

PART NUMBERING SYSTEM

M83-L # #X #X N XX - AA BB - XXX

PRODUCT RANGE

GENDER

F	Female (Socket)
M	Male (Plug)

TERMINATION STYLE

T1	Vertical PC Tail, 3mm tail
T2	Vertical PC Tail, 4.5mm tail
L3	Horizontal PC Tail, 4mm tail (Male only)
C1	Crimp 24-28 AWG (Small Bore) (Female only)
D1	Crimp 22 AWG (Large Bore) (Female only)

PART NUMBER OF SPECIAL CONTACT

See page 66, or 000 if none loaded

NUMBER OF SPECIAL CONTACTS ON OPPOSITE SIDE

NUMBER OF SPECIAL CONTACTS FROM SIGNAL CONTACT NO. 1 SIDE

NO. OF SIGNAL CONTACTS

JACKSCREW VARIANT (see following page)

00	None assembled
Fx	Female jackscrews - see page 64
Mx	Male jackscrews - see page 65

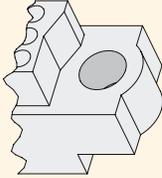
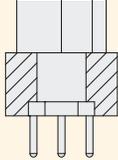
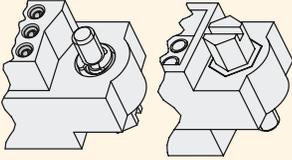
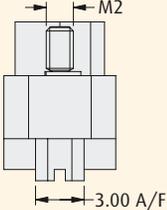
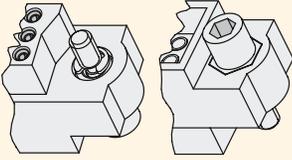
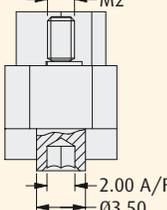
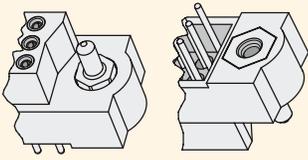
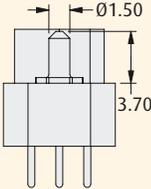
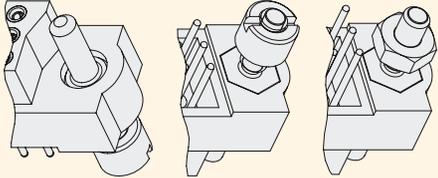
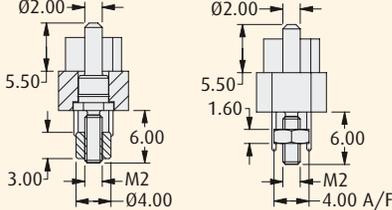
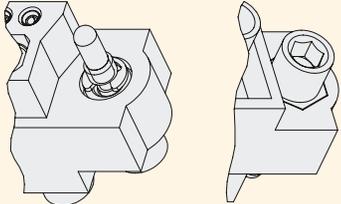
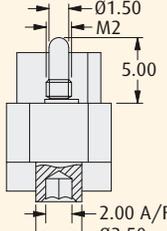
See pages 67 to 76 for configurations currently available.
Contact datamate@harwin.com for other variants



M83 Datamate Connectors

JACKSCREWS

FEMALE

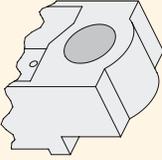
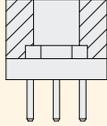
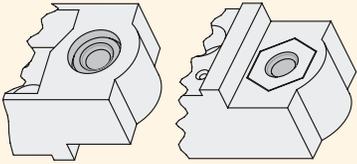
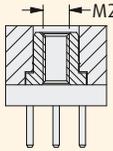
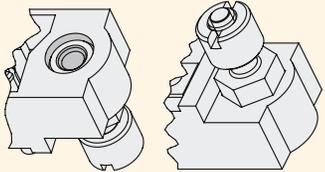
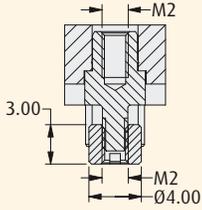
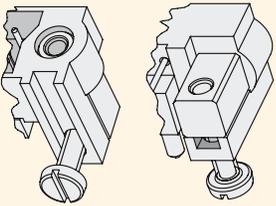
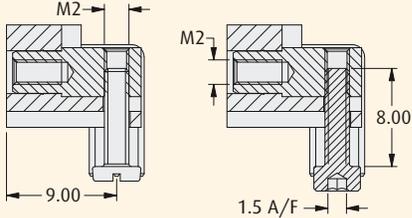
00			None assembled
F1			Hexagonal Slotted Jackscrew (floating)
F2			Hexagonal Socket Jackscrew (floating)
F4			Guide Pin Jackscrew
F6 OR F7			Guide Pin Jackscrew with Panel Mount F6 = slotted nut F7 = hexagonal nut
FB			Hexagonal Socket Jackscrew (floating) with guide pin

All dimensions in mm.

www.harwin.com



MALE

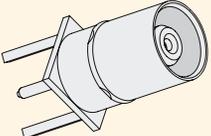
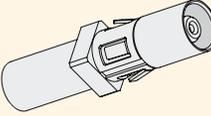
00			None assembled
M1			Jackscrew Nut only
M2 or M3			Jackscrew Nut with Vertical Board Mount stud M2 = 3.5mm stud length M3 = 5mm stud length
M5 or M7			Jackscrew Nut with Horizontal Board Mount stud M5 = slotted head M7 = hexagonal socket

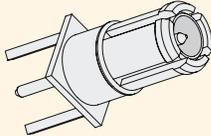
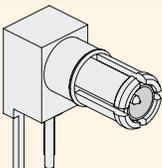


M83 Datamate Connectors

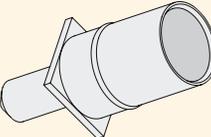
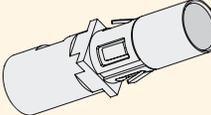
SPECIAL CONTACTS

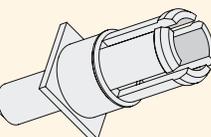
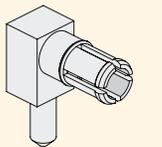
COAX

FEMALE	
301 or 302	 <p>Vertical PC Tail 301 = 3.00mm tail 302 = 4.50mm tail</p>
305 306 307	 <p>Straight Crimp 305 = Ø2.00mm cable 306 = Ø2.40mm cable 307 = Ø2.70mm cable</p>

MALE	
311 or 312	 <p>Vertical PC Tail 311 = 3.00mm tail 312 = 4.50mm tail</p>
313 or 314	 <p>Horizontal PC Tail 313 = 3.00mm tail 314 = 4.50mm tail</p>

POWER

FEMALE	
321 or 322	 <p>Vertical PC Tail 321 = 3.50mm tail 322 = 5.00mm tail</p>
325 326 327	 <p>Straight Solder 325 = 12 AWG cable 326 = 14 AWG cable 327 = 16 AWG cable</p>

MALE	
331 or 332	 <p>Vertical PC Tail 331 = 3.50mm tail 332 = 5.00mm tail</p>
333 or 334	 <p>Horizontal PC Tail 333 = 3.00mm tail 334 = 4.50mm tail</p>

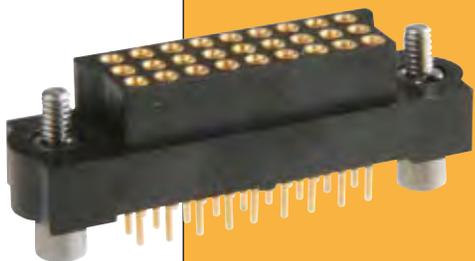
Tail dimensions given are for the special contacts once assembled into the connector.

www.harwin.com



M83 Datamate Connectors

Female Vertical PC Tail



- ❖ Choice of compatible jackscrews.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See pages 68 and 69 for configurations including special contacts.
- ❖ Contact datamate@harwin.com for alternative contact configurations.

FEMALE VERTICAL

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

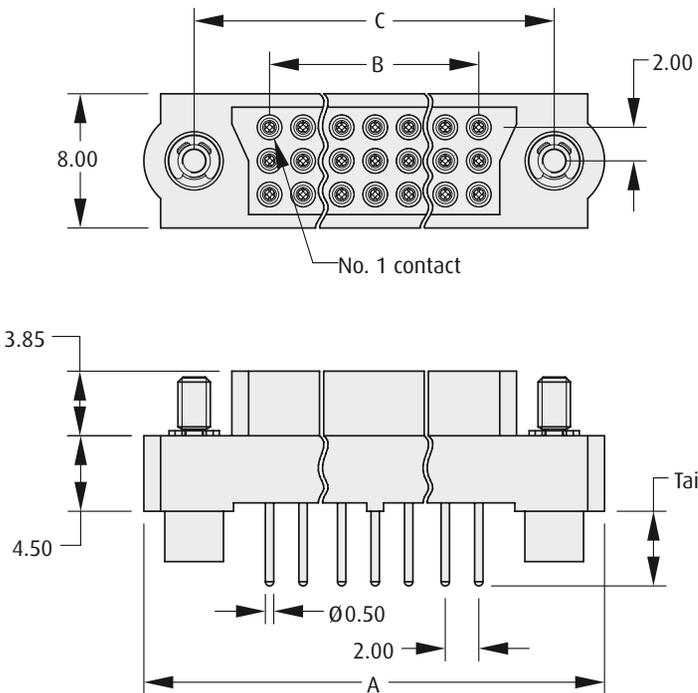


Diagram shown with Jackscrew F2 assembled.

Recommended PC Board Pattern

HOW TO ORDER

M83 - LF TX XX N XX - 0000 - 000

SERIES CODE

TOTAL NO. OF CONTACTS

TAIL	
T1	3mm Tail
T2	4.5mm Tail

27, 36, 48, 51, 60, 78, 96

JACKSCREW	
00	No Jackscrew
Fx	Female Jackscrews - see page 64

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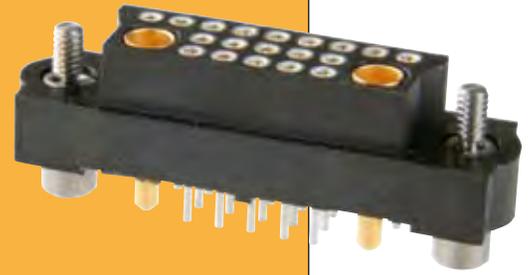
All dimensions in mm.



M83 Datamate Connectors

Female Vertical PC Tail

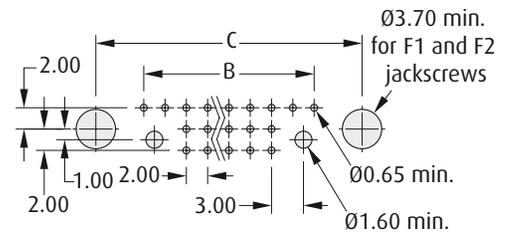
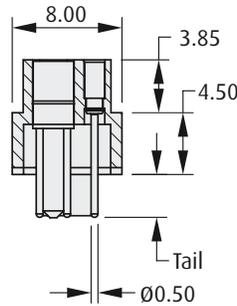
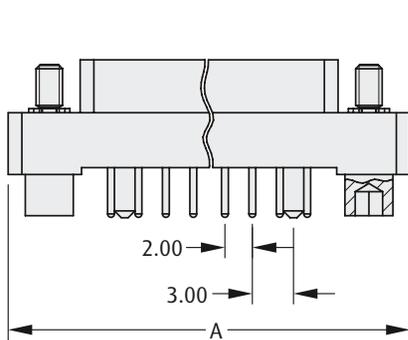
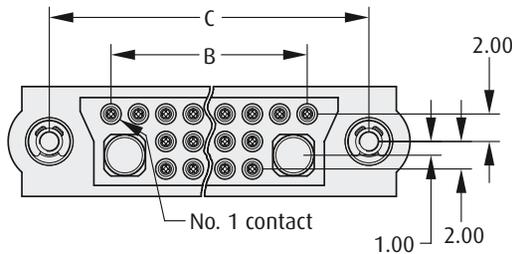
- ❖ Choice of compatible jackscrews and special contacts.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See page 67 for a signal-only configuration, and page 69 for an alternative mixed technology configuration.
- ❖ Contact datamate@harwin.com for alternative contact configurations.



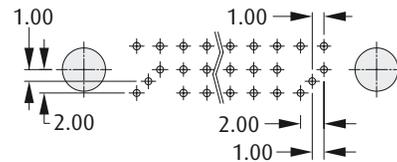
FEMALE VERTICAL

CALCULATION

A	$B + 15$
B	$(\text{Total No. of contacts} + 5) \times 2/3$
C	$B + 9$



Recommended PC Board Pattern with 321 or 322 Power contacts



Recommended PC Board Pattern with 301 or 302 Coax contacts

Diagram shown with Special Contact 321 and Jackscrew F2 assembled.

HOW TO ORDER

M83 - LF TX XX N XX - 0101 - XXX

SERIES CODE

TAIL

T1	3mm Tail
T2	4.5mm Tail

JACKSCREW

00	No Jackscrew
Fx	Female Jackscrews - see page 64

SPECIAL CONTACTS

301, 302, 321, 322

TOTAL NO. OF CONTACTS

19, 25

All dimensions in mm.

www.harwin.com



M83 Datamate Connectors

Female Vertical PC Tail



- ❖ Choice of compatible jackscrews and special contacts.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See page 67 for a signal-only configuration, and page 68 for an alternative mixed technology configuration.
- ❖ Contact datamate@harwin.com for alternative contact configurations.

Diagrams shown with special contact 321 and Jackscrew F4 assembled.

13 – 0302 CONFIGURATION	14 – 0700 CONFIGURATION
<p style="text-align: center; font-size: small;">Recommended PC Board Pattern</p>	<p style="text-align: center; font-size: small;">Recommended PC Board Pattern</p>
20 – 1000 CONFIGURATION	
<p style="text-align: center; font-size: small;">Recommended PC Board Pattern</p>	

HOW TO ORDER

M83 - LF TX XX N XX - XXXX - XXX

SERIES CODE		SPECIAL CONTACTS													
TAIL	JACKSCREW	SIGNAL/SPECIAL CONFIGURATIONS													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">T1</td><td>3mm Tail</td></tr> <tr><td>T2</td><td>4.5mm Tail</td></tr> </table>	T1	3mm Tail	T2	4.5mm Tail	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">00</td><td>No Jackscrew</td></tr> <tr><td>Fx</td><td>Female Jackscrews – see page 64</td></tr> </table>	00	No Jackscrew	Fx	Female Jackscrews – see page 64	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 100%;">13 – 0302</td></tr> <tr><td>14 – 0700</td></tr> <tr><td>20 – 1000</td></tr> </table>	13 – 0302	14 – 0700	20 – 1000	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 100%;">301, 302, 321, 322</td></tr> </table>	301, 302, 321, 322
T1	3mm Tail														
T2	4.5mm Tail														
00	No Jackscrew														
Fx	Female Jackscrews – see page 64														
13 – 0302															
14 – 0700															
20 – 1000															
301, 302, 321, 322															

www.harwin.com

All dimensions in mm.



M83 Datamate Connectors

Female Crimp

- ❖ Choice of compatible jackscrews.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See page 71 for configurations including special contacts.
- ❖ Contact datamate@harwin.com for alternative contact configurations.
- ❖ Spare contacts are available – see page 16.



FEMALE CRIMP

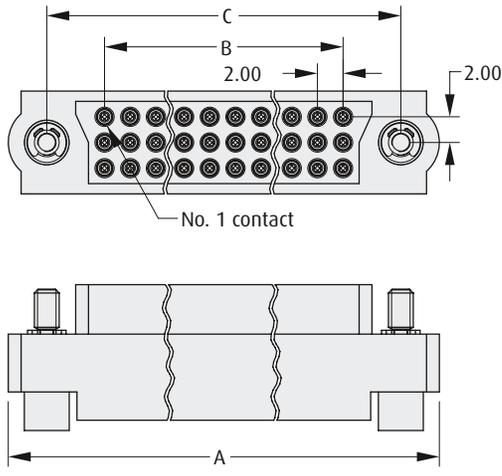


Diagram shown with Jackscrew F2 assembled.

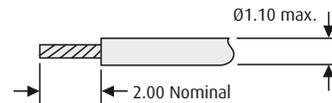
CALCULATION

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

TOOLS

Recommended Crimp Tool – M22520/2-01
Positioner – T5747
Contact Insertion/Removal Tool – Z80-280
 See pages 77 to 79
 ❖ Instruction sheets available at www.harwin.com/downloads/instructions

WIRE STRIPPING DETAILS



HOW TO ORDER

M83 - LF XX XX N XX - 0000 - 000

SERIES CODE

CRIMPS

C1	Small Bore
D1	Large Bore

TOTAL NO. OF CONTACTS

18,27,36,51,54,60,72,96

JACKSCREW

00	No Jackscrew
Fx	Female Jackscrews – see page 64

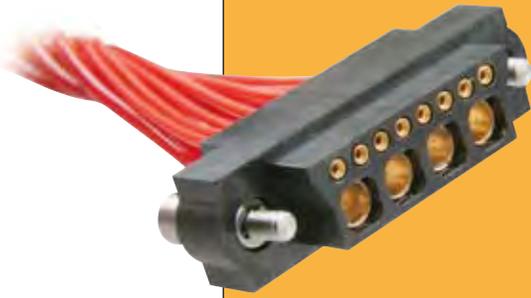
All dimensions in mm.

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M83 Datamate Connectors

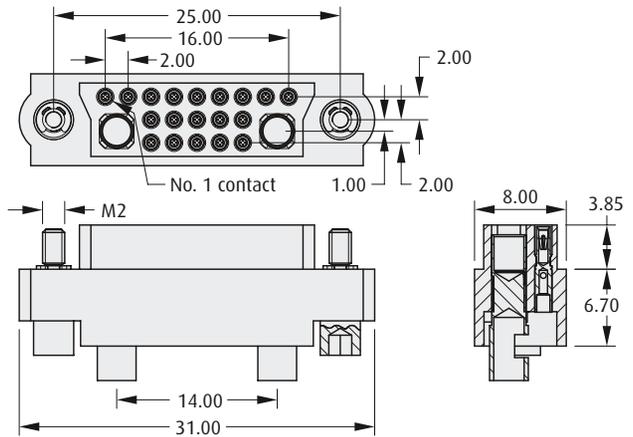
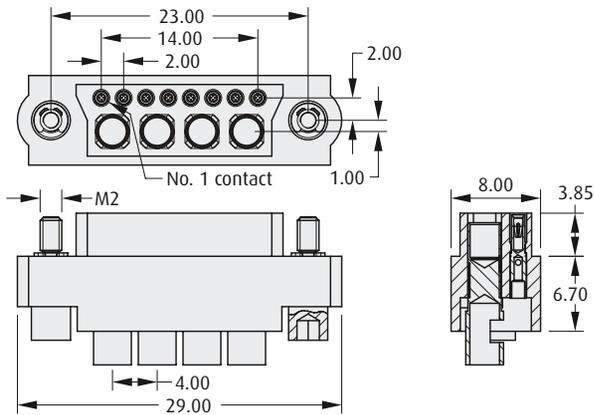
Female Crimp



- ❖ Choice of compatible jackscrews and special contacts.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See page 71 for signal-only configurations.
- ❖ Contact datamate@harwin.com for alternative contact configurations.
- ❖ Spare contacts are available – see page 16.

08 – 0400 CONFIGURATION

19 – 0101 CONFIGURATION

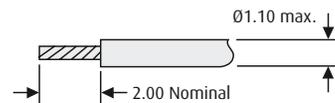


Diagrams shown with special contact 327 and Jackscrew F2 assembled.

TOOLS

WIRE STRIPPING DETAILS

Recommended Crimp Tool – M22520/2-01
Positioner – T5747
Contact Insertion/Removal Tool – Z80-280
 See pages 77 to 79
 ❖ Instruction sheets available at www.harwin.com/downloads/instructions



HOW TO ORDER

M83 – LF XX XX N XX – XXXX – XXX

SERIES CODE

CRIMPS	
C1	Small Bore
D1	Large Bore

JACKSCREW	
00	No Jackscrew
Fx	Female Jackscrews – see page 64

SPECIAL CONTACTS
 305, 306, 307, 325, 326, 327

SIGNAL/SPECIAL CONFIGURATIONS	
08 – 0400	
19 – 0101	

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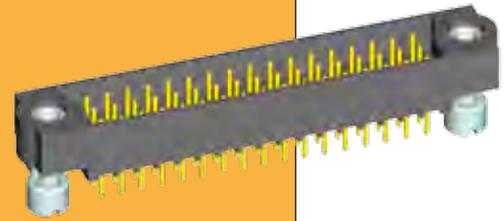
All dimensions in mm.



M83 Datamate Connectors

Male Vertical PC Tail

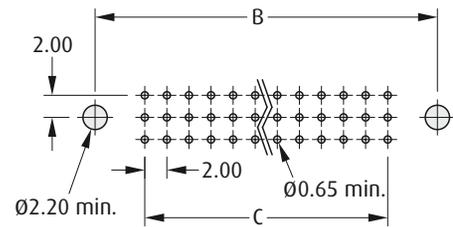
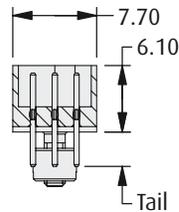
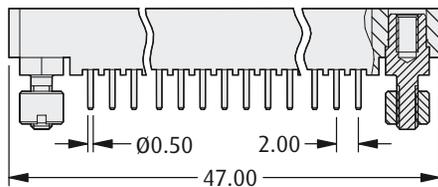
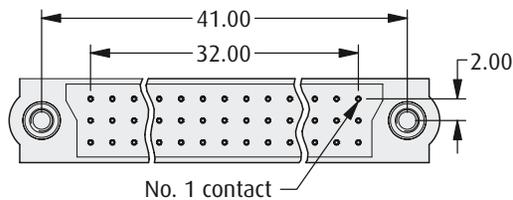
- Choice of compatible jackscrews.
- All contacts are gold finish for full RoHS compliance.
- See page 73 for configurations including special contacts.
- Contact datamate@harwin.com for alternative contact configurations.



MALE VERTICAL

CALCULATION

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



Recommended PC Board Pattern

Diagram shown with Jackscrew M2 assembled.

HOW TO ORDER

M83 - LM TX XX N XX - 0000 - 000

SERIES CODE

TAIL

T1 3mm Tail

T2 4.5mm Tail

JACKSCREW

00	No Jackscrew
Mx	Male Jackscrews - see page 65

TOTAL NO. OF CONTACTS

18, 60, 72, 96

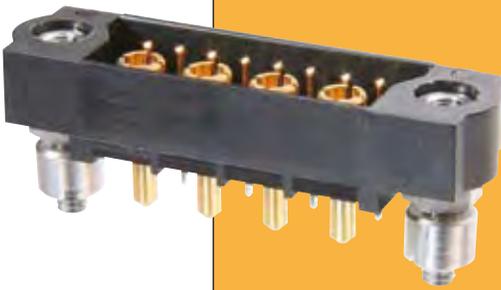
All dimensions in mm.

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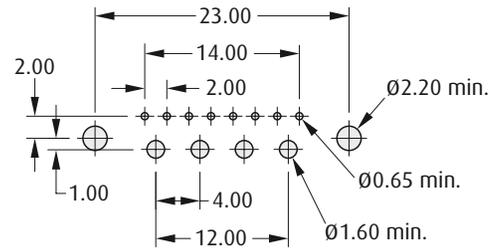
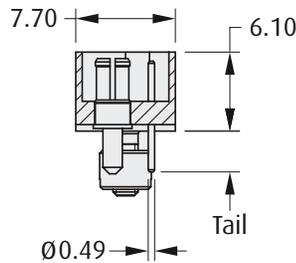
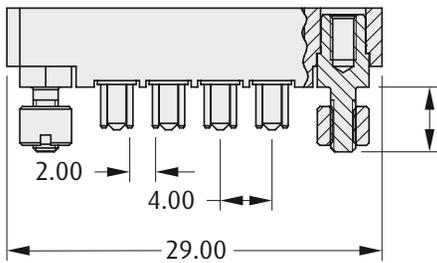
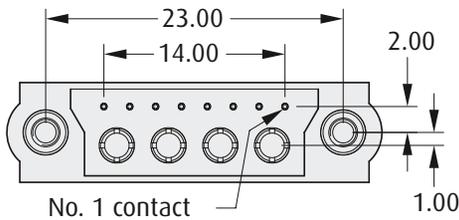
M83 Datamate Connectors

Male Vertical PC Tail

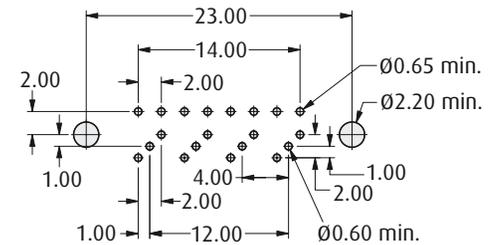


- ❖ Choice of compatible jackscrews and special contacts.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ Contact datamate@harwin.com for alternative contact configurations.
- ❖ See page 72 for signal-only configurations.

MALE VERTICAL



Recommended PC Board Pattern with 331 or 332 Power contacts



Recommended PC Board Pattern with 311 or 312 Coax contacts

Diagram shown with special contact 331 and Jackscrew M2 assembled.

HOW TO ORDER

M83 - LM TX XX N 08 - 0400 - XXX

SERIES CODE	M83 - LM TX XX N	SPECIAL CONTACTS	311, 312, 331, 332
TAIL	T1 3mm Tail T2 4.5mm Tail	TOTAL NO. OF CONTACTS	08
JACKSCREW			
00	No Jackscrew		
Mx	Male Jackscrews - see page 65		

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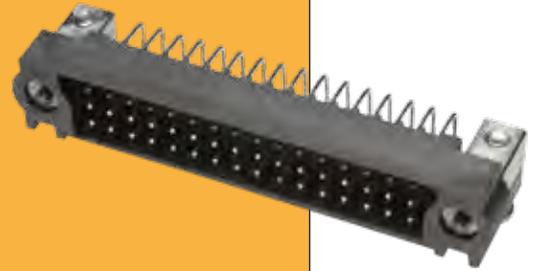
All dimensions in mm.



M83 Datamate Connectors

Male Horizontal PC Tail

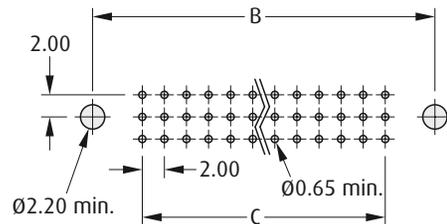
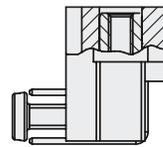
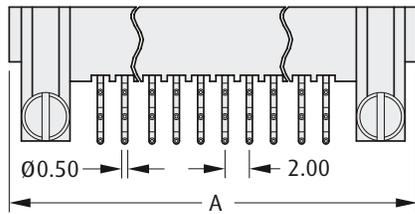
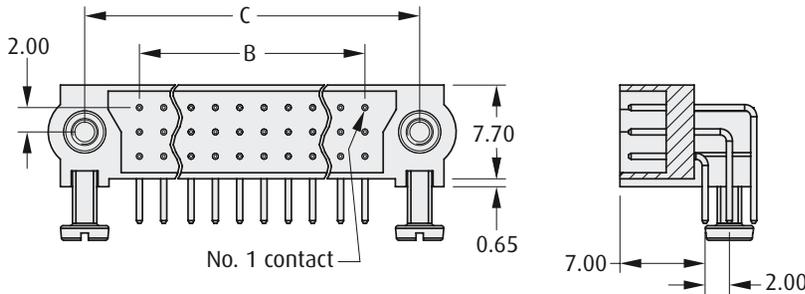
- ❖ Choice of compatible jackscrews.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See pages 75 and 76 for configurations including special contacts.
- ❖ Contact datamate@harwin.com for alternative contact configurations.



MALE HORIZONTAL

CALCULATION

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



Recommended PC Board Pattern

Diagram shown with Jackscrew M5 assembled.

HOW TO ORDER

M83 - LM L3 XX N XX - 0000 - 000

SERIES CODE	M83 - LM	TOTAL NO. OF CONTACTS	18, 27, 36, 48, 54, 60, 96
TAIL	L3 4mm Tail	JACKSCREW	00 No Jackscrew Mx Male Jackscrews - see page 65

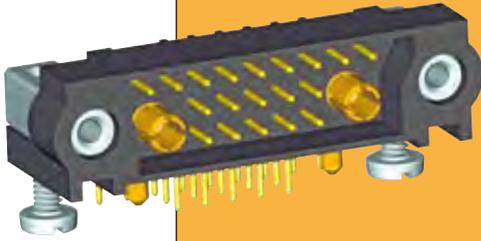
All dimensions in mm.

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M83 Datamate Connectors

Male Horizontal PC Tail

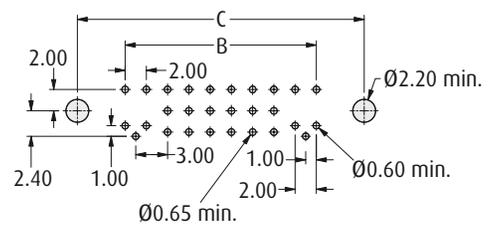
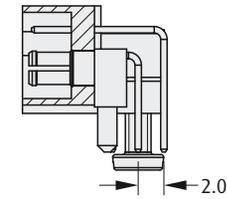
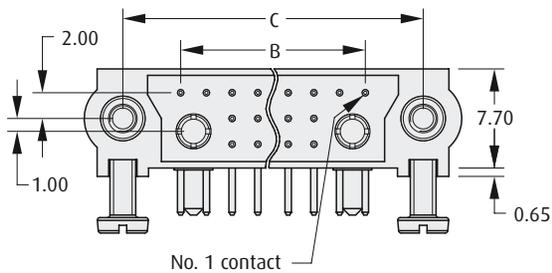


- Choice of compatible jackscrews and special contacts.
- All contacts are gold finish for full RoHS compliance.
- See page 74 for a signal-only configuration, and page 76 for an alternative mixed technology configuration.
- Contact datamate@harwin.com for alternative contact configurations.

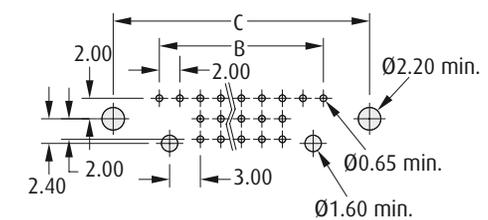
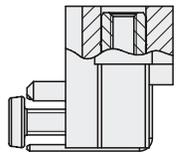
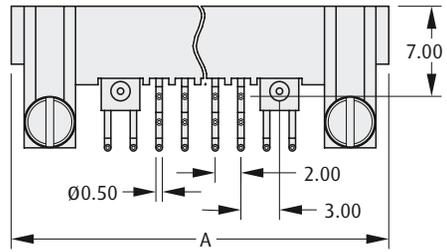
MALE HORIZONTAL

CALCULATION

A	B + 15
B	(Total No. of contacts + 5) x 2/3
C	B + 9



Recommended PC Board Pattern with 313 or 314 Coax contacts



Recommended PC Board Pattern with 333 or 334 Power contacts

Diagram shown with special contact 333 and Jackscrew M5 assembled.

HOW TO ORDER

M83 - LM L3 XX N XX - 0101 - XXX

SERIES CODE	M83 - LM
TAIL	L3 4mm Tail

SPECIAL CONTACTS	313, 314, 333, 334
-------------------------	--------------------

TOTAL NO. OF CONTACTS	19, 25
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JACKSCREW	
00	No Jackscrew
Mx	Male Jackscrews - see page 65

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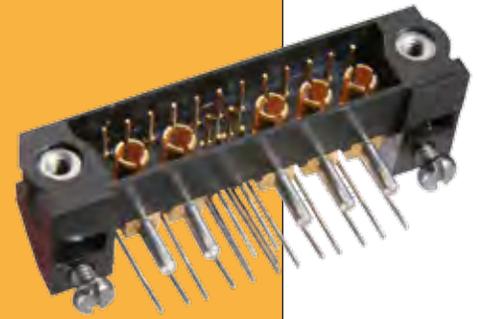
All dimensions in mm.



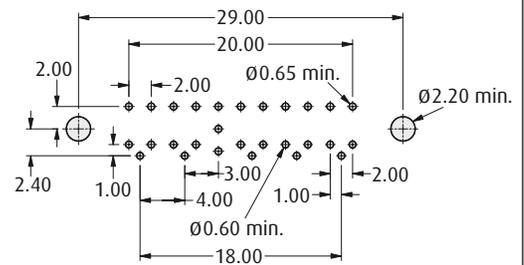
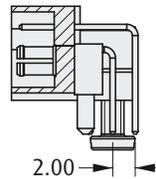
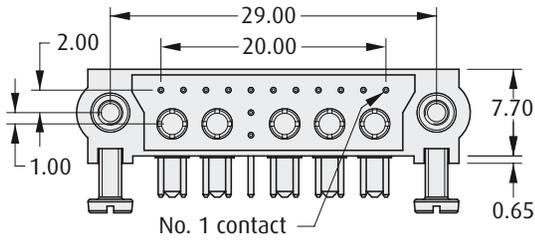
M83 Datamate Connectors

Male Horizontal PC Tail

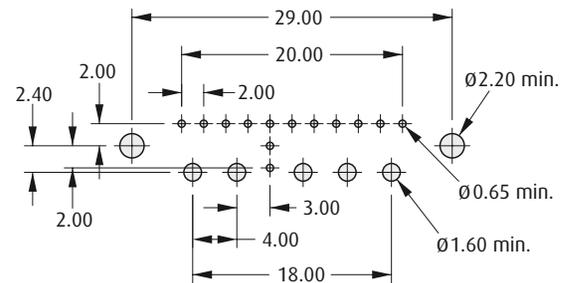
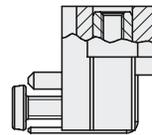
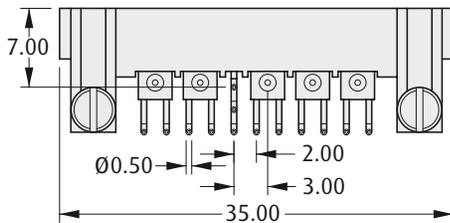
- ❖ Choice of compatible jackscrews and special contacts.
- ❖ All contacts are gold finish for full RoHS compliance.
- ❖ See page 74 for a signal-only configuration, and page 75 for an alternative mixed technology configuration.
- ❖ Contact datamate@harwin.com for alternative contact configurations.



MALE HORIZONTAL



Recommended PC Board Pattern with 313 or 314 Coax contacts



Recommended PC Board Pattern with 333 or 334 Power contacts

Diagram shown with special contact 333 and Jackscrew M5 assembled.

HOW TO ORDER

M83 - LM L3 XX N 13 - 0302 - XXX

SERIES CODE

TAIL

L3 4mm Tail

JACKSCREW

00	No Jackscrew
Mx	Male Jackscrews - see page 65

SPECIAL CONTACTS

313, 314, 333, 334

TOTAL NO. OF CONTACTS

13

All dimensions in mm.

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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Harwin:

[M83-LML3M5N96-0000-000](#) [M83-LFC1F2N60-0000-000](#) [M83-LFT100N19-0101-321](#) [M83-LML3M5N19-0101-333](#)
[M83-LML300N19-0101-333](#) [M83-LMT1M1N18-0000-000](#) [M83-LML3M7N60-0000-000](#) [M83-LFT1F2N60-0000-000](#)
[M83-LFT1F2N18-0000-000](#) [M83-LFT1F2N36-0000-000](#) [M83-LML3M1N18-0000-000](#) [M83-LML3M1N36-0000-000](#)
[M83-LML3M7N18-0000-000](#) [M83-LML3M7N36-0000-000](#) [M83-LML3M7N96-0000-000](#) [M83-LFT1F2N96-0000-000](#)
[M83-LMT1M2N96-0000-000](#) [M83-LMT1M2N18-0000-000](#) [M83-LMT1M2N36-0000-000](#) [M83-LMT1M2N60-0000-000](#)
[M83-LFC1F2N96-0000-000](#) [M83-LFD1F2N60-0000-000](#) [M83-LFD1F2N18-0000-000](#) [M83-LFD1F2N36-0000-000](#)
[M83-LFC1F2N36-0000-000](#)