

Datamate J-Tek 3-Row Specification

Materials

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

Electrical

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

Mechanical

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

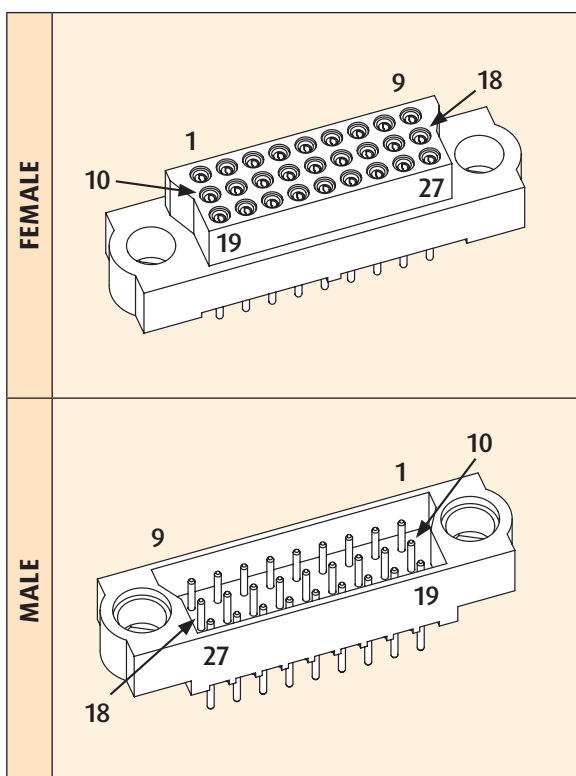
Environmental

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

* Tested with connectors with Jackscrews.

DATAMATE J-TEK 3-ROW

Pin Numbering



All dimensions in mm.

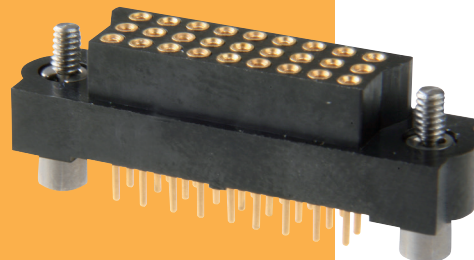
Mating Profiles

		FEMALE	
		VERTICAL THROUGHBOARD	CRIMP
MALE	VERTICAL THROUGHBOARD		
	HORIZONTAL THROUGHBOARD		

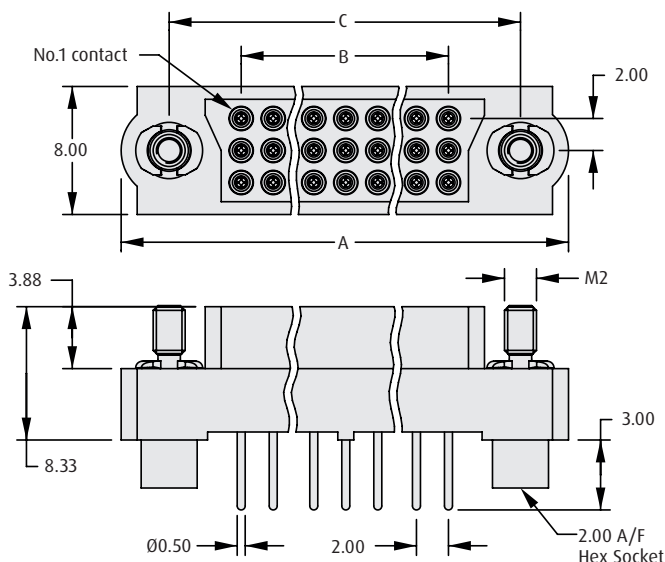
Datamate J-Tek 3-Row Connectors

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.

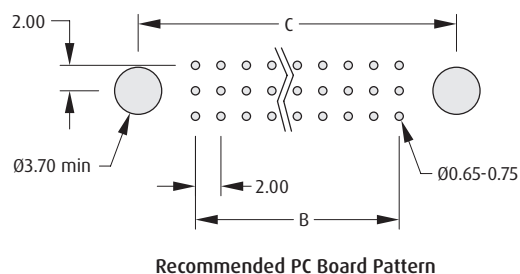


THROUGHBOARD



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

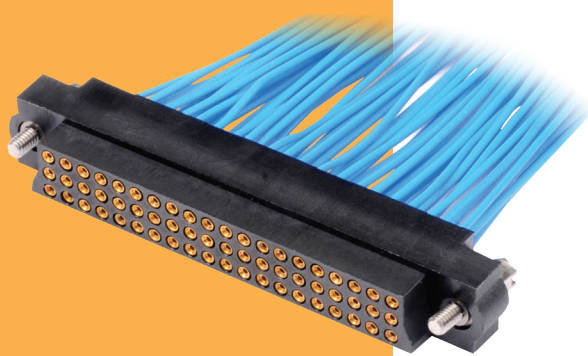
Hex Socket Jackscrew

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

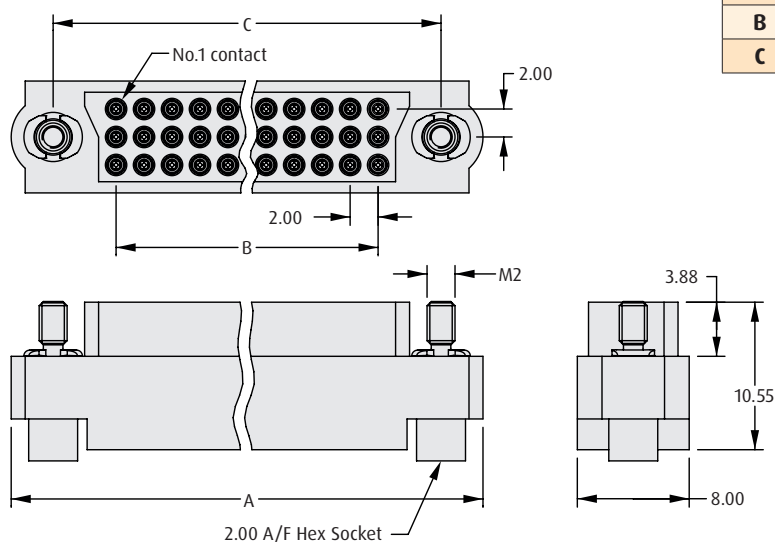
Female Crimp Kit

- ❖ 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.



DATAMATE J-TEK 3-ROW

FEMALE CRIMP



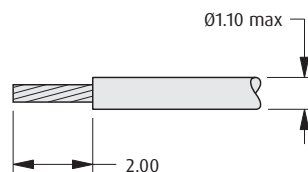
CALCULATION

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

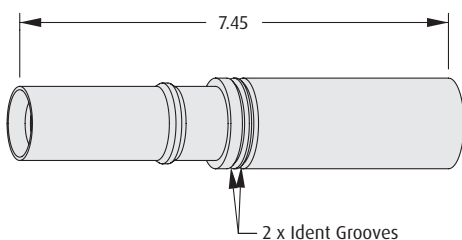
Spare Female Crimp Contacts

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

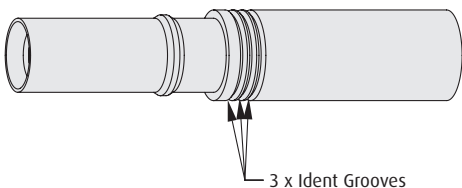


CRIMP CONTACTS

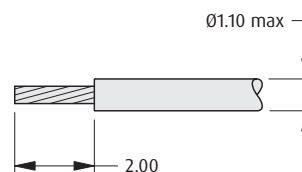
Large Bore (22 AWG)



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

M83 - 01X 00 05

SERIES CODE

TYPE

011	Large Bore (22 AWG)
013	Small Bore (24-28 AWG)

FINISH

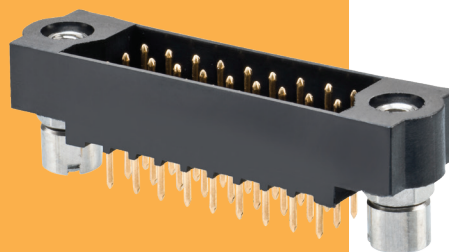
05	Gold
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All dimensions in mm.

Datamate J-Tek 3-Row Connectors

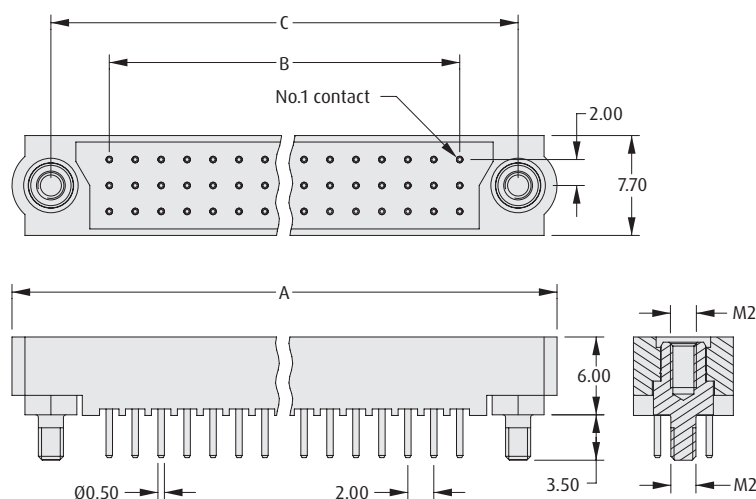
Male Vertical Throughboard

- ❏ 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.



DATAMATE J-TEK 3-ROW

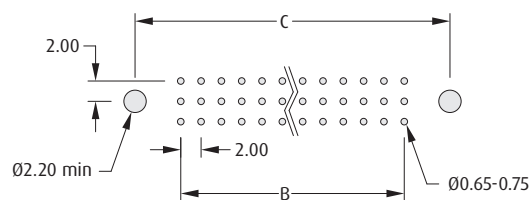
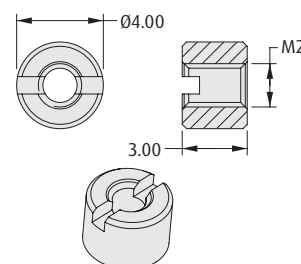
MALE VERTICAL



CALCULATION

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

Board Mount Nut, 2 per connector



Recommended PC Board Pattern

HOW TO ORDER

M83 - LM T1 M2 N XX - 0000 - 000

SERIES CODE

TYPE

T1

3mm Tail

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

JACKSCREW

M2

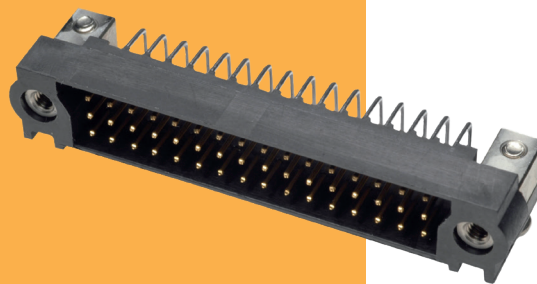
Board Mount Jackscrew

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

Male Horizontal Throughboard

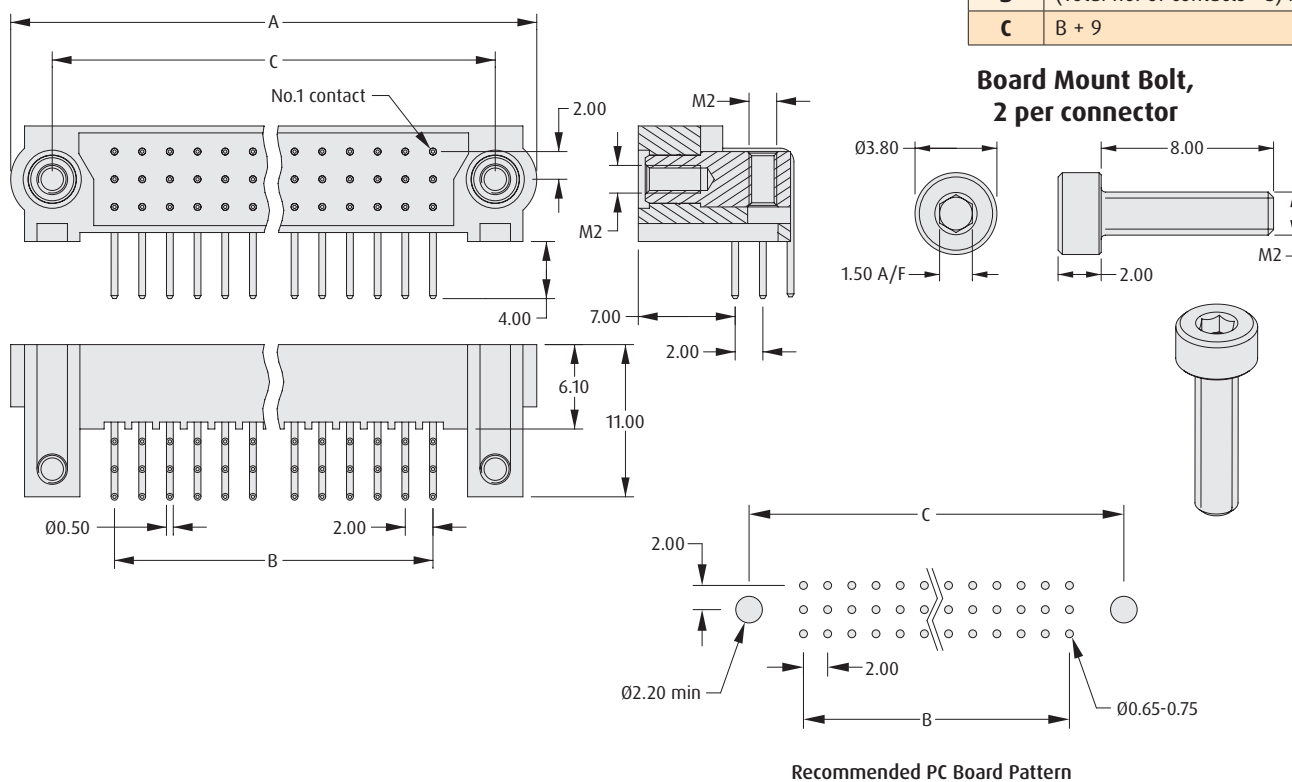
- ❖ Board Mount screws to be tightened to a maximum torque of 23cmN.
- ❖ Suitable for motherboard/daughterboard configurations.
- ❖ Fully shrouded contacts, polarized housings.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ Mates with all Datamate 3-Row female connectors with compatible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



MALE HORIZONTAL

CALCULATION

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



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.