

# Datamate J-Tek 3-Row Specification

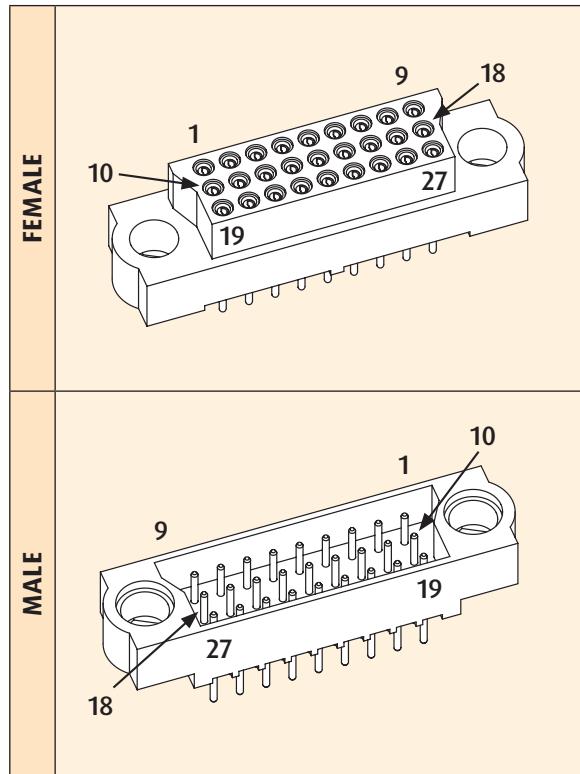
## Materials

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

## Electrical

Current	
Individual contacts in isolation:	3.3A max (at 25°C)
	2.6A max (at 85°C)
All contacts simultaneously:	3.0A max (at 25°C)
	2.2A max (at 85°C)
Working voltage	
At sea level 1013 mbar:	800V DC or AC <sub>rms</sub>
Voltage proof	
At sea level 1013 mbar:	1200V DC or AC <sub>rms</sub>
Contact resistance	
Initial:	20mΩ max
After conditioning:	25mΩ max
Insulation resistance	
Initial:	1000MΩ min
After conditioning:	100MΩ min

## Pin Numbering



## Mechanical

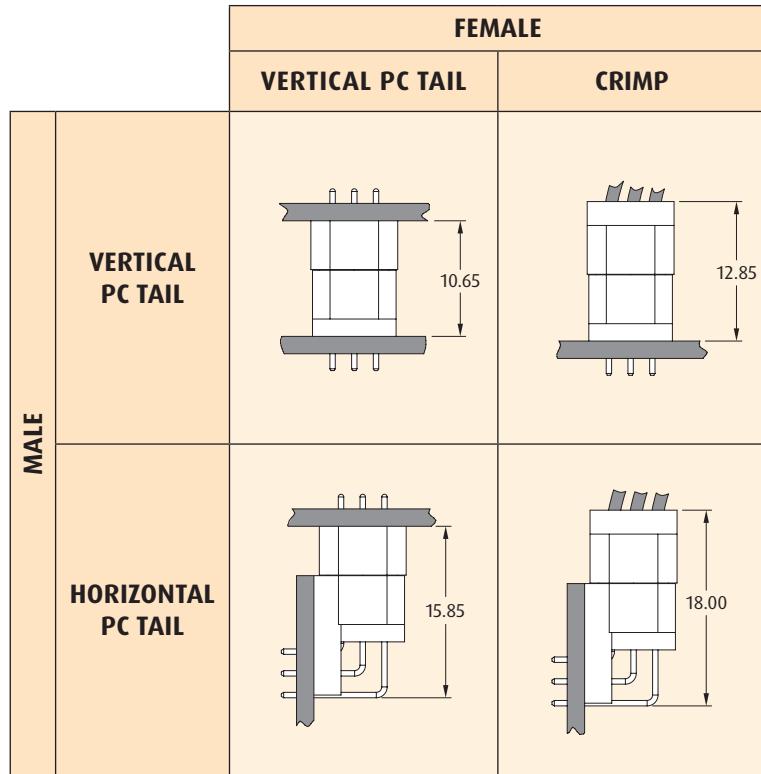
Durability:	500 operations
Insertion force (max):	1.0N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 28 AWG BS 3G 210 Type A or MIL-DTL-16878/6 Type ET

## Environmental

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

\* Tested with connectors with Jackscrews.

## Mating Profiles

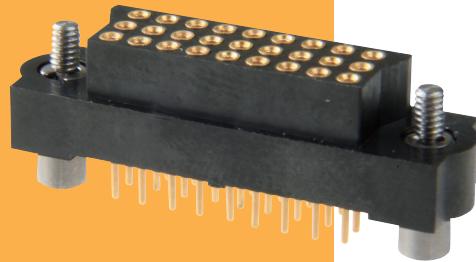


All dimensions in mm.

# Datamate J-Tek 3-Row Connectors

## Female Vertical PC Tail

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



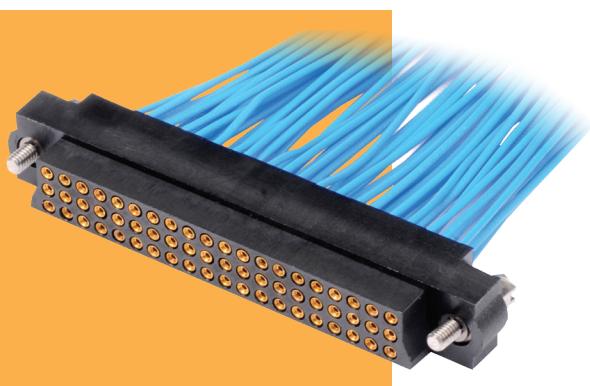
REVERSE FIX		CALCULATION	
<b>A</b>	<b>B + 15</b>		
<b>B</b>	<b>(Total no. of contacts - 3) x 2/3</b>		
<b>C</b>	<b>B + 9</b>		
HOW TO ORDER		<b>M83 - LF T1 F2 N XX - 0000 - 000</b>	
<b>SERIES CODE</b>		<b>TOTAL NO. OF CONTACTS</b> 18, 27, 36, 54, 60, 96	
<b>TYPE</b>		<b>JACKSCREW</b> F2 Hex Socket Jackscrew	
<b>T1</b>	3mm Tail		

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
		<b>A</b> B + 15 <b>B</b> (Total no. of contacts - 3) x 2/3 <b>C</b> B + 9
TOOLS		WIRE STRIPPING DETAILS
<b>Recommended Crimp Tool</b> - M22520/2-01 <b>Positioner</b> - T5747 <b>Contact Insertion/Removal Tool</b> - Z80-280 Spare contacts shown on following pages. Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a> .		
HOW TO ORDER		
M83 - LF X1 F2 N XX - 0000 - 000		
<b>SERIES CODE</b>		<b>TOTAL NO. OF CONTACTS</b>
C1	Small Bore (24-28 AWG)	18, 27, 36, 54, 60, 96
D1	Large Bore (22 AWG)	
<b>TYPE</b>		<b>JACKSCREW</b>
F2	Hex Socket Jackscrew	

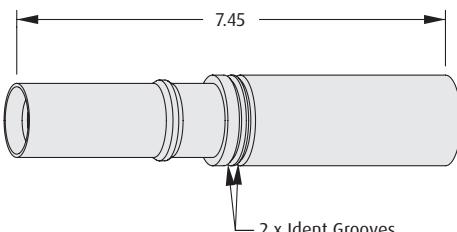
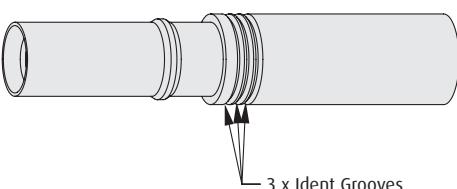
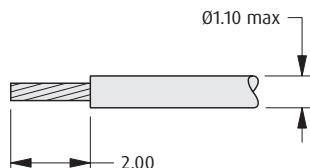
All dimensions in mm.

# 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.



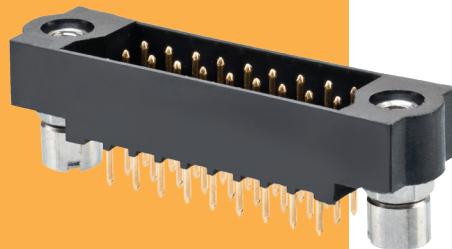
CRIMP CONTACTS	WIRE STRIPPING DETAILS																								
<b>Large Bore (22 AWG)</b>  <b>Small Bore (24 to 28 AWG)</b> 																									
	<b>TOOLS</b> <b>Recommended Crimp Tool</b> - M22520/2-01 <b>Positioner</b> - T5747 <b>Contact Insertion/Removal Tool</b> - Z80-280 Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a> .																								
<b>HOW TO ORDER</b>																									
<p>M83 - 01X 00 05</p> <table border="1"><tr><td><b>Series Code</b></td><td>01X</td><td>00</td><td>05</td></tr><tr><td><b>Type</b></td><td></td><td></td><td></td></tr><tr><td>011</td><td>Large Bore (22 AWG)</td><td></td><td></td></tr><tr><td>013</td><td>Small Bore (24-28 AWG)</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td><b>Finish</b></td></tr><tr><td></td><td></td><td></td><td>05 Gold</td></tr></table>		<b>Series Code</b>	01X	00	05	<b>Type</b>				011	Large Bore (22 AWG)			013	Small Bore (24-28 AWG)						<b>Finish</b>				05 Gold
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All dimensions in mm.

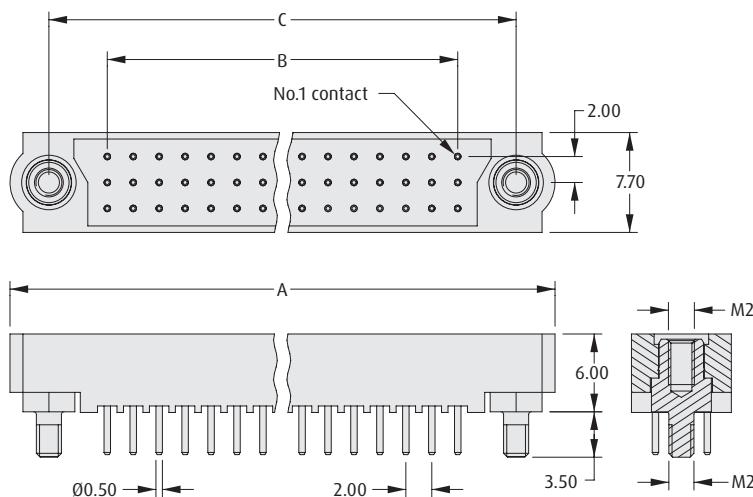
# Datamate J-Tek 3-Row Connectors

## Male Vertical PC Tail

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



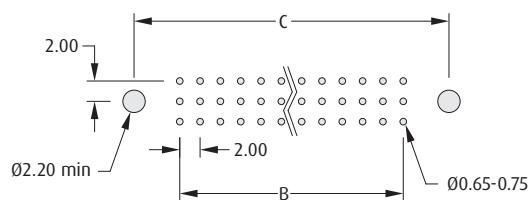
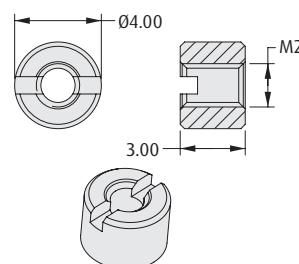
### MALE VERTICAL



### CALCULATION

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

### Board Mount Nut, 2 per connector



Recommended PC Board Pattern

### HOW TO ORDER

M83 - LM T1 M2 N XX - 0000 - 000

**SERIES CODE**

**TOTAL NO. OF CONTACTS**

18, 27, 36, 54, 60, 96

**TYPE**

T1 3mm Tail

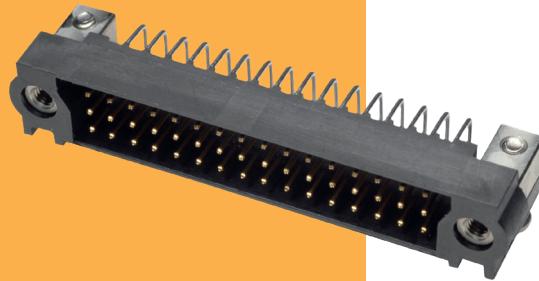
**JACKSCREW**

M2 Board Mount Jackscrew

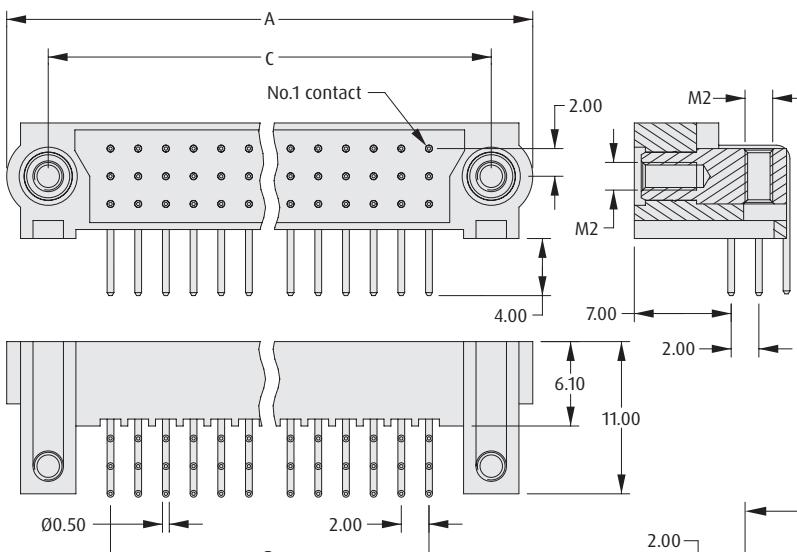
All dimensions in mm.

# Datamate J-Tek 3-Row Connectors

## Male Horizontal PC Tail

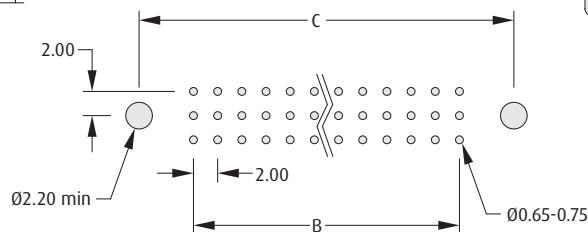
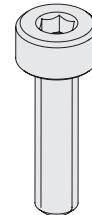
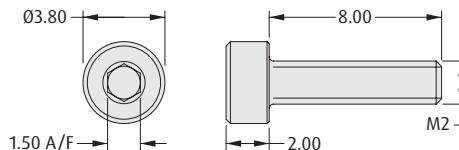


## MALE HORIZONTAL



CALCULATION	
<b>A</b>	$B + 15$
<b>B</b>	(Total no. of contacts - 3) $\times 2/3$
<b>C</b>	$B + 9$

**Board Mount Bolt,  
2 per connector**



### Recommended PC Board Pattern

## HOW TO ORDER

M83 - LM L3 M7 N XX - 0000 - 000

## SERIES CODE

## TOTAL NO. OF CONTACTS

TYPE

L3 4mm Tail

JACKSCREW

## M7 Hex Socket Board Mount

All dimensions in mm.