

# 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

<b>Current</b>	
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)
<b>Working voltage</b>	
At sea level 1013 mbar:	800V DC or AC <sub>rms</sub>
<b>Voltage proof</b>	
At sea level 1013 mbar:	1200V DC or AC <sub>rms</sub>
<b>Contact resistance</b>	
Initial:	20mΩ max
After conditioning:	25mΩ max
<b>Insulation resistance</b>	
Initial:	1000MΩ min
After conditioning:	100MΩ min

## Mechanical

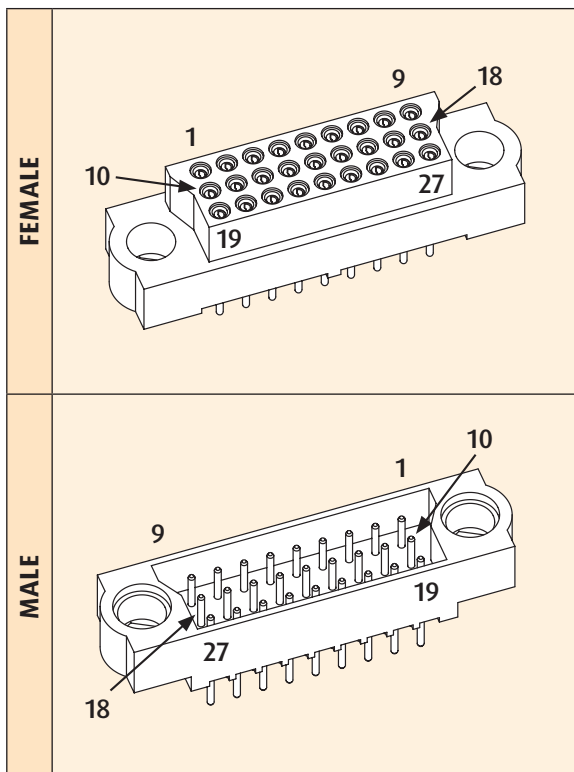
Durability:	500 operations
Insertion force (max):	1.0N
Withdrawal force (min):	0.2N
Signal crimp accommodation:	22 AWG to 28 AWG BS 3G 210 Type A or MIL-DTL-16878/6 Type ET

## Environmental

Environmental classification:	55/125/56 days at 95% RH
Operational temperature:	-55°C to +125°C
*Vibration sensitivity:	10Hz to 2000Hz, 0.75mm, 98m/s <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)

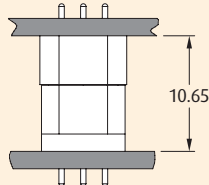
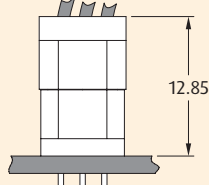
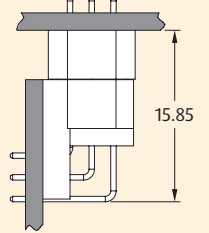
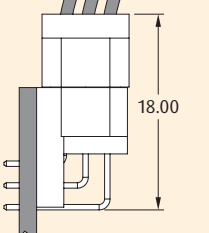
\* Tested with connectors with Jackscrews.

## Pin Numbering



All dimensions in mm.

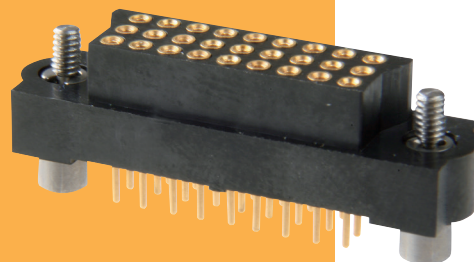
## Mating Profiles

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

# Datamate J-Tek 3-Row Connectors

## Female Vertical PC Tail

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

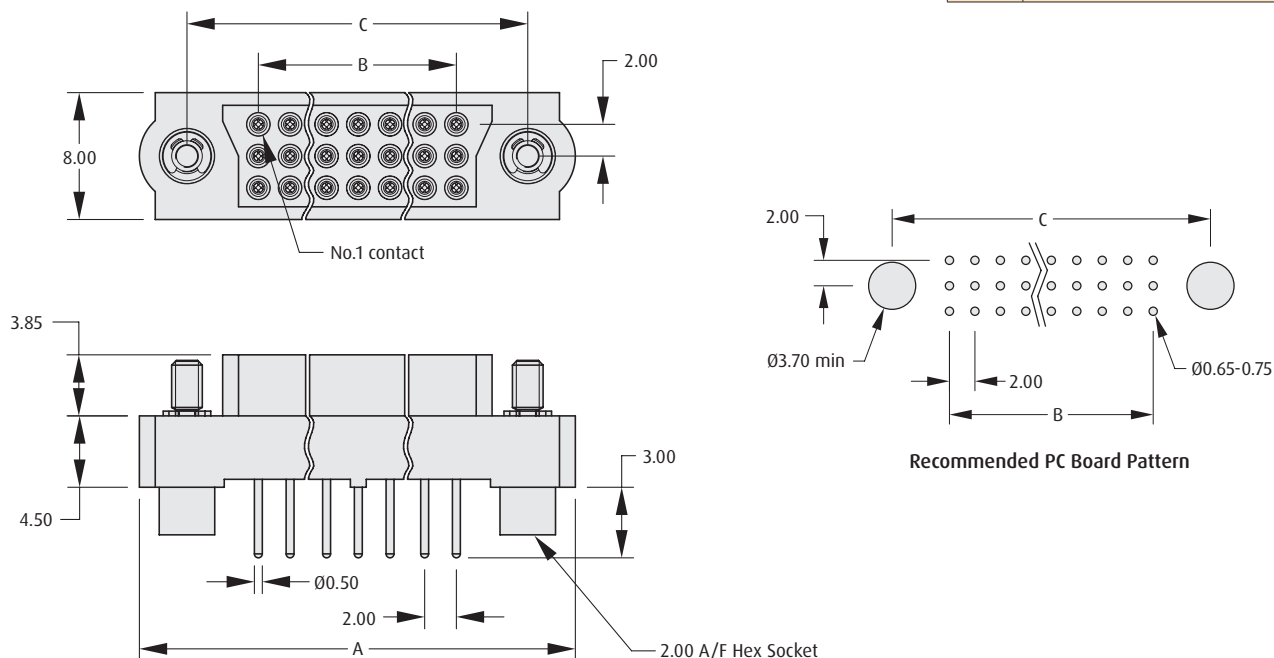


DATAMATE J-TEK 3-ROW

### REVERSE FIX

### CALCULATION

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



### 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**

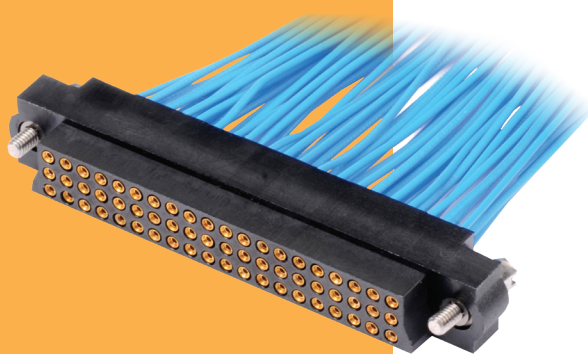
**F2** Hex Socket Jackscrew

All dimensions in mm.

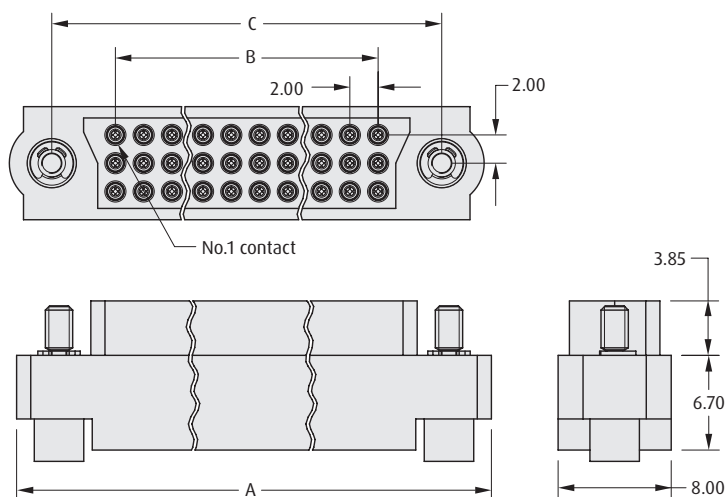
# Datamate J-Tek 3-Row Connectors

## 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



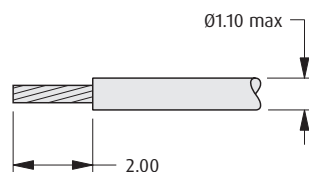
### CALCULATION

<b>A</b>	B + 15
<b>B</b>	(Total no. of contacts - 3) x 2/3
<b>C</b>	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](http://www.harwin.com/instructions).

### WIRE STRIPPING DETAILS



### HOW TO ORDER

**M83 - LF X1 F2 N XX - 0000 - 000**

#### SERIES CODE

#### TYPE

<b>C1</b>	Small Bore (24-28 AWG)
<b>D1</b>	Large Bore (22 AWG)

#### TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

#### JACKSCREW

**F2** Hex Socket Jackscrew

All dimensions in mm.

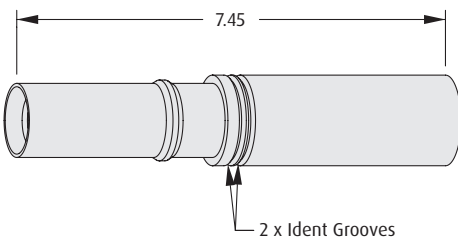
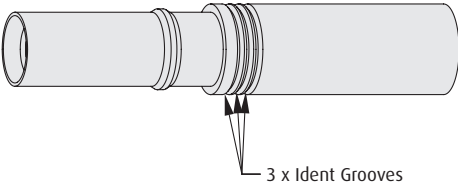
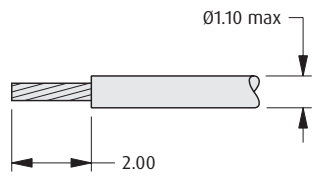
# Datamate J-Tek 3-Row Connectors

## 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

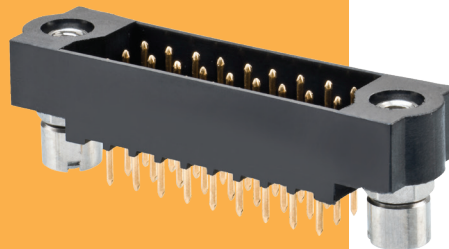
CRIMP CONTACTS	WIRE STRIPPING DETAILS								
<p><b>Large Bore (22 AWG)</b></p>  <p>7.45</p> <p>2 x Ident Grooves</p> <p><b>Small Bore (24 to 28 AWG)</b></p>  <p>3 x Ident Grooves</p>	 <p>Ø1.10 max</p> <p>2.00</p> <p><b>TOOLS</b></p> <p><b>Recommended Crimp Tool</b> - M22520/2-01  <b>Positioner</b> - T5747  <b>Contact Insertion/Removal Tool</b> - Z80-280</p> <p>❖ Instruction sheets available at <a href="http://www.harwin.com/instructions">www.harwin.com/instructions</a>.</p>								
HOW TO ORDER									
<p><b>SERIES CODE</b></p> <table border="1" data-bbox="146 1686 470 1801"> <thead> <tr> <th colspan="2">TYPE</th> </tr> </thead> <tbody> <tr> <td>011</td> <td>Large Bore (22 AWG)</td> </tr> <tr> <td>013</td> <td>Small Bore (24-28 AWG)</td> </tr> </tbody> </table>	TYPE		011	Large Bore (22 AWG)	013	Small Bore (24-28 AWG)	<p><b>M83 - 01X 00 05</b></p> <p><b>FINISH</b></p> <table border="1" data-bbox="1320 1667 1471 1747"> <tbody> <tr> <td>05</td> <td>Gold</td> </tr> </tbody> </table>	05	Gold
TYPE									
011	Large Bore (22 AWG)								
013	Small Bore (24-28 AWG)								
05	Gold								

All dimensions in mm.

# Datamate J-Tek 3-Row Connectors

## Male Vertical PC Tail

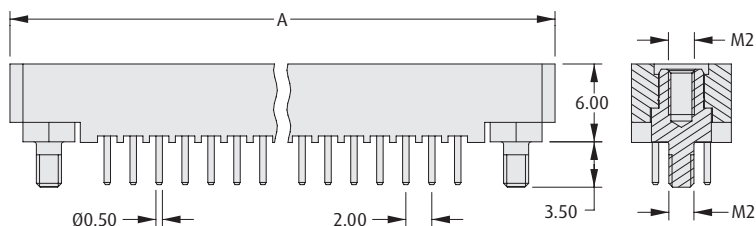
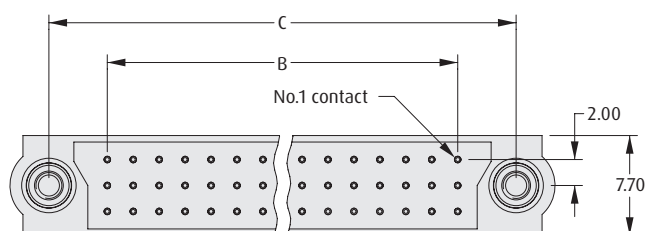
- Board Mount nuts to be tightened to a maximum torque of 23cmN.
- Fully shrouded contacts.
- Polarised mouldings.
- All contacts are gold finish for full RoHS compliance.
- Mates with all Datamate 3-Row female connectors with compatible jackscrews.



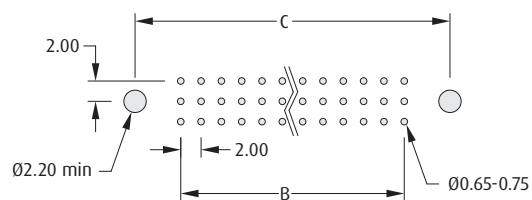
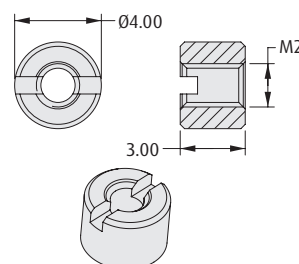
### MALE VERTICAL

### CALCULATION

<b>A</b>	B + 15
<b>B</b>	(Total no. of contacts - 3) x 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

#### TYPE

**T1**

3mm Tail

#### TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

#### JACKSCREW

**M2**

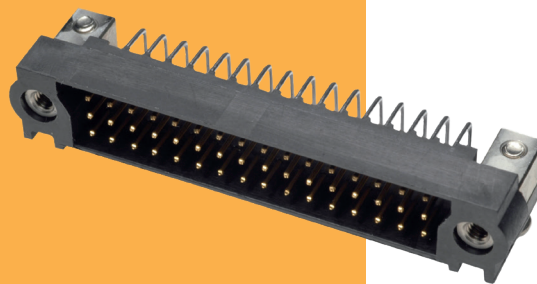
Board Mount Jackscrew

All dimensions in mm.

# Datamate J-Tek 3-Row Connectors

## Male Horizontal PC Tail

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

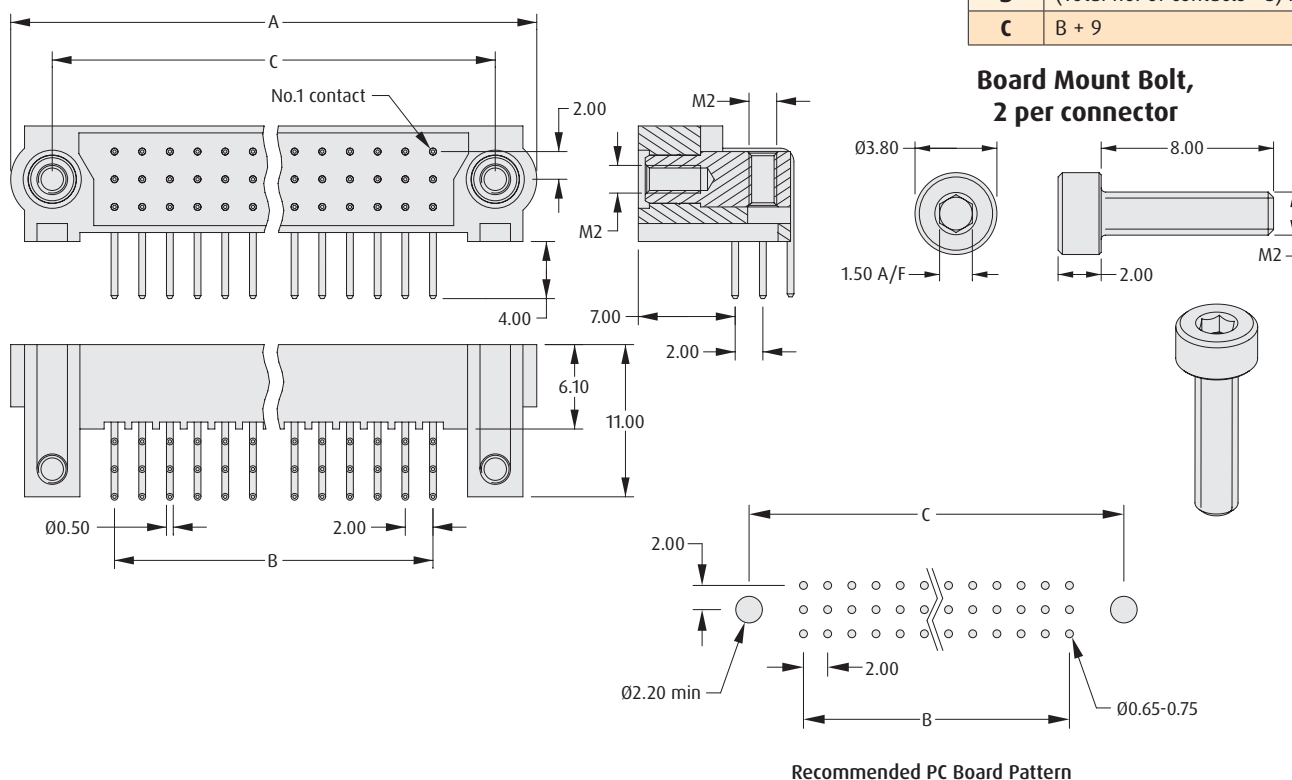


DATAMATE J-TEK 3-ROW

### MALE HORIZONTAL

### CALCULATION

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



### HOW TO ORDER

**M83 - LM L3 M7 N XX - 0000 - 000**

#### SERIES CODE

#### TYPE

**L3**

4mm Tail

#### TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

#### JACKSCREW

**M7**

Hex Socket Board Mount

All dimensions in mm.