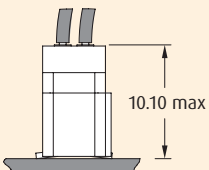
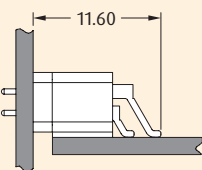
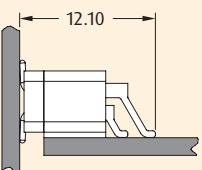
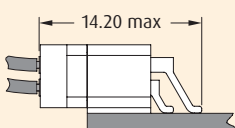
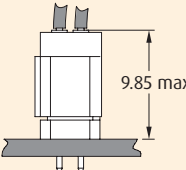
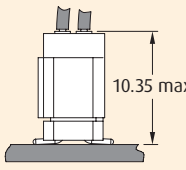
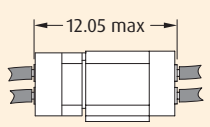
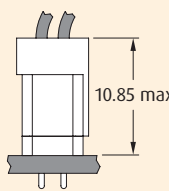
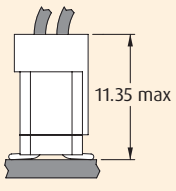
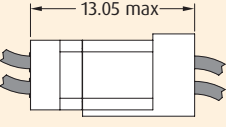
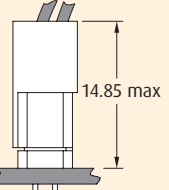
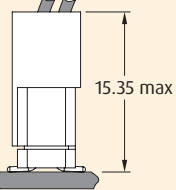
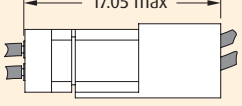
* Tested with connectors with Jackscrews.

Pin Numbering



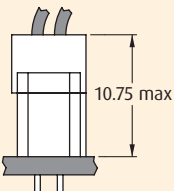
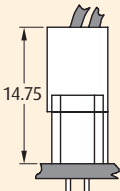
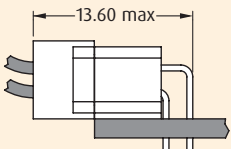
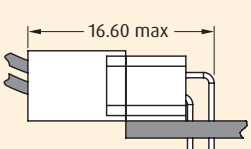
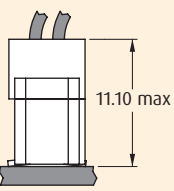
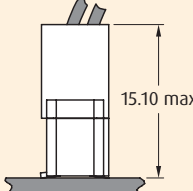
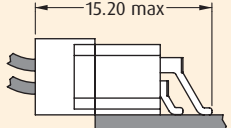
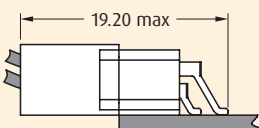
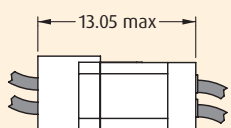
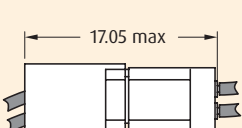
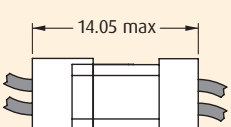
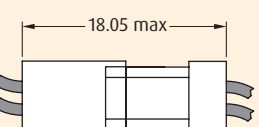
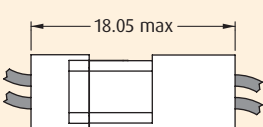
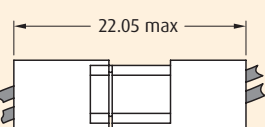
All dimensions in mm.

Datamate J-Tek Mating Profiles

		FEMALE		
		VERTICAL THROUGHBOARD	VERTICAL SMT	CRIMP
MALE	VERTICAL THROUGHBOARD			
	HORIZONTAL THROUGHBOARD			
	VERTICAL SMT			
	HORIZONTAL SMT			
	CRIMP			
	CRIMP 1mm EXTENDED WALL			
	CRIMP 5mm EXTENDED WALL			

All dimensions in mm.

Datamate J-Tek Mating Profiles

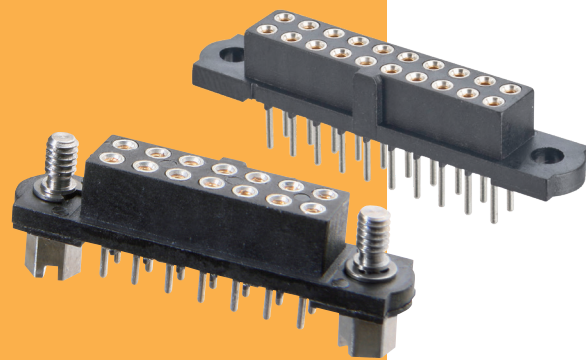
		FEMALE	
		CRIMP 1mm EXTENDED WALL	CRIMP 5mm EXTENDED WALL
MALE	VERTICAL THROUGH-BOARD		
	HORIZONTAL THROUGH-BOARD		
	VERTICAL SMT		
	HORIZONTAL SMT		
	CRIMP		
	CRIMP 1mm EXTENDED WALL		
	CRIMP 5mm EXTENDED WALL		

All dimensions in mm.

Datamate J-Tek Connectors

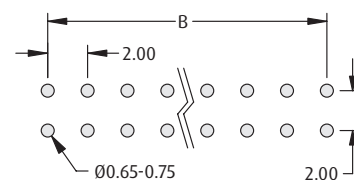
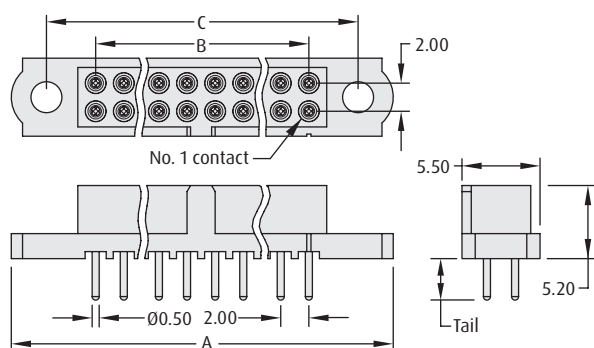
Female Vertical Throughboard

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



DATAMATE J-TEK

WITHOUT JACKSCREWS

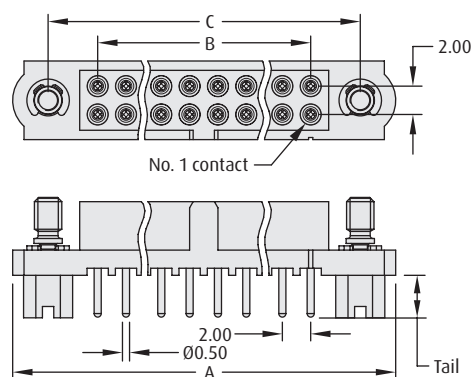


Recommended PC Board Pattern

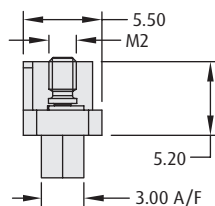
CALCULATION

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

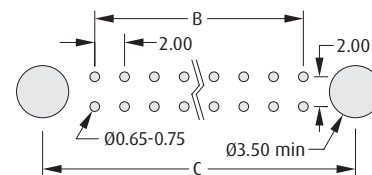
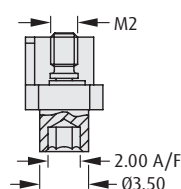
WITH JACKSCREWS



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

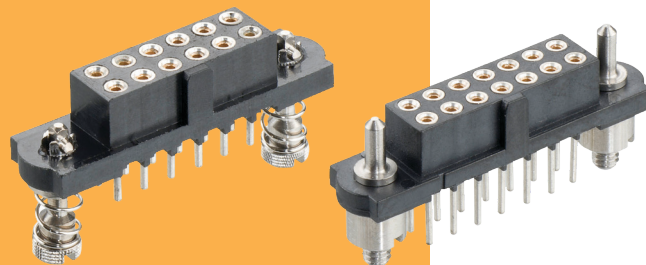
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

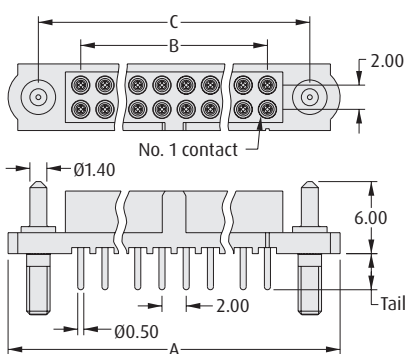
Datamate J-Tek Connectors

Female Vertical Throughboard, Guide Pin, 101Lok

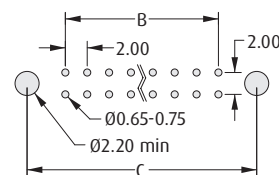
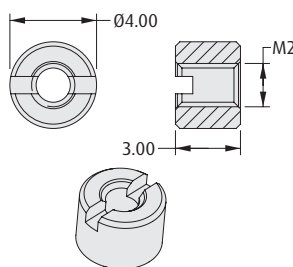
- Guide pin style includes board mount fixing, and mates with Datamate J-Tek male connectors with compatible jackscrows.
- 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- 101Lok style mates with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



GUIDE PIN JACKSCREWS



Board Mount Nut, 2 per connector

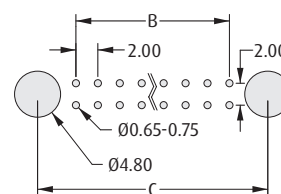
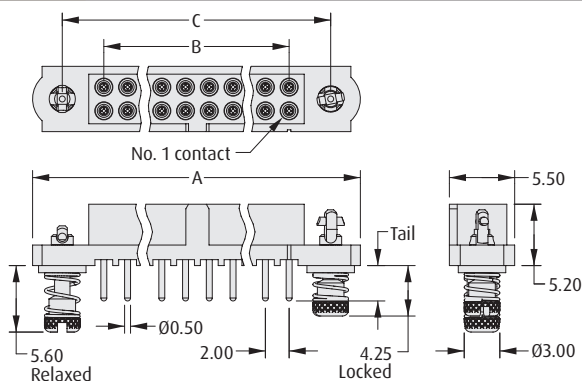


Recommended PC Board Pattern

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
FD	101Lok

FINISH

05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Female Vertical Throughboard Reverse Fix

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

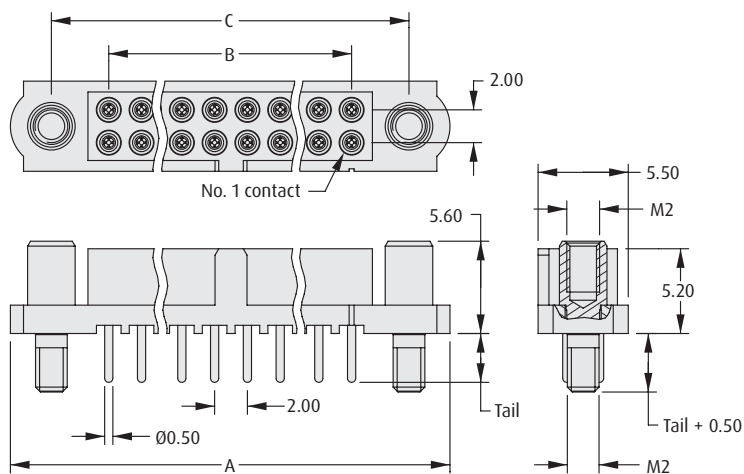


DATAMATE J-TEK

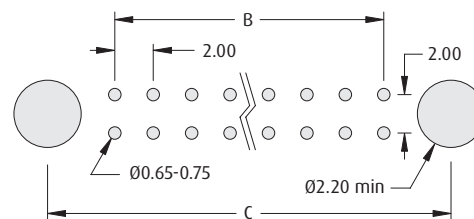
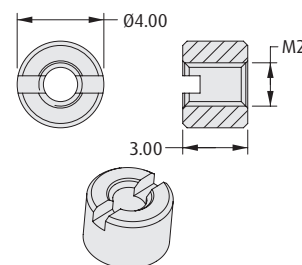
REVERSE FIX

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

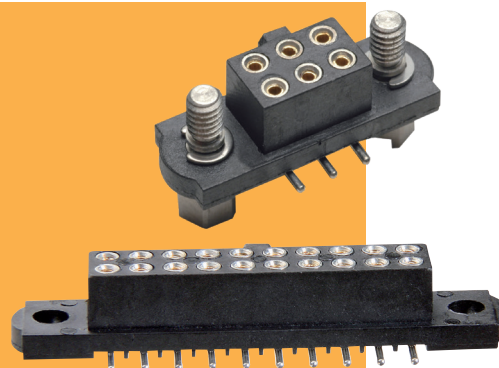
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

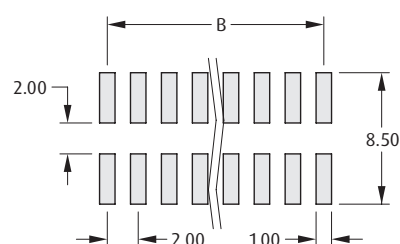
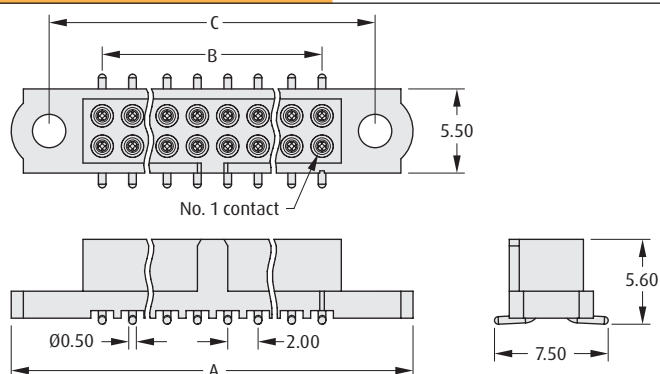
Datamate J-Tek Connectors

Female Vertical Surface Mount

- ▣ Mates with all Datamate J-Tek male connectors with compatible jackscrews.
- ▣ Gull wing SMT tails simplify inspection process.



WITHOUT JACKSCREWS

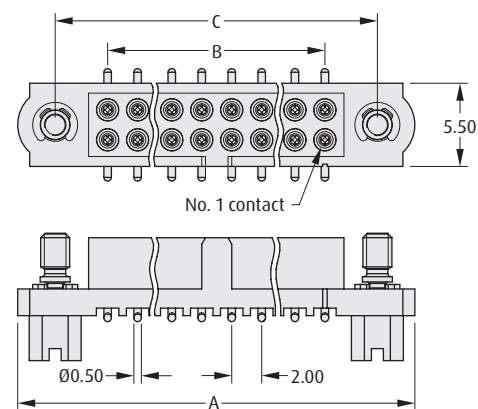


Recommended PC Board Pattern

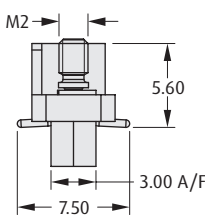
CALCULATION

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

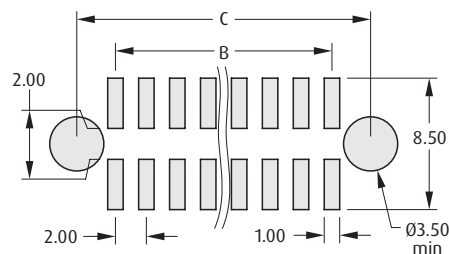
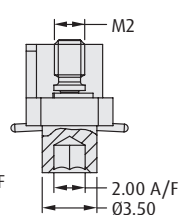
WITH JACKSCREWS



Hex Slotted Jackscrew



Hex Socket Jackscrew



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4 X 2 XX XX

SERIES CODE

TYPE

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

FINISH

05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

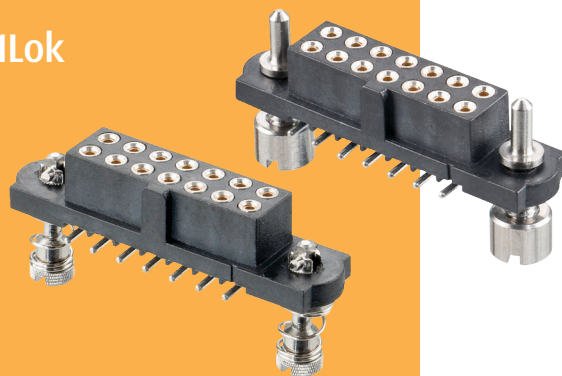
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

Datamate J-Tek Connectors

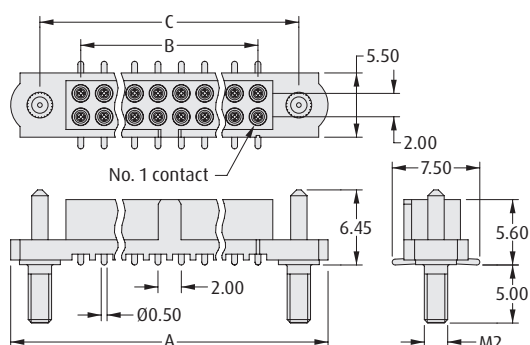
Female Vertical Surface Mount Guide Pin, 101Lok

- ❖ 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.

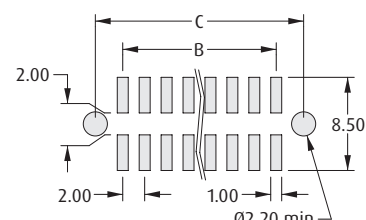
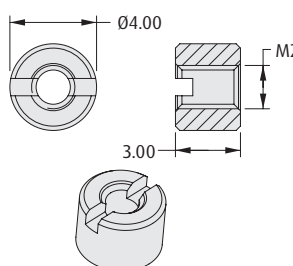


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



Board Mount Nut, 2 per connector

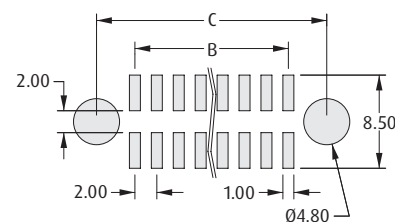
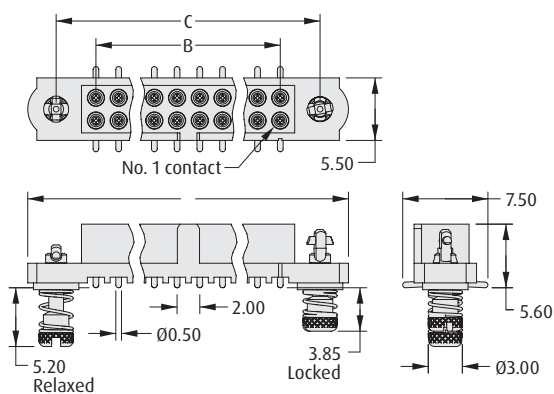


Recommended PC Board Pattern

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
FD	101Lok

FINISH

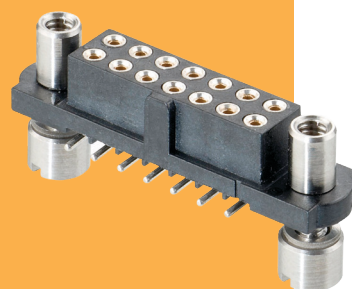
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Female Vertical Surface Mount Reverse Fix

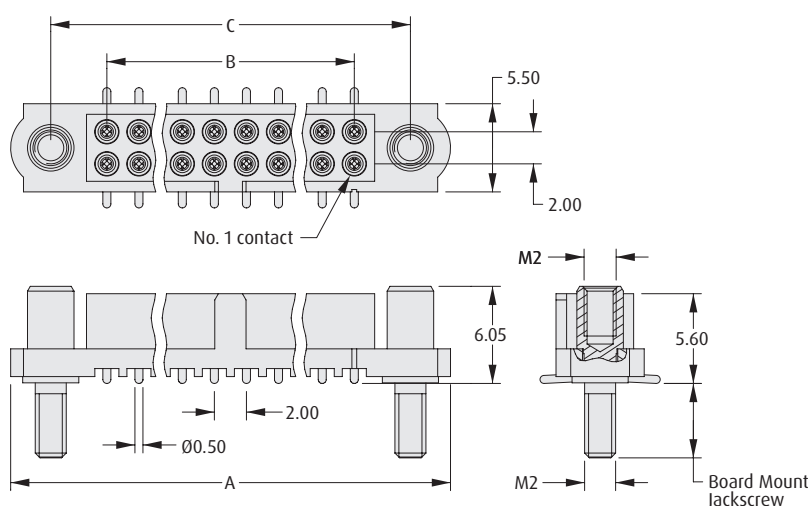
- Fully shrouded contacts.
- Polarized housings.
- Includes Board Mount fixing.
- Mates with male Datamate J-Tek connectors with compatible Reverse Fix jackscrews.



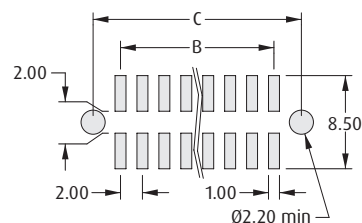
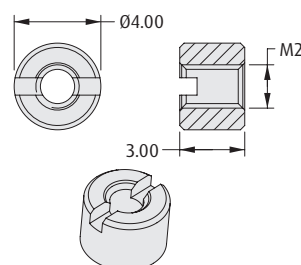
REVERSE FIX

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

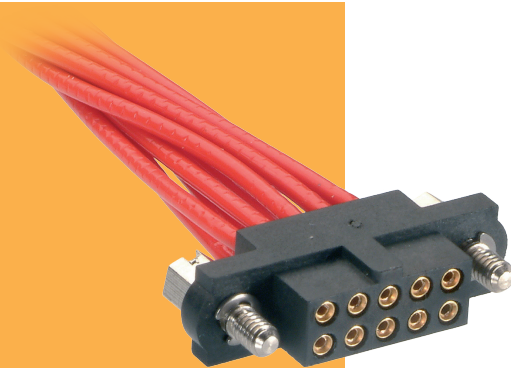
05	Gold
42	Gold + Tin

All dimensions in mm.

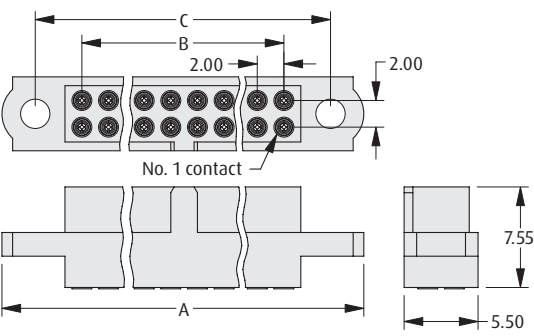
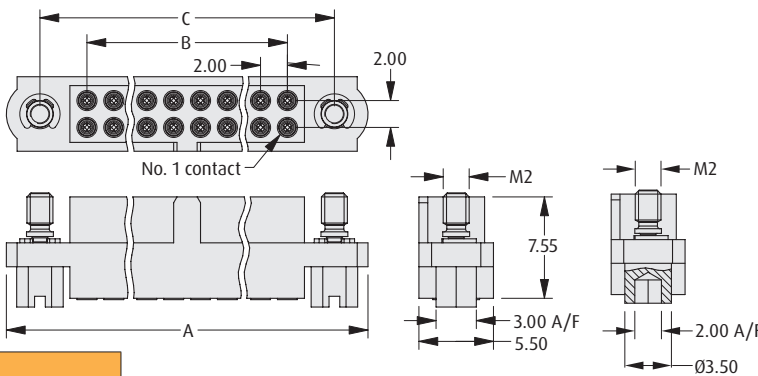
Datamate J-Tek Connectors

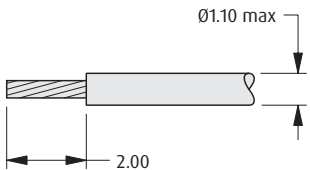
Female Crimp Kit

- ❖ 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	<div>Hex Slotted Jackscrew</div> <div>Hex Socket Jackscrew</div>	
CALCULATION											
A	B + 12										
B	Total no. of contacts - 2										
C	B + 7										

TOOLS		WIRE STRIPPING DETAILS	
<p>Recommended Crimp Tool – M22520/2-01</p> <p>Positioner – T5747</p> <p>Contact Insertion/Removal Tool – Z80-280</p> <p>❖ Spare and pre-cabled contacts shown on following pages.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>			

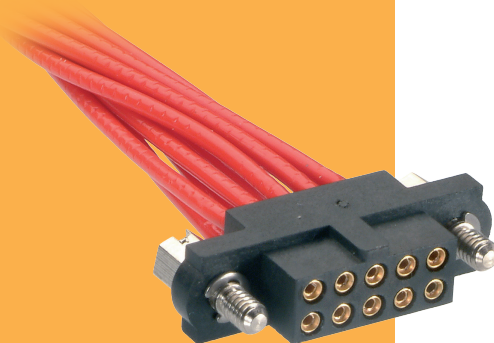
HOW TO ORDER			
M80 - 4XX XX XX			
SERIES CODE		FINISH	
LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)	05	Gold
470	471	42	Gold + Tin
460	461		
480	481		
		TOTAL NO. OF CONTACTS	
		04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50	

All dimensions in mm.

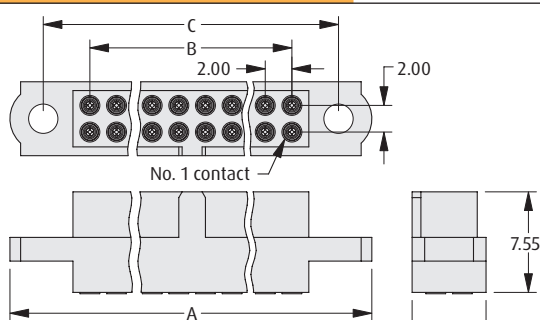
Datamate J-Tek Connectors

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.



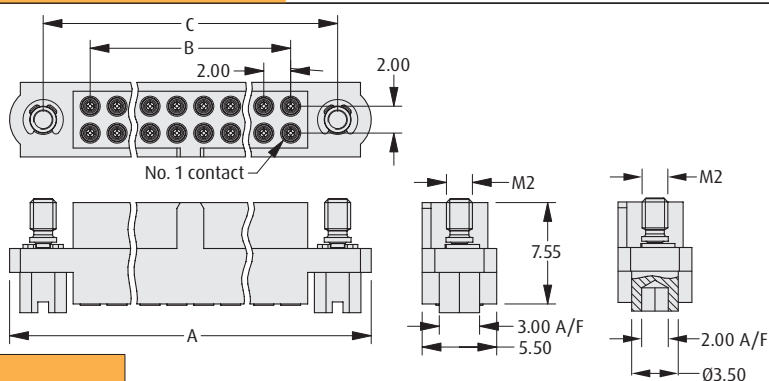
WITHOUT JACKSCREWS



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

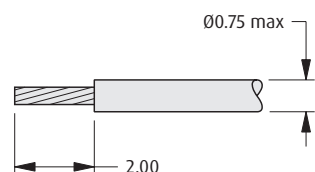
Positioner - T5747

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

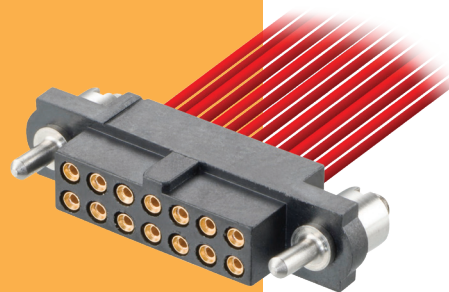
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

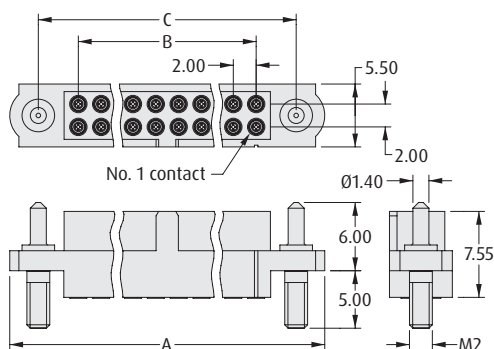
Female Crimp Kit - Guide Pin, 101Lok

- ❖ 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.

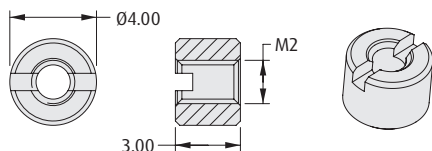


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



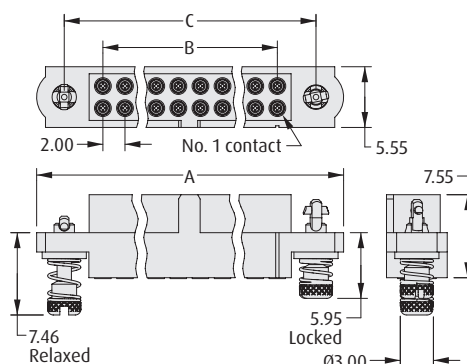
Board Mount Nut, 2 per connector



CALCULATION

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

101LOK



TOOLS

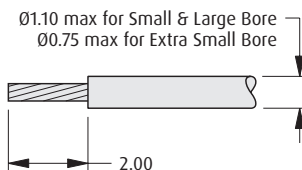
Recommended Crimp Tool - M22520/2-01

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

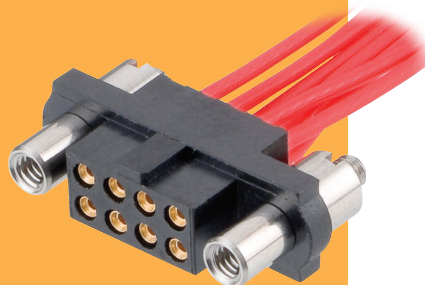
05	Gold
42	Gold + Tin

All dimensions in mm.

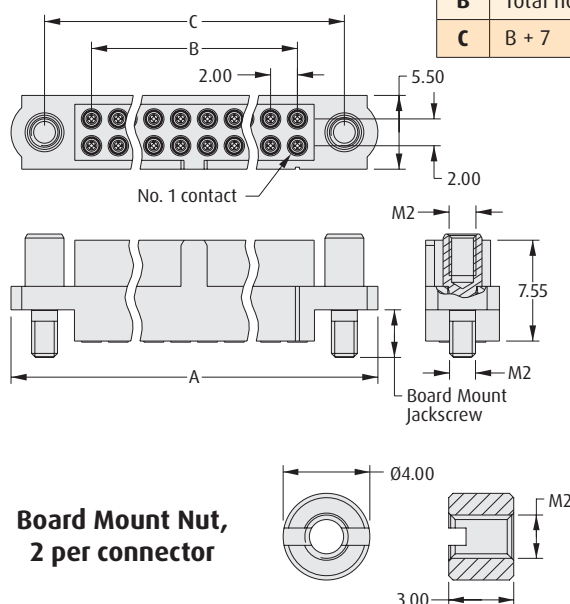
Datamate J-Tek Connectors

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

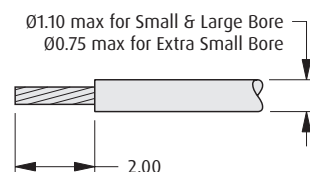


**Board Mount Nut,
2 per connector**

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

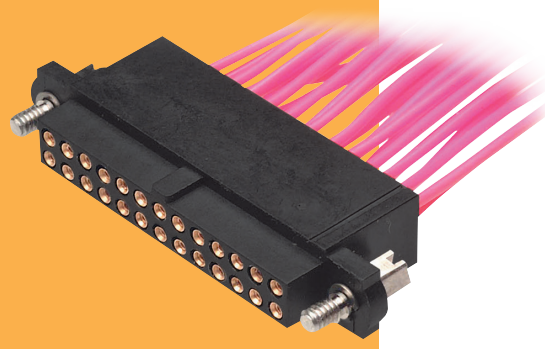
F8	3.5mm Board Mount
F9	5mm Board Mount

All dimensions in mm.

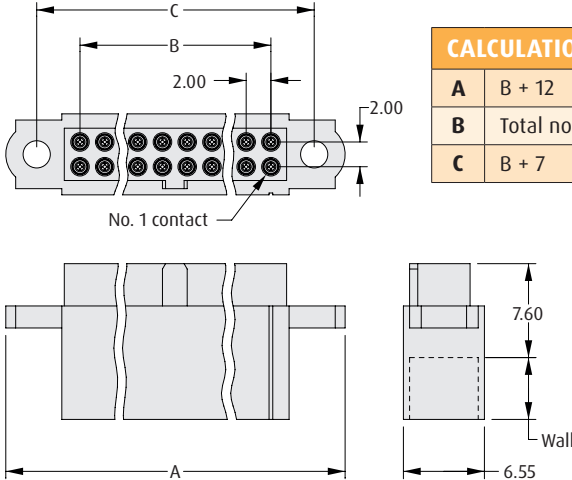
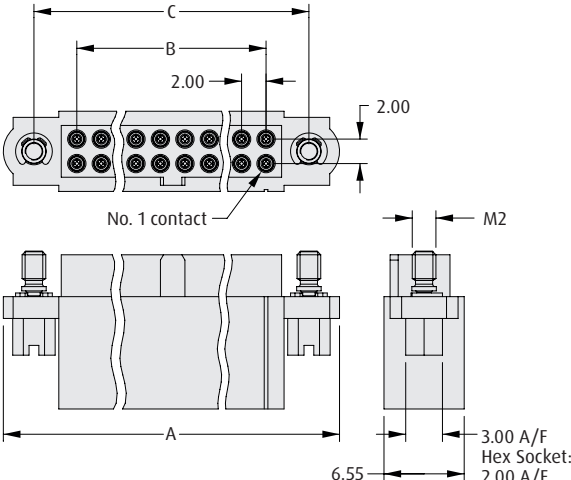
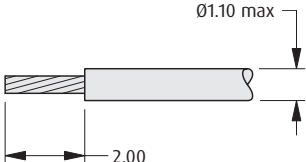
Datamate J-Tek Connectors

Female Crimp Kit - Extended Wall

- ❖ Extended Wall Datamate allows back potting to be performed.
- ❖ Polarized housings.
- ❖ 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

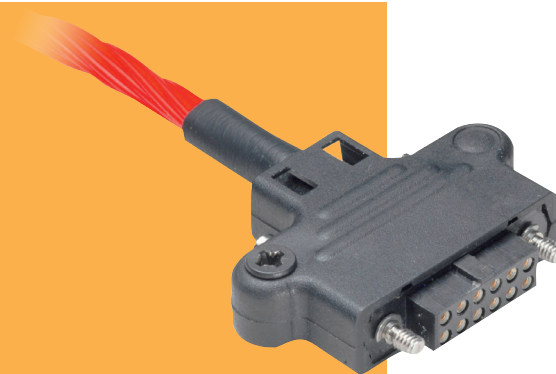
WITHOUT JACKSCREWS		WITH JACKSCREWS																					
																							
<div>CALCULATION</div> <table><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>		A	B + 12	B	Total no. of contacts - 2	C	B + 7																
A	B + 12																						
B	Total no. of contacts - 2																						
C	B + 7																						
<div>TOOLS</div> <p>Recommended Crimp Tool - M22520/2-01</p> <p>Positioner - T5747</p> <p>Contact Insertion/Removal Tool - Z80-280</p> <p>❖ Spare and pre-cabled contacts shown on following pages.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>		<div>WIRE STRIPPING DETAILS</div> 																					
<div>HOW TO ORDER</div>																							
<div>SERIES CODE</div> <table><tr><th>LARGE BORE (22 AWG)</th><th>SMALL BORE (24-28 AWG)</th><th></th></tr><tr><td>475</td><td>476</td><td>Without Jackscrews</td></tr><tr><td>465</td><td>466</td><td>With Hex Slotted Jackscrews</td></tr><tr><td>485</td><td>486</td><td>With Hex Socket Jackscrews</td></tr></table>		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	<div>M80 - XXX XX XX</div> <div>WALL SIZE</div> <table><tr><td>BLANK</td><td>Wall = 5mm</td></tr><tr><td>A</td><td>Wall = 1mm</td></tr></table> <div>FINISH</div> <table><tr><td>05</td><td>Gold</td></tr><tr><td>42</td><td>Gold + Tin</td></tr></table> <div>TOTAL NO. OF CONTACTS</div> <p>06, 10, 12, 14, 18, 20, 26, 34, 42, 50</p>		BLANK	Wall = 5mm	A	Wall = 1mm	05	Gold	42	Gold + Tin
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																					
BLANK	Wall = 5mm																						
A	Wall = 1mm																						
05	Gold																						
42	Gold + Tin																						

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Kit with Hood

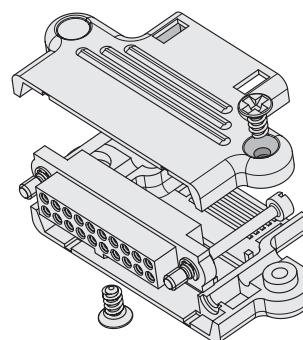
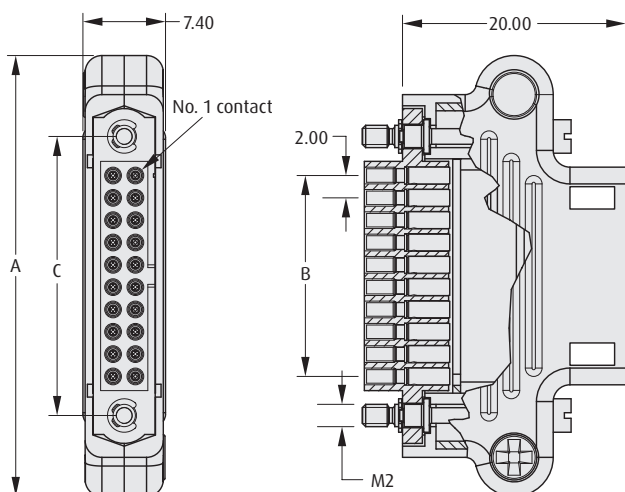
- ❖ Supplied as a complete kit: jackscrews assembled to housing; hood, contacts and assembly screws supplied loose.
- ❖ Provides strain relief by preventing cable bending at the rear of the connector, and also has the option of inserting a cable tie to reduce pull strain.



FEMALE

CALCULATION

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



TOOLS

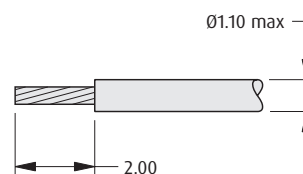
Recommended Crimp Tool - M22520/2-01

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.

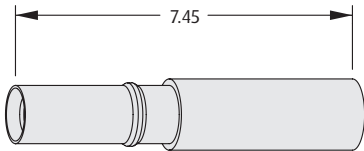
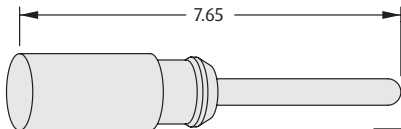
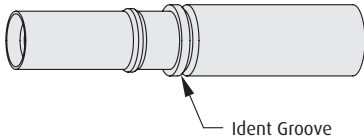
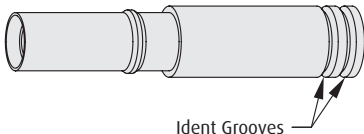
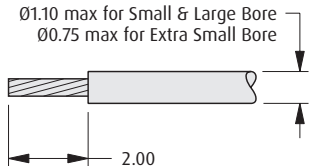
Datamate J-Tek Connectors

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

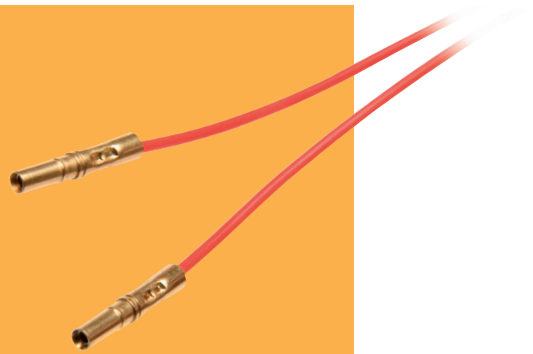
CRIMP CONTACTS		DUMMY CONTACT	
<p>Large Bore (22 AWG)</p> 		 <div>ORDER CODE M80-023</div>	
<p>Small Bore (24 to 28 AWG)</p> 		WIRE STRIPPING DETAILS	
<p>Extra Small Bore (28 to 32 AWG)</p> 			
		TOOLS	
		<p>Recommended Crimp Tool - M22520/2-01</p> <p>Positioner - T5747</p> <p>Contact Insertion/Removal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

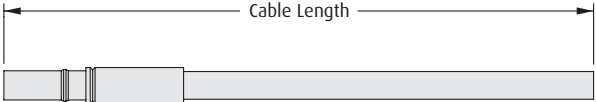
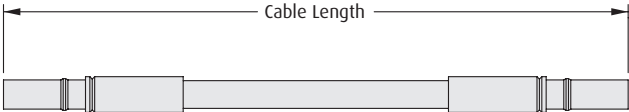
All dimensions in mm.

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.



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

All dimensions in mm.

Datamate J-Tek Connectors

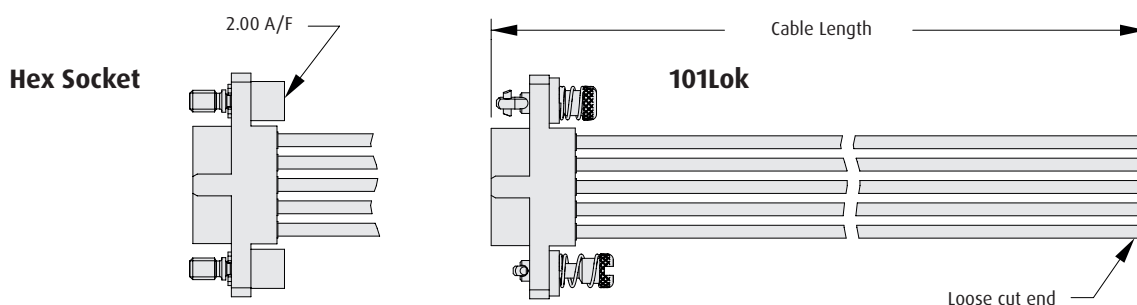
Female Cable Assemblies

- ❖ Fully assembled connectors, fixings and cable in standard configurations.
- ❖ Fitted with 24AWG wire, PTFE insulation.
- ❖ Connectors mate with Datamate J-Tek male connectors with applicable threaded jackscrews or 101Lok fixings.



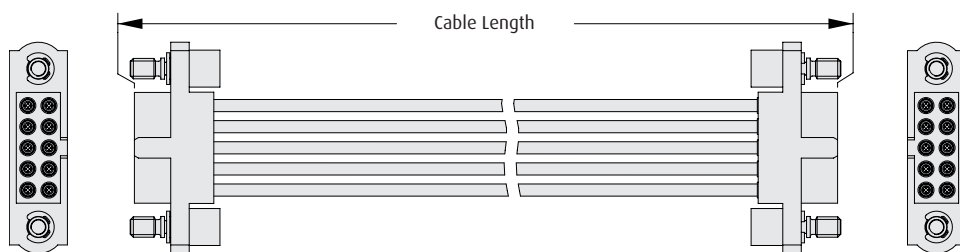
DATAMATE J-TEK

FEMALE SINGLE ENDED



- ❖ Cable insulation is multicolored - check applicable Technical Drawing for color sequence.

FEMALE - FEMALE DOUBLE ENDED



- ❖ Cable insulation is white.
- ❖ Contact 1 is attached to Contact 1, Contact 2 to Contact 2, etc.

HOW TO ORDER

M80 - FC2 XX XX XX - 0150 XX

SERIES CODE

TOTAL NO. OF CONTACTS

06, 10, 20, 26	Double Ended, Hex Socket
06, 10, 20, 26, 50	Single Ended, Hex Socket
04, 08, 12, 20	Single Ended, 101Lok

FIXING, LENGTH, TERMINATION - SECOND END

F2-0150F2	150mm, Double Ended, Hex Socket Jackscrews
F2-0150L	150mm, Single Ended, Hex Socket Jackscrews
FC-0150L	150mm, Single Ended, 101Lok

WIRE COLOR

05	White (Double Ended only)
68	Multicolor (Single Ended only)

All dimensions in mm.

Datamate J-Tek Connectors

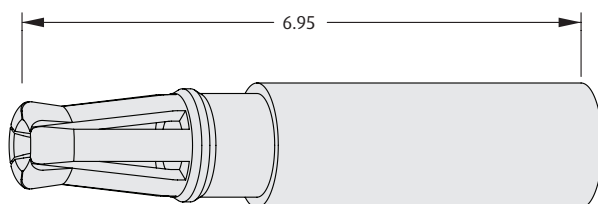
Female Crimp T-Contact

- ❖ 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.



CRIMP CONTACTS

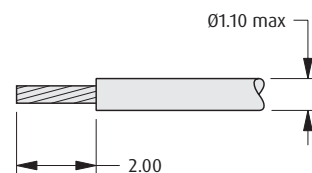
Large Bore (22 AWG)



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

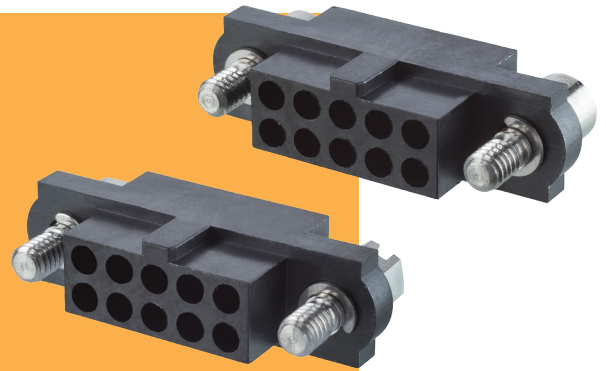
FINISH

05 Gold

Datamate J-Tek Connectors

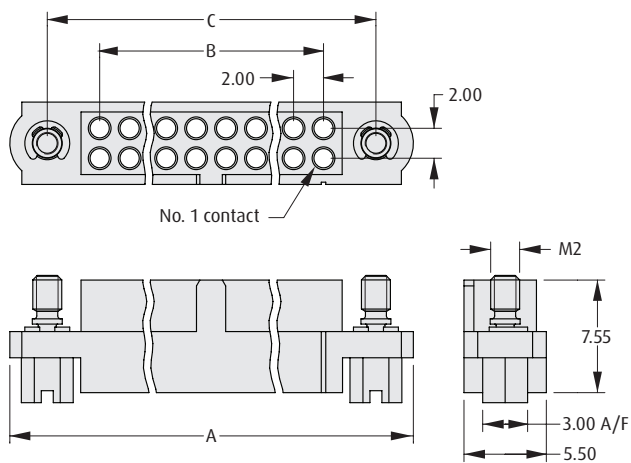
Female Crimp Housing

- ❖ 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.

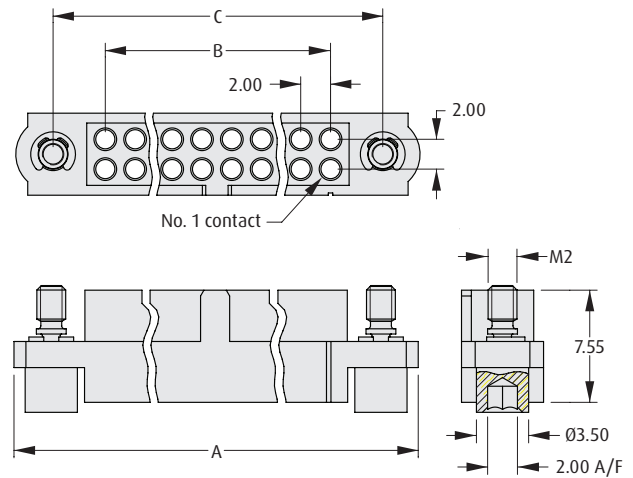


DATAMATE J-TEK

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

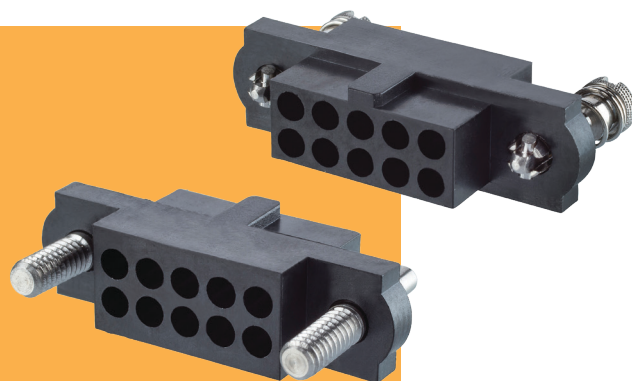
04 to 50

All dimensions in mm.

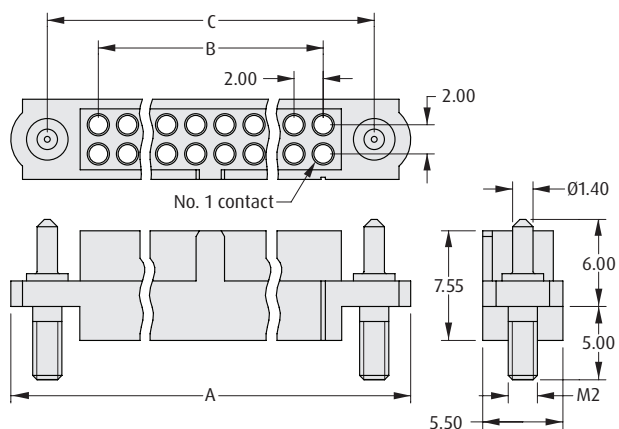
Datamate J-Tek Connectors

Female Crimp Housing - Guide Pin, 101Lok

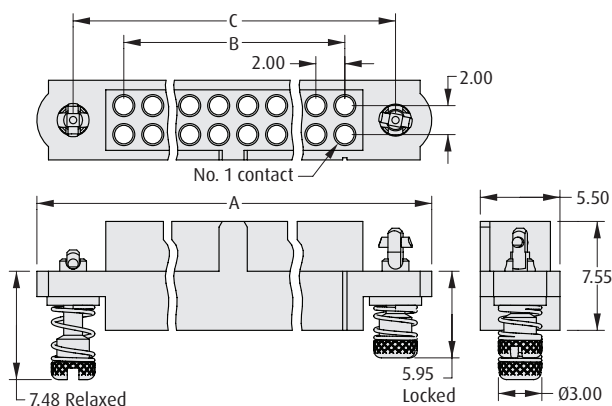
- ❖ Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- ❖ Guide pin style includes board mount fixing.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors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



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

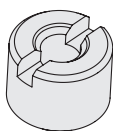
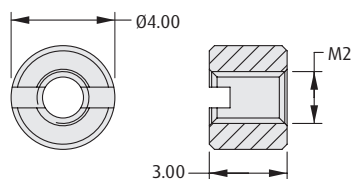
TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR GUIDE PIN STUD

Order separately from connector

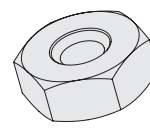
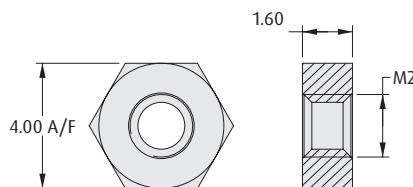
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

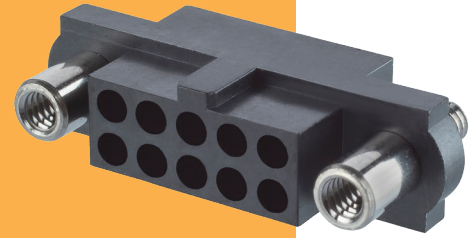
M80-2430000B

All dimensions in mm.

Datamate J-Tek Connectors

Female 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.

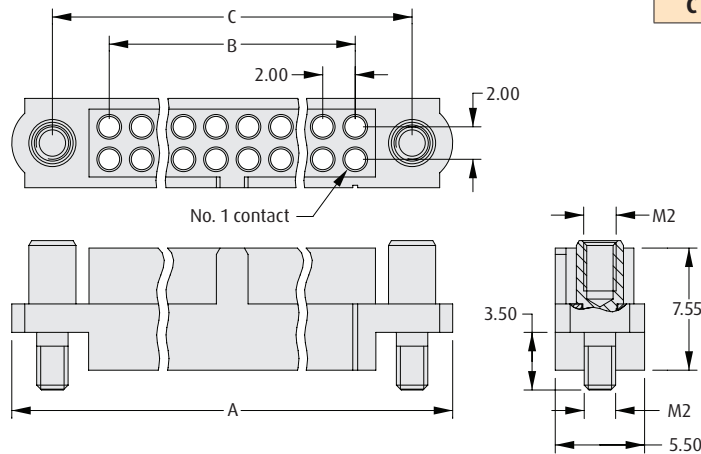


DATAMATE J-TEK

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

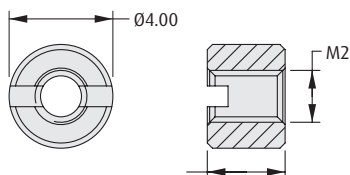
TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR PANEL MOUNT STUD

Order separately from connector

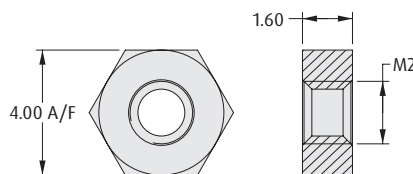
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

M80-2430000B

All dimensions in mm.

Datamate J-Tek Connectors

Female Metal Backshell

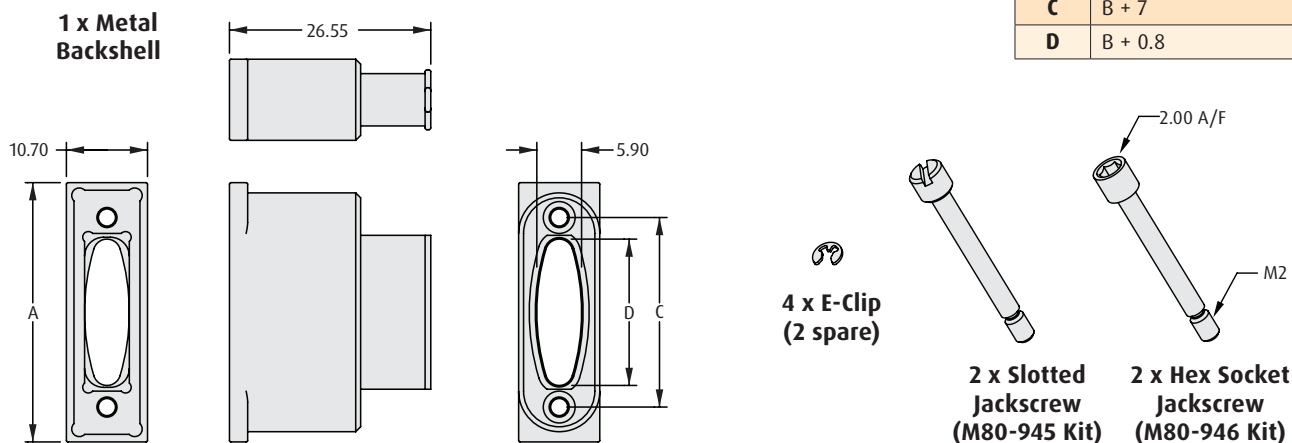
- ❖ Supplied as an accessory kit, including metal backshell, e-clips and the applicable jackscrews.
- ❖ To be used with the appropriate size of Female Crimp Kit without jackscrews.
- ❖ Gives 360 degree shielding when used with conductive braid and mated to a compatible male connector with metal backshell.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



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	Length = 206.8mm
M80-9480000	Length = 362.0mm

HOW TO ORDER

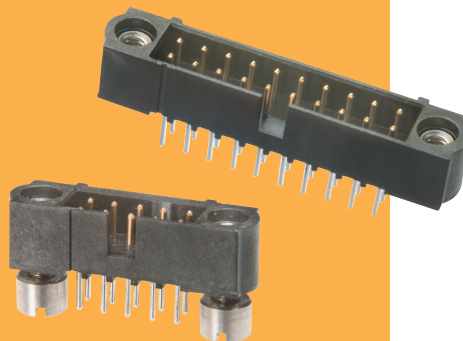
SERIES CODE		M80	-	94	X	XX	02	FINISH	
TYPE								02	Nickel
5	With Slotted Jackscrews							EQUIVALENT NO. OF SIGNAL CONTACTS	
6	With Hex Socket Jackscrews							08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32	

All dimensions in mm.

Datamate J-Tek Connectors

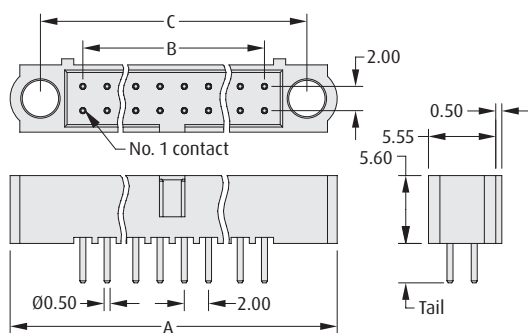
Male Vertical Throughboard

- Polarized housings.
- Fully shrouded contacts.
- Jackscrews are assembled where specified.
- Choice of throughboard termination length.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.



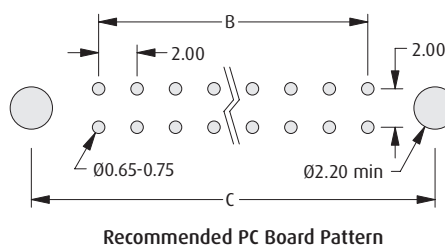
DATAMATE J-TEK

WITHOUT JACKSCREWS

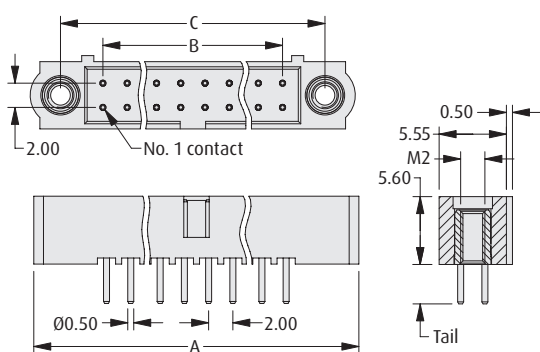


CALCULATION

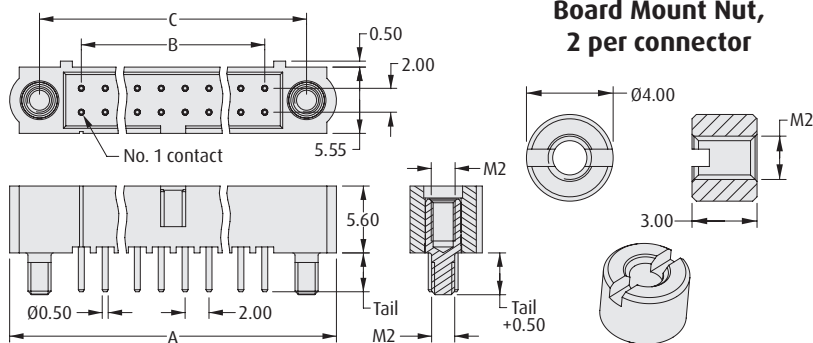
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



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

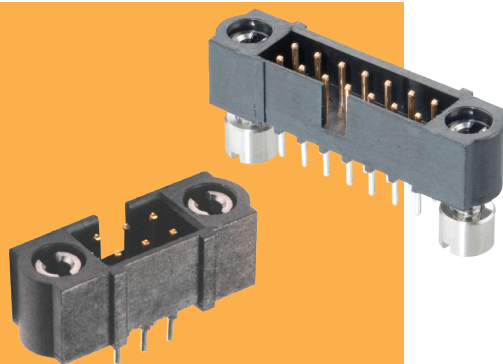
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

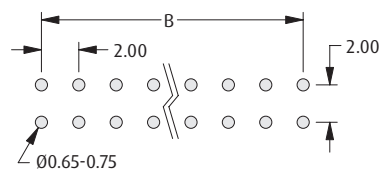
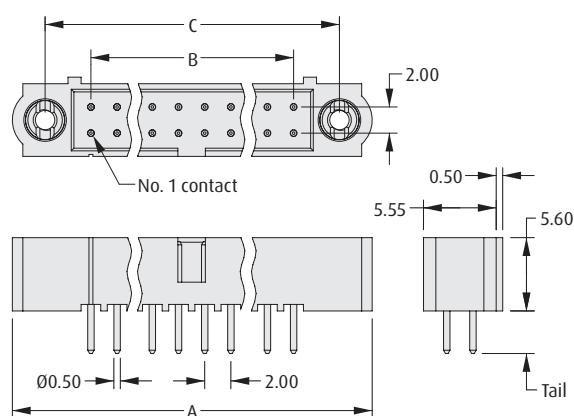
Datamate J-Tek Connectors

Male Vertical Throughboard 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 throughboard termination length.



101LOK

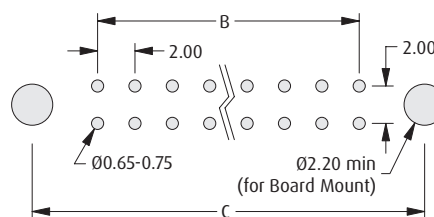
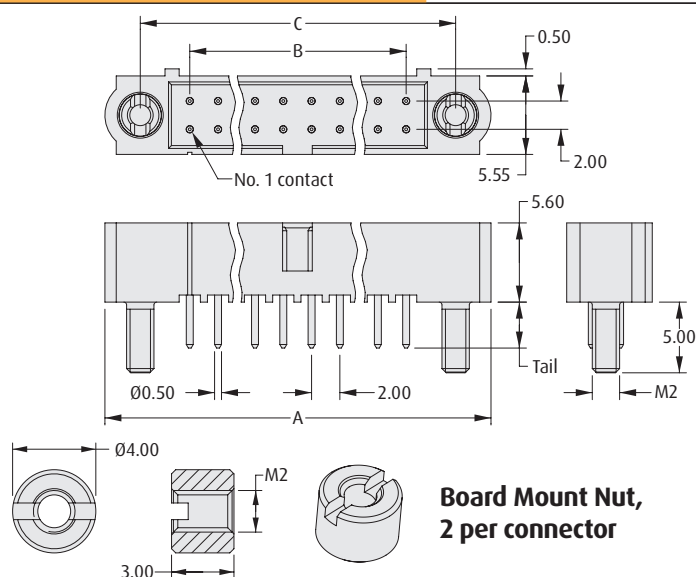


Recommended PC Board Pattern

CALCULATION

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

101LOK WITH BOARD MOUNT



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

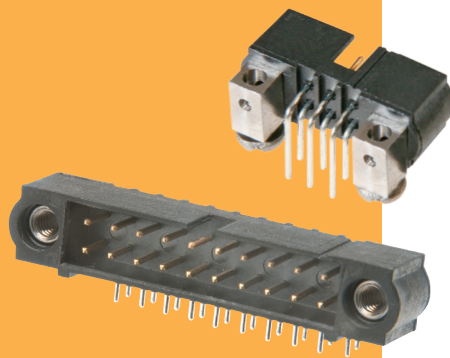
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

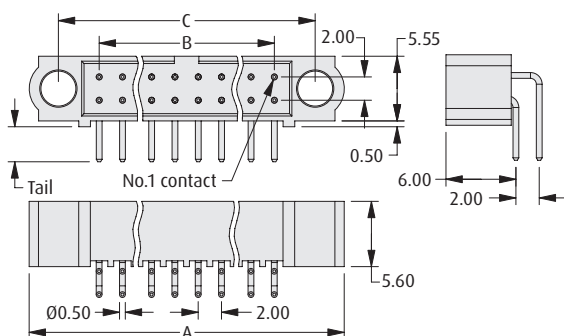
Male Horizontal Throughboard

- Polarized housings.
- Fully shrouded contacts.
- Jackscrews are assembled where specified.
- Choice of throughboard termination length.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.



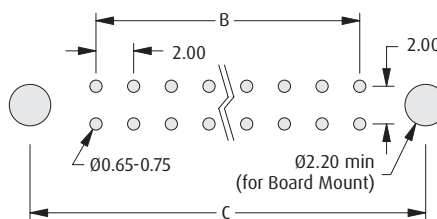
DATAMATE J-TEK

WITHOUT JACKSCREWS



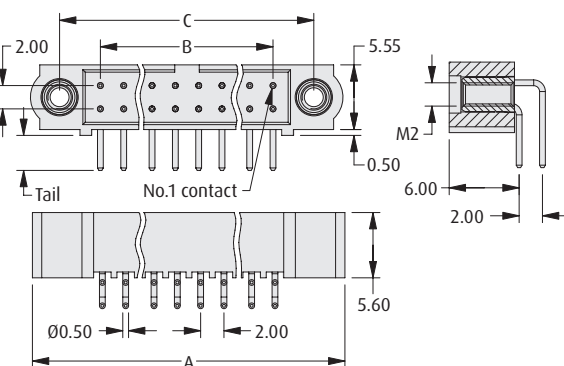
CALCULATION

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

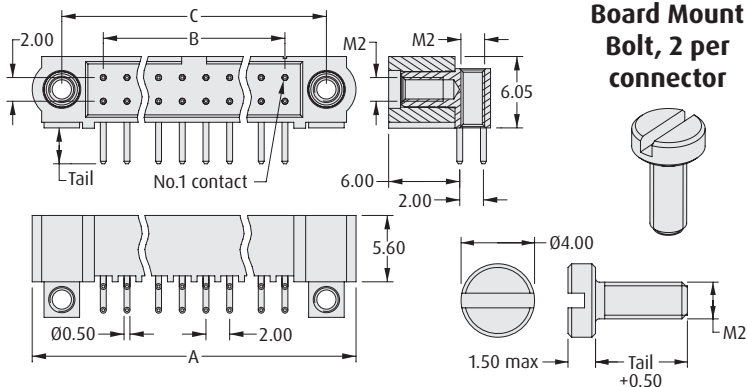


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 X X XX XX

SERIES CODE

3	With Jackscrews
4	With Board Mount
5	Without Jackscrews

0	3mm Tails
1	4.5mm Tails

FINISH

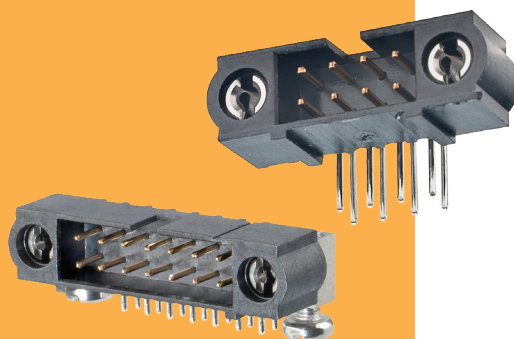
05	Gold
42	Gold + Tin

TOTAL NO. OF CONTACTS

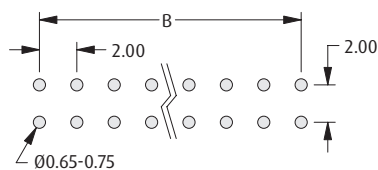
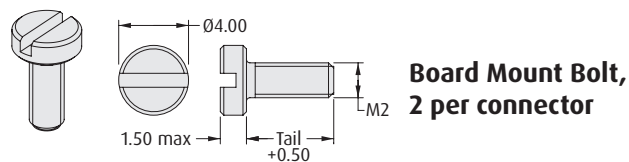
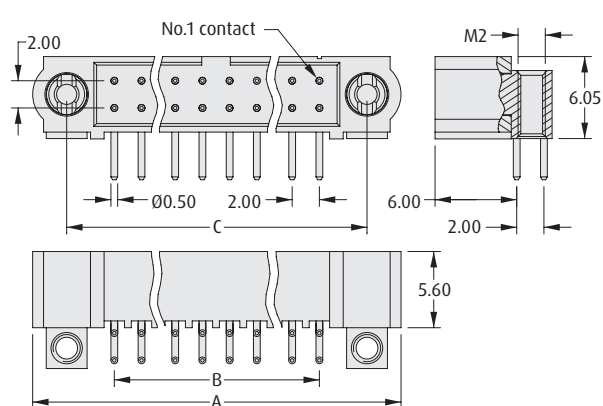
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

DATA-MATE J-TEK



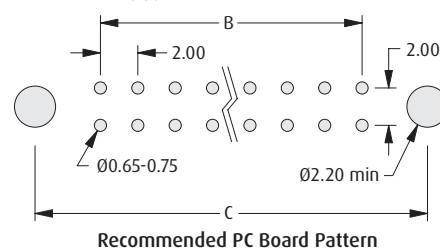
101LOK WITH BOARD MOUNT



Recommended PC Board Pattern

CALCULATION

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



Recommended PC Board Pattern

HOW TO ORDER

M80 - 5 LX XX XX MX

JACKSCREW	
MC	101Lok
MD	101Lok with Board Mount

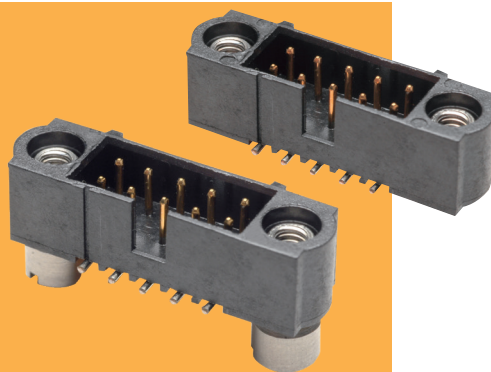
FINISH	
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

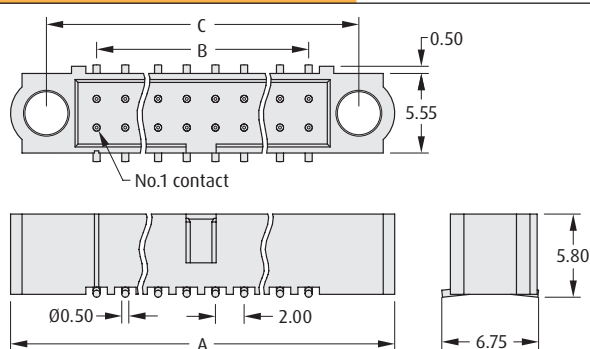
Male Vertical Surface Mount

- 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.



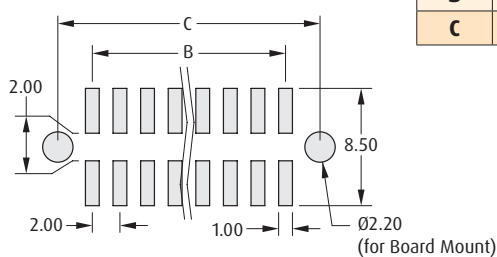
DATAMATE J-TEK

WITHOUT JACKSCREWS



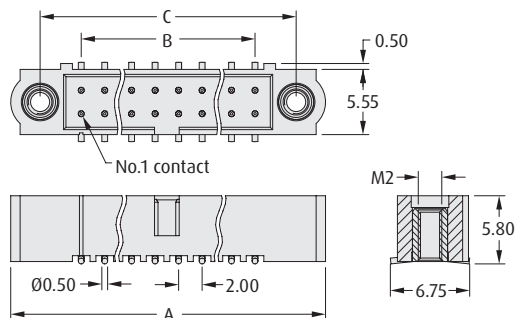
CALCULATION

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

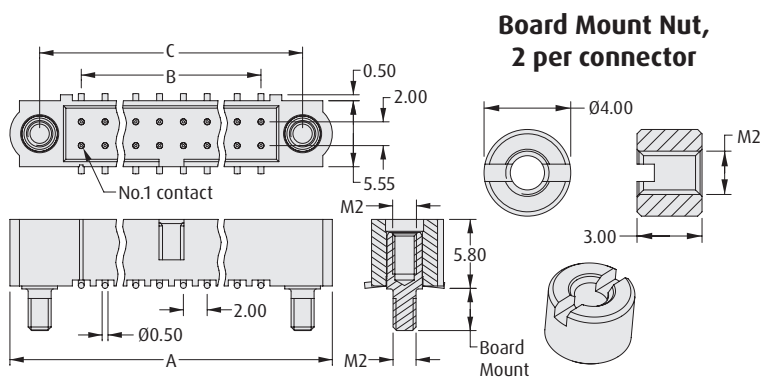


Recommended PC Board Pattern

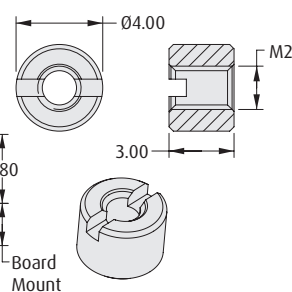
WITH JACKSCREWS



WITH BOARD MOUNT



Board Mount Nut, 2 per connector



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

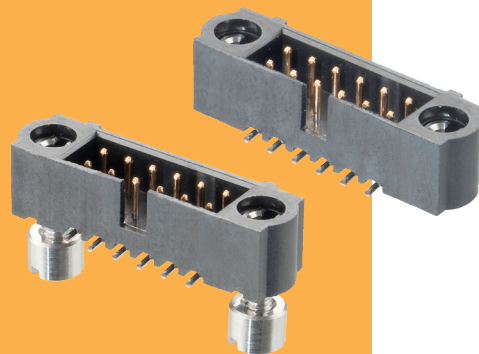
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

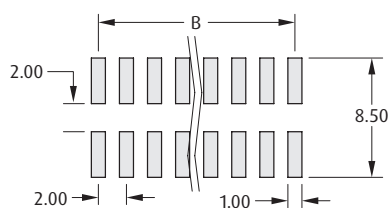
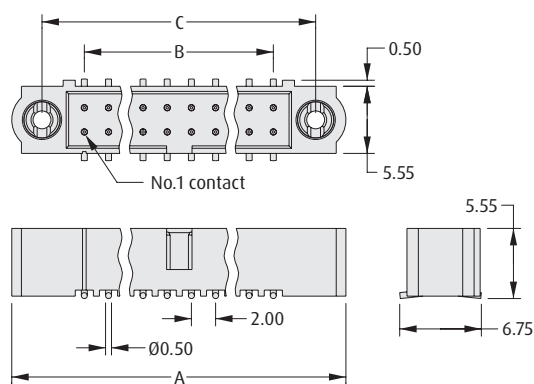
Datamate J-Tek Connectors

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.



101LOK

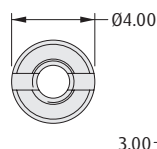
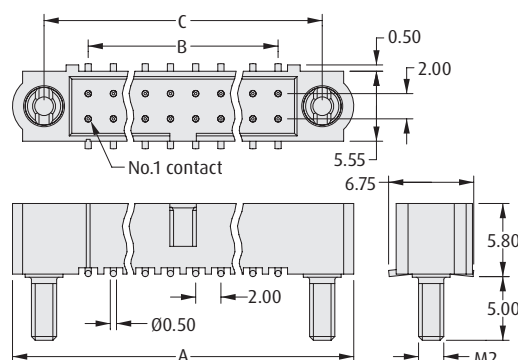


Recommended PC Board Pattern

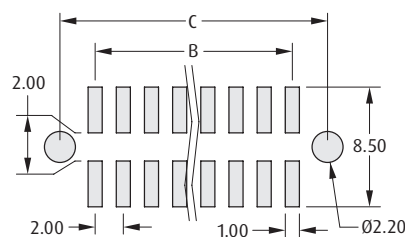
CALCULATION

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

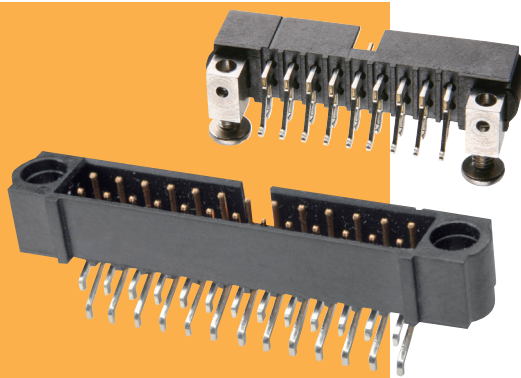
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

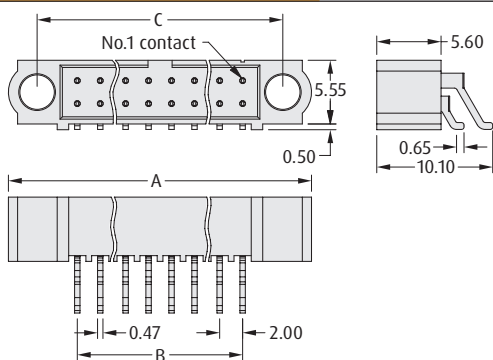
Male Horizontal Surface Mount

- Stamped contact ensures co-planarity.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.



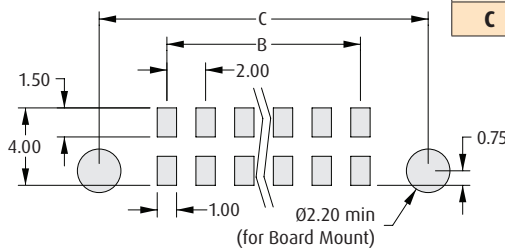
DATAMATE J-TEK

WITHOUT JACKSCREWS



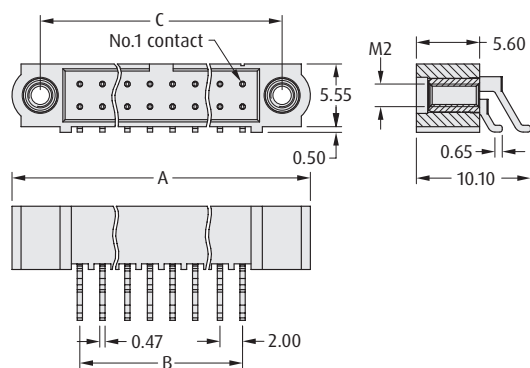
CALCULATION

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

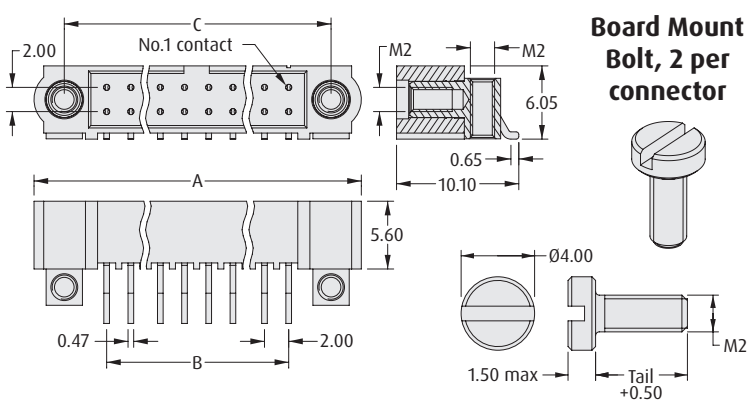


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 XX XX XX

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

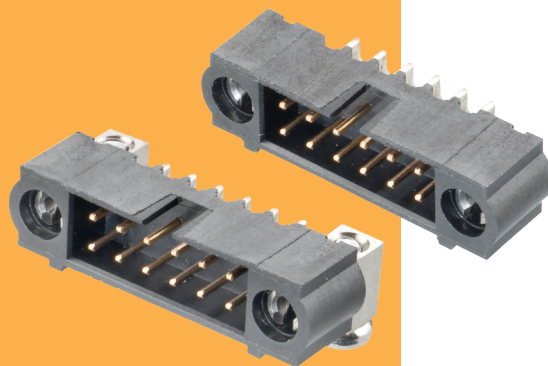
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

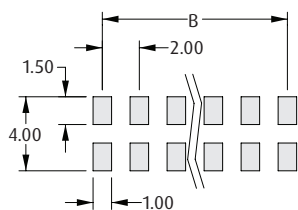
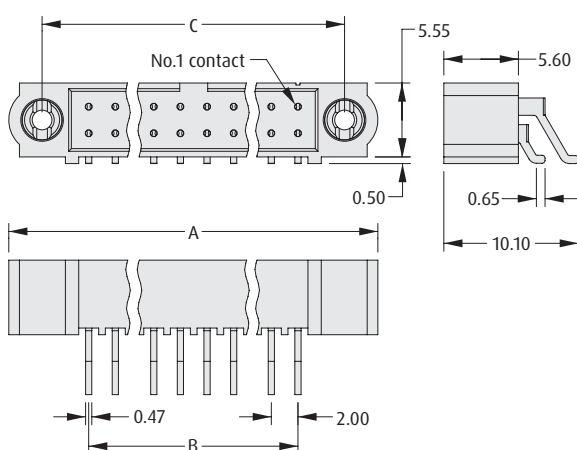
Datamate J-Tek Connectors

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.



101LOK

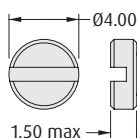
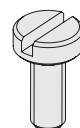
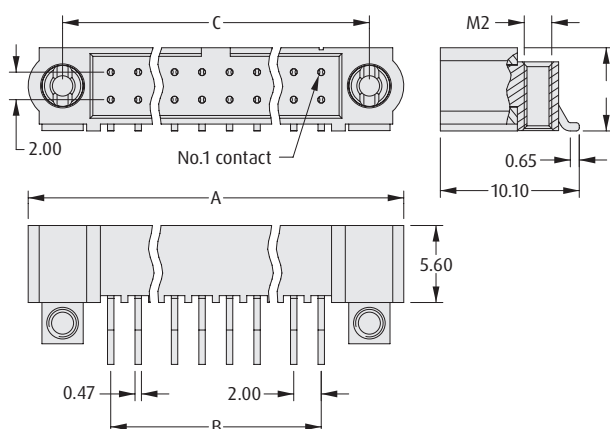


Recommended PC Board Pattern

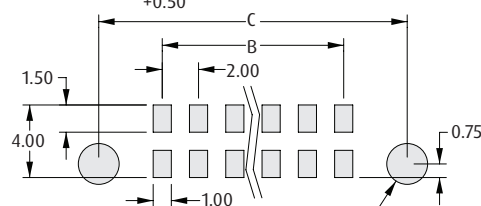
CALCULATION

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

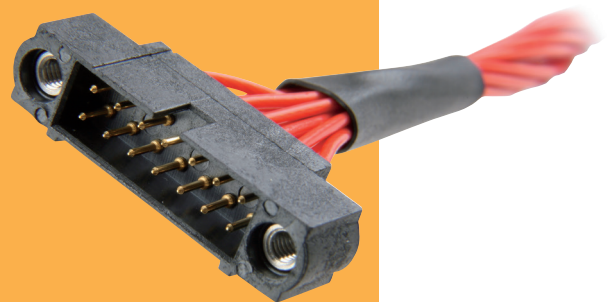
05	Gold
42	Gold + Tin

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

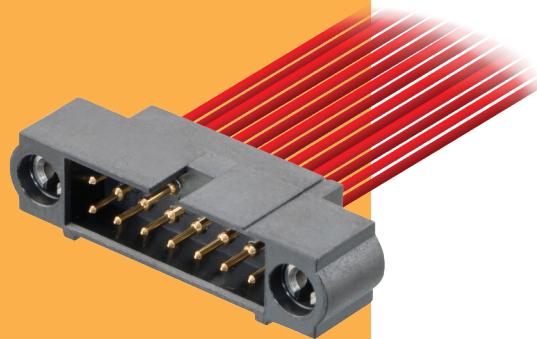
WITHOUT JACKSCREWS		WITH JACKSCREWS															
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>				CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7						
CALCULATION																	
A	B + 12																
B	Total no. of contacts - 2																
C	B + 7																
TOOLS		WIRE STRIPPING DETAILS															
<p>Recommended Crimp Tool - M22520/2-01</p> <p>Positioner - Z80-193</p> <p>Contact Insertion/Removal Tool - Z80-280</p> <p>❖ Spare contacts shown on following pages.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>																	
HOW TO ORDER																	
<p>M80 - 5XX XX 05</p>																	
<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 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

Male Crimp Kit 101Lok

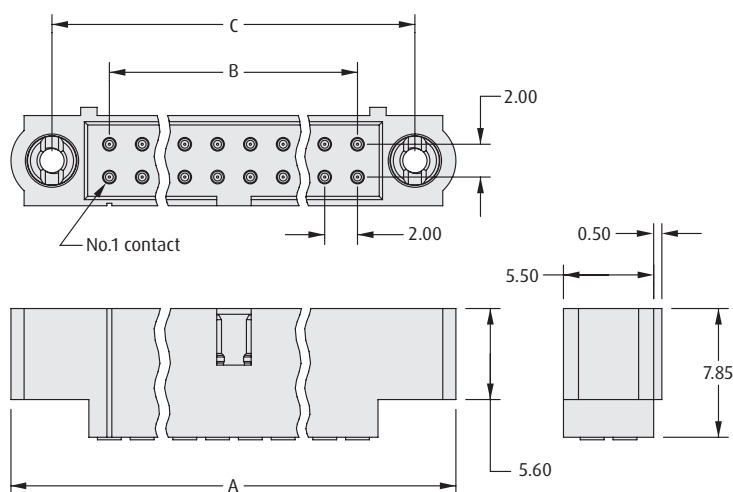
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors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



101LOK

CALCULATION

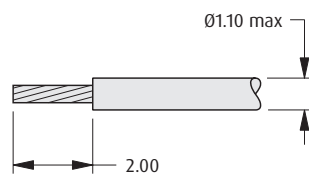
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



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

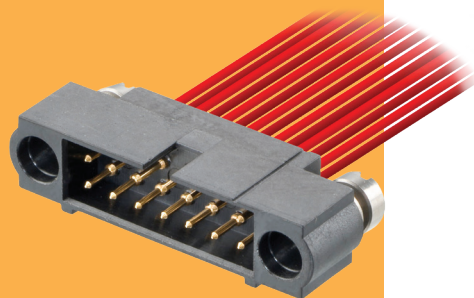
05 Gold

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

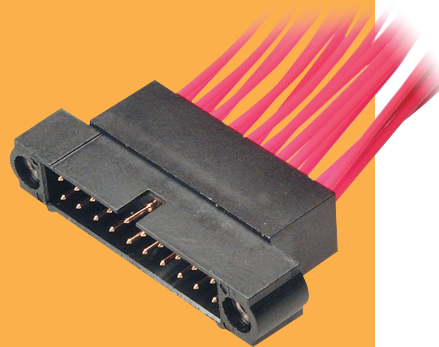
REVERSE FIX		CALCULATION									
<p>No.1 contact</p> <p>2.00</p> <p>0.50</p> <p>5.50</p> <p>M2</p> <p>7.85</p> <p>Slotted</p> <p>Hex Socket</p> <p>2.00 A/F</p> <p>03.50</p> <p>04.00</p> <p>A</p>		A	B + 12								
		B	Total no. of contacts - 2								
		C	B + 7								
TOOLS		WIRE STRIPPING DETAILS									
<p>Recommended Crimp Tool - M22520/2-01</p> <p>Positioner - Z80-193</p> <p>Contact Insertion/Removal Tool - Z80-280</p> <p>❖ Spare contacts shown on following pages.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>		<p>01.10 max</p> <p>2.00</p>									
HOW TO ORDER											
<p>M80 - 5XX XX 05</p>											
<p>SERIES CODE</p>		<p>FINISH</p> <p>05 Gold</p>									
<p>TYPE</p> <table><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>		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	<p>TOTAL NO. OF CONTACTS</p> <p>04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50</p>	
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										

All dimensions in mm.

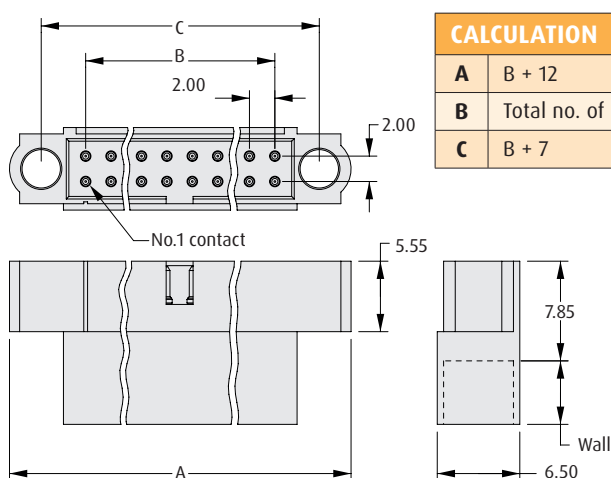
Datamate J-Tek Connectors

Male Crimp Kit Extended Wall

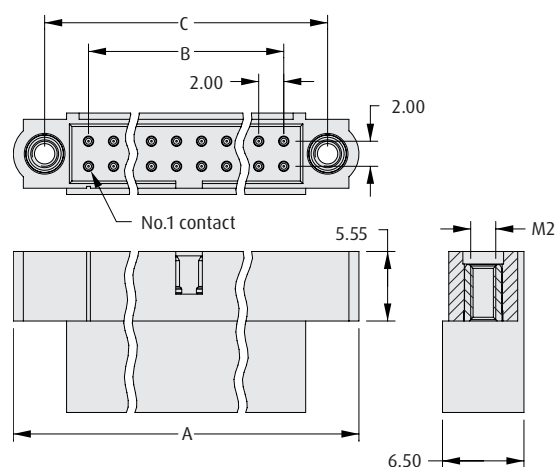
- Extended Wall Datamate allows back potting to be performed.
- Fully shrouded contacts.
- Large Bore 22 AWG, Small Bore 24 – 28 AWG.
- Part numbers are for a complete kit of a housing and the applicable number of contacts.
- Crimp contacts are rear insertable and replaceable.
- Crimp contacts supplied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



WITHOUT JACKSCREWS



WITH JACKSCREWS

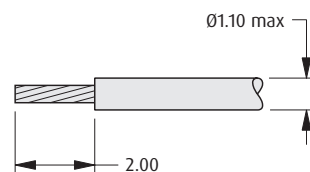


TOOLS

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

M80 - 5XX XX 05 X

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

WALL SIZE

BLANK	Wall = 5mm
A	Wall = 1mm

FINISH

05	Gold
----	------

TOTAL NO. OF CONTACTS

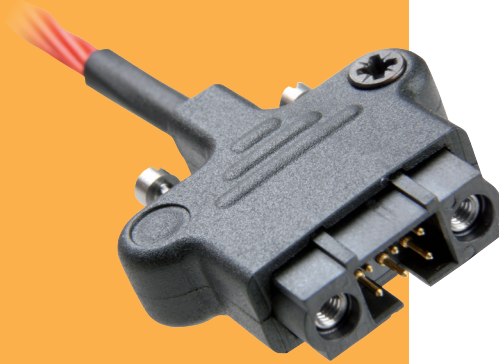
06, 10, 14, 20, 26, 34

All dimensions in mm.

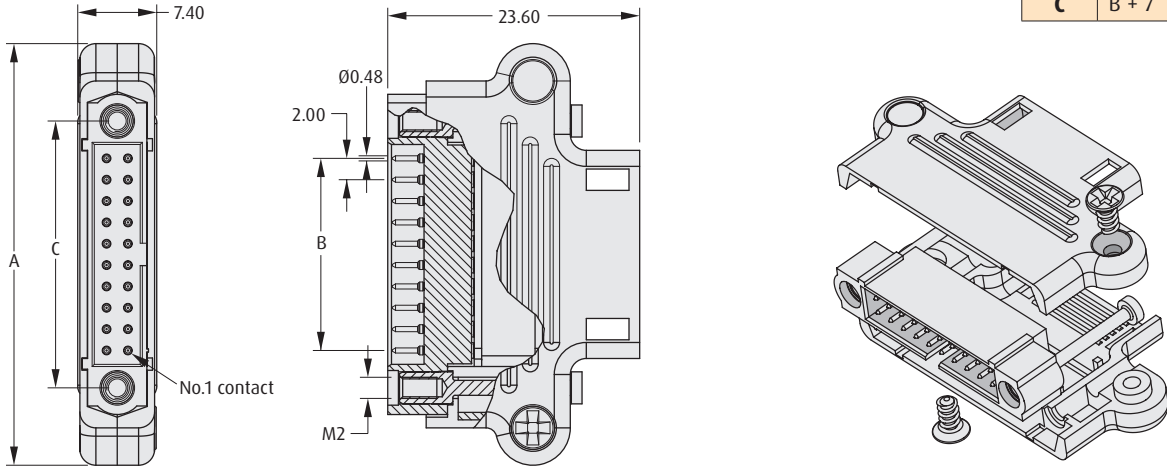
Datamate J-Tek Connectors

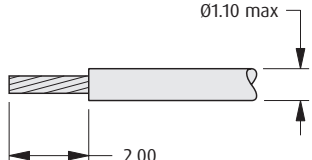
Male Crimp with Hood

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

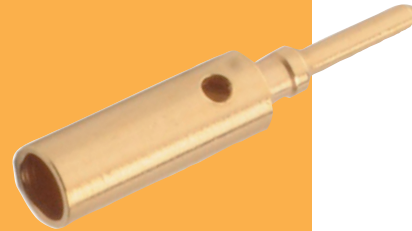
HOW TO ORDER			
<div>M80 - 94 X XX 05</div>			
<div>SERIES CODE</div>		<div>FINISH</div>	
<div>TYPE</div>		<div>05 Gold</div>	
<div>2 Small Bore (24-28 AWG)</div>			
<div>3 Large Bore (22 AWG)</div>			
		<div>TOTAL NO. OF CONTACTS</div>	
		<div>06, 08, 10, 12, 14, 20, 26, 34, 42, 50</div>	

All dimensions in mm.

Datamate J-Tek Connectors

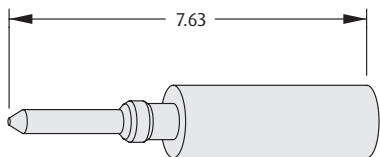
Spare Male Crimp Contacts

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

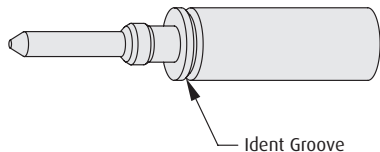


CRIMP CONTACTS

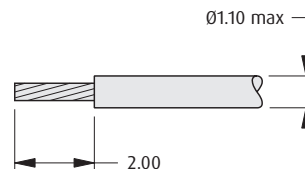
Large Bore (22 AWG)



Small Bore (24 to 28 AWG)



WIRE STRIPPING DETAILS



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

TYPE

4	Large Bore (22 AWG)
5	Small Bore (24-28 AWG)

FINISH

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.

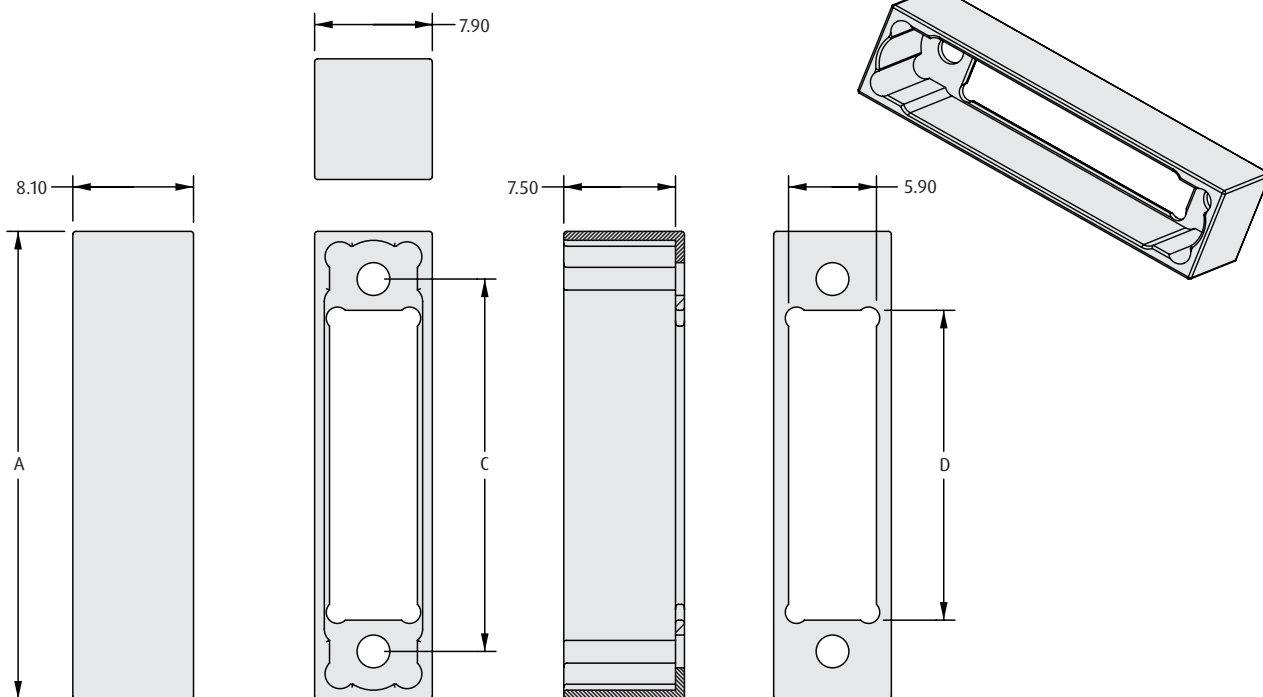


DATAMATE J-TEK

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

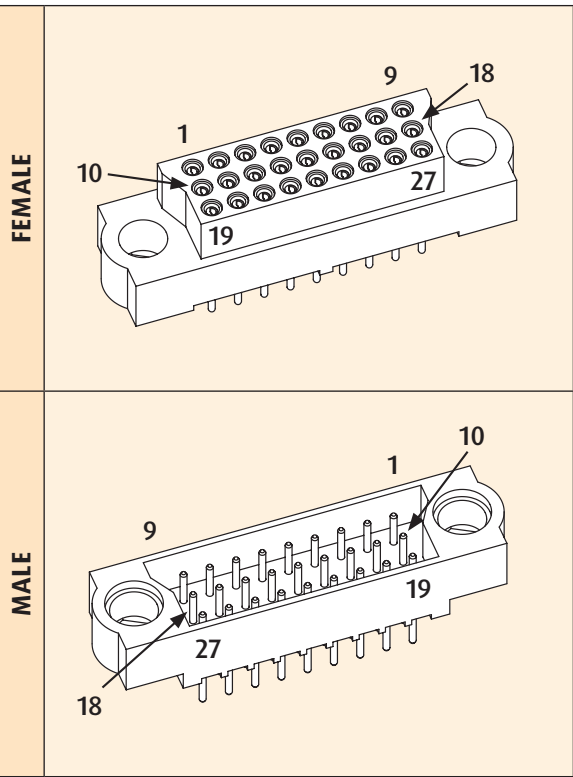
All dimensions in mm.

Datamate J-Tek 3-Row Specification

❖ Materials		❖ Mechanical	
Housings:	Glass-filled thermoplastic UL94V-0	Durability:	500 operations
Female contacts:	Brass shell, with Beryllium Copper inner contact	Insertion force (max):	1.0N
Male contacts:	Phosphor bronze	Withdrawal force (min):	0.2N
Finish:	Gold	Signal crimp accommodation:	22 AWG to 28 AWG BS 3G 210 Type A or MIL-DTL-16878/6 Type ET
❖ Electrical		❖ Environmental	
Current		Environmental classification:	
Individual contacts in isolation:		55/125/56 days at 95% RH	
		Operational temperature:	
All contacts simultaneously:		-55°C to +125°C	
		*Vibration sensitivity:	
		10Hz to 2000Hz, 0.75mm, 98m/s ² (10G), duration 6h	
Working voltage		*Bump severity:	
At sea level 1013 mbar:		390m/s ² (40G), 4000 ±10 bumps	
Voltage proof		*Shock severity:	
At sea level 1013 mbar:		981m/s ² (100G) for 6ms	
Contact resistance		*Acceleration severity:	
Initial:		490m/s ² (50G)	
After conditioning:			
Insulation resistance			
Initial:			
After conditioning:			

* Tested with connectors with Jackscrews.

Pin Numbering



All dimensions in mm.

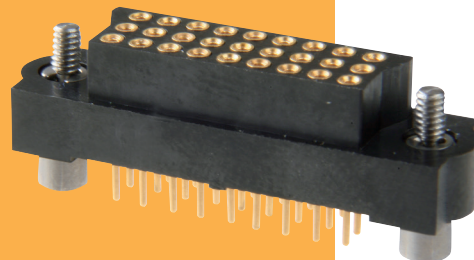
Mating Profiles

		FEMALE	
		VERTICAL THROUGHBOARD	CRIMP
MALE	VERTICAL THROUGHBOARD		
	HORIZONTAL THROUGHBOARD		

Datamate J-Tek 3-Row Connectors

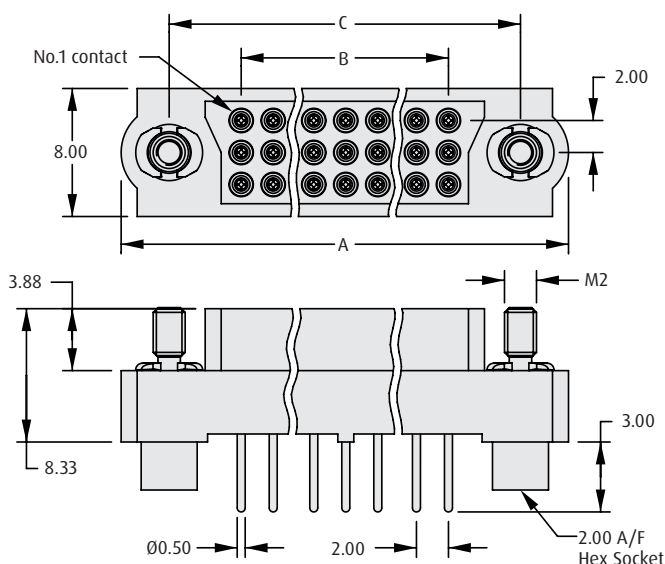
Female Vertical Throughboard

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



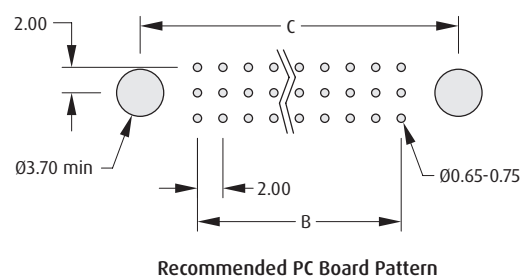
DATAMATE J-TEK 3-ROW

THROUGHBOARD



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

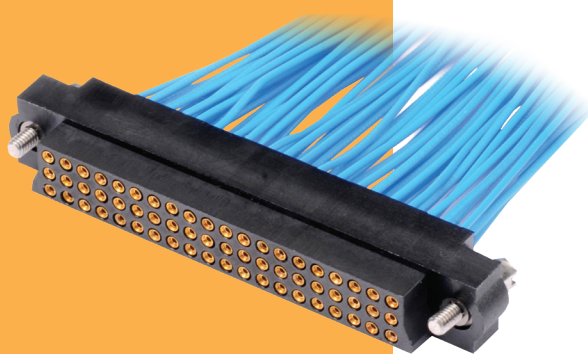
F2 Hex Socket Jackscrew

All dimensions in mm.

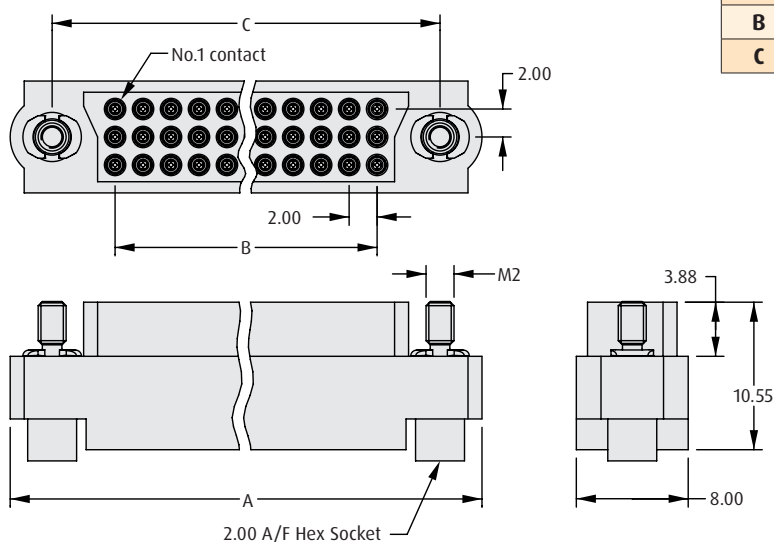
Datamate J-Tek 3-Row Connectors

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

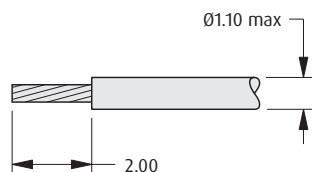
A	B + 15
B	(Total no. of contacts - 3) x 2/3
C	B + 9

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.

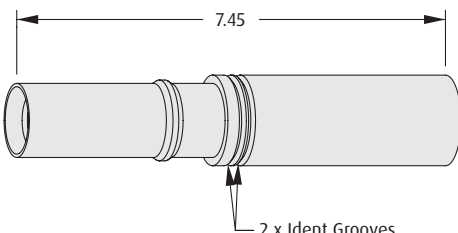
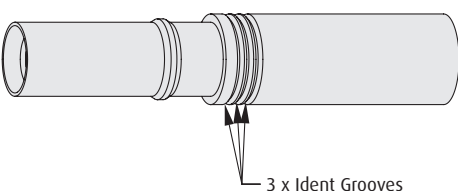
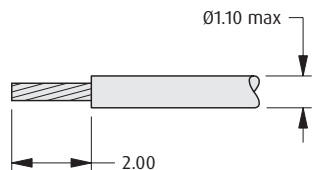
Datamate J-Tek 3-Row Connectors

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

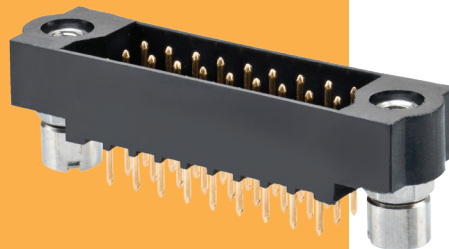
CRIMP CONTACTS	WIRE STRIPPING DETAILS										
<p>Large Bore (22 AWG)</p>  <p>7.45</p> <p>2 x Ident Grooves</p> <p>Small Bore (24 to 28 AWG)</p>  <p>3 x Ident Grooves</p>	 <p>Ø1.10 max</p> <p>2.00</p> <p>TOOLS</p> <p>Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>										
HOW TO ORDER											
<p>SERIES CODE</p> <table border="1"> <thead> <tr> <th data-bbox="147 1686 217 1717">TYPE</th><th data-bbox="233 1686 469 1717"></th></tr> </thead> <tbody> <tr> <td data-bbox="167 1732 207 1757">011</td><td data-bbox="233 1732 428 1757">Large Bore (22 AWG)</td></tr> <tr> <td data-bbox="167 1770 207 1795">013</td><td data-bbox="233 1770 444 1795">Small Bore (24-28 AWG)</td></tr> </tbody> </table>	TYPE		011	Large Bore (22 AWG)	013	Small Bore (24-28 AWG)	<p>M83 - 01X 00 05</p> <table border="1"> <thead> <tr> <th data-bbox="1333 1675 1409 1701">FINISH</th><th data-bbox="1409 1675 1471 1701"></th></tr> </thead> <tbody> <tr> <td data-bbox="1344 1715 1385 1740">05</td><td data-bbox="1409 1715 1455 1740">Gold</td></tr> </tbody> </table>	FINISH		05	Gold
TYPE											
011	Large Bore (22 AWG)										
013	Small Bore (24-28 AWG)										
FINISH											
05	Gold										

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

Male Vertical Throughboard

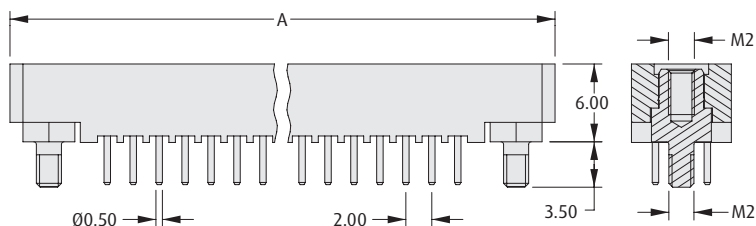
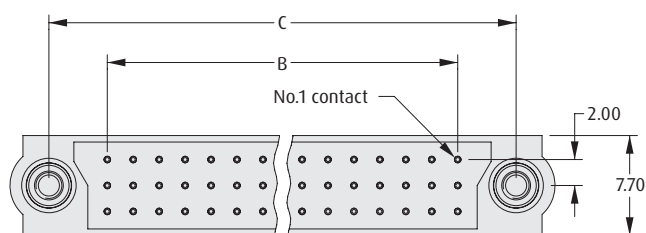
- Board Mount nuts to be tightened to a maximum torque of 23cmN.
- Fully shrouded contacts.
- Polarized housings.
- All contacts are gold finish for full RoHS compliance.
- Mates with all Datamate 3-Row female connectors with compatible jackscrews.



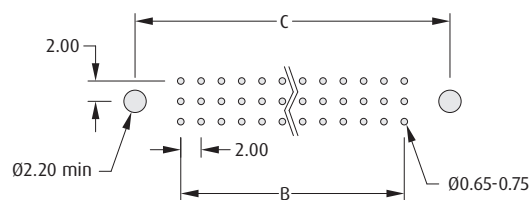
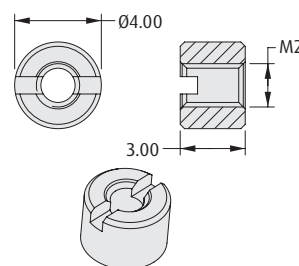
MALE VERTICAL

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

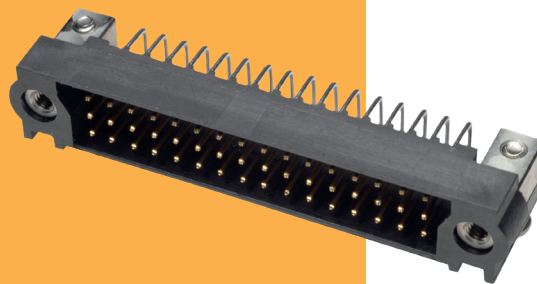
JACKSCREW

M2

Board Mount Jackscrew

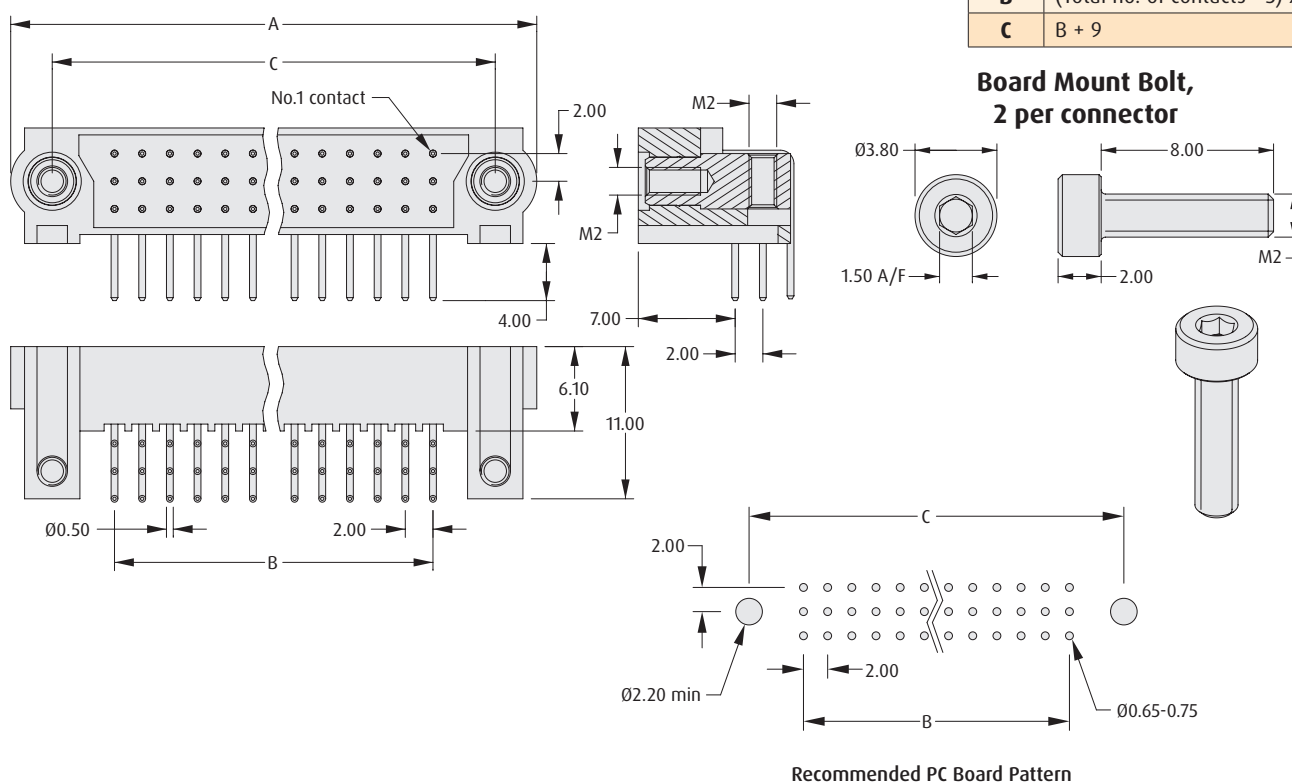
All dimensions in mm.

DATA-MATE J-TEK 3-ROW



CALCULATION

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



M83 - LM L3 M7 N XX - 0000 - 000

SERIES CODE**TOTAL NO. OF CONTACTS**

18, 27, 36, 54, 60, 96

TYPE

4mm Tai

JACKSCREW

M7	Hex Socket Board Mount
-----------	------------------------

www.harwin.com

Datamate L-Tek Specification

Materials

Housings:	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

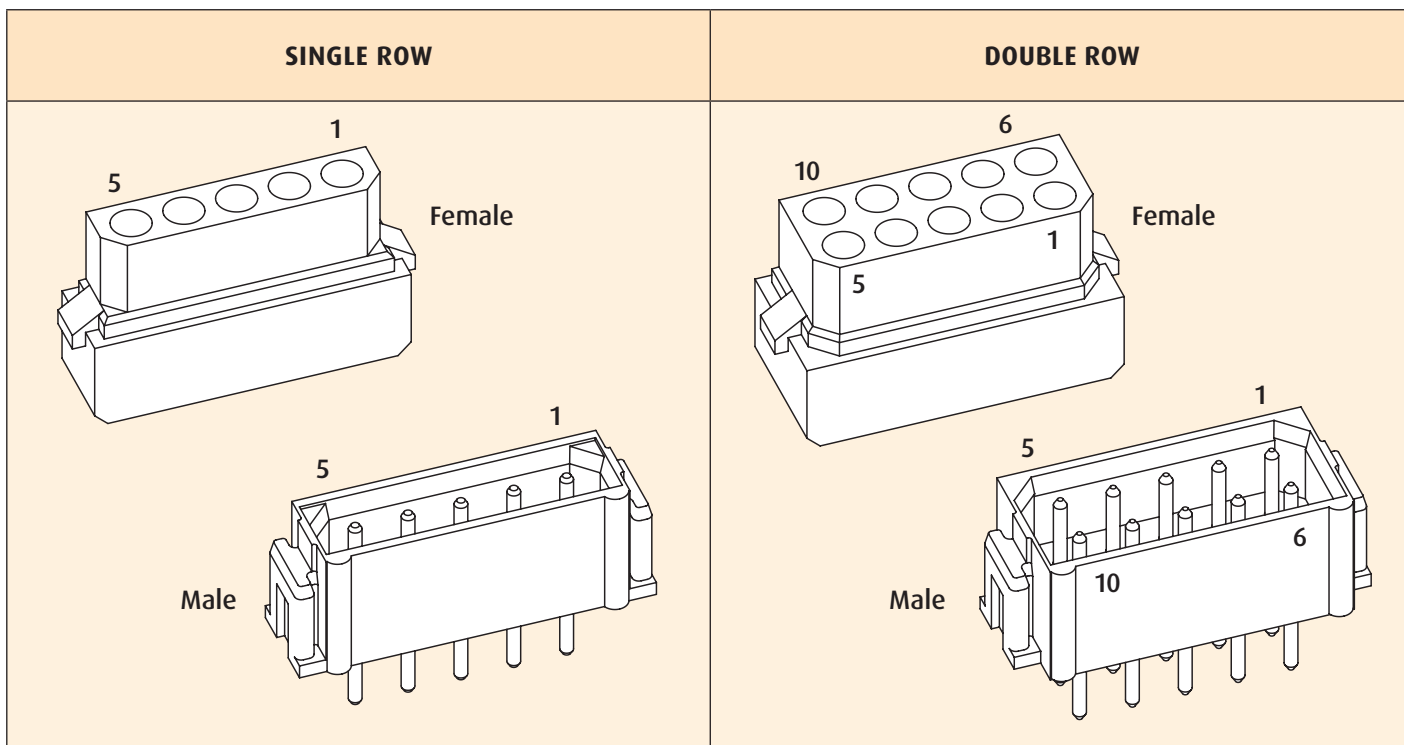
Durability:	500 operations
Insertion force (max):	2.8N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 32 AWG BS 3G 210 Type A, MIL-W-16878

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)

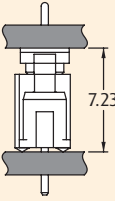
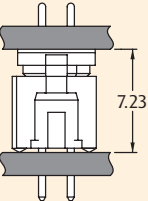
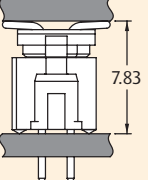
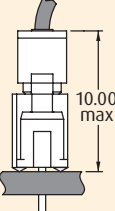
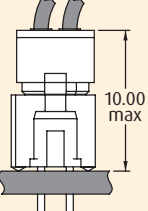
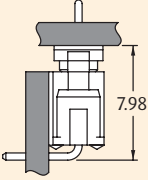
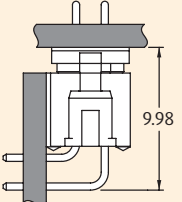
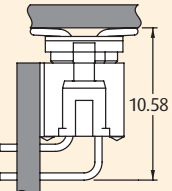
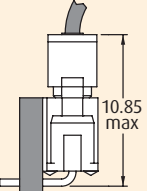
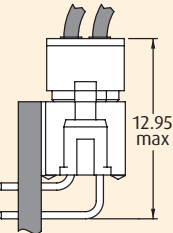
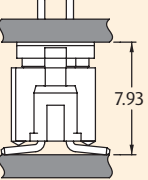
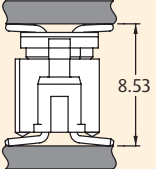
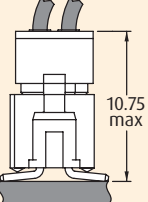
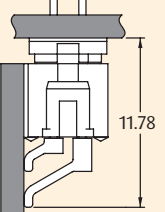
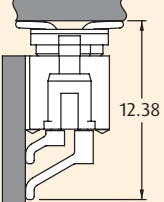
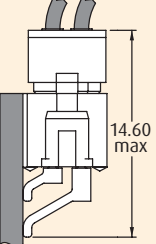
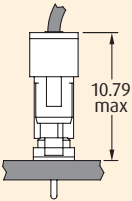
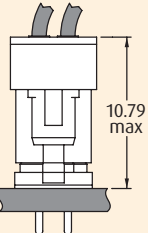
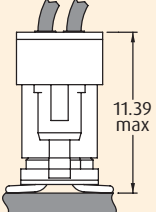
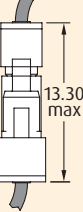
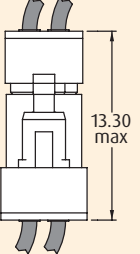
* Tested with latched connectors.

Pin Numbering



All dimensions in mm.

Datamate L-Tek Mating Profiles

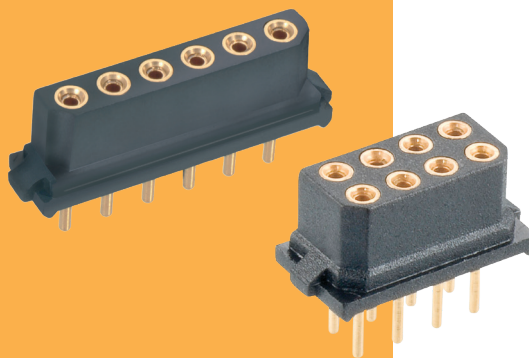
		FEMALE				
		VERTICAL THROUGHBOARD		VERTICAL SMT	CRIMP	
		SIL	DIL	DIL	SIL	DIL
MALE	VERTICAL THROUGHBOARD	 7.23	 7.23	 7.83	 10.00 max	 10.00 max
	HORIZONTAL THROUGHBOARD	 7.98	 9.98	 10.58	 10.85 max	 12.95 max
	VERTICAL SMT		 7.93	 8.53		 10.75 max
	HORIZONTAL SMT		 11.78	 12.38		 14.60 max
	CRIMP	 10.79 max	 10.79 max	 11.39 max	 13.30 max	 13.30 max

All dimensions in mm.

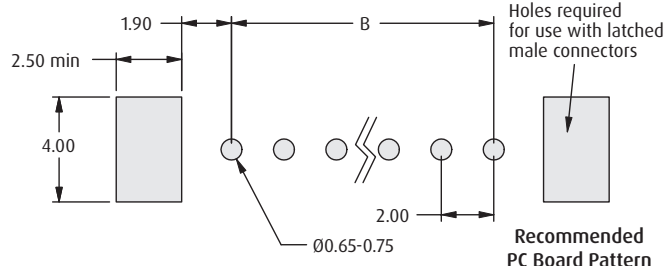
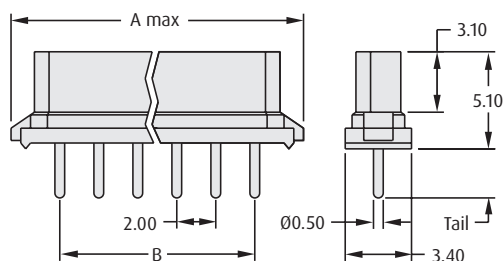
Datamate L-Tek Connectors

Female Vertical Throughboard

- Polarized housings.
- Dummy contacts are available for additional polarization, use **order code M80-023**.



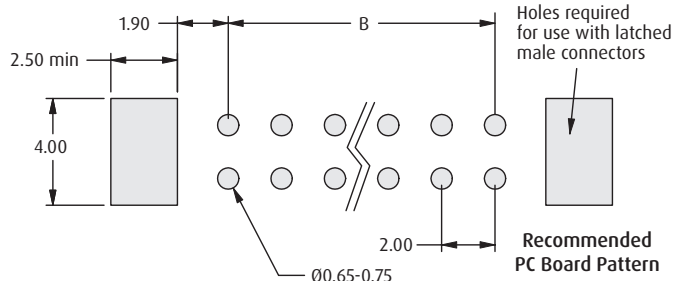
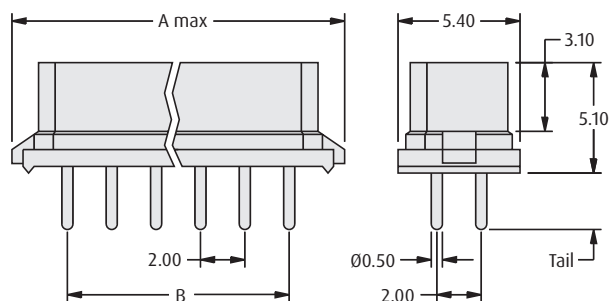
SINGLE ROW



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

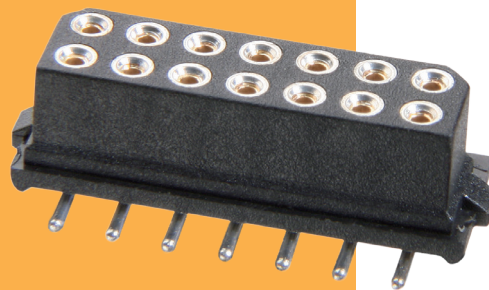
02 to 07, 17, 22	Single Row
04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34, 44	Double Row

All dimensions in mm.

Datamate L-Tek Connectors

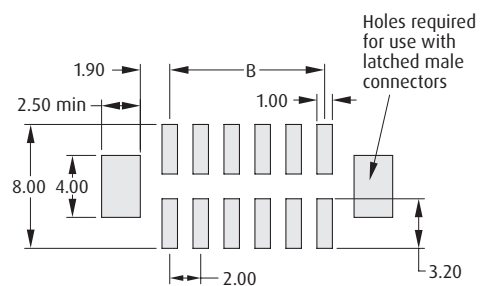
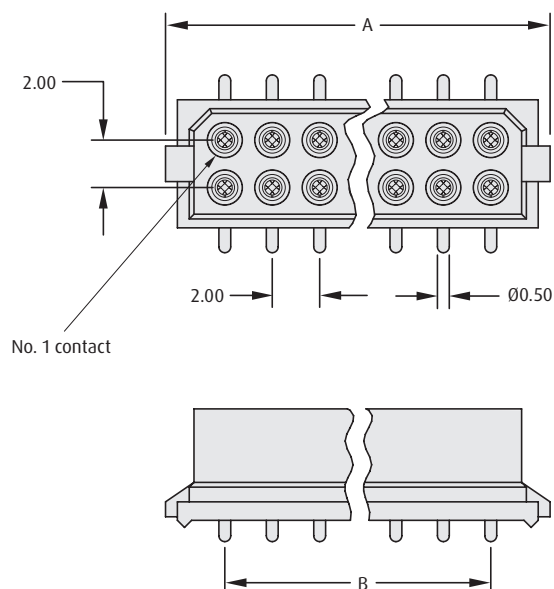
Female Vertical Surface Mount

- ❖ Optional pick and place cap.
- ❖ Gull wing SMT tails simplify inspection process.

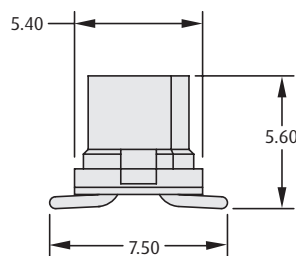


DATAMATE L-TEK

DOUBLE ROW



Recommended PC Board Pattern



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

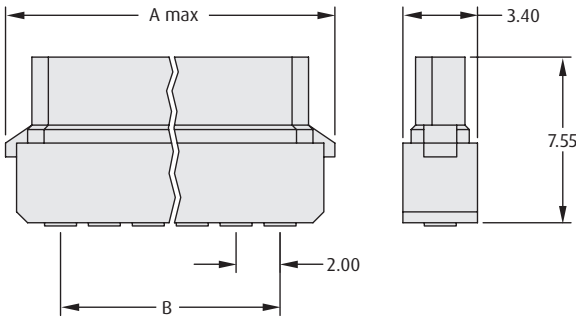
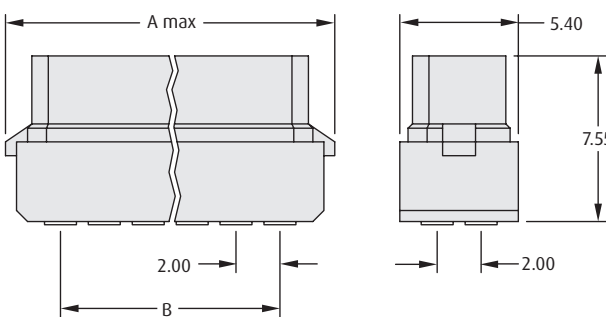
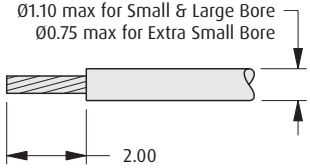
All dimensions in mm.

Datamate L-Tek Connectors

Female Crimp Kit

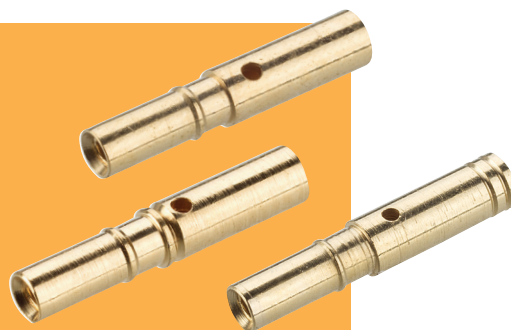
- Part numbers are for a complete kit of a housing and the applicable number of contacts.
- Contacts are rear insertable.
- Spare contacts are available – see the following page.



SINGLE ROW		CALCULATION		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																									
<p>Recommended Crimp Tool – M22520/2-01</p> <p>Positioner – T5747</p> <p>Contact Insertion/Removal Tool – Z80-280</p> <p>❖ Spare and pre-cabled contacts shown on following pages.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>																													
HOW TO ORDER																													
SERIES CODE		M80 - XXX XX XX		FINISH		TOTAL NO. OF CONTACTS																							
<table><tr><th>TYPE</th><th></th></tr><tr><td>798</td><td>Single Row, Extra Small Bore (28-32 AWG)</td></tr><tr><td>898</td><td>Single Row, Small Bore (24-28 AWG)</td></tr><tr><td>899</td><td>Single Row, Large Bore (22 AWG)</td></tr><tr><td>788</td><td>Double Row, Extra Small Bore (28-32 AWG)</td></tr><tr><td>888</td><td>Double Row, Small Bore (24-28 AWG)</td></tr><tr><td>889</td><td>Double Row, Large Bore (22 AWG)</td></tr></table>		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)			<table><tr><th>01</th><td>Gold + Tin</td></tr><tr><th>05</th><td>Gold</td></tr></table>		01	Gold + Tin	05	Gold	<table><tr><td>02 to 07, 17</td><td>Single Row</td></tr><tr><td>04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34</td><td>Double Row</td></tr></table>		02 to 07, 17	Single Row	04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34	Double Row
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05	Gold																												
02 to 07, 17	Single Row																												
04, 06, 08, 10, 12, 14, 16, 18, 20, 26, 34	Double Row																												

All dimensions in mm.

DATA-MATE L-TEK

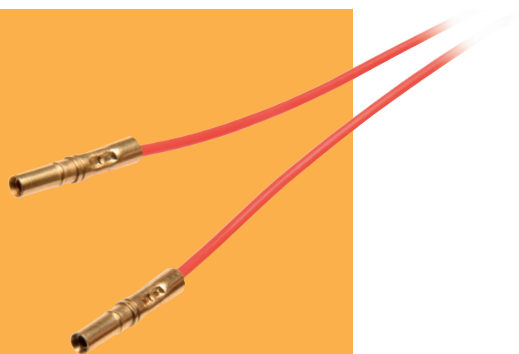


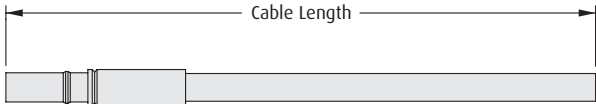
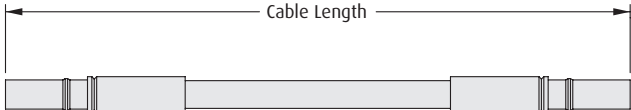
All dimensions in mm.

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.



FEMALE SINGLE ENDED		FEMALE - FEMALE																											
																													
TOOLS																													
Contact Insertion/Removal Tool – Z80-Z80		<ul style="list-style-type: none">❖ 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 COLOR</th></tr><tr><td>99</td><td>Red</td></tr></table>		CABLE COLOR		99	Red																						
CABLE COLOR																													
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																												
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26 AWG Cable, 300mm length																													
28 AWG Cable, 300mm length																													

All dimensions in mm.

Datamate L-Tek Connectors

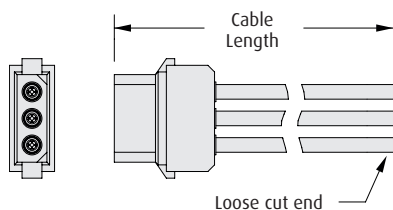
Female Cable Assemblies

- Fully assembled connectors and cable in standard configurations.
- Fitted with 24AWG wire, PTFE insulation.
- Double Row connectors (10 contacts and larger) compatible with plastic Hood shown on following page.



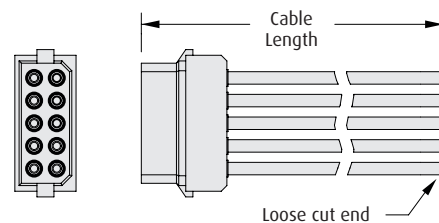
DATAMATE L-TEK

SINGLE ROW, SINGLE ENDED



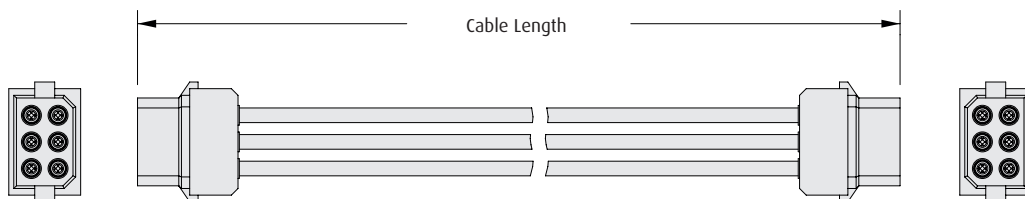
- Cable insulation is multicolored - check applicable Technical Drawing for color sequence.

DOUBLE ROW, SINGLE ENDED



- Cable insulation is multicolored - check applicable Technical Drawing for color sequence.

FEMALE - FEMALE DOUBLE ENDED



- Cable insulation is white.
- Contact 1 is attached to Contact 1, Contact 2 to Contact 2, etc.

HOW TO ORDER

M80 - FX2 XX XX L0 - 0150 XX

SERIES CODE	
M80-FD2	Single Row
M80-FC2	Double Row

TOTAL NO. OF CONTACTS	
02, 03, 04, 17	Single Row
06, 10, 26, 34	Double Row

TERMINATION - SECOND END	
L	Loose cut end
F	Female connector (Double row only)

CABLE LENGTH	
0150	150mm

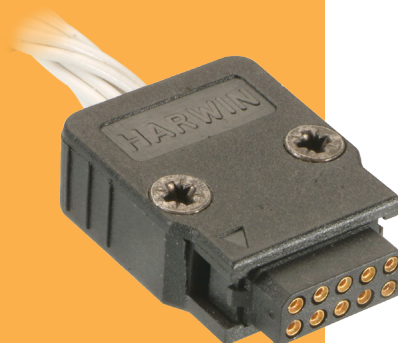
WIRE COLOR	
05	White (Double Ended only)
68	Multicolor (Single Ended only)

All dimensions in mm.

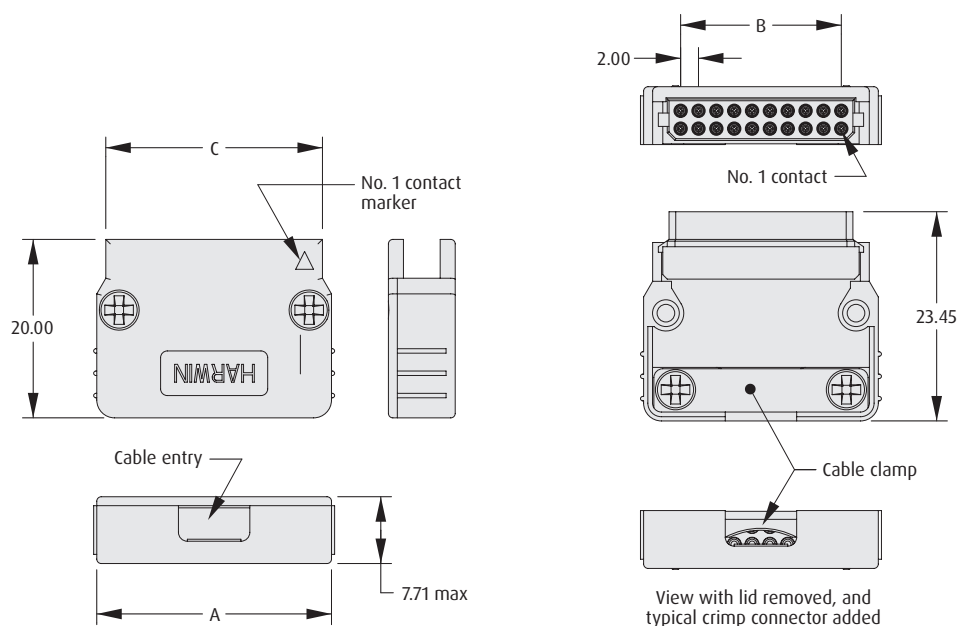
Datamate L-Tek Connectors

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 polarization or keying of multiple connectors.
- ❖ Fits both female Throughboard and Crimp housings.



CRIMP HOOD



CALCULATION

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

HOW TO ORDER

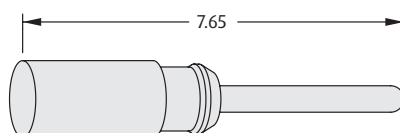
M80 - 880 XX 98

SERIES CODE

TOTAL NO. OF CONTACTS

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

DUMMY CONTACT



ORDER CODE

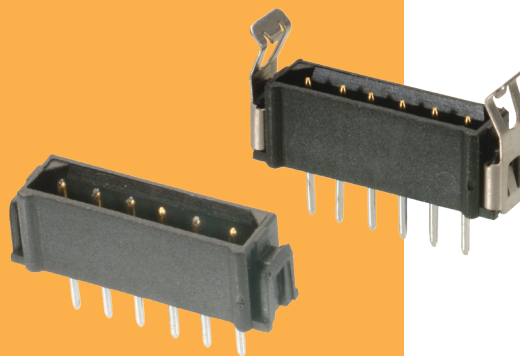
M80-023

All dimensions in mm.

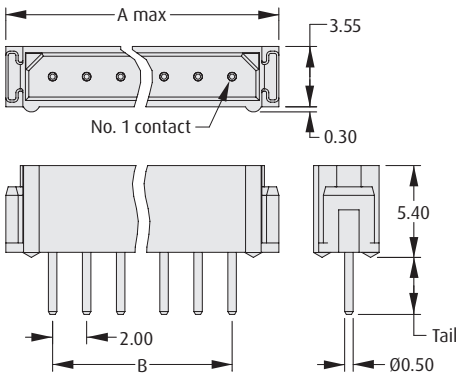
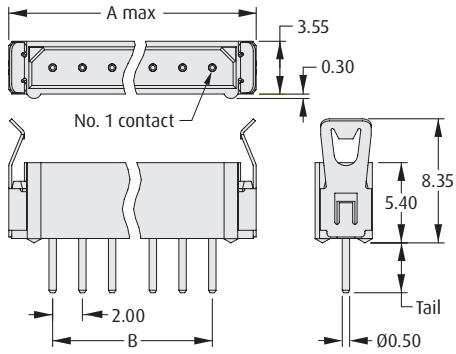
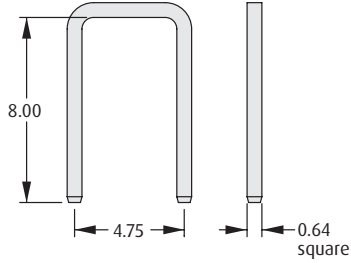
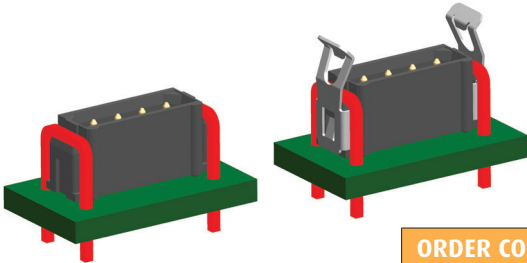
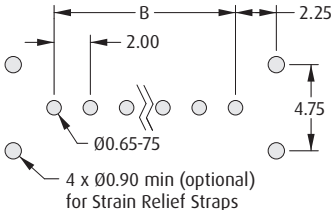
Datamate L-Tek Connectors

Male Single Row Vertical Throughboard

- Polarized housings.
- 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

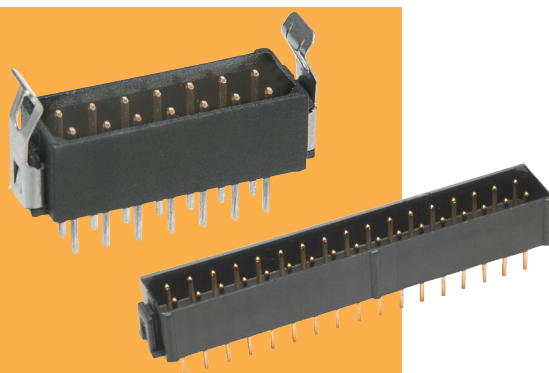
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	(Total no. of contacts - 1) x 2			B	(Total no. of contacts - 1) x 2
							
STRAIN RELIEF STRAP		Order separately from connector				Recommended PC Board Pattern	
							
		View of Strain Relief strap in place				ORDER CODE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

All dimensions in mm.

Datamate L-Tek Connectors

Male Double Row Vertical Throughboard

- ❖ Polarized housings.
- ❖ 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**.



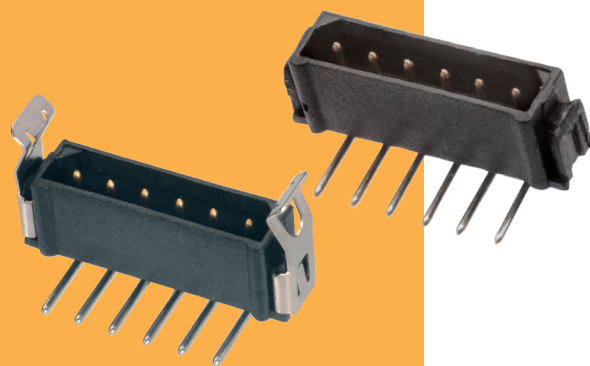
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Order separately from connector				Recommended PC Board Pattern	
		View of Strain Relief strap in place				ORDER CODE M80-0030006	
HOW TO ORDER							
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.

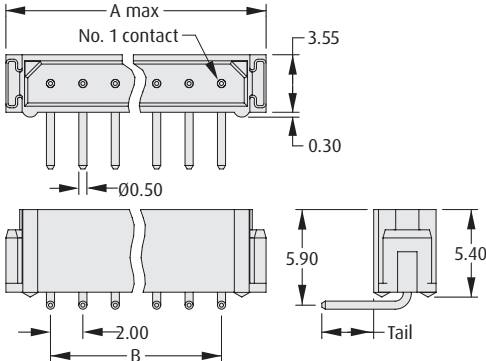
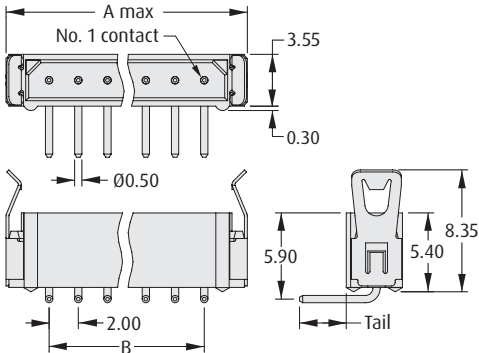
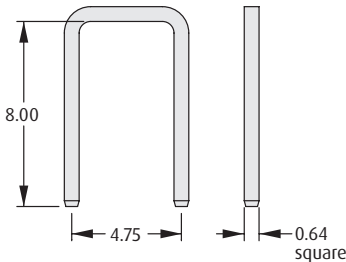
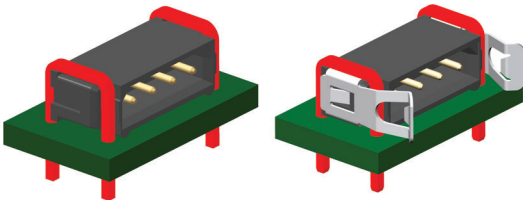
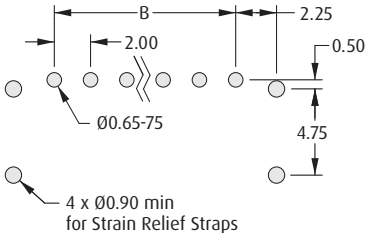
Datamate L-Tek Connectors

Male Single Row Horizontal Throughboard

- Polarized housings.
- 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

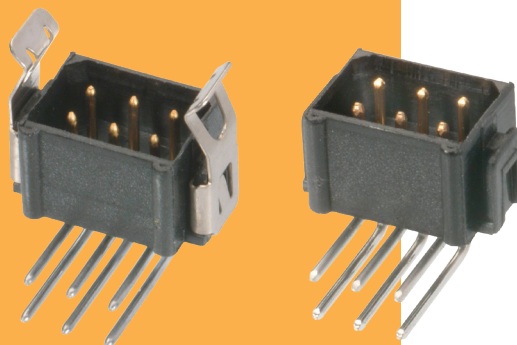
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	(Total no. of contacts - 1) x 2			B	(Total no. of contacts - 1) x 2
							
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
		 View of Strain Relief strap in place					
HOW TO ORDER							
SERIES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

All dimensions in mm.

Datamate L-Tek Connectors

Male Double Row Horizontal Throughboard

- ❖ Polarized housings.
- ❖ 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**.



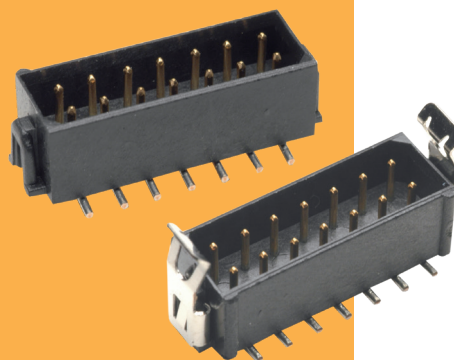
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
		View of Strain Relief strap in place					
HOW TO ORDER							
SERIES CODE		M80		XXX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

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**.
- Optional pick and place cap.
- Gull wing SMT tails simplify inspection process.



DATAMATE L-TEK

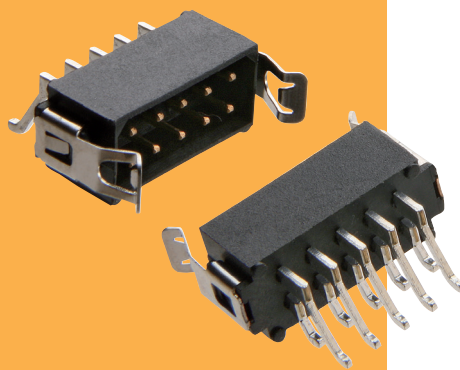
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	B + 5.6			A	B + 6.1
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Order separately from connector				Recommended PC Board Pattern	
		<div>ORDER CODE</div> <div>M80-0030006</div>					
HOW TO ORDER							
		M80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

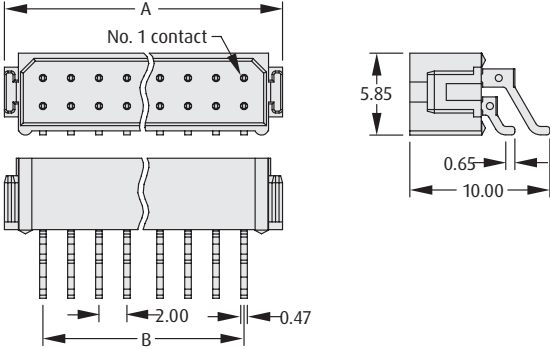
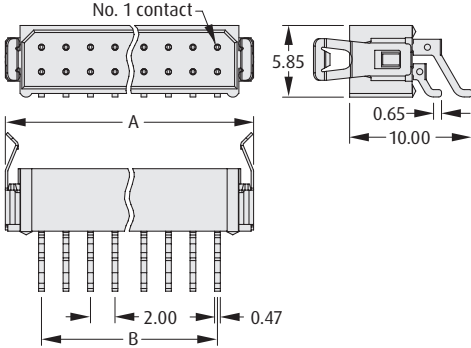
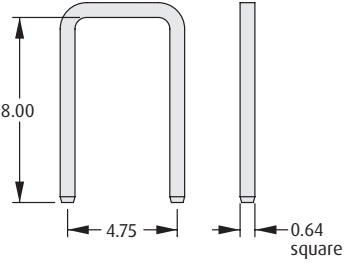
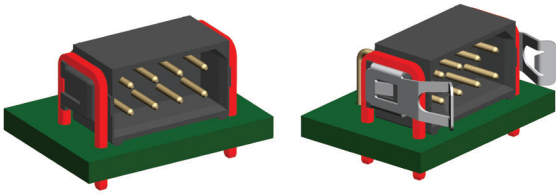
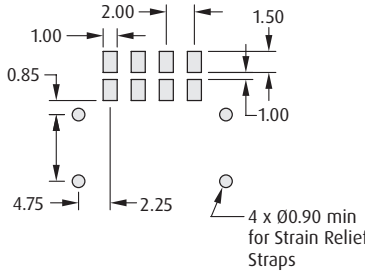
All dimensions in mm.

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.



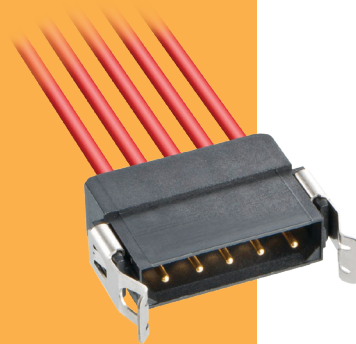
NO LATCHES		CALCULATION		LOCKING LATCH		CALCULATION	
		A	$B + 5.6$			A	$B + 6.1$
		B	Total no. of contacts - 2			B	Total no. of contacts - 2
STRAIN RELIEF STRAP		Supplied with connector				Recommended PC Board Pattern	
		 View of Strain Relief strap in place					
HOW TO ORDER							
SERIES CODE		M80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

All dimensions in mm.

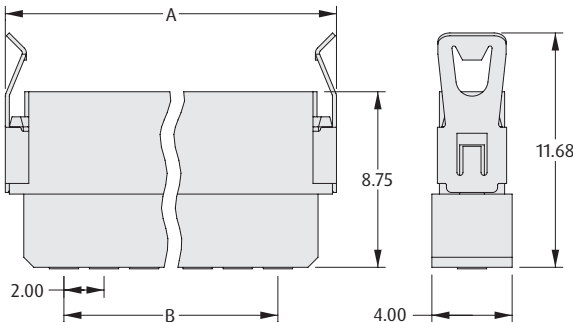
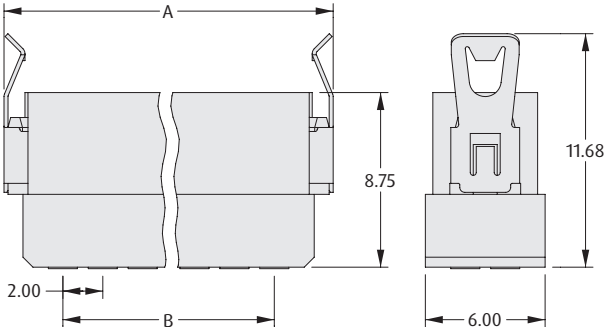
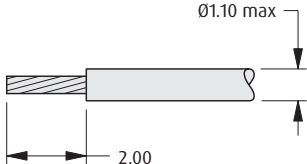
Datamate L-Tek Connectors

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.



DATAMATE L-TEK

SINGLE ROW		CALCULATION	
Latches (when fitted) add 0.5mm to overall length 'A'		A	B + 5.6
		B	(Total no. of contacts - 1) x 2
			
TOOLS			
<p>Recommended Crimp Tool – M22520/2-01</p> <p>Positioner – T5747</p> <p>Contact Insertion/Removal Tool – Z80-280</p> <p>❖ Spare contacts shown on following page.</p> <p>❖ Instruction sheets available at www.harwin.com/instructions.</p>			
DOUBLE ROW		CALCULATION	
Latches (when fitted) add 0.5mm to overall length 'A'		A	B + 5.6
		B	Total no. of contacts - 2
			
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

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

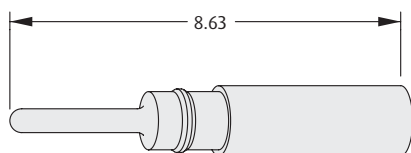
Spare Male Crimp Contacts

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

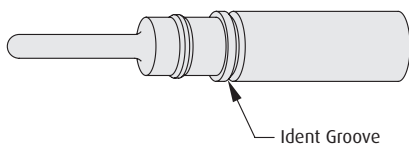


CRIMP CONTACTS

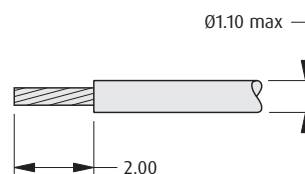
Large Bore (22 AWG)



Small Bore (24 to 28 AWG)



WIRE STRIPPING DETAILS



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

TYPE

040	Large Bore (22 AWG)
041	Small Bore (24-28 AWG)

FINISH

05	Gold
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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.

<div data-bbox="142 363 399 399" data-label="Section-Header"> <h2>HAND CRIMP TOOL</h2> </div> <div data-bbox="142 430 743 630" data-label="List-Group"> <ul style="list-style-type: none"> ❖ 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. </div> <div data-bbox="203 688 722 892" data-label="Image"> </div> <div data-bbox="443 1008 581 1037" data-label="Section-Header"> <h3>ORDER CODE</h3> </div> <div data-bbox="443 1047 800 1100" data-label="Table"> <table> <tr> <td>Signal contacts, L-Tek, J-Tek & Mix-Tek</td> <td>M22520/2-01</td> </tr> </table> </div>	Signal contacts, L-Tek, J-Tek & Mix-Tek	M22520/2-01	<div data-bbox="841 363 1097 399" data-label="Section-Header"> <h2>HAND CRIMP TOOL</h2> </div> <div data-bbox="841 430 1442 598" data-label="List-Group"> <ul style="list-style-type: none"> ❖ Standard circular crimp tool. ❖ Precision tool with ratchet mechanism and 8-indent form. ❖ Must be used with applicable positioner shown below. ❖ Instruction sheet available. </div> <div data-bbox="885 688 1404 892" data-label="Image"> </div> <div data-bbox="1177 1008 1315 1037" data-label="Section-Header"> <h3>ORDER CODE</h3> </div> <div data-bbox="1177 1047 1495 1100" data-label="Table"> <table> <tr> <td>Inner contact of Mix-Tek coax contacts</td> <td>Z80-292</td> </tr> </table> </div>	Inner contact of Mix-Tek coax contacts	Z80-292						
Signal contacts, L-Tek, J-Tek & Mix-Tek	M22520/2-01										
Inner contact of Mix-Tek coax contacts	Z80-292										
<div data-bbox="142 1142 399 1178" data-label="Section-Header"> <h2>HAND CRIMP TOOL</h2> </div> <div data-bbox="142 1209 662 1308" data-label="List-Group"> <ul style="list-style-type: none"> ❖ Standard coax crimp tool for crimping the outer sleeve of Mix-Tek coax contacts. ❖ Instruction sheet available. </div> <div data-bbox="186 1375 738 1759" data-label="Image"> </div> <div data-bbox="480 1797 618 1827" data-label="Section-Header"> <h3>ORDER CODE</h3> </div> <div data-bbox="480 1837 800 1890" data-label="Table"> <table> <tr> <td>Outer sleeve of Mix-Tek coax contacts</td> <td>Z80-293</td> </tr> </table> </div>	Outer sleeve of Mix-Tek coax contacts	Z80-293	<div data-bbox="841 1142 1008 1178" data-label="Section-Header"> <h2>POSITIONER</h2> </div> <div data-bbox="841 1209 1263 1245" data-label="List-Group"> <ul style="list-style-type: none"> ❖ Used with applicable hand crimp tool. </div> <div data-bbox="876 1291 1429 1606" data-label="Image"> </div> <div data-bbox="1086 1665 1224 1694" data-label="Section-Header"> <h3>ORDER CODE</h3> </div> <div data-bbox="1086 1705 1495 1890" data-label="Table"> <table> <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> </table> </div>	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
Outer sleeve of Mix-Tek coax contacts	Z80-293										
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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.

INSERTION/REMOVAL TOOL	REMOVAL TOOL																
<ul style="list-style-type: none"> ❖ For inserting crimped contacts into the rear of housings. ❖ Suitable for all Datamate signal Barrel crimp contacts.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th> </tr> </thead> <tbody> <tr> <td>Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek</td> <td>Z80-280</td> </tr> </tbody> </table>	ORDER CODE		Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek	Z80-280	<ul style="list-style-type: none"> ❖ To aid removal of special cable contacts from Mix-Tek connectors.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th> </tr> </thead> <tbody> <tr> <td>Mix-Tek special cable connectors</td> <td>Z80-290</td> </tr> </tbody> </table>	ORDER CODE		Mix-Tek special cable connectors	Z80-290								
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Barrel Signal crimps for L-Tek, J-Tek & Mix-Tek	Z80-280																
ORDER CODE																	
Mix-Tek special cable connectors	Z80-290																
SEPARATOR TOOL	DRIVERS																
<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 connectors. ❖ Suitable for all sizes.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th> </tr> </thead> <tbody> <tr> <td>L-Tek</td> <td>Z80-299</td> </tr> </tbody> </table>	ORDER CODE		L-Tek	Z80-299	<ul style="list-style-type: none"> ❖ Mating jackscrews to be tightened to a torque of 23cmN max. ❖ Board mount nuts and bolts to be tightened to a torque of 21 ±2cmN.  <table border="1"> <thead> <tr> <th colspan="2">ORDER CODE</th> </tr> </thead> <tbody> <tr> <td>Slotted Nut Screwdriver (board mount nuts)</td> <td>Z80-298</td> </tr> <tr> <td>1.5mm A/F Hex Drive Bit (board mount bolts)</td> <td>Z9950-00</td> </tr> <tr> <td>2mm A/F Hex Drive Bit (floating jackscrews)</td> <td>Z9951-00</td> </tr> <tr> <td>1.5mm A/F Ball Hex Driver (board mount bolts)</td> <td>Z9952-00</td> </tr> <tr> <td>2mm A/F Ball Hex Driver (floating jackscrews)</td> <td>Z9953-00</td> </tr> </tbody> </table>	ORDER CODE		Slotted Nut Screwdriver (board mount nuts)	Z80-298	1.5mm A/F Hex Drive Bit (board mount bolts)	Z9950-00	2mm A/F Hex Drive Bit (floating jackscrews)	Z9951-00	1.5mm A/F Ball Hex Driver (board mount bolts)	Z9952-00	2mm A/F Ball Hex Driver (floating jackscrews)	Z9953-00
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