

Datamate J-Tek Specification

Materials

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

Electrical

Current - Standard J-Tek, Trio-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

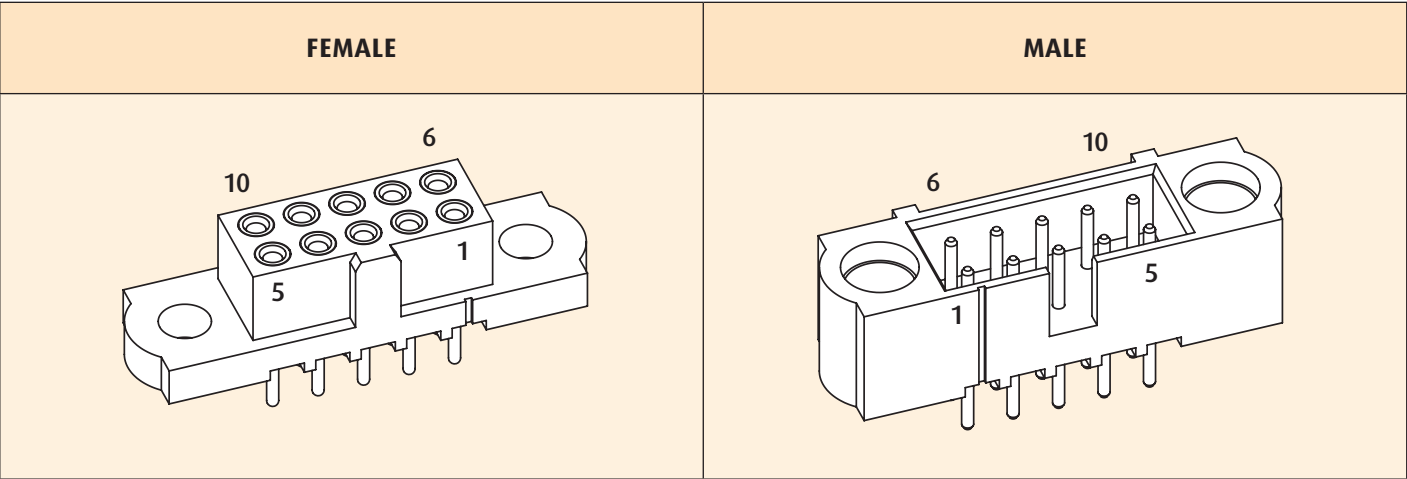
Durability	
Standard J-Tek:	500 operations
T-Contact:	1,000 operations
Trio-Tek:	400 operations
Insertion force (max)	
Standard J-Tek:	2.8N
T-Contact:	4.0N
Trio-Tek:	2.8N
Withdrawal force (min)	
Standard J-Tek:	0.2N
T-Contact:	0.5N
Trio-Tek:	0.2N
Signal crimp accommodation:	
	22 AWG to 32 AWG BS 3G 210 Type A, MIL-W-16878

Environmental

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

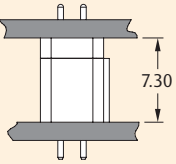
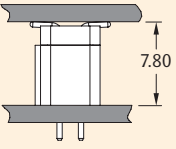
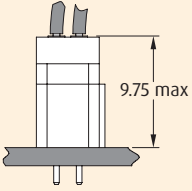
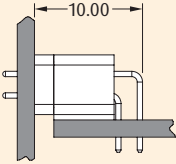
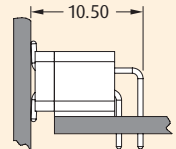
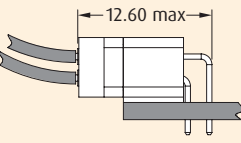
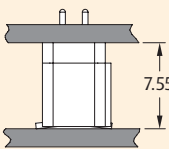
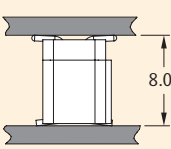
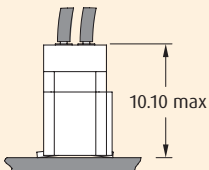
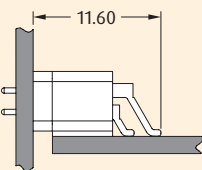
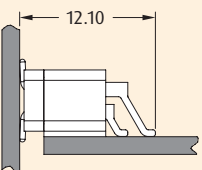
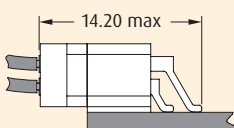
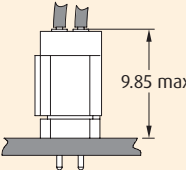
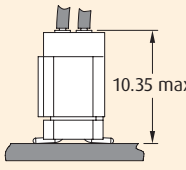
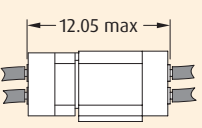
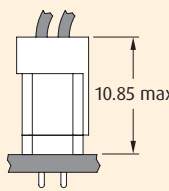
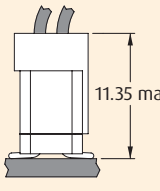
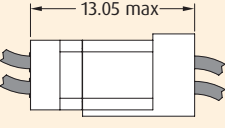
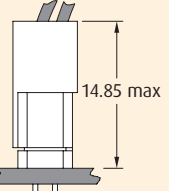
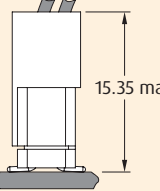
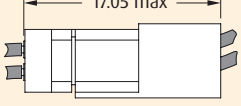
* Tested with connectors with Jackscrews.

Pin Numbering



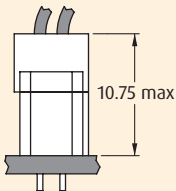
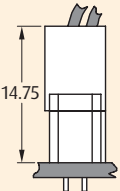
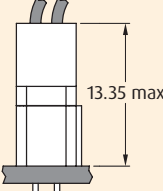
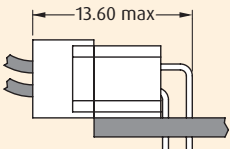
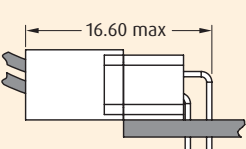
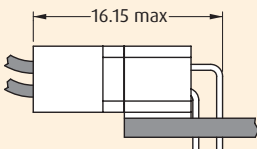
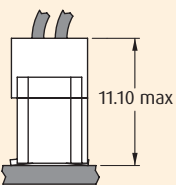
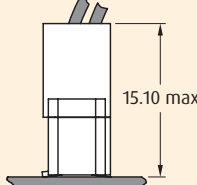
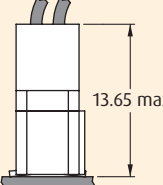
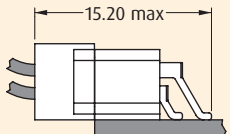
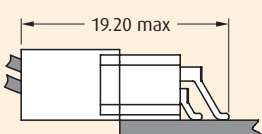
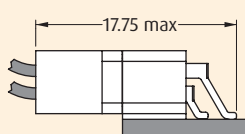
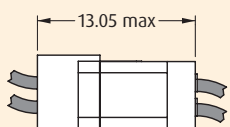
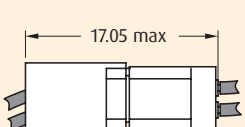
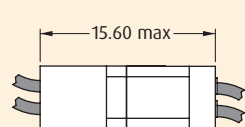
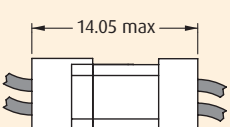
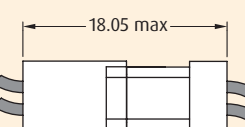
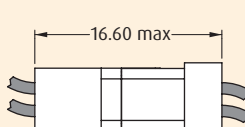
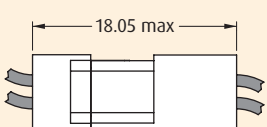
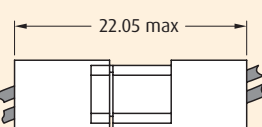
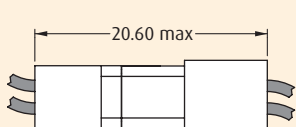
All dimensions in mm.

Datamate J-Tek Mating Profiles

		FEMALE		
		VERTICAL PC TAIL	VERTICAL SMT	CRIMP
MALE	VERTICAL PC TAIL			
	HORIZONTAL PC TAIL			
	VERTICAL SMT			
	HORIZONTAL SMT			
	CRIMP			
	CRIMP 1mm EXTENDED WALL			
	CRIMP 5mm EXTENDED WALL			

All dimensions in mm.

Mating Profiles

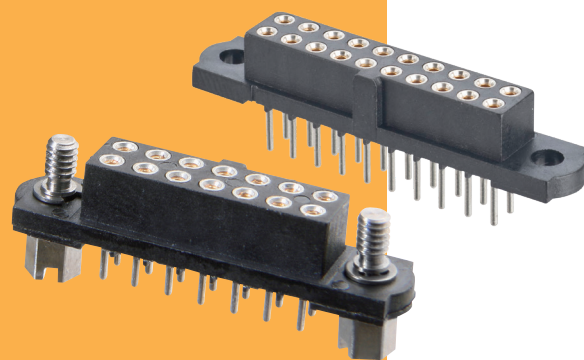
		FEMALE		
		CRIMP 1mm EXTENDED WALL	CRIMP 5mm EXTENDED WALL	CRIMP TRIO-TEK
MALE	VERTICAL PC TAIL			
	HORIZONTAL PC TAIL			
	VERTICAL SMT			
	HORIZONTAL SMT			
	CRIMP			
	CRIMP 1mm EXTENDED WALL			
	CRIMP 5mm EXTENDED WALL			

All dimensions in mm.

Datamate J-Tek Connectors

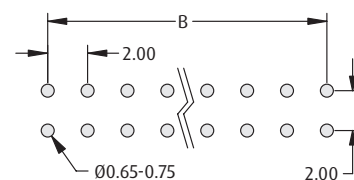
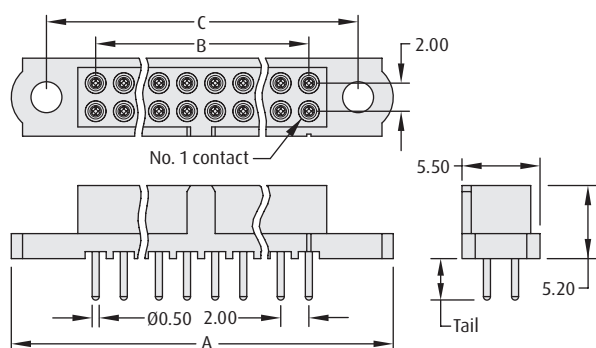
Female Vertical PC Tail

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



DATAMATE J-TEK

WITHOUT JACKSCREWS

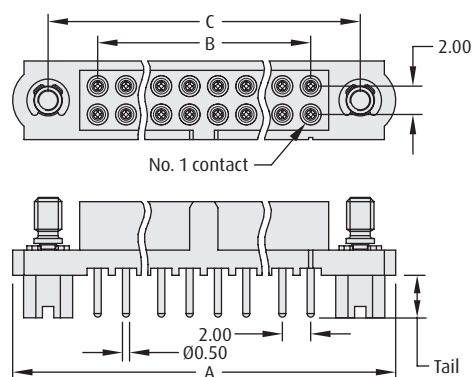


Recommended PC Board Pattern

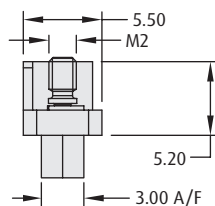
CALCULATION

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

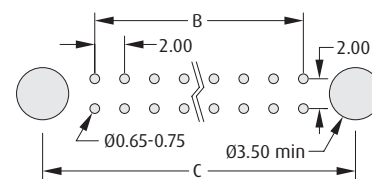
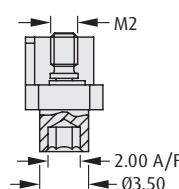
WITH JACKSCREWS



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

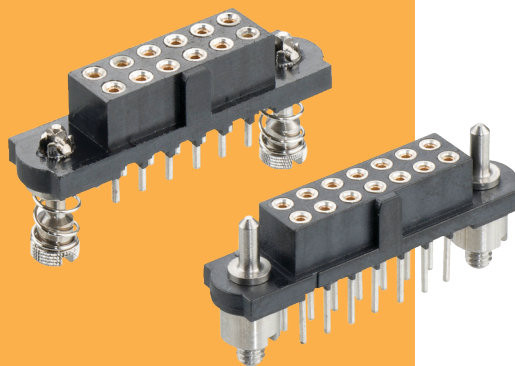
TOTAL NO. OF CONTACTS

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

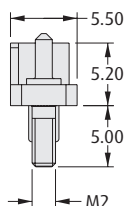
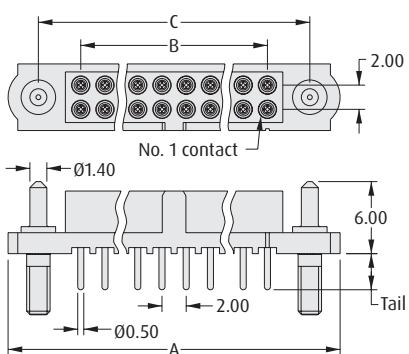
All dimensions in mm.

Datamate J-Tek Connectors

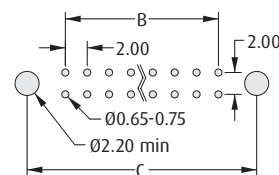
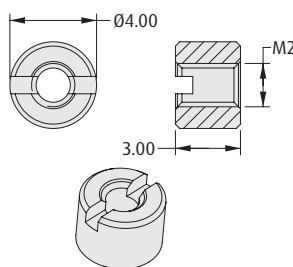
Female Vertical PC Tail Guide Pin, 101Lok



GUIDE PIN JACKSCREWS



**Board Mount Nut,
2 per connector**

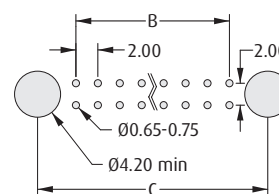
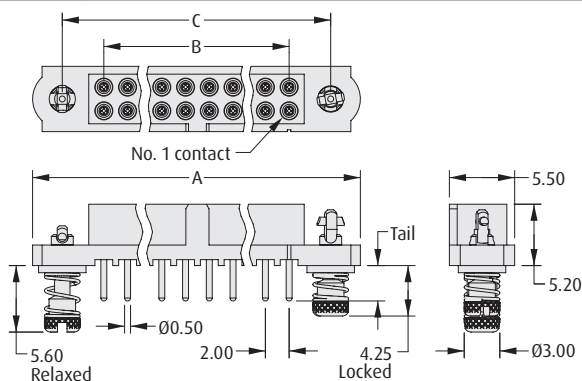


Recommended PC Board Pattern

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
FC	101Lok

FINISH

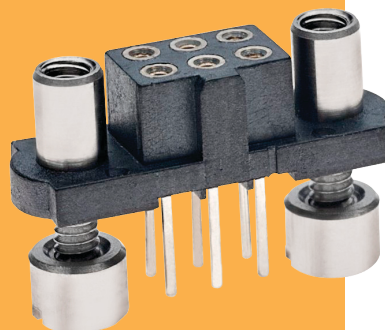
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

Female Vertical PC Tail Reverse Fix

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

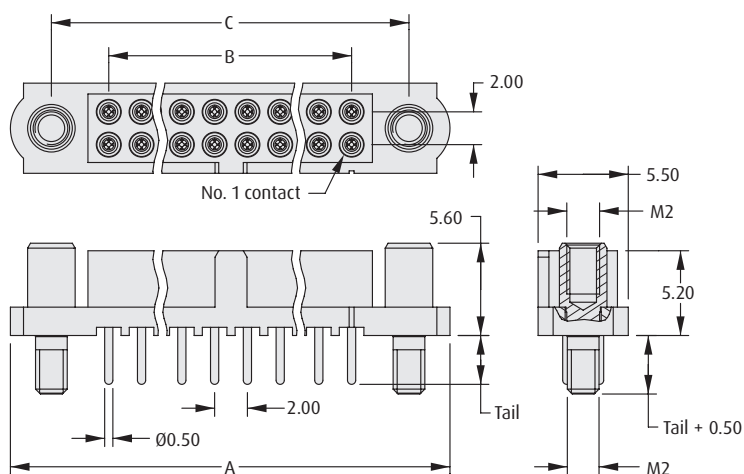


DATAMATE J-TEK

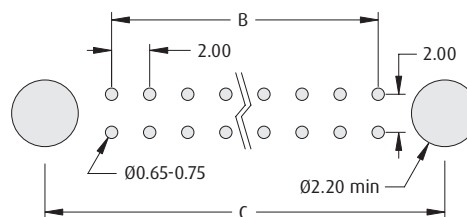
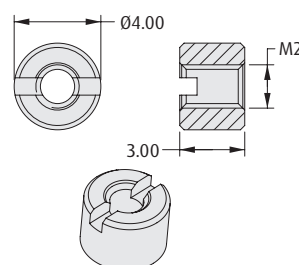
REVERSE FIX

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

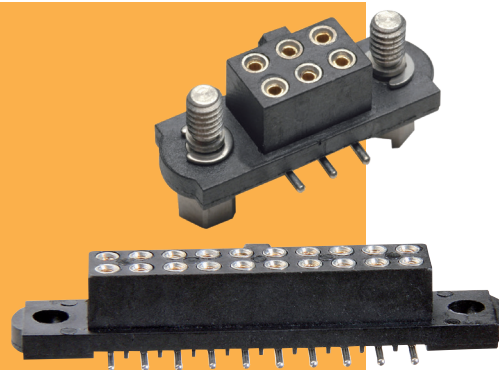
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

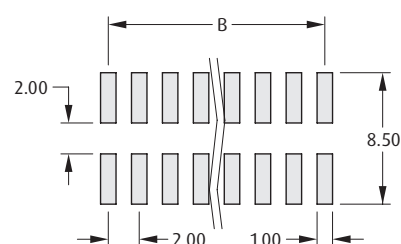
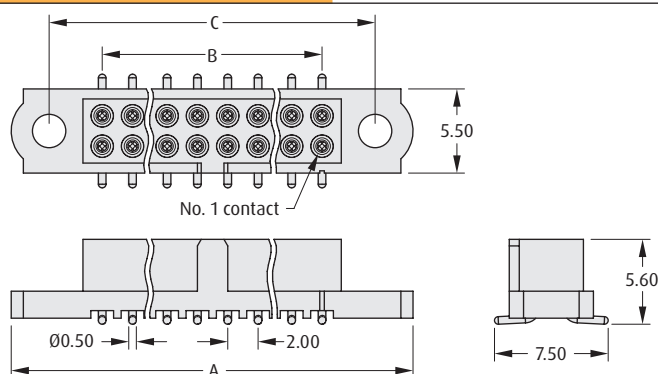
Datamate J-Tek Connectors

Female Vertical Surface Mount

- ❏ Mates with all Datamate J-Tek male connectors with compatible jackscrews.
- ❏ Gull wing SMT tails simplify inspection process.
- ❏ Optional pick and place cap.
- ❏ Contact datamate@harwin.com for tape and reel options.



WITHOUT JACKSCREWS

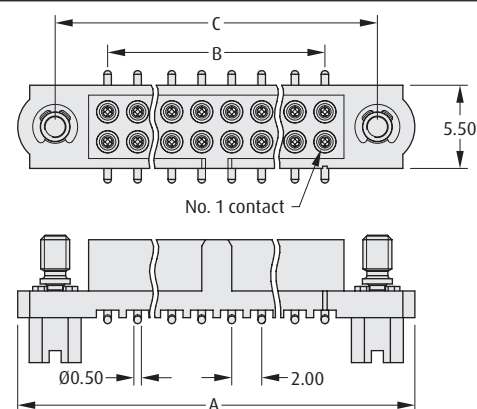


Recommended PC Board Pattern

CALCULATION

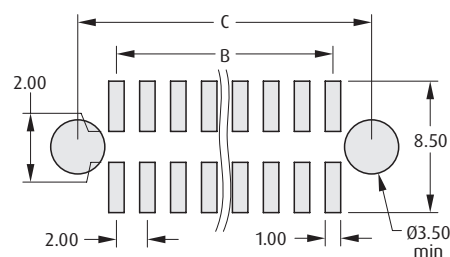
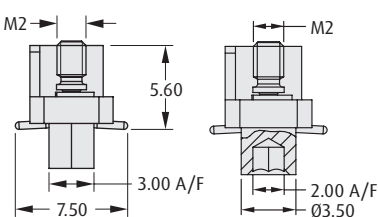
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

WITH JACKSCREWS



Hex Slotted Jackscrew

Hex Socket Jackscrew



Recommended PC Board Pattern

HOW TO ORDER

M80 - 4 X 2 XX XX P

SERIES CODE

TYPE

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

TOTAL NO. OF CONTACTS

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

PICK AND PLACE CAP

BLANK	No cap
P	Pick and place cap

FINISH

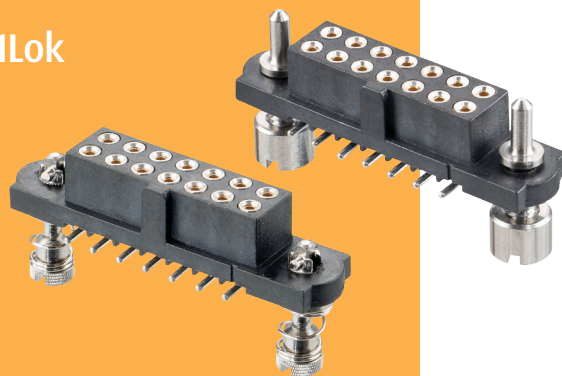
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

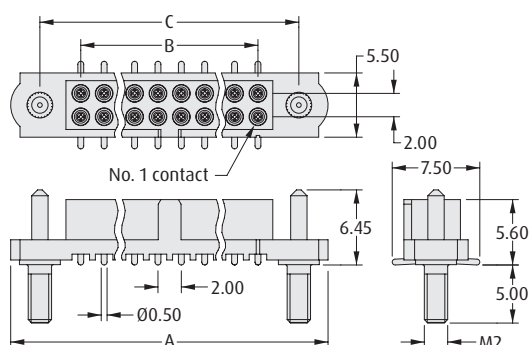
Female Vertical Surface Mount Guide Pin, 101Lok

- ❖ 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.

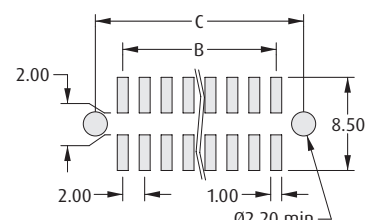
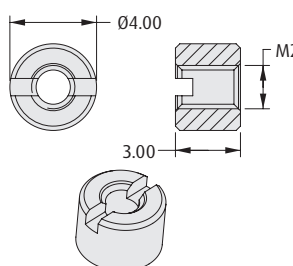


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



Board Mount Nut, 2 per connector

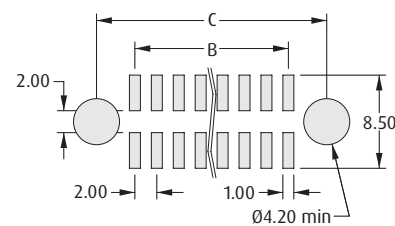
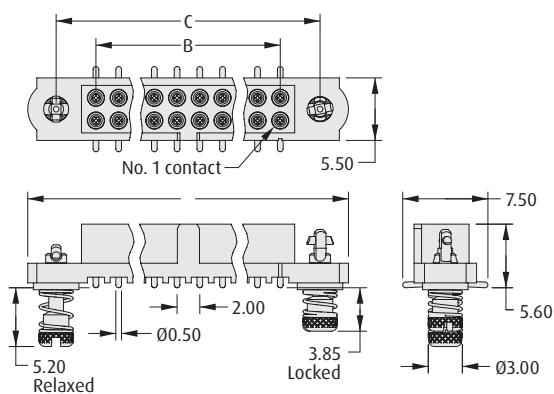


Recommended PC Board Pattern

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
FC	101Lok

FINISH

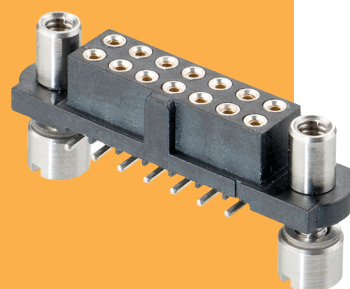
05	Gold
42	Gold + Tin

All dimensions in mm.

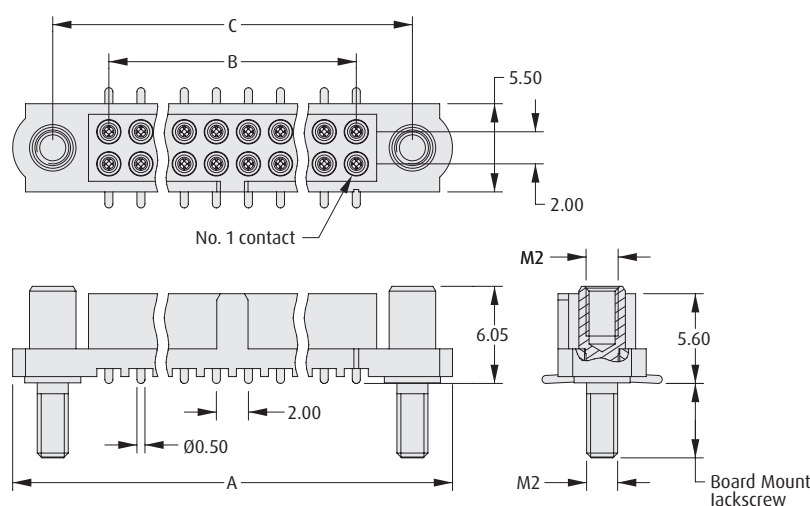
Datamate J-Tek Connectors

Female Vertical Surface Mount Reverse Fix

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



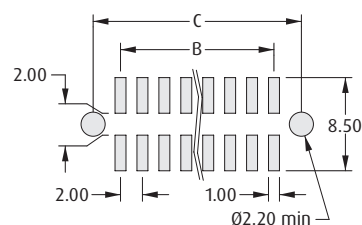
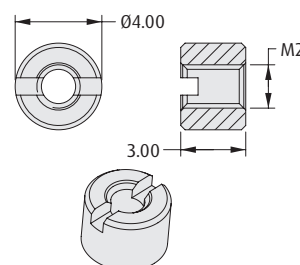
REVERSE FIX



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

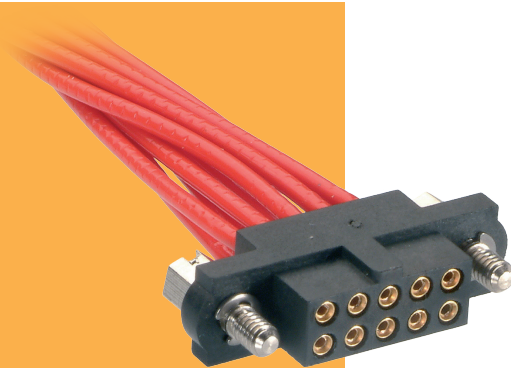
05	Gold
42	Gold + Tin

All dimensions in mm.

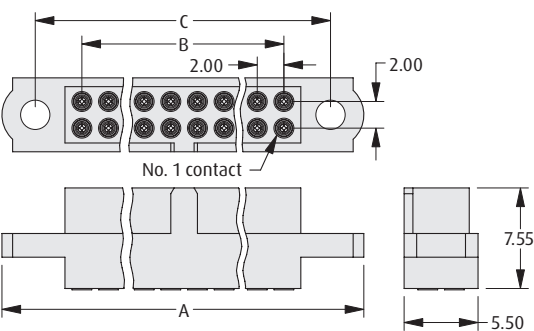
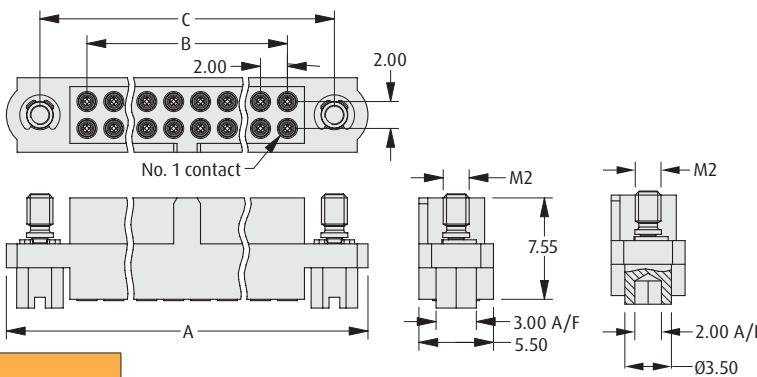
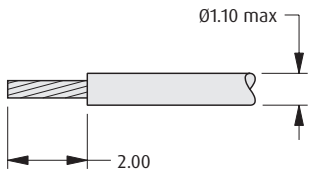
Datamate J-Tek Connectors

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

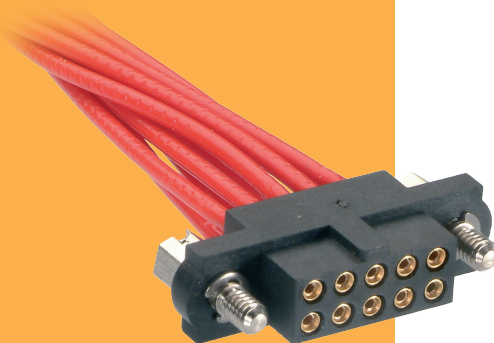
WITHOUT JACKSCREWS		WITH JACKSCREWS																	
																			
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>		CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7										
CALCULATION																			
A	B + 12																		
B	Total no. of contacts - 2																		
C	B + 7																		
TOOLS		WIRE STRIPPING DETAILS																	
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																			
<table><tr><th colspan="2">SERIES CODE</th></tr><tr><th>LARGE BORE (22 AWG)</th><th>SMALL BORE (24-28 AWG)</th></tr><tr><td>470</td><td>471</td></tr><tr><td>460</td><td>461</td></tr><tr><td>480</td><td>481</td></tr></table>		SERIES CODE		LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)	470	471	460	461	480	481	<table><tr><th colspan="2">FINISH</th></tr><tr><td>05</td><td>Gold</td></tr><tr><td>42</td><td>Gold + Tin</td></tr></table>		FINISH		05	Gold	42	Gold + Tin
SERIES CODE																			
LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)																		
470	471																		
460	461																		
480	481																		
FINISH																			
05	Gold																		
42	Gold + Tin																		
<table><tr><td>Without Jackscrews</td></tr><tr><td>With Hex Slotted Jackscrews</td></tr><tr><td>With Hex Socket Jackscrews</td></tr></table>		Without Jackscrews	With Hex Slotted Jackscrews	With Hex Socket Jackscrews	<table><tr><th>TOTAL NO. OF CONTACTS</th></tr><tr><td>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											
Without Jackscrews																			
With Hex Slotted Jackscrews																			
With Hex Socket Jackscrews																			
TOTAL NO. OF CONTACTS																			
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50																			

All dimensions in mm.

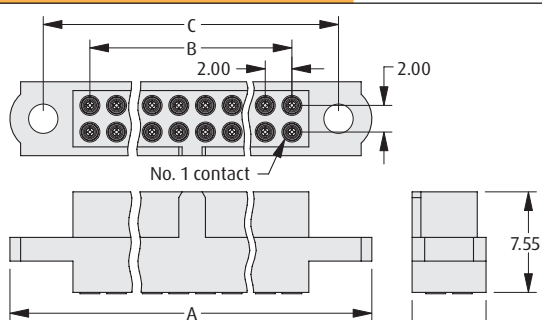
Datamate J-Tek Connectors

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.



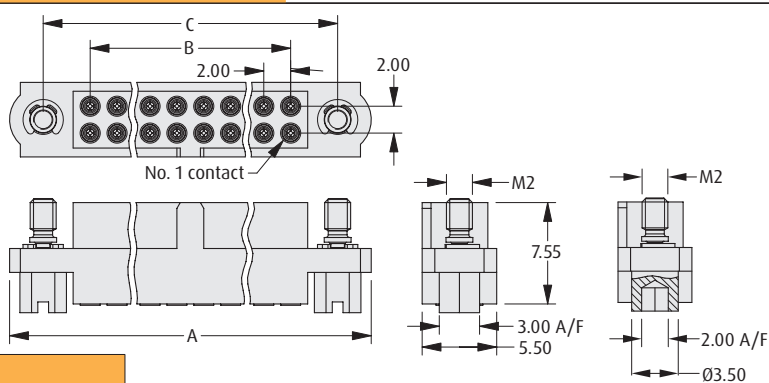
WITHOUT JACKSCREWS



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

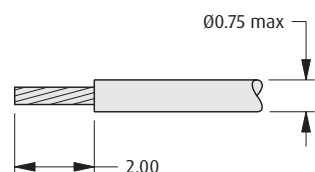
Positioner - T5747

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

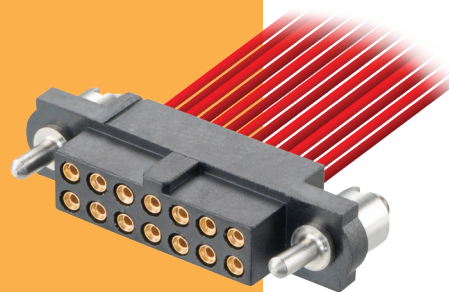
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

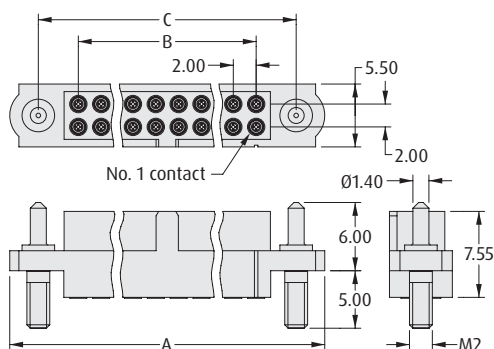
Female Crimp Kit - Guide Pin, 101Lok

- ❖ 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.

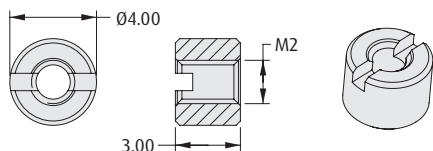


DATAMATE J-TEK

GUIDE PIN JACKSCREWS



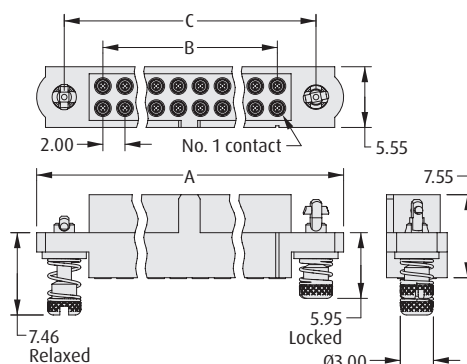
Board Mount Nut, 2 per connector



CALCULATION

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

101LOK



TOOLS

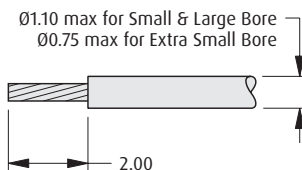
Recommended Crimp Tool - M22520/2-01

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

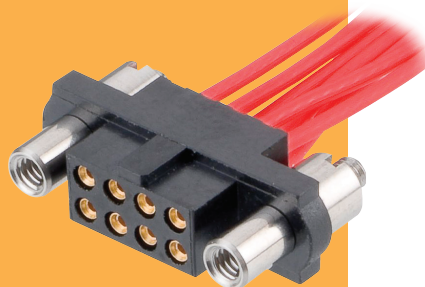
05	Gold
42	Gold + Tin

All dimensions in mm.

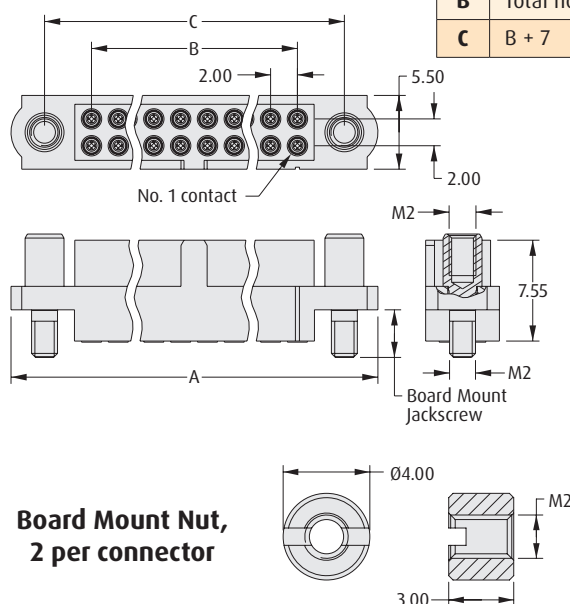
Datamate J-Tek Connectors

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.



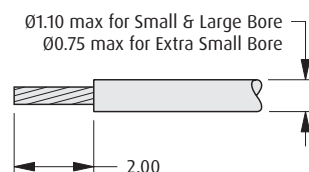
WITH JACKSCREWS



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

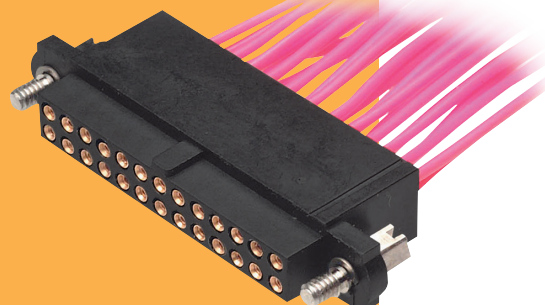
F8	3.5mm Board Mount
F9	5mm Board Mount

All dimensions in mm.

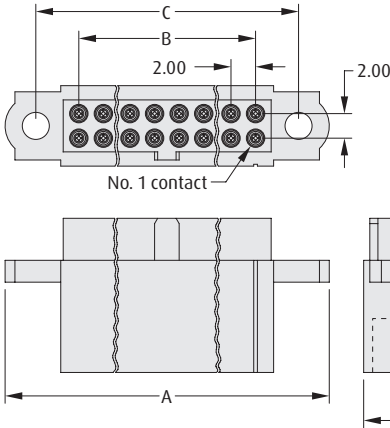
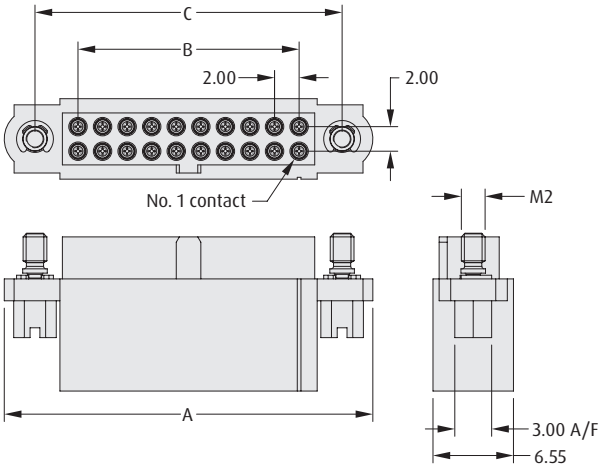
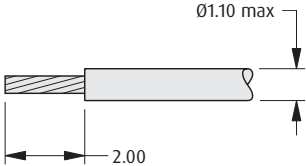
Datamate J-Tek Connectors

Female Crimp Kit - Extended Wall

- ❖ Extended Wall Datamate allows back potting to be performed.
- ❖ Polarised mouldings.
- ❖ 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

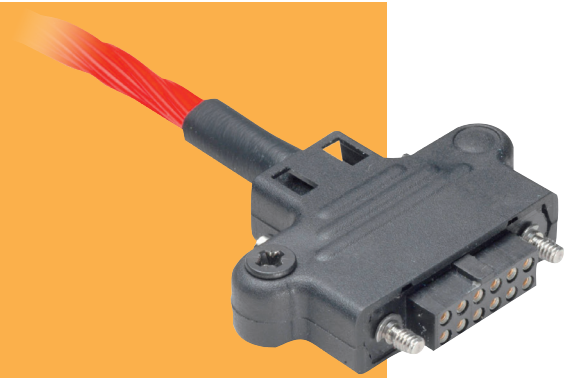
WITHOUT JACKSCREWS		WITH JACKSCREWS																
																		
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>		CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7									
CALCULATION																		
A	B + 12																	
B	Total no. of contacts - 2																	
C	B + 7																	
TOOLS 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																		
<table><tr><th colspan="2">SERIES CODE</th></tr><tr><th>LARGE BORE (22 AWG)</th><th>SMALL BORE (24-28 AWG)</th></tr><tr><td>475</td><td>476</td></tr><tr><td>465</td><td>466</td></tr><tr><td>485</td><td>486</td></tr></table>		SERIES CODE		LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)	475	476	465	466	485	486	<table><tr><td>M80</td><td>-</td><td>XXX</td><td>XX</td><td>XX</td></tr></table>		M80	-	XXX	XX	XX
SERIES CODE																		
LARGE BORE (22 AWG)	SMALL BORE (24-28 AWG)																	
475	476																	
465	466																	
485	486																	
M80	-	XXX	XX	XX														
		<table><tr><th colspan="2">WALL SIZE</th></tr><tr><td>BLANK</td><td>Wall = 5mm</td></tr><tr><td>A</td><td>Wall = 1mm</td></tr></table>		WALL SIZE		BLANK	Wall = 5mm	A	Wall = 1mm									
WALL SIZE																		
BLANK	Wall = 5mm																	
A	Wall = 1mm																	
		<table><tr><th colspan="2">FINISH</th></tr><tr><td>05</td><td>Gold</td></tr><tr><td>42</td><td>Gold + Tin</td></tr></table>		FINISH		05	Gold	42	Gold + Tin									
FINISH																		
05	Gold																	
42	Gold + Tin																	
		<table><tr><th>TOTAL NO. OF CONTACTS</th></tr><tr><td>06, 10, 12, 14, 18, 20, 26, 34, 42, 50</td></tr></table>		TOTAL NO. OF CONTACTS	06, 10, 12, 14, 18, 20, 26, 34, 42, 50													
TOTAL NO. OF CONTACTS																		
06, 10, 12, 14, 18, 20, 26, 34, 42, 50																		

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Kit with Hood

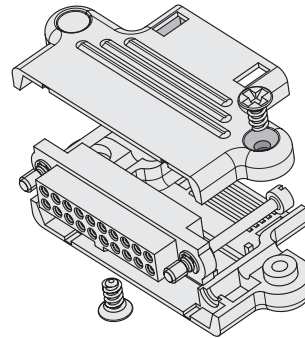
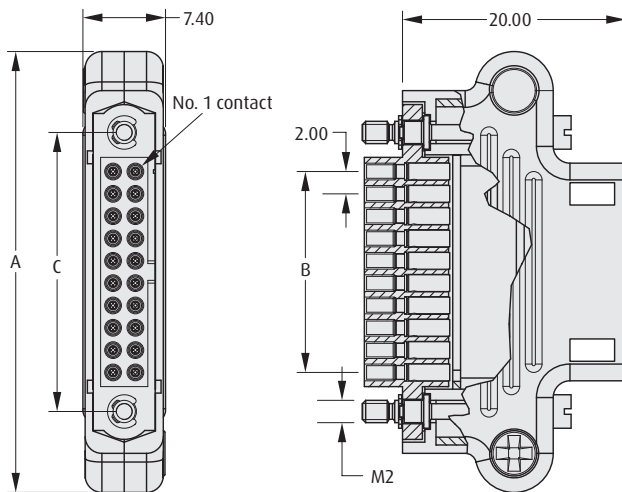
- ❖ Supplied as a complete kit: jackscrews assembled to housing; hood, contacts and assembly screws supplied loose.
- ❖ Provides strain relief by preventing cable bending at the rear of the connector, and also has the option of inserting a cable tie to reduce pull strain.



FEMALE

CALCULATION

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



TOOLS

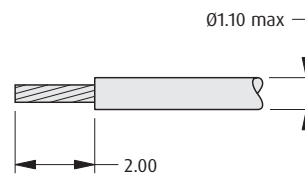
Recommended Crimp Tool - M22520/2-01

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.

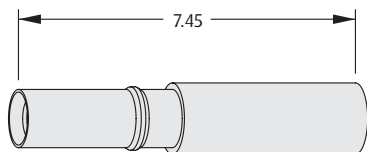
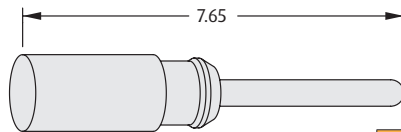
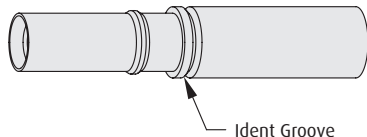
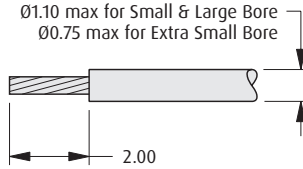
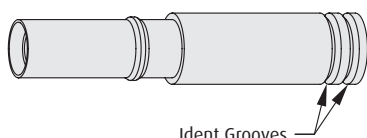
Datamate J-Tek Connectors

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

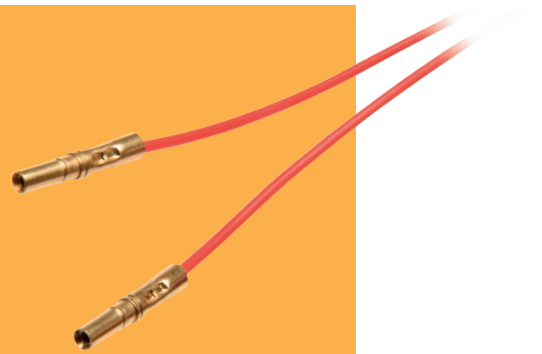
CRIMP CONTACTS		DUMMY CONTACT															
Large Bore (22 AWG) 		 ORDER CODE M80-023															
Small Bore (24 to 28 AWG) 		WIRE STRIPPING DETAILS 															
Extra Small Bore (28 to 32 AWG) 		TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280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

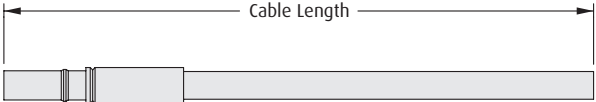
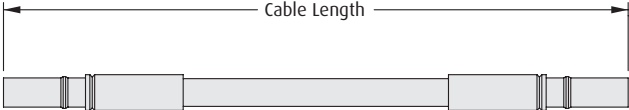
All dimensions in mm.

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.
- ❖ For non-standard cable lengths, please visit harwin.com/cable-assemblies and fill in your requirements.



FEMALE SINGLE ENDED		FEMALE - FEMALE	
			
TOOLS			
Contact Insertion/Removal Tool – Z80-Z80		Full crimp connector kits and spare crimp contacts shown on previous pages. Instruction sheets available at www.harwin.com/instructions.	
HOW TO ORDER			
SERIES CODE M80 - 9XX 00 99		CABLE COLOUR 99Red	
SINGLE ENDED FEMALE-FEMALE			
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 Crimp T-Contact

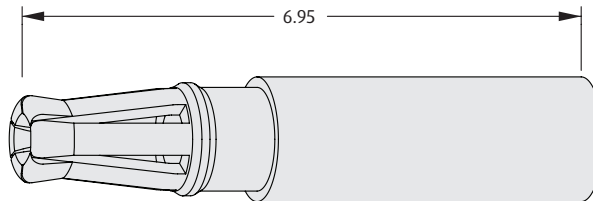
- ❖ Advanced single-piece contact design using Beryllium Copper for a 6-finger contact with improved capabilities.
- ❖ Current carrying capacity up to 8.5 Amps per contact.
- ❖ Improved mating durability to 1,000 operations.
- ❖ Suitable for use with 22AWG cable, Ø1.1mm maximum insulation diameter.
- ❖ Compatible cable housings showing on the following pages - order contact and housings separately.



DATAMATE J-TEK

CRIMP CONTACTS

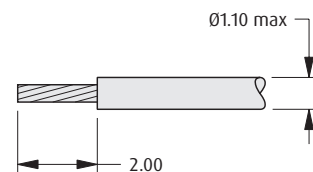
Large Bore (22 AWG)



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

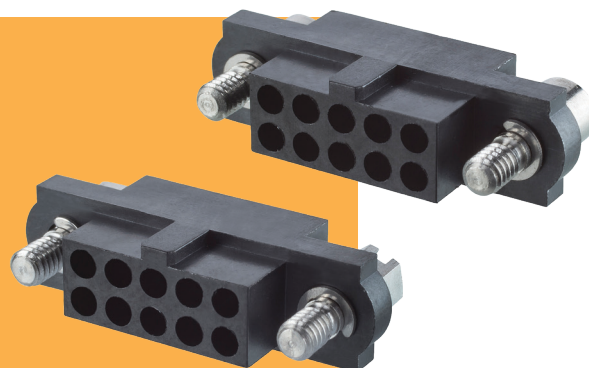
05 Gold

All dimensions in mm.

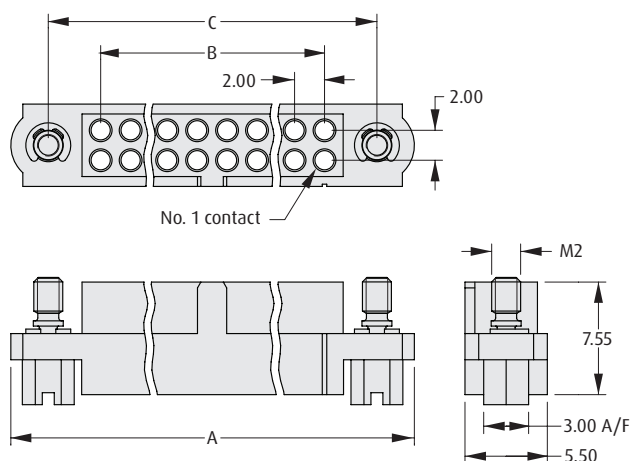
Datamate J-Tek Connectors

Female Crimp Housing

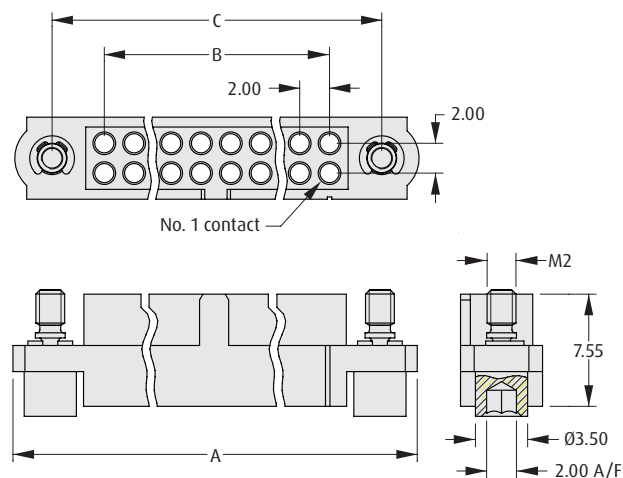
- ❖ Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- ❖ Use insertion tool to insert crimped contacts into rear of connector housing: **order code Z80-Z80**.
- ❖ Connectors mate with Datamate J-Tek male connectors with applicable jackscrews.
- ❖ Jackscrews are supplied already assembled to housing.



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

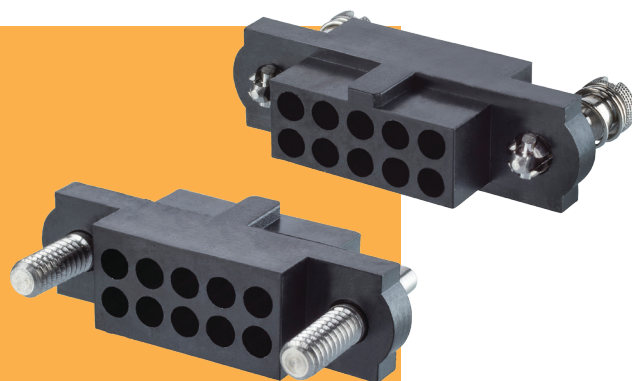
04 to 50

All dimensions in mm.

Datamate J-Tek Connectors

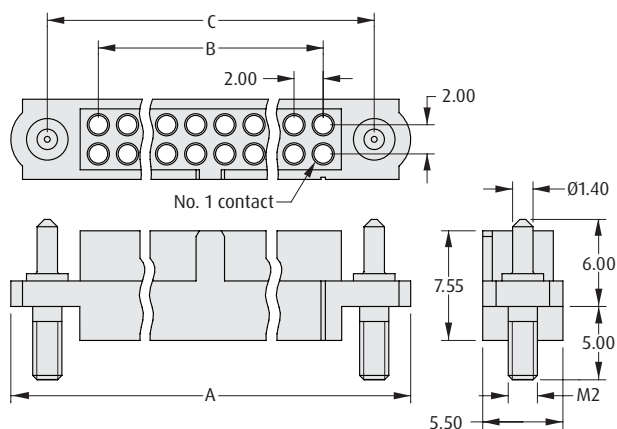
Female Crimp Housing - Guide Pin, 101Lok

- ❖ 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.

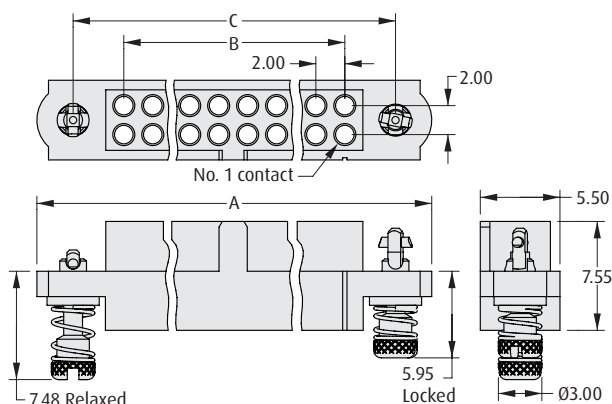


DATAMATE J-TEK

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

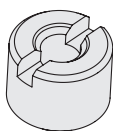
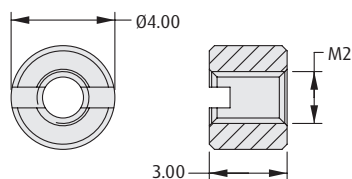
7	Guide Pin Jackscrews
8	101Lok

TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR GUIDE PIN STUD

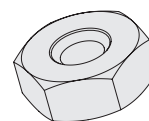
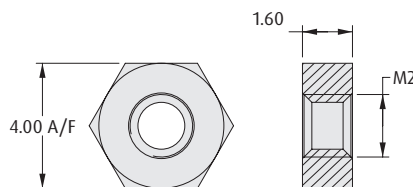
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

M80-2430000B

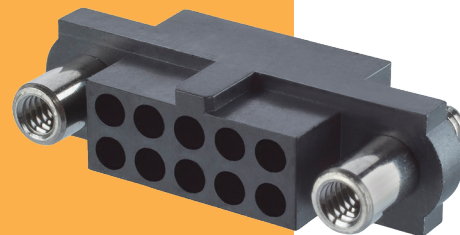
Order separately from connector

All dimensions in mm.

Datamate J-Tek Connectors

Female Crimp Housing - Reverse Fix

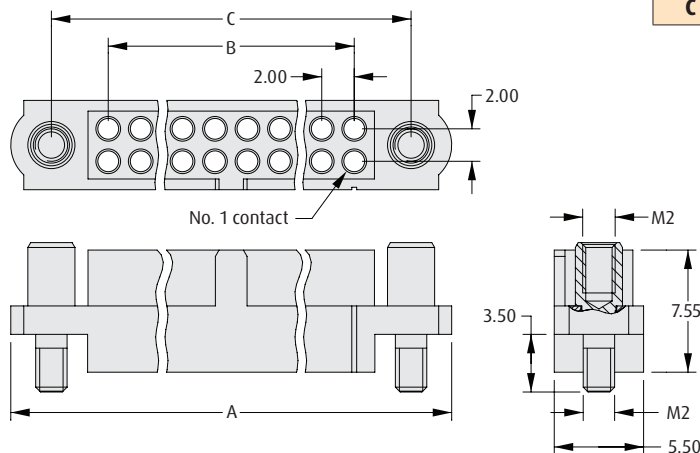
- Compatible with all female signal barrel crimp contacts, including T-Contact shown on previous page.
- Use insertion tool to insert crimped contacts into rear of connector housing: **order code Z80-280**.
- Jackscrews are supplied already assembled to housing.
- Connectors mate with Datamate J-Tek male connectors with compatible Reverse Fix jackscrews.



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

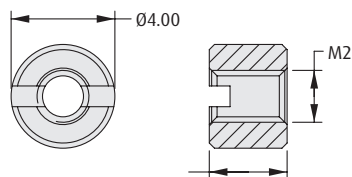
TOTAL NO. OF CONTACTS

04 to 50

HARDWARE FOR PANEL MOUNT STUD

Order separately from connector

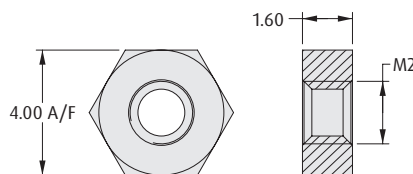
Slotted Board Mount Nut



ORDER CODE

M80-2130000B

Hexagonal Board Mount Nut



ORDER CODE

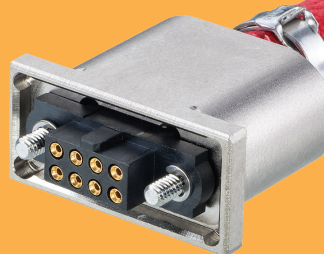
M80-2430000B

All dimensions in mm.

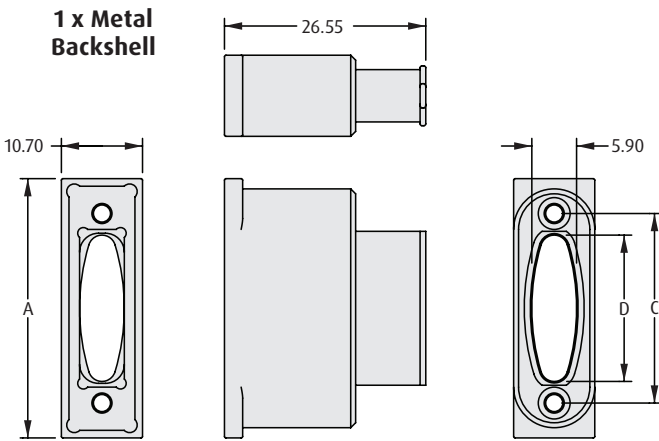
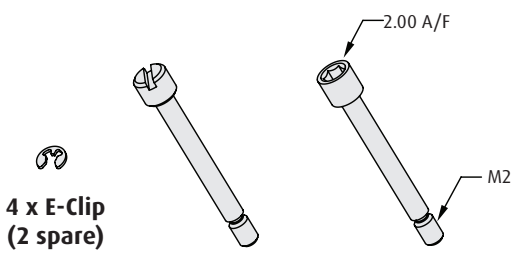
Datamate J-Tek Connectors

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.



DATAMATE J-TEK

FEMALE		CALCULATION	
1 x Metal Backshell 	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	BAND-IT TIE
 ❖ For assembling E-Clips supplied with kit. ORDER CODE Z80-300	 ❖ For fixing braid to rear collar (requires Tie Dex II A30199 Micro Band tool). ORDER CODE M80-9470000

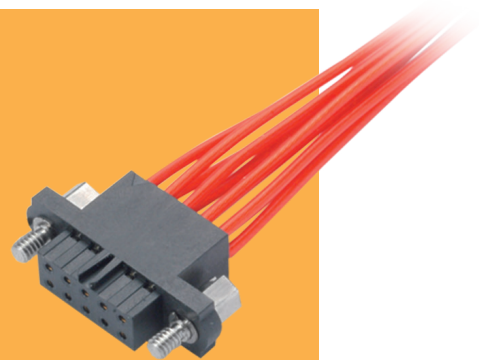
HOW TO ORDER			
M80 - 94 X XX 02 SERIES CODE TYPE 5 With Slotted Jackscrews 6 With Hex Socket Jackscrews FINISH 02 Nickel EQUIVALENT NO. OF SIGNAL CONTACTS 08, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32			

All dimensions in mm.

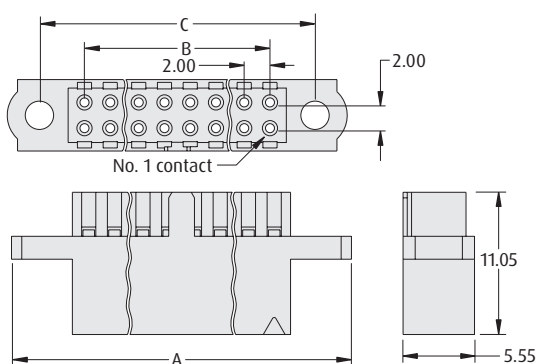
Datamate J-Tek Connectors

Female Crimp Trio-Tek Housings

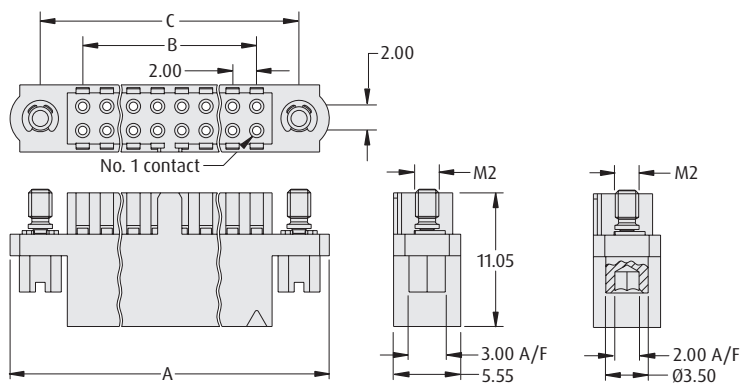
- ❖ Part numbers are for housings only, see following page for Trio-Tek contacts.
- ❖ Contacts are rear insertable.
- ❖ Crimp inspection window in housing.
- ❖ Mates with all standard Datamate J-Tek male connectors.
- ❖ Ideal for volume applications.



WITHOUT JACKSCREWS



WITH JACKSCREWS



CALCULATION

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

Hex Slotted Jackscrew

Hex Socket Jackscrew

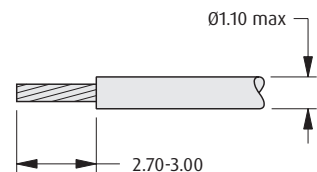
TOOLS

Recommended Hand Crimp Tool - Z80-255

Contact Removal Tool - Z80-258

- ❖ Open crimp contacts shown on following page.
- ❖ Instruction sheets available at www.harwin.com/instructions.

WIRE STRIPPING DETAILS



HOW TO ORDER

M80 - 45X XX 98

SERIES CODE

TYPE

454	Without Jackscrews
455	With Hex Slotted Jackscrews
456	With Hex Socket Jackscrews

FINISH

98	Housings
-----------	----------

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 Trio-Tek - 101Lok

- ❖ Part numbers are for housings only, see following page for Trio-Tek contacts.
- ❖ Ideal for volume applications.
- ❖ 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 101Lok fixings.



DATAMATE J-TEK

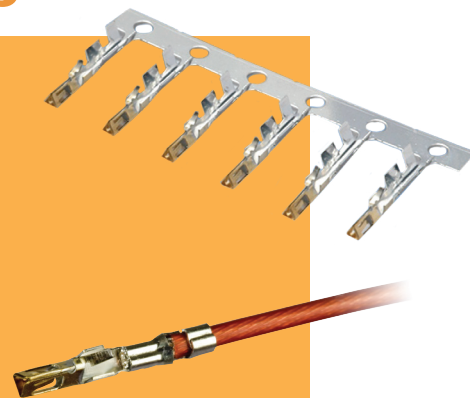
101LOK		CALCULATION	
No. 1 contact Relaxed Locked		A	B + 12
		B	Total no. of contacts - 2
		C	B + 7
TOOLS		WIRE STRIPPING DETAILS	
Recommended Hand Crimp Tool - Z80-255 Contact Removal Tool - Z80-258 ❖ Open crimp contacts shown on following page. ❖ Instruction sheets available at www.harwin.com/instructions.			
HOW TO ORDER			
M80 - 459 XX 98			
SERIES CODE		FINISH 98 Housings	
TYPE 459 101Lok		TOTAL NO. OF CONTACTS 04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50	

All dimensions in mm.

Datamate J-Tek Connectors

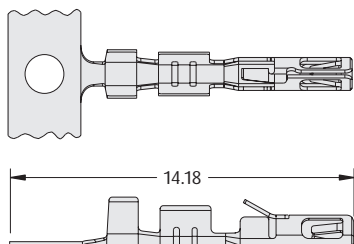
Female Crimp Contacts Trio-Tek

- ❖ Trio-Tek contacts must be ordered separately, see previous pages for applicable housings.
- ❖ Crimp contacts are available loose, or in continuous reeled format for automated crimping.

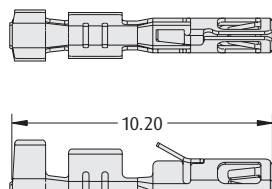


CRIMP CONTACTS

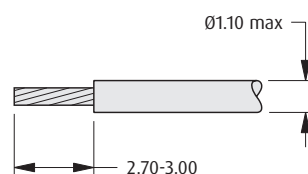
Reeled



Loose



WIRE STRIPPING DETAILS



TOOLS

Recommended Hand Crimp Tool – Z80-255

- ❖ Crimp housings shown on previous page.
- ❖ Instruction sheets available at www.harwin.com/instructions.

HOW TO ORDER

M80 - XXX 00 XX

SERIES CODE

TYPE	
253	Trio-Tek Crimp 22-24 AWG, Reeled
254	Trio-Tek Crimp 26-28 AWG, Reeled
283	Trio-Tek Crimp 22-24 AWG, Loose
284	Trio-Tek Crimp 26-28 AWG, Loose

FINISH

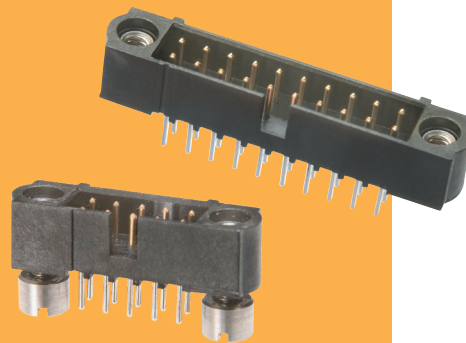
42	Gold + Tin
45	Gold

All dimensions in mm.

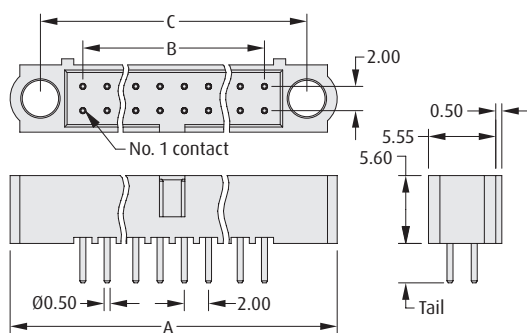
Datamate J-Tek Connectors

Male Vertical PC Tail

- Polarised mouldings.
- Fully shrouded contacts.
- Jackscrews are assembled where specified.
- Choice of PC tail length.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.

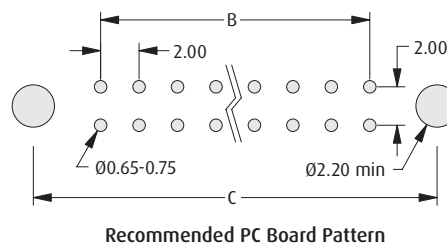


WITHOUT JACKSCREWS

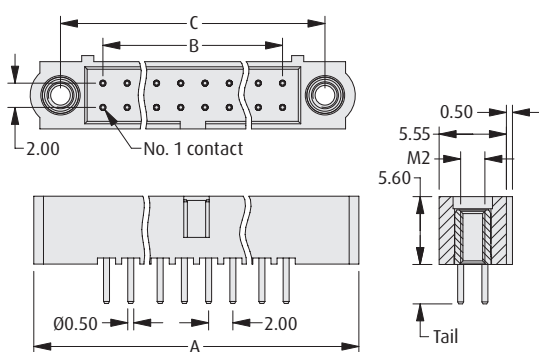


CALCULATION

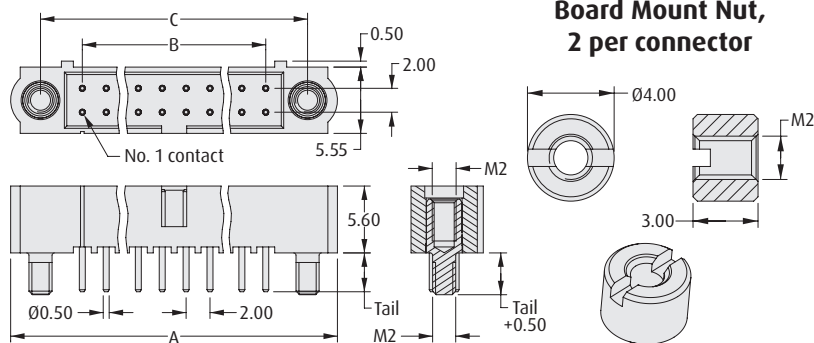
A	B + 12
B	Total no. of contacts - 2
C	B + 7



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

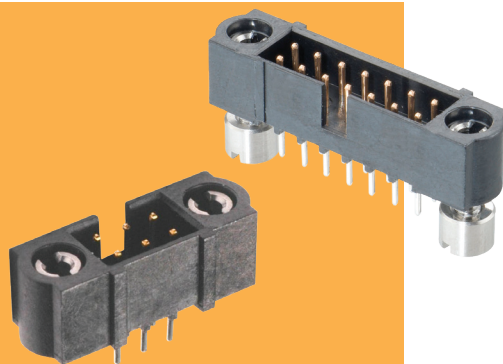
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

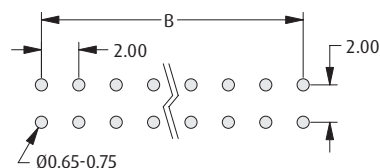
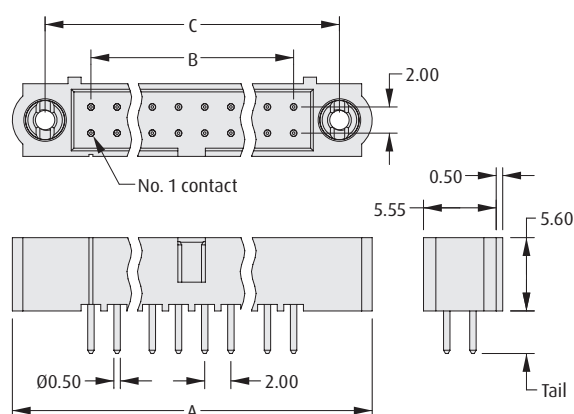
Datamate J-Tek Connectors

Male Vertical PC Tail 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 PC tail length.



101LOK

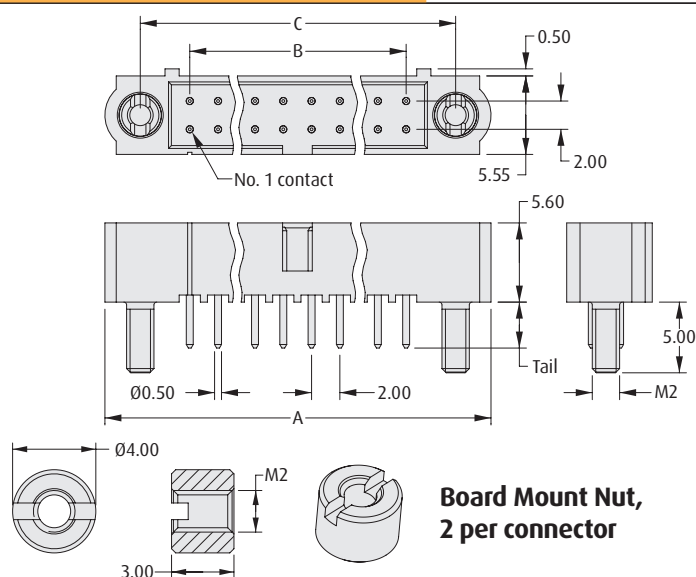


Recommended PC Board Pattern

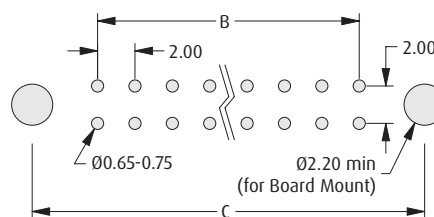
CALCULATION

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 - 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

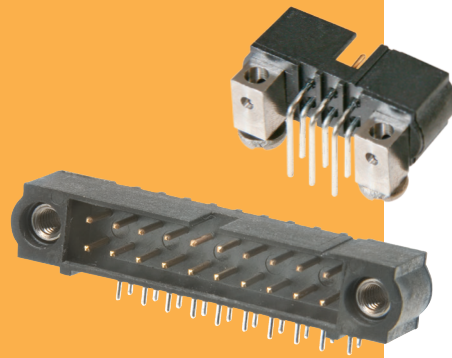
05	Gold
42	Gold + Tin

All dimensions in mm.

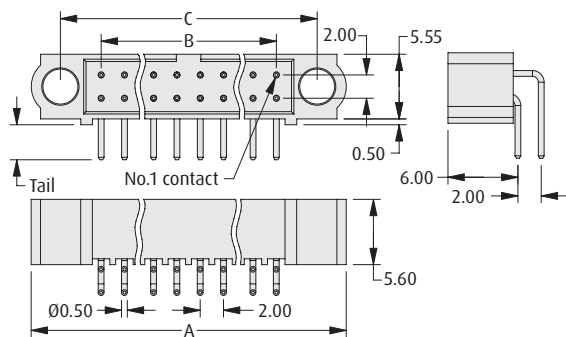
Datamate J-Tek Connectors

Male Horizontal PC Tail

- Polarised mouldings.
- Fully shrouded contacts.
- Jackscrews are assembled where specified.
- Choice of PC tail length.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.

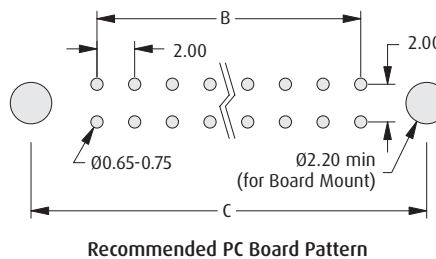


WITHOUT JACKSCREWS

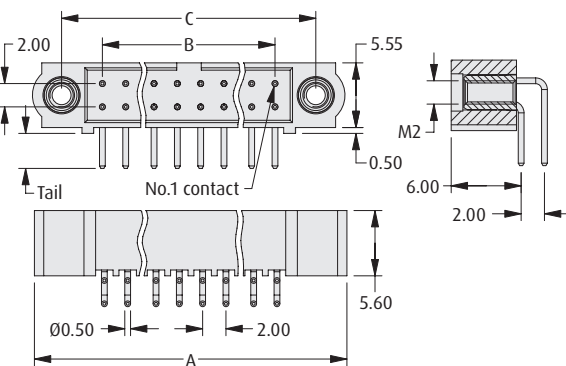


CALCULATION

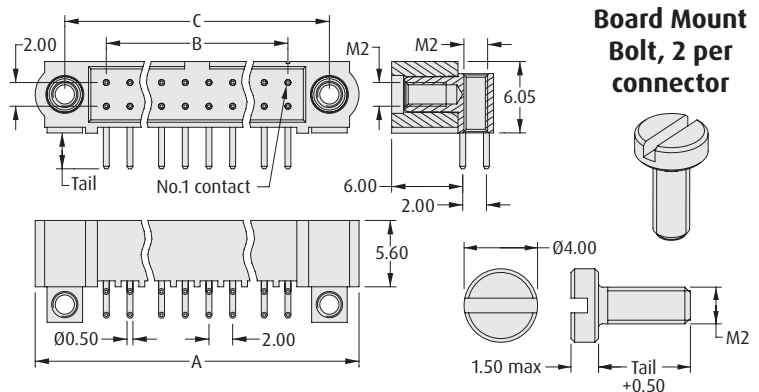
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$



WITH JACKSCREWS



WITH BOARD MOUNT



Board Mount Bolt, 2 per connector

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

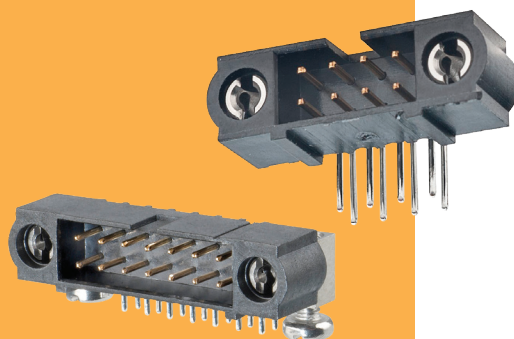
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

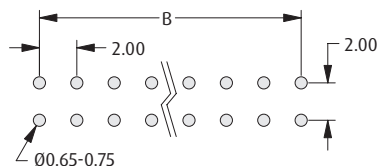
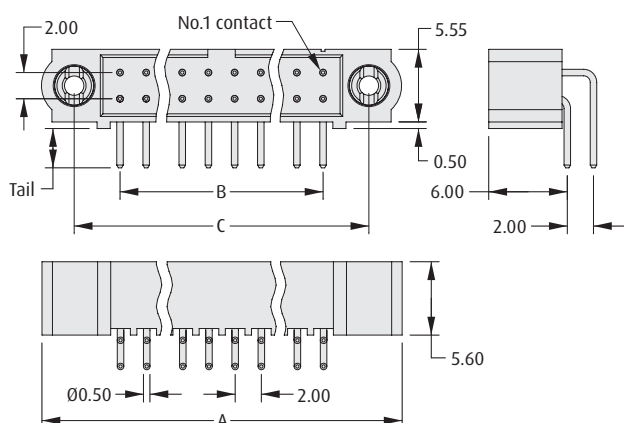
Datamate J-Tek Connectors

Male Horizontal PC Tail 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 PC tail length.



101LOK

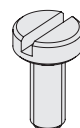
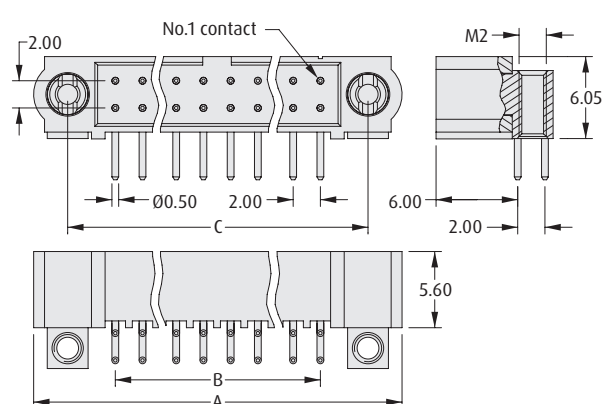


Recommended PC Board Pattern

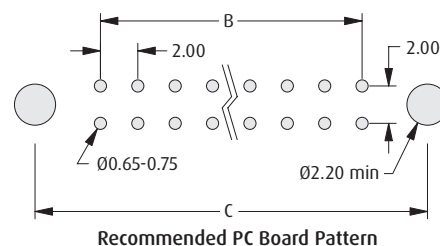
CALCULATION

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 - 5 LX XX XX MX

SERIES CODE

TYPE

L1	3mm Tails
L2	4.5mm Tails

TOTAL NO. OF CONTACTS

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

JACKSCREW

MC	101Lok
MD	101Lok with Board Mount

FINISH

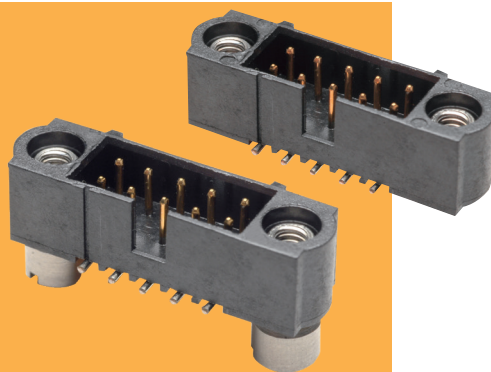
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

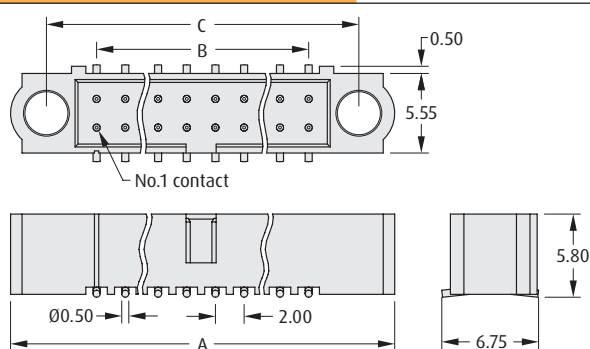
Male Vertical Surface Mount

- ❖ 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.
- ❖ Contact datamate@harwin.com for tape and reel options.



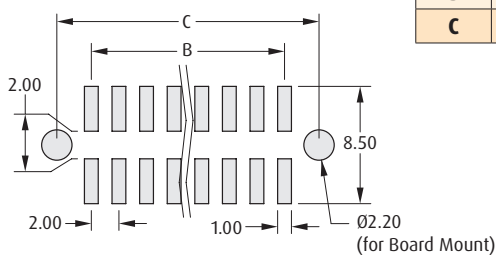
DATAMATE J-TEK

WITHOUT JACKSCREWS



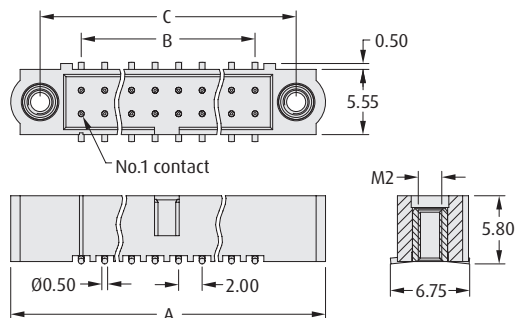
CALCULATION

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

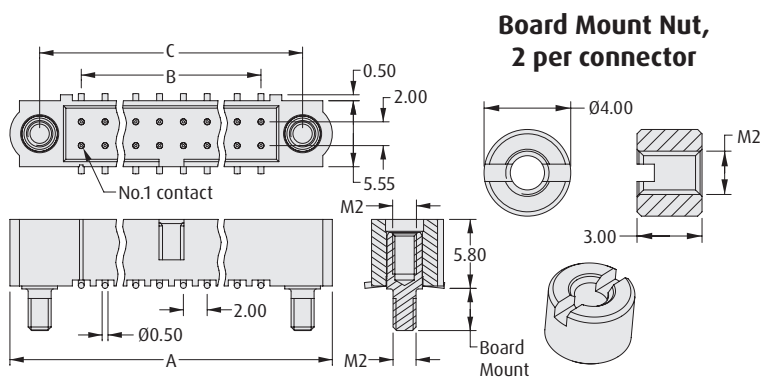


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



HOW TO ORDER

M80 - 5 XX XX XX 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

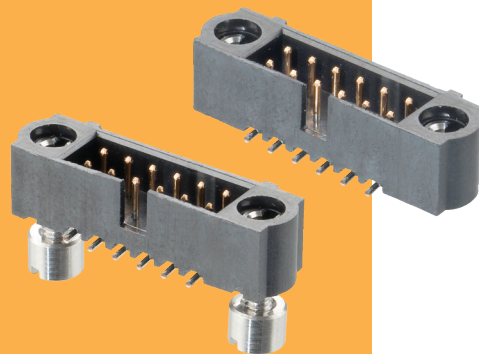
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

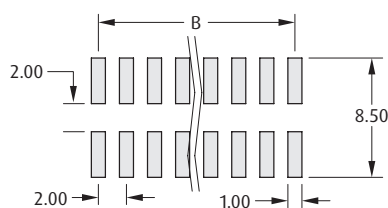
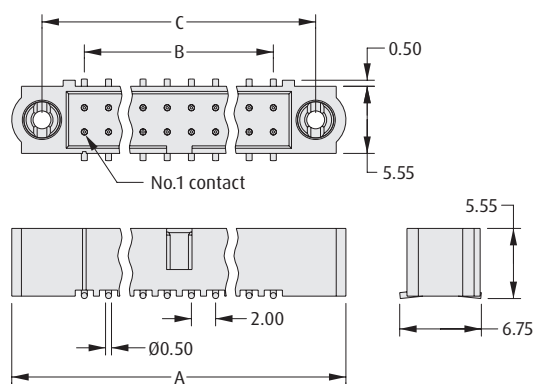
Datamate J-Tek Connectors

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.
- ❖ Contact datamate@harwin.com for tape and reel options.



101LOK

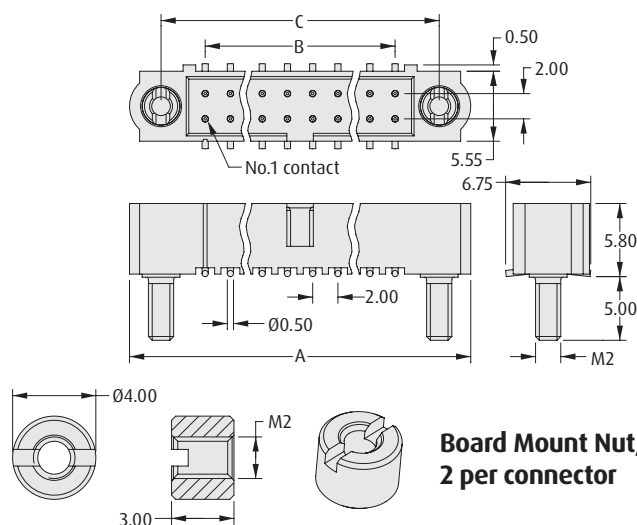


Recommended PC Board Pattern

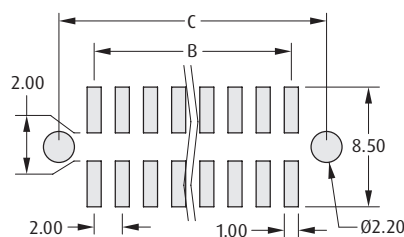
CALCULATION

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

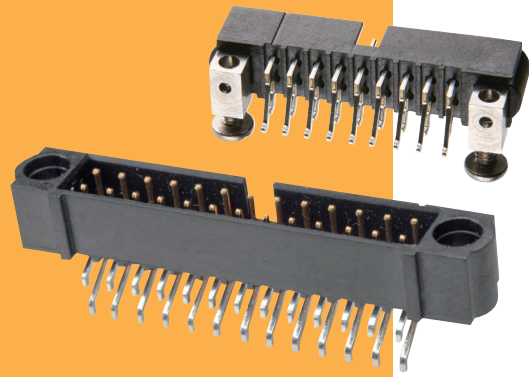
05	Gold
42	Gold + Tin

All dimensions in mm.

Datamate J-Tek Connectors

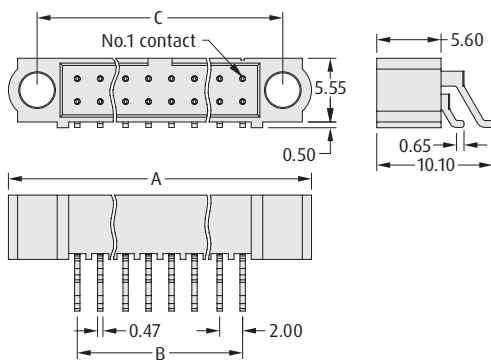
Male Horizontal Surface Mount

- Stamped contact ensures co-planarity.
- Board Mount provides PCB strain relief.
- Mates with female Datamate J-Tek connectors with compatible jackscrews.
- Contact datamate@harwin.com for tape and reel options.



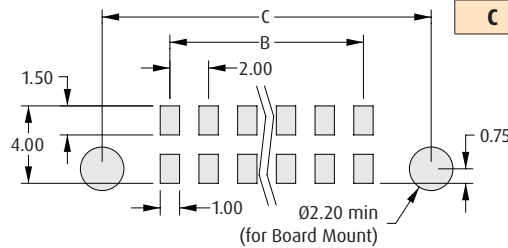
DATAMATE J-TEK

WITHOUT JACKSCREWS



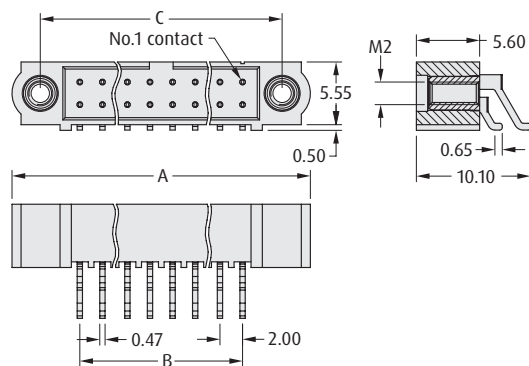
CALCULATION

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

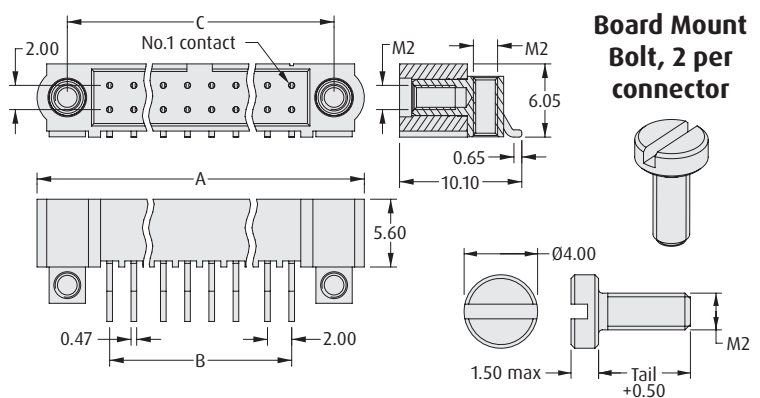


Recommended PC Board Pattern

WITH JACKSCREWS



WITH BOARD MOUNT



Board Mount Bolt, 2 per connector

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

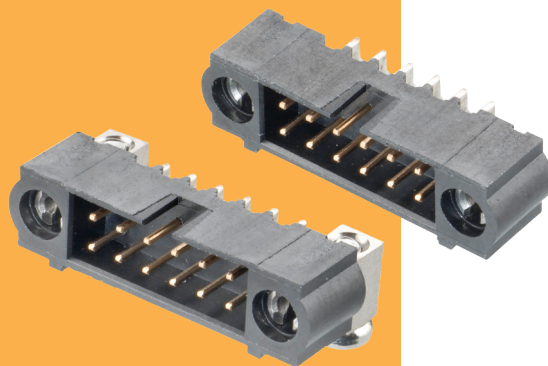
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

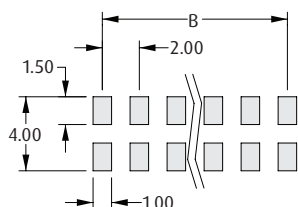
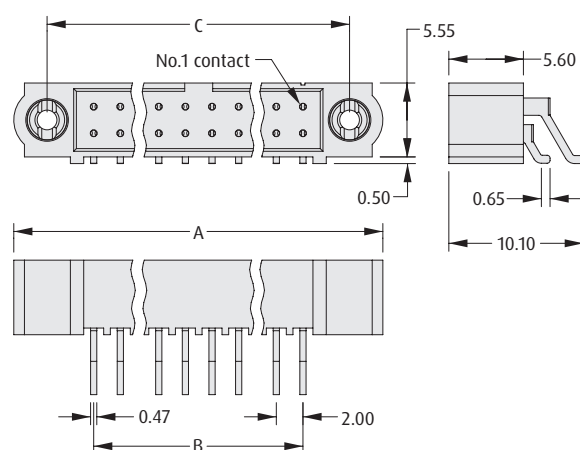
Datamate J-Tek Connectors

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.
- ❖ Contact datamate@harwin.com for tape and reel options.



101LOK

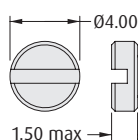
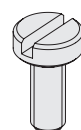
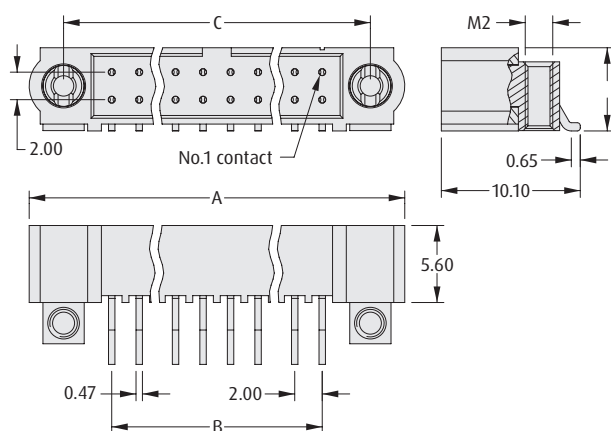


Recommended PC Board Pattern

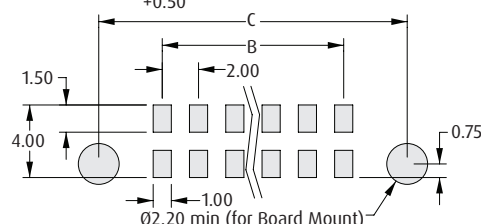
CALCULATION

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

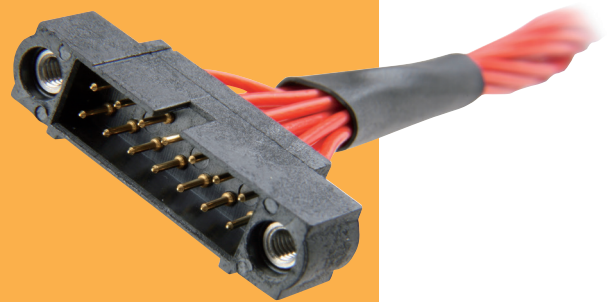
05	Gold
42	Gold + Tin

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

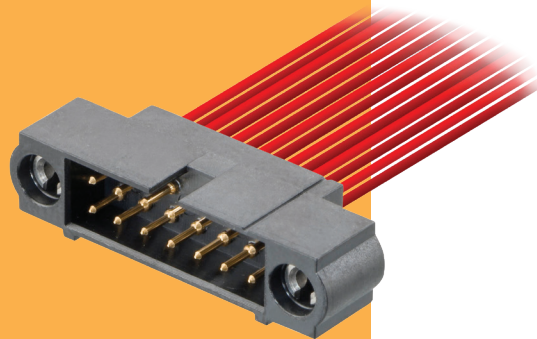
WITHOUT JACKSCREWS		WITH JACKSCREWS															
<table><tr><th colspan="2">CALCULATION</th></tr><tr><td>A</td><td>B + 12</td></tr><tr><td>B</td><td>Total no. of contacts - 2</td></tr><tr><td>C</td><td>B + 7</td></tr></table>				CALCULATION		A	B + 12	B	Total no. of contacts - 2	C	B + 7						
CALCULATION																	
A	B + 12																
B	Total no. of contacts - 2																
C	B + 7																
TOOLS		WIRE STRIPPING DETAILS															
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.																	
HOW TO ORDER																	
SERIES CODE		M80 - 5XX XX 05															
<table><tr><th colspan="2">TYPE</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>		TYPE		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
TYPE																	
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

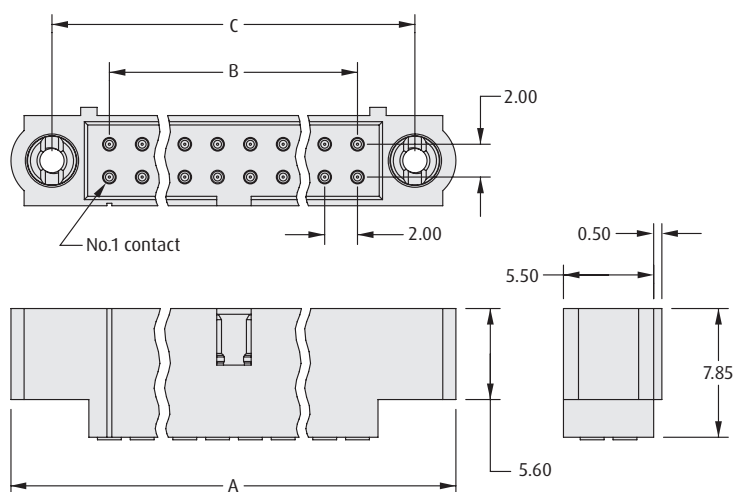
- ❖ Part numbers are for a complete kit of a housing and the applicable number of contacts.
- ❖ 101Lok fixing gives secure, fast and simple mating; no special tooling required. Just a simple 101-degree turn is required to fix the connectors together.
- ❖ Connectors mate with Datamate J-Tek female connectors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



101LOK

CALCULATION

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

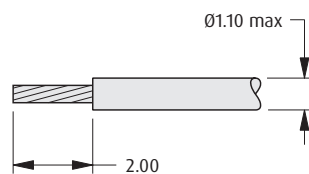


TOOLS

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

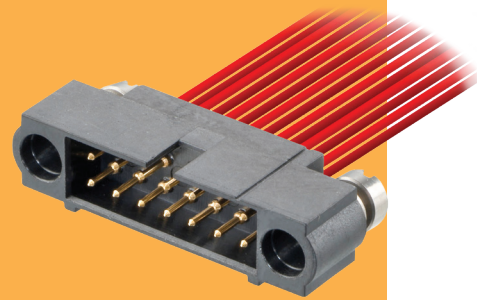
05 Gold

All dimensions in mm.

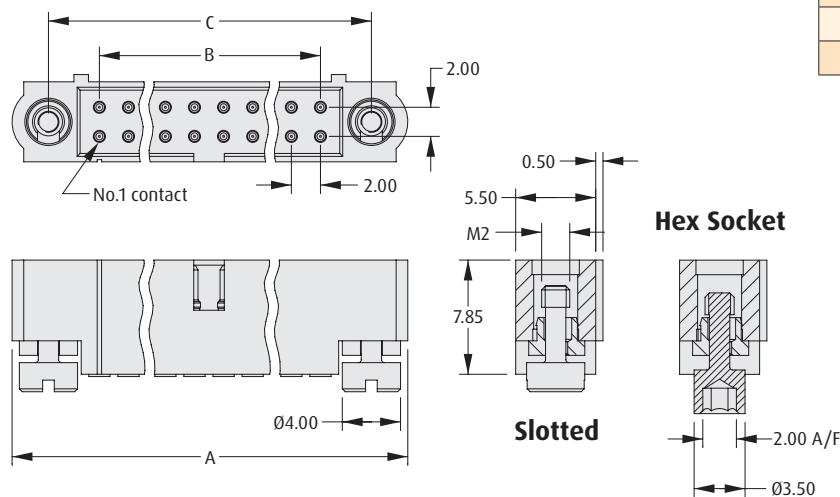
Datamate J-Tek Connectors

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.



REVERSE FIX



CALCULATION

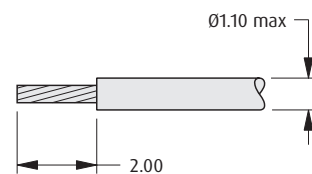
A	$B + 12$
B	Total no. of contacts - 2
C	$B + 7$

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 - 5XX XX 05

SERIES CODE

TYPE

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

FINISH

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

TOTAL NO. OF CONTACTS

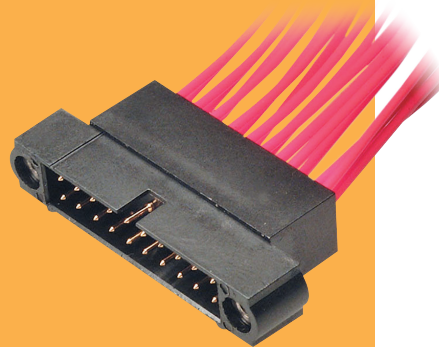
04, 06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

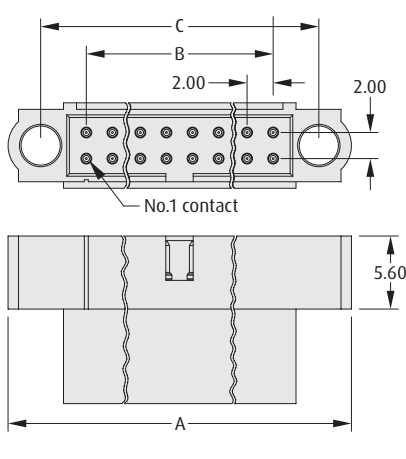
Datamate J-Tek Connectors

Male Crimp Kit 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.



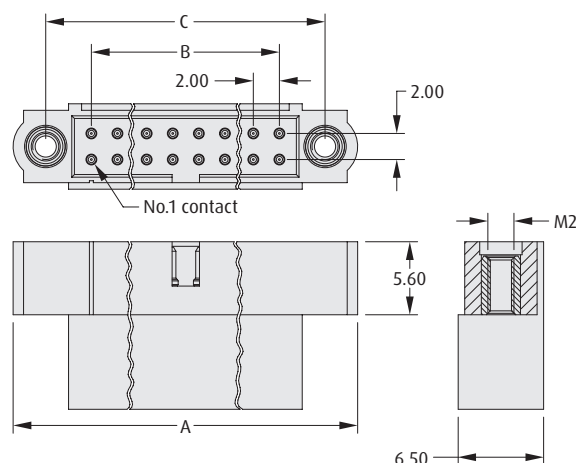
WITHOUT JACKSCREWS



CALCULATION

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

WITH JACKSCREWS

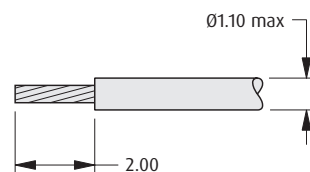


TOOLS

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

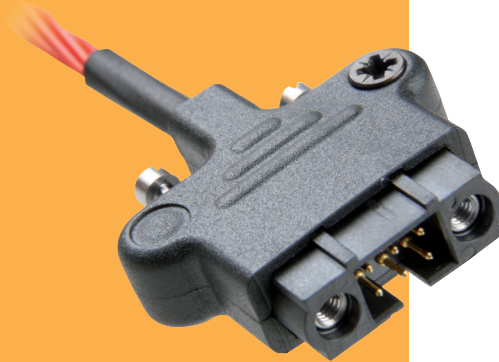
06, 10, 14, 20, 26, 34

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.

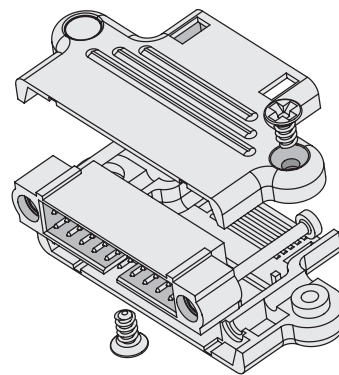
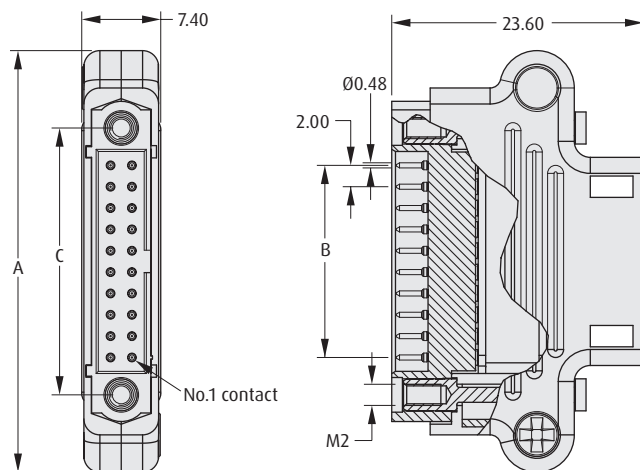


DATAMATE J-TEK

MALE

CALCULATION

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

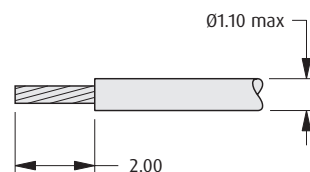


TOOLS

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 - 94 X XX 05

SERIES CODE

TYPE

2	Small Bore (24-28 AWG)
3	Large Bore (22 AWG)

FINISH

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

TOTAL NO. OF CONTACTS

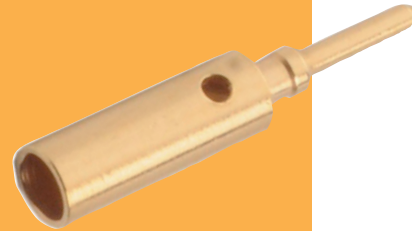
06, 08, 10, 12, 14, 20, 26, 34, 42, 50

All dimensions in mm.

Datamate J-Tek Connectors

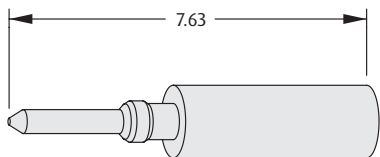
Spare Male Crimp Contacts

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

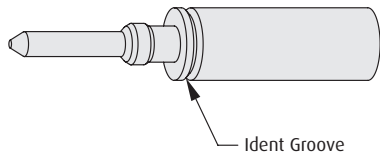


CRIMP CONTACTS

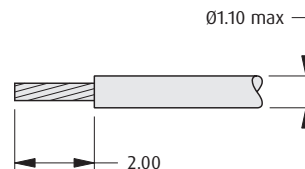
Large Bore (22 AWG)



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.

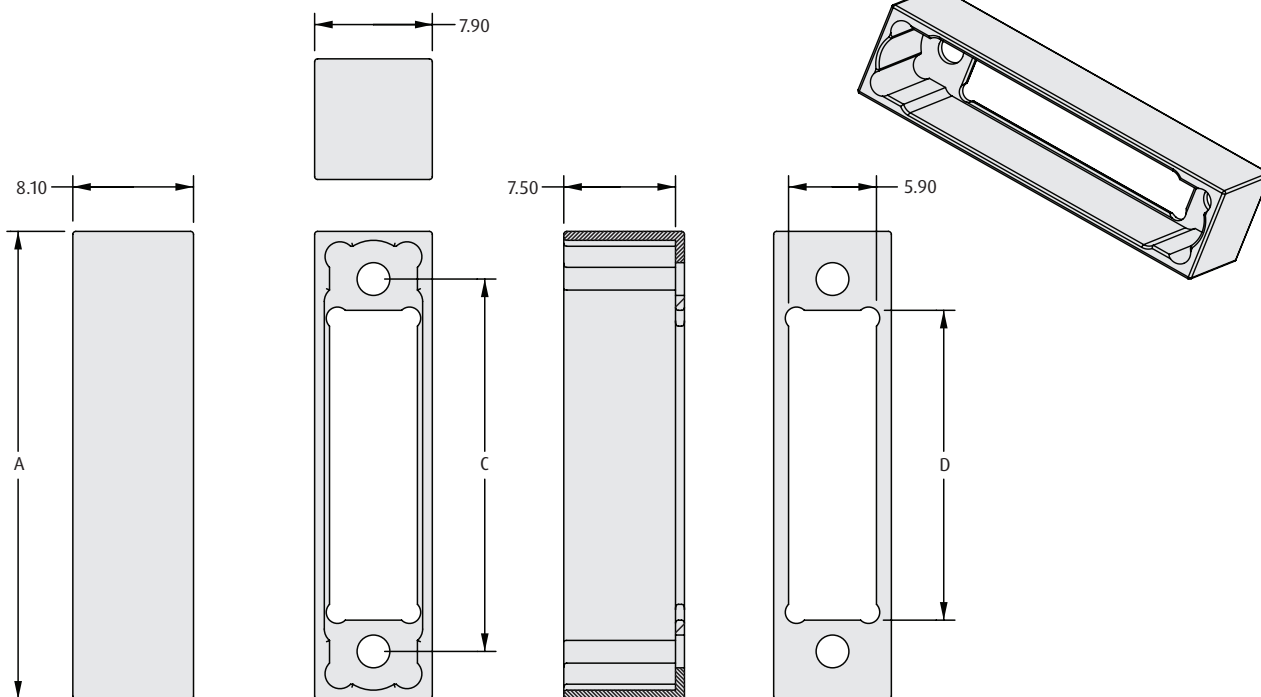


DATAMATE J-TEK

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

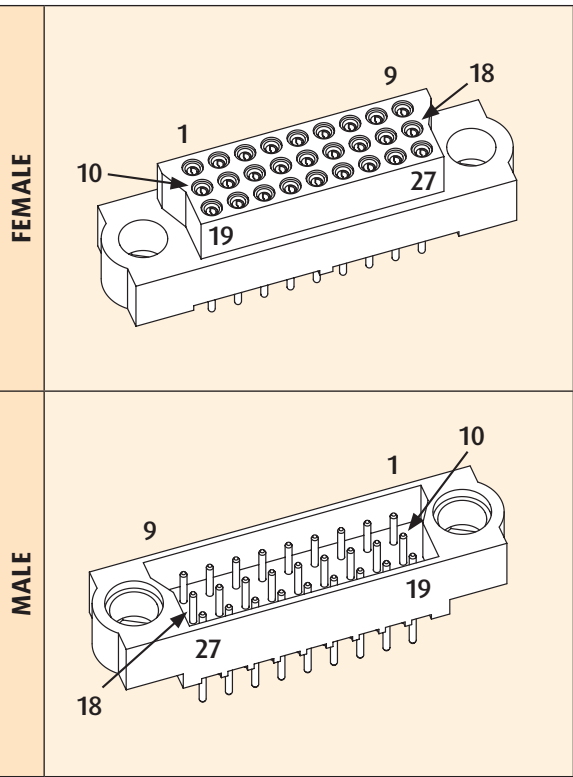
All dimensions in mm.

Datamate J-Tek 3-Row Specification

❖ Materials		❖ Mechanical	
Mouldings:	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.

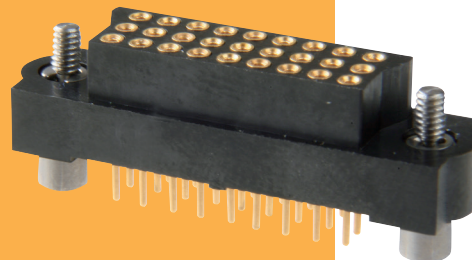
Mating Profiles

		FEMALE	
		VERTICAL 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.

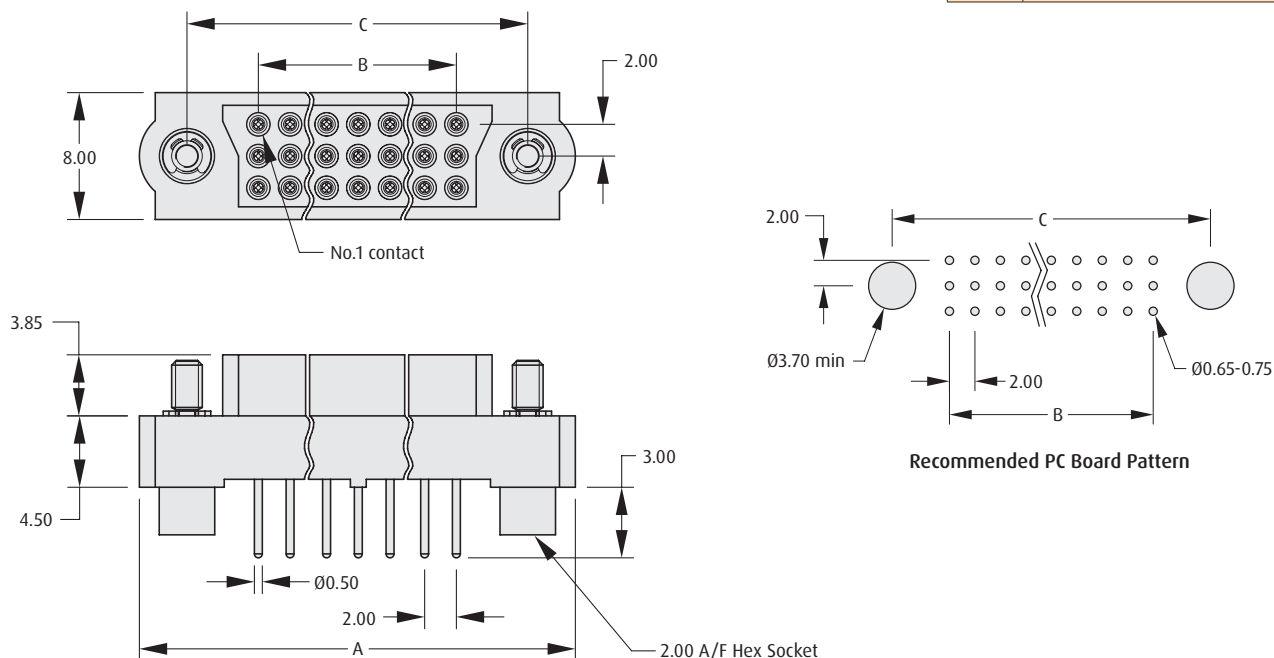


DATAMATE J-TEK 3-ROW

REVERSE FIX

CALCULATION

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

TOTAL NO. OF CONTACTS

18, 27, 36, 54, 60, 96

TYPE

T1 3mm Tail

JACKSCREW

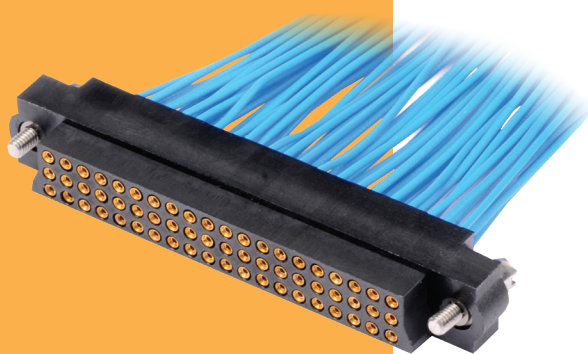
F2 Hex Socket Jackscrew

All dimensions in mm.

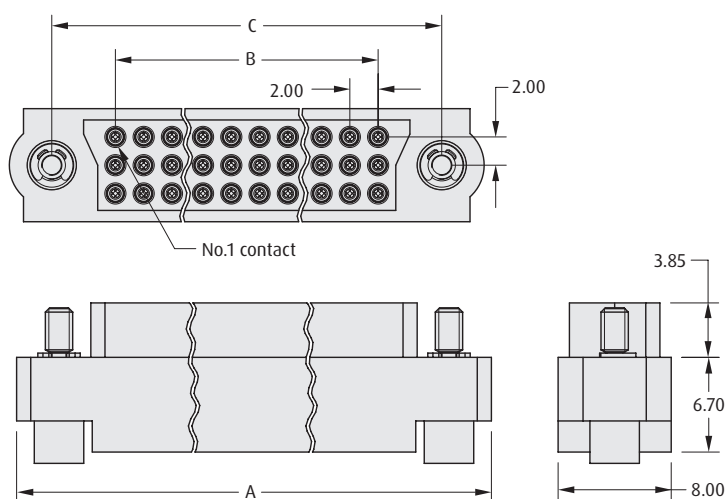
Datamate J-Tek 3-Row Connectors

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



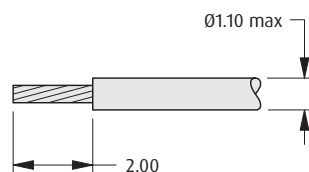
CALCULATION

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.

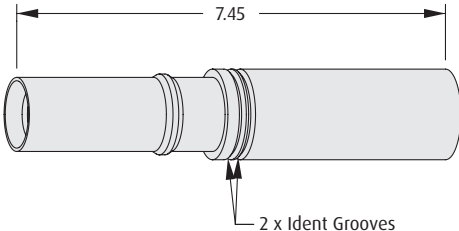
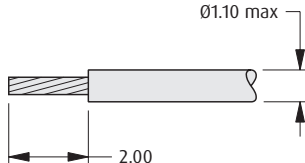
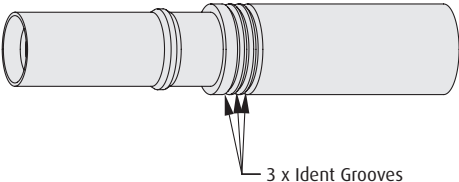
Datamate J-Tek 3-Row Connectors

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

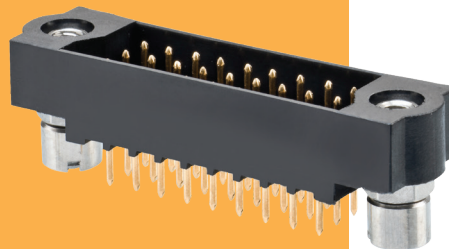
CRIMP CONTACTS		WIRE STRIPPING DETAILS											
Large Bore (22 AWG) 													
Small Bore (24 to 28 AWG) 		TOOLS Recommended Crimp Tool - M22520/2-01 Positioner - T5747 Contact Insertion/Removal Tool - Z80-280 ❖ Instruction sheets available at www.harwin.com/instructions.											
HOW TO ORDER													
SERIES CODE <table><tr><th colspan="2">TYPE</th></tr><tr><td>011</td><td>Large Bore (22 AWG)</td></tr><tr><td>013</td><td>Small Bore (24-28 AWG)</td></tr></table>		TYPE		011	Large Bore (22 AWG)	013	Small Bore (24-28 AWG)	M83 - 01X 00 05 <table><tr><th colspan="2">FINISH</th></tr><tr><td>05</td><td>Gold</td></tr></table>		FINISH		05	Gold
TYPE													
011	Large Bore (22 AWG)												
013	Small Bore (24-28 AWG)												
FINISH													
05	Gold												

All dimensions in mm.

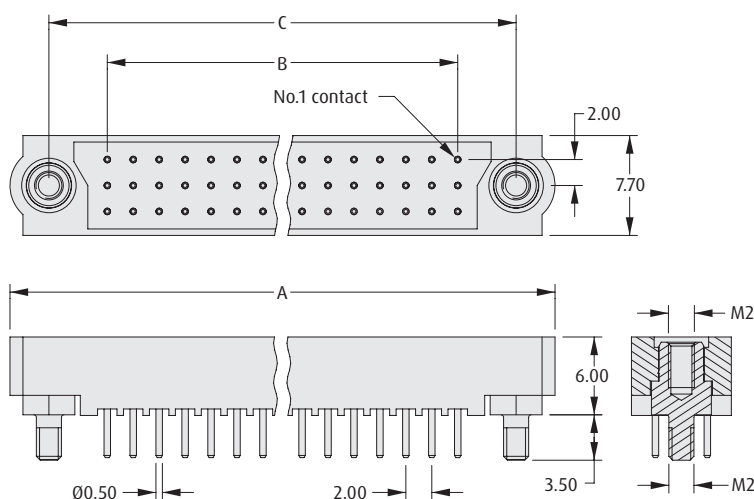
Datamate J-Tek 3-Row Connectors

Male Vertical 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.



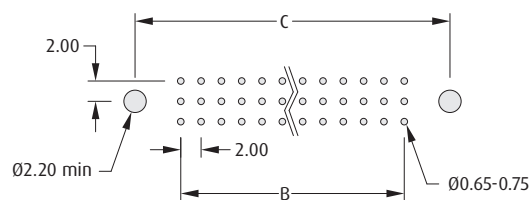
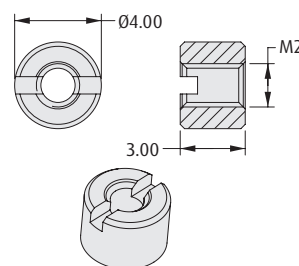
MALE VERTICAL



CALCULATION

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

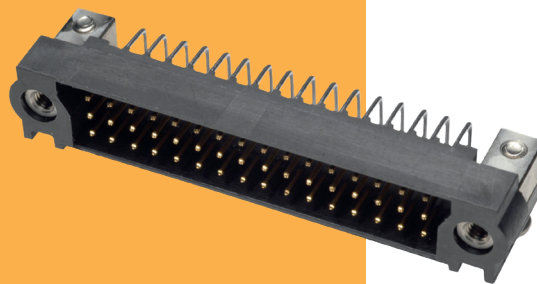
M2 Board Mount Jackscrew

All dimensions in mm.

Datamate J-Tek 3-Row Connectors

Male Horizontal 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.

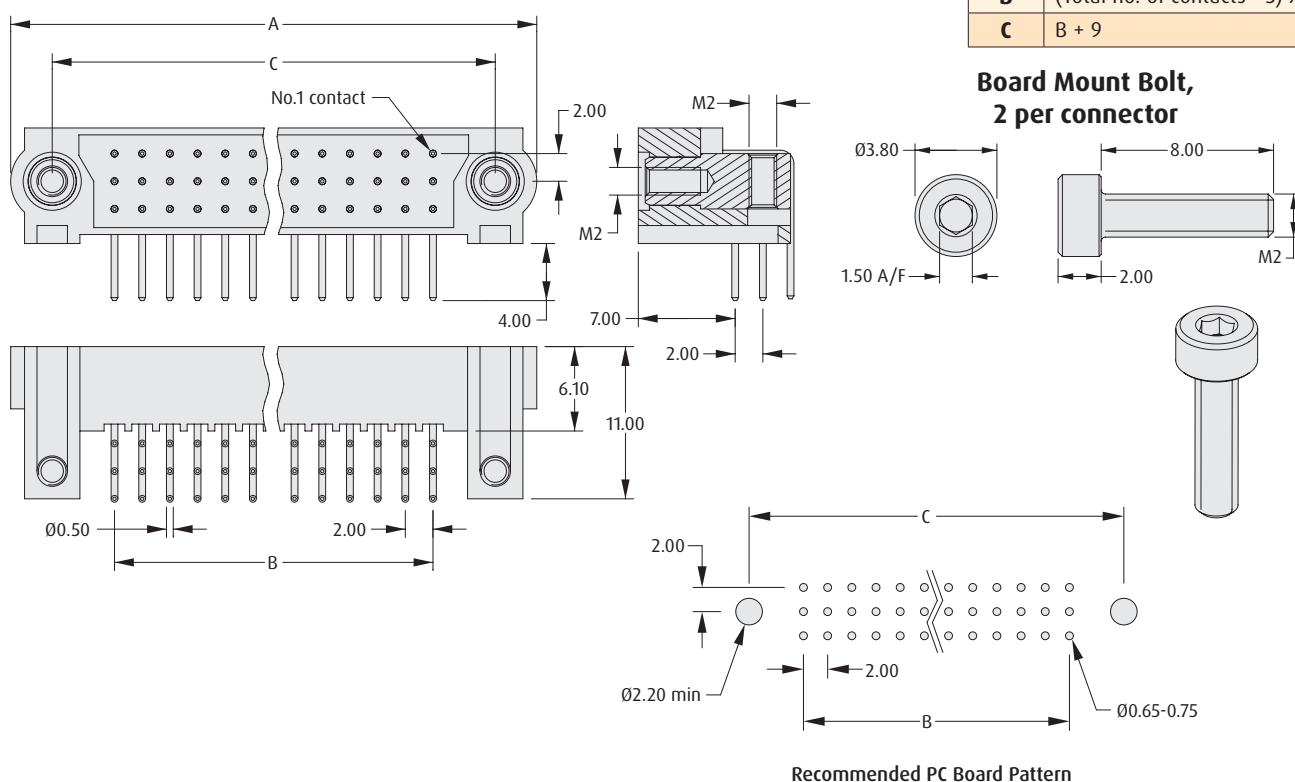


DATAMATE J-TEK 3-ROW

MALE HORIZONTAL

CALCULATION

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.