

## PART NUMBERING SYSTEM

**M80 - X #X XX XX #X - XX - XXX - XX - XXX**

### PRODUCT RANGE

### GENDER

4	Female (Socket)
5	Male (Plug)






### SIGNAL CONTACT STYLE

00	No Signal Contacts
T1	Vertical PC Tail, 3mm tail
T2	Vertical PC Tail, 4.5mm tail
L1	Horizontal PC Tail, 3mm tail (Male only)
L2	Horizontal PC Tail, 4.5mm tail (Male only)
C1	Crimp 24-28 AWG (Small Bore)
D1	Crimp 22 AWG (Large Bore)
S1	Vertical Surface Mount
S2	Horizontal Surface Mount (Male only)

### NO. OF SIGNAL CONTACTS

00, 02 to 50 (Must be even number)

### SIGNAL CONTACT FINISH

	00	No Signal Contacts	
	01	Gold + Tin/Lead	Female PC Tail only
	05	Gold	
	22	Gold + Tin/Lead	Male PC Tail only
	42	Gold + Tin	All PC Tail & Female Crimp

### PART NUMBER OF SPECIAL CONTACTS AFTER FINAL SIGNAL CONTACT

See following page, or 000 if none loaded

### NUMBER OF SPECIAL CONTACTS AFTER FINAL SIGNAL CONTACT

00 to 12

### PART NUMBER OF SPECIAL CONTACTS BEFORE SIGNAL CONTACT NO. 1

See following page, or 000 if none loaded

### NUMBER OF SPECIAL CONTACTS BEFORE SIGNAL CONTACT NO. 1

00 to 12

### JACKSCREW VARIANT (see following page)

00	None assembled
F1	Hexagonal slotted jackscrew (Female only)
F2	Hex socket jackscrew (Female only)
F3	Guide Pin with Panel Mount (Female only)
M1	Jackscrew Nut only (Male only)
M2	Jackscrew Nut with Vertical 3.5mm Board Mount Stud (Male only)
M3	Jackscrew Nut with Vertical 5mm Board Mount Stud (Male only)
M5	Jackscrew Nut with Horizontal 5mm Board Mount Slotted Bolt (Male only)
M7	Jackscrew Nut with Horizontal 5mm Board Mount Hex Skt Bolt (Male only)

Note: If special contacts are being ordered separately, and cavities in mould are to be left empty, then the Special Contact part numbers should be 000.

### EXAMPLES:

#### M80-5T11422M1-02-311-02-311

DIL Male Vertical with Jackscrew, no board mount, 3mm PC Tail - 2 Coax, 14 Signal, 2 Coax.

#### M80-4C12005F1-04-326-00-000

DIL Female Crimp with Slotted Hex Jackscrews, Small Bore - 4 Power (for 14 AWG), 20 Signal

#### M80-4D11042F2-04-305-02-308

DIL Female Crimp with Hex Socket Jackscrews, Large Bore - 4 Special cavity, 10 Signal, 2 Special cavity.

Supplied with 4-off Female Straight Crimp Coax for Ø2mm cable, and 2-off Female 90° Crimp Coax for Ø2mm cable.

Max. number of contacts per connector: Special contacts only - 12 off, Signal contacts only - 50 off.

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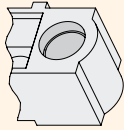
# Datamate

# SPECIFICATION

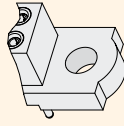
## JACKSCREWS

### NONE ASSEMBLED (MALE & FEMALE)

00



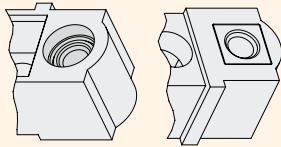
Pages 38, 39, 40



Pages 41, 42

### FOR MALE ASSEMBLIES

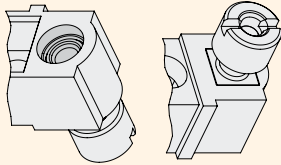
M1



Jackscrew Nut Only

Pages 38, 39, 40

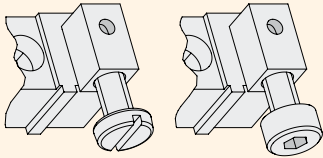
M2  
or  
M3



Jackscrew Nut  
with Vertical  
Board Mount Stud

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M5  
or  
M7

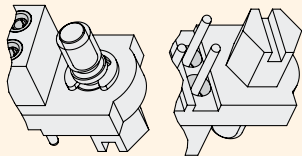


Jackscrew Nut  
with Horizontal  
Board Mount Stud

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### FOR FEMALE ASSEMBLIES

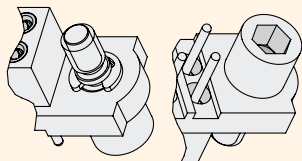
F1



Hexagonal Slotted  
Jackscrew

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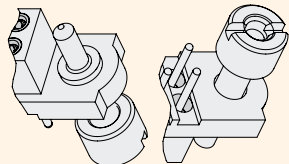
F2



Hex Socket  
Jackscrew

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F3



Panel Guide  
with Board Mount

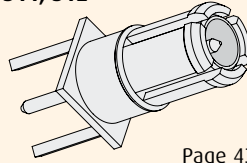
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\*See following pages for dimensional information.

## SPECIAL CONTACTS

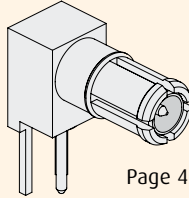
### MALE

311, 312



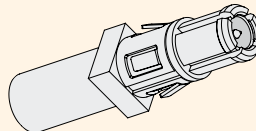
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314



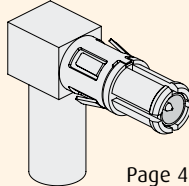
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315, 316, 317



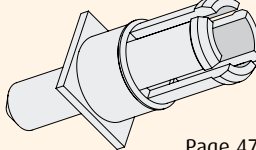
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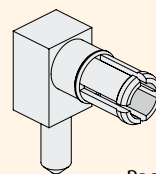
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331, 332



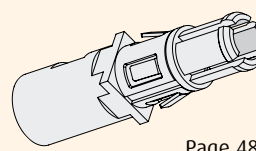
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Page 47

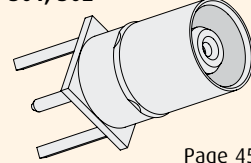
335, 336, 337



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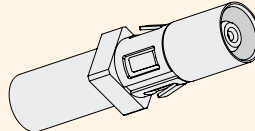
### FEMALE

301, 302



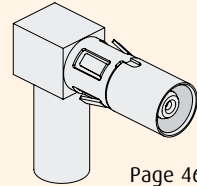
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305, 306, 307



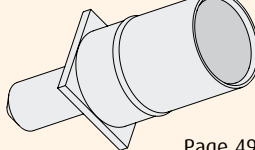
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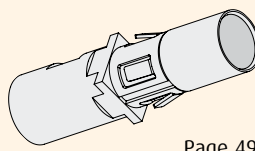
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321, 322



Page 49

325, 326, 327



Page 49

COAX

POWER

\*See pages listed above for dimensional information.

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## SPECIFICATION

## Special Contacts

### Materials

Latching collar:	Beryllium copper, nickel plated
Other metallic parts:	Copper alloy, Gold plated
Insulator:	PTFE

### Electrical

Frequency range:	6 GHz (depending on cable)
Impedance:	50 Ohms
V.S.W.R.:	< 1.05 + 0.04 F (GHz)
Operating voltage (sea level):	180 V a.c. at 500 mA
Maximum voltage (sea level):	1000 Vrms
Contact resistance:	6 Milliohms max
Insulation resistance:	106 Megohms at 250 Vrms

### Mechanical

Endurance:	500 cycles
Insertion force:	5N max, 0.6N min
Withdrawal force:	2N max, 0.5N min
Contact replacement in connector:	5 times

### Environmental

Operating temperature:	-55°C to +125°C
Salt spray test:	96 hrs
Humidity test:	56 days

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**HARWIN**

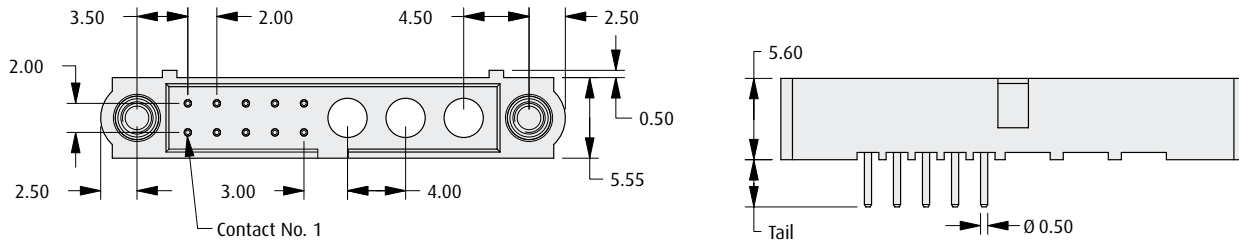
# Datamate Connectors

## Male Vertical PC Tail

- ❖ Customer defined contact configurations.
- ❖ Jackscrews are assembled where specified.
- ❖ Special contacts are assembled where specified.
- ❖ For loose special contacts see pages 43 and 47.
- ❖ Fully shrouded contacts.
- ❖ Polarised mouldings.
- ❖ Mates with connectors shown on pages 41 and 42.

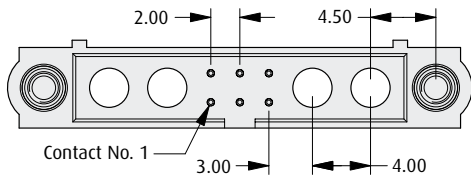


### NON-SYMMETRICAL CONTACT CONFIGURATION



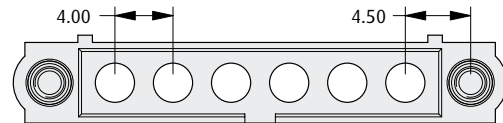
EXAMPLE OF PART NUMBER **M80-5TX10XXXX-00-000-03-XXX**

### SYMMETRICAL CONTACT CONFIGURATION



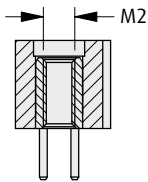
EXAMPLE OF PART NUMBER **M80-5TX06XXXX-02-XXX-02-XXX**

### SPECIAL CONTACTS ONLY



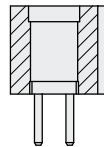
EXAMPLE OF PART NUMBER **M80-5000000XX-06-XXX-00-000**

### WITH JACKSCREWS



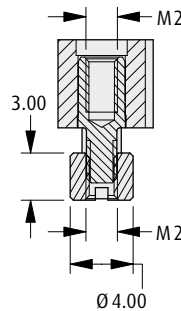
TAIL LENGTH	SERIES CODE
3mm	<b>M80-5T1XXXXM1</b>
4.5mm	<b>M80-5T2XXXXM1</b>

### NO JACKSCREWS



TAIL LENGTH	SERIES CODE
3mm	<b>M80-5T1XXXX00</b>
4.5mm	<b>M80-5T2XXXX00</b>

### WITH BOARD-MOUNT JACKSCREWS



TAIL LENGTH	STUD LENGTH	SERIES CODE
3mm	3.5mm	<b>M80-5T1XXXXM2</b>
3mm	5.0mm	<b>M80-5T1XXXXM3</b>
4.5mm	3.5mm	<b>M80-5T2XXXXM2</b>
4.5mm	5.0mm	<b>M80-5T2XXXXM3</b>

All dimensions in mm.

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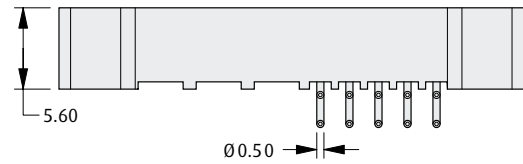
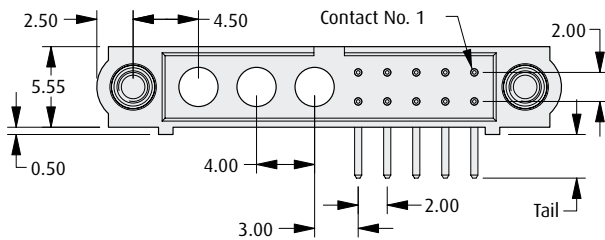
# Datamate Connectors

## Male Horizontal PC Tail



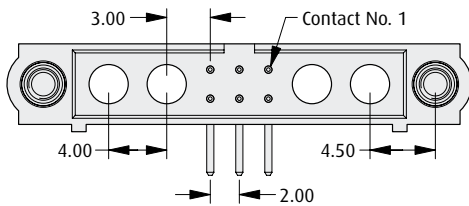
- ❖ Jackscrews are assembled where specified.
- ❖ For loose special contacts see pages 43 and 47.
- ❖ Mates with connectors shown on pages 41 and 42.

### NON-SYMMETRICAL CONTACT CONFIGURATION



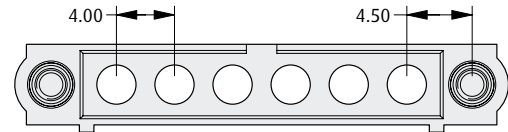
EXAMPLE OF PART NUMBER **M80-5LX10XXXX-00-000-03-XXX**

### SYMMETRICAL CONTACT CONFIGURATION



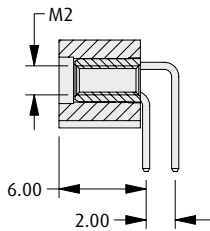
EXAMPLE OF PART NUMBER **M80-5LX06XXXX-02-XXX-02-XXX**

### SPECIAL CONTACTS ONLY



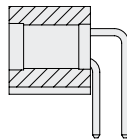
EXAMPLE OF PART NUMBER **M80-5000000XX-06-XXX-00-000**

### WITH JACKSCREWS



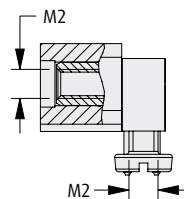
TAIL	SERIES CODE
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4.5mm	<b>M80-5L2XXXXM1</b>

### NO JACKSCREWS



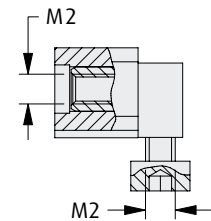
TAIL	SERIES CODE
3mm	<b>M80-5L1XXXX00</b>
4.5mm	<b>M80-5L2XXXX00</b>

### WITH BOARD MOUNT SLOTTED JACKSCREWS



TAIL	BOLT	SERIES CODE
3mm	5.0mm	<b>M80-5L1XXXXM5</b>
4.5mm	5.0mm	<b>M80-5L2XXXXM5</b>

### WITH BOARD MOUNT HEX SOCKET JACKSCREWS



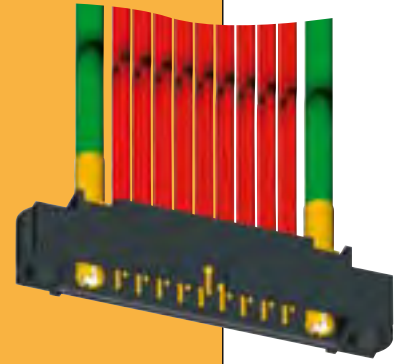
TAIL	BOLT	SERIES CODE
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4.5mm	5.0mm	<b>M80-5L2XXXXM7</b>



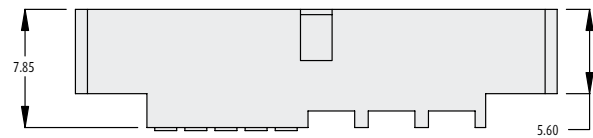
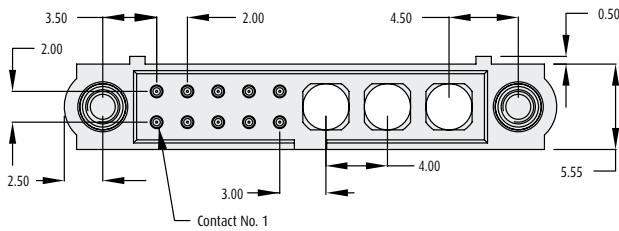
# Datamate Connectors

## Male Crimp

- ❖ Customer defined contact configurations.
- ❖ Polarised mouldings.
- ❖ Fully shrouded contacts.
- ❖ Large bore 22 AWG, small bore 24-28 AWG.
- ❖ Jackscrews are assembled where specified.
- ❖ Signal contacts are supplied loose and are rear insertable.
- ❖ Mates with connectors shown on pages 41 and 42.

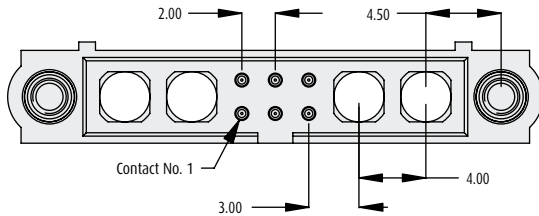


### NON-SYMMETRICAL CONTACT CONFIGURATION

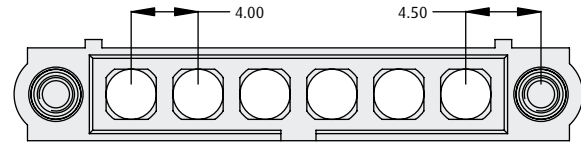


EXAMPLE OF PART NUMBER **M80-5X110XXXX-00-000-03-XXX**

### SYMMETRICAL CONTACT CONFIGURATION



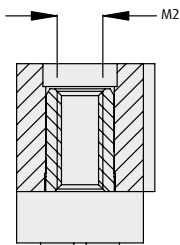
### SPECIAL CONTACTS ONLY



EXAMPLE OF PART NUMBER **M80-5X106XXXX-02-XXX-02-XXX**

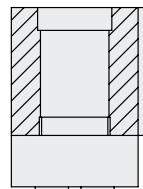
EXAMPLE OF PART NUMBER **M80-5000000XX-06-XXX-00-000**

### WITH JACKSCREWS



CRIMP SIZE	SERIES CODE
Large Bore	<b>M80-5D1XXXXM1</b>
Small Bore	<b>M80-5C1XXXXM1</b>

### NO JACKSCREWS



CRIMP SIZE	SERIES CODE
Large Bore	<b>M80-5D1XXXX00</b>
Small Bore	<b>M80-5C1XXXX00</b>

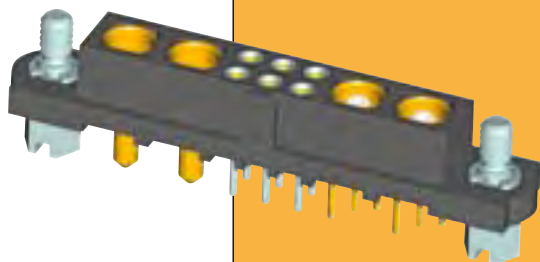
All dimensions in mm.

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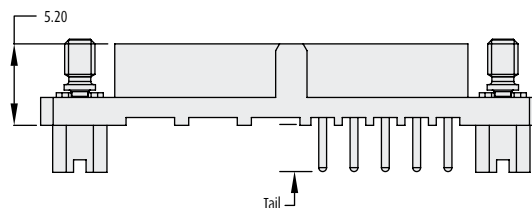
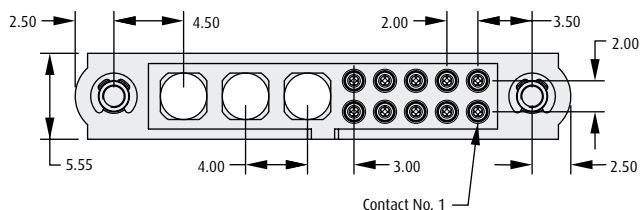
# Datamate Connectors

## Female PC Tail



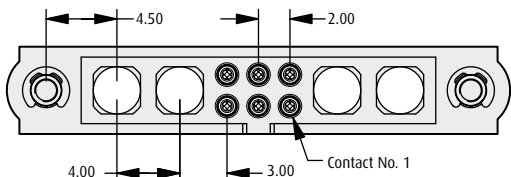
- ❖ Customer defined contact configurations.
- ❖ Jackscrews assembled where specified.
- ❖ Fully shrouded contacts.
- ❖ Polarised mouldings.
- ❖ Mates with connectors shown on pages 38 and 40.
- ❖ Special contacts are assembled where specified.
- ❖ For loose special contacts see pages 45 and 49.

### NON-SYMMETRICAL CONTACT CONFIGURATION

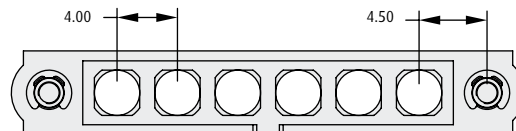


EXAMPLE OF PART NUMBER **M80-4TX10XXXX-00-000-03-XXX**

### SYMMETRICAL CONTACT CONFIGURATION



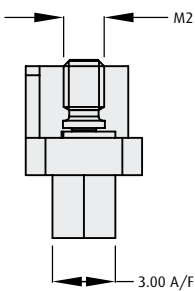
### SPECIAL CONTACTS ONLY



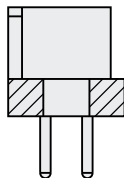
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EXAMPLE OF PART NUMBER **M80-4000000XX-06-XXX-00-000**

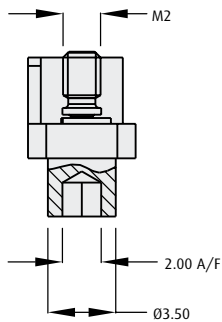
### WITH SLOTTED JACKSCREWS



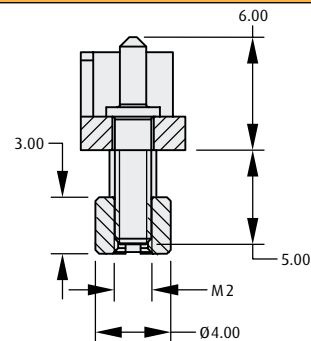
### NO JACKSCREWS



### WITH HEX SOCKET JACKSCREWS



### WITH PANEL MOUNT & GUIDE



TAIL LENGTH	SERIES CODE	TAIL LENGTH	SERIES CODE	TAIL LENGTH	SERIES CODE	TAIL LENGTH	SERIES CODE
3mm	<b>M80-4T1XXXXF1</b>	3mm	<b>M80-4T1XXXX00</b>	3mm	<b>M80-4T1XXXXF2</b>	3mm	<b>M80-4T1XXXXF3</b>
4.5mm	<b>M80-4T2XXXXF1</b>	4.5mm	<b>M80-4T2XXXX00</b>	4.5mm	<b>M80-4T2XXXXF2</b>	4.5mm	<b>M80-4T2XXXXF3</b>

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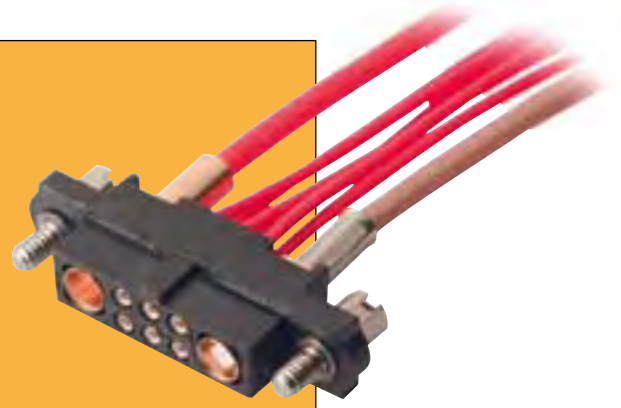
All dimensions in mm.



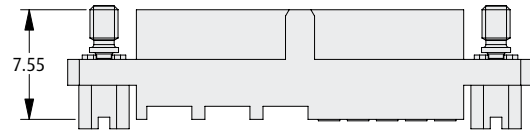
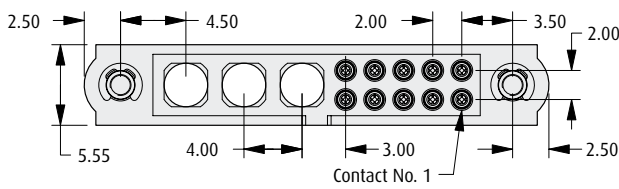
# Datamate Connectors

## Female Crimp

- ❖ Customer defined contact configurations.
- ❖ Polarised mouldings.
- ❖ Fully shrouded contacts.
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- ❖ Signal contacts are supplied loose and are rear insertable.
- ❖ Mates with connectors shown on pages 38 to 40.

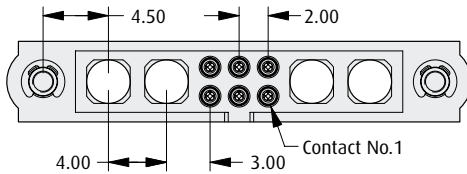


### NON-SYMMETRICAL CONTACT CONFIGURATION



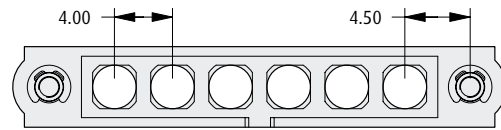
EXAMPLE OF PART NUMBER **M80-4X110XXXX-00-000-03-XXX**

### SYMMETRICAL CONTACT CONFIGURATION



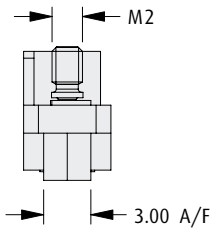
EXAMPLE OF PART NUMBER **M80-4X106XXXX-02-XXX-02-XXX**

### SPECIAL CONTACTS ONLY



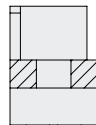
EXAMPLE OF PART NUMBER **M80-4000000XX-06-XXX-00-000**

### WITH JACKSCREWS



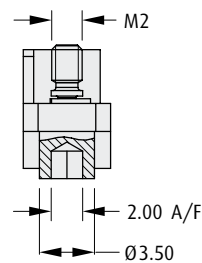
CRIMP SIZE	SERIES CODE
Large Bore	<b>M80-4D1XXF1</b>
Small Bore	<b>M80-4C1XXF1</b>

### NO JACKSCREWS



CRIMP SIZE	SERIES CODE
Large Bore	<b>M80-4D1XX00</b>
Small Bore	<b>M80-4C1XX00</b>

### WITH BOARD-MOUNT JACKSCREWS



CRIMP SIZE	SERIES CODE
Large Bore	<b>M80-4D1XXF2</b>
Small Bore	<b>M80-4C1XXF2</b>

All dimensions in mm.

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