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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# M20 Connectors Specification

- ❖ 2.54mm pitch, with 0.64mm square male pin connection system.
- ❖ Board-to-Board and Cable-to-Board application options.

## ❖ Materials

Mouldings:	Standard or High Temperature Plastic, UL94V-0
Contacts	
Female:	Phosphor Bronze
Male:	Copper Alloy
Finish:	See individual pages

## ❖ Electrical

Current:	3A per contact
Voltage proof:	800V AC, 500V DC for 1 minute
Contact resistance:	30mΩ max
Insulation resistance:	1,000MΩ min

## ❖ Mechanical

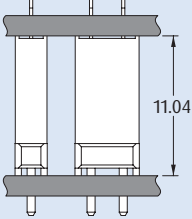
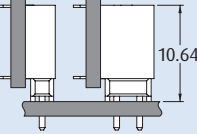
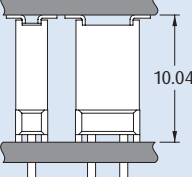
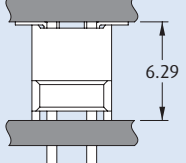
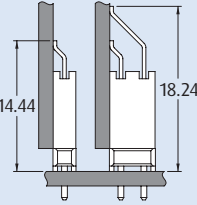
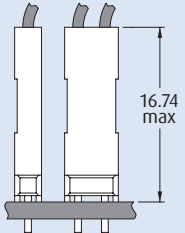
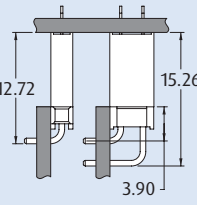
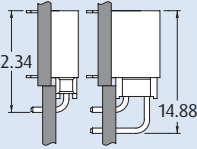
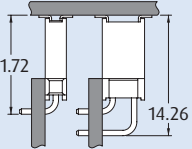
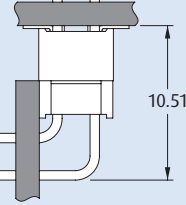
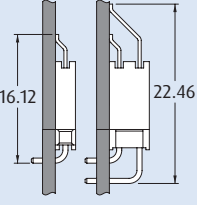
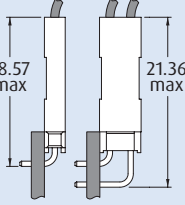
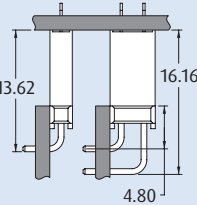
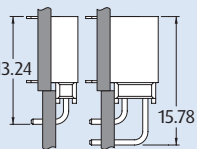
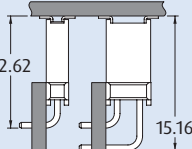
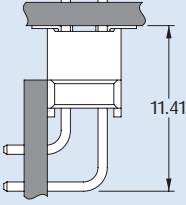
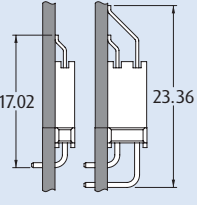
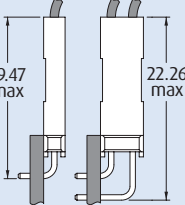
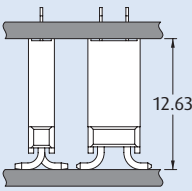
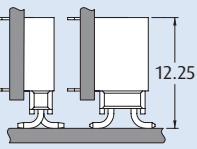
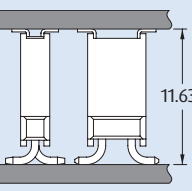
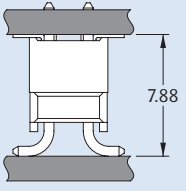
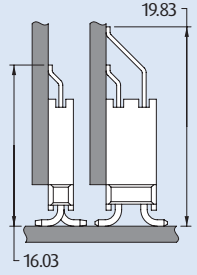
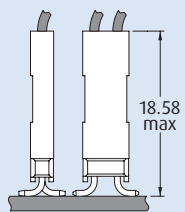
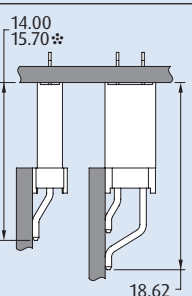
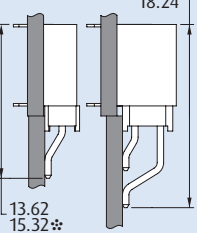
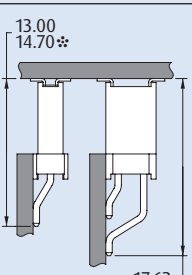
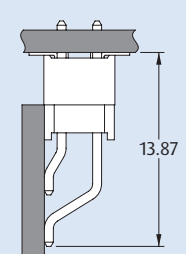
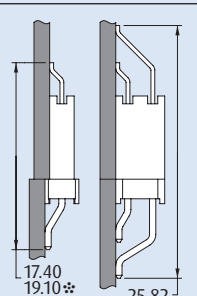
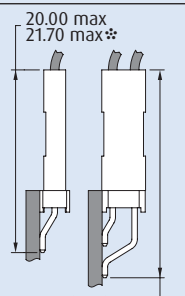
Durability	
Gold finish:	300 operations
Tin finish:	50 operations
Insertion force (max)	
Female:	2.0N per contact
Jumper sockets:	12.5N total
Withdrawal force (min)	
Female:	0.3N per contact
Jumper sockets:	1.0N total
Vibration sensitivity:	50 – 2,000Hz, 3.13G, 45 minutes duration
Shock severity:	294m/s <sup>2</sup> (30G) for 11ms

## ❖ Environmental

Operating temperature:	-40°C to +105°C
Solderability:	245°C for 5 seconds
Soldering heat resistance:	260°C for 10 seconds

# M20 Connectors Mating Profiles

2.54mm (.100") PITCH

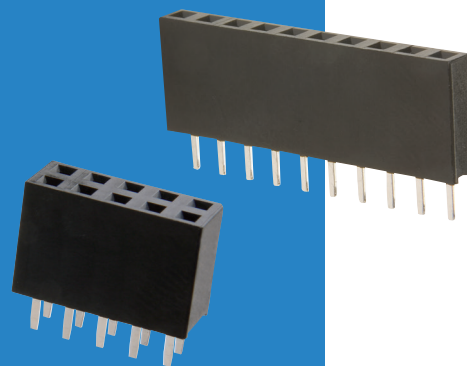
		FEMALE					
		VERTICAL PC TAIL	HORIZONTAL PC TAIL	VERTICAL SMT	VERTICAL SMT Low Profile	HORIZONTAL SMT	CRIMP
MALE	VERTICAL PC TAIL	 11.04	 10.64	 10.04	 6.29	 14.44 18.24	 16.74 max
	HORIZONTAL PC TAIL 3.9mm Tail	 12.72 15.26 3.90	 12.34 14.88	 11.72 14.26	 10.51	 16.12 22.46	 18.57 max 21.36 max
	HORIZONTAL PC TAIL 4.8mm Tail	 13.62 16.16 4.80	 13.24 15.78	 12.62 15.16	 11.41	 17.02 23.36	 19.47 max 22.26 max
	VERTICAL SMT	 12.63	 12.25	 11.63	 7.88	 19.83 16.03	 18.58 max
	HORIZONTAL SMT *High Profile Single Row	 14.00 15.70* 18.62	 18.24 13.62 15.32*	 13.00 14.70* 17.62	 13.87	 17.40 19.10* 25.82	 20.00 max 21.70 max* 24.62 max

All dimensions in mm.

# M20 Connectors

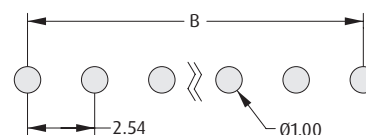
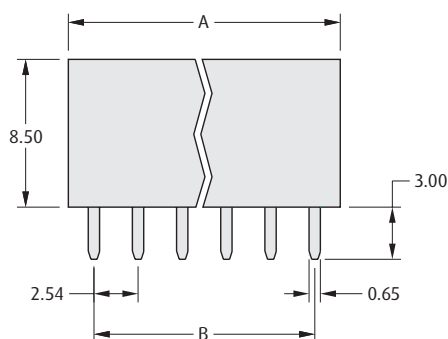
## Female Vertical PC Tail

- ❖ Twin beam phosphor bronze contacts.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.



2.54mm (.100") PITCH

### SINGLE ROW

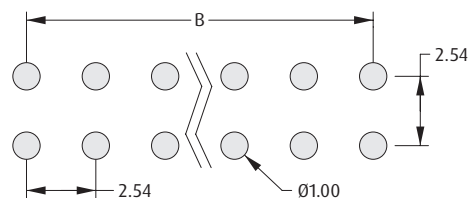
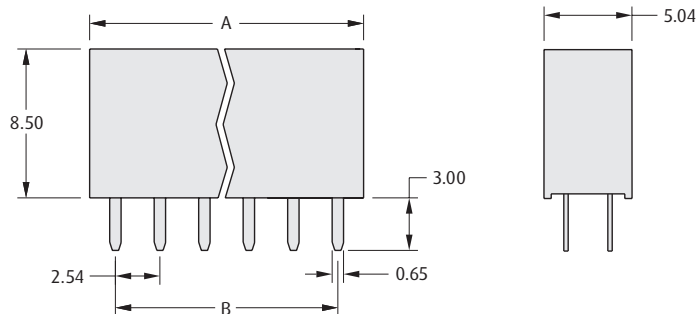


Recommended PC Board Pattern

### CALCULATION

<b>A</b>	$B + 2.94$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$

### DOUBLE ROW



Recommended PC Board Pattern

### HOW TO ORDER

#### SERIES CODE

**M20 - 78 X XX XX**

#### TYPE

<b>2</b>	Single Row
<b>3</b>	Double Row

#### FINISH

<b>42</b>	Gold + Tin
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

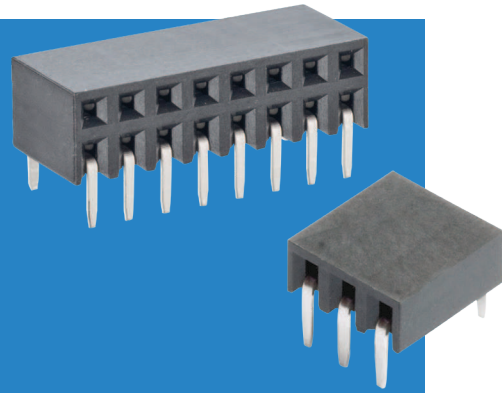
02 to 20, 25, 32, 36

All dimensions in mm.

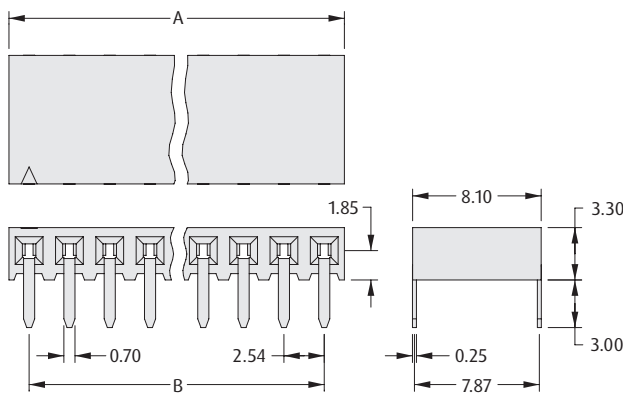
# M20 Connectors

## Female Horizontal PC Tail

- ❖ Two point solder fixing for connector rigidity.
- ❖ Twin beam contact for cost-effective reliability.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.

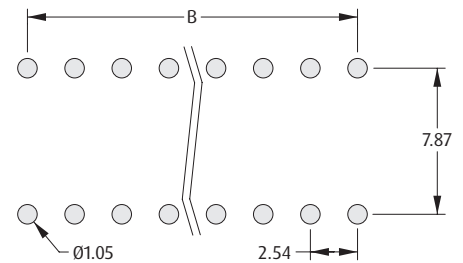


### SINGLE ROW



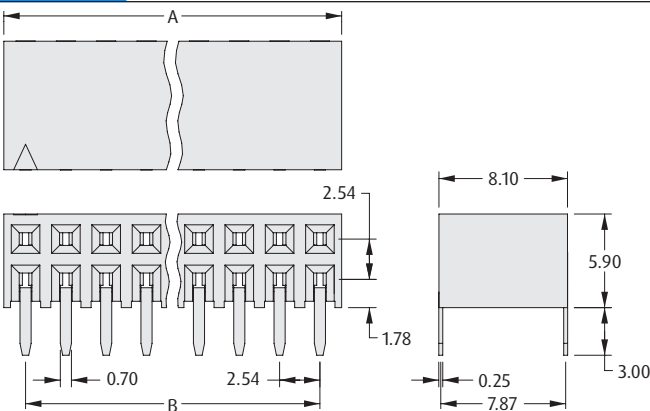
### CALCULATION

<b>A</b>	$2.54 \times \text{No. of contacts per row}$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$



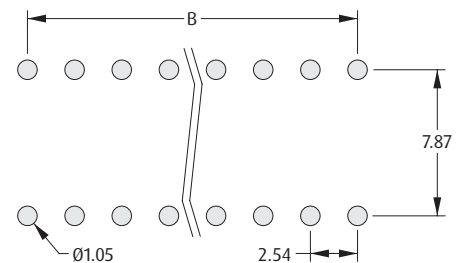
Recommended PC Board Pattern

### DOUBLE ROW



### CALCULATION

<b>A</b>	$B + 2.74$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$



Recommended PC Board Pattern

### HOW TO ORDER

**M20 - 78 X XX XX**

#### SERIES CODE

#### TYPE

<b>8</b>	Double Row
<b>9</b>	Single Row

#### FINISH

<b>42</b>	Gold + Tin
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

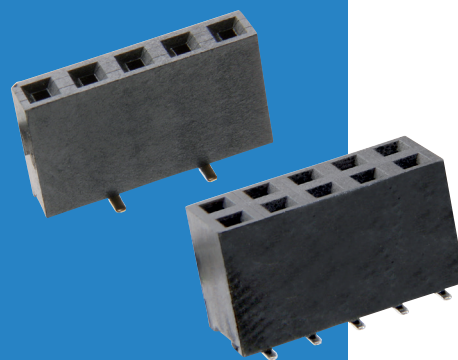
<b>02 to 20, 25, 35, 36</b>	Double Row
<b>02 to 20, 25, 36, 40</b>	Single Row

All dimensions in mm.

# M20 Connectors

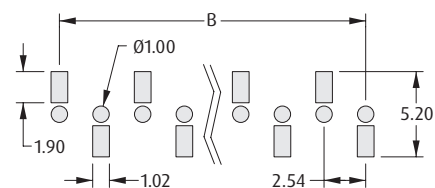
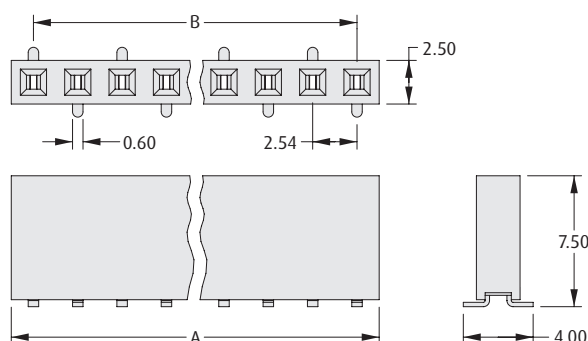
## Female Vertical Surface Mount, Dual Entry

- ❖ Dual Entry sockets - can be used as either a top entry or bottom entry configuration.
- ❖ Twin beam contact for cost-effective reliability.
- ❖ Contact [technical@harwin.com](mailto:technical@harwin.com) for Tape and Reel options.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.



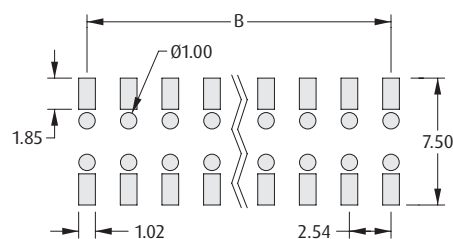
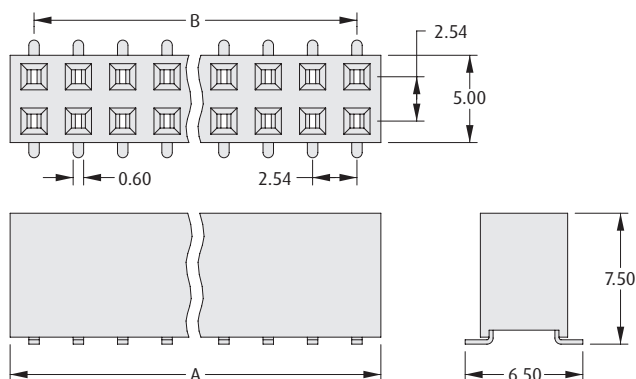
2.54mm (.100") PITCH

### SINGLE ROW



Recommended PC Board Pattern

### DOUBLE ROW



Recommended PC Board Pattern

### CALCULATION

<b>A</b>	$B + 2.74$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$

### HOW TO ORDER

#### SERIES CODE

#### TYPE

6	Single Row
7	Double Row

**M20 - 78 X XX XX**

#### FINISH

42	Gold + Tin
46	Tin

#### NO. OF CONTACTS PER ROW

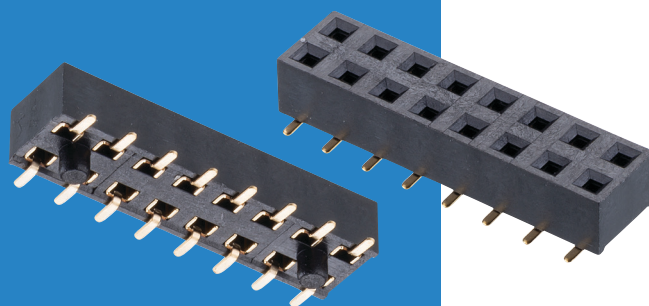
02 to 20

All dimensions in mm.

# M20 Connectors

## Female Vertical Surface Mount, Dual Entry

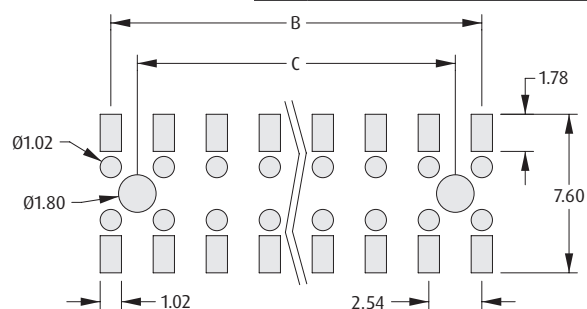
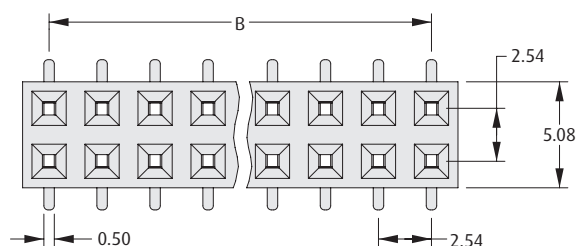
- ❖ Dual Entry socket - can be used as either a top entry or bottom entry configuration.
- ❖ Twin beam contact for cost-effective reliability.
- ❖ Tape and Reel option supplied fitted with Pick and Place cap.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.



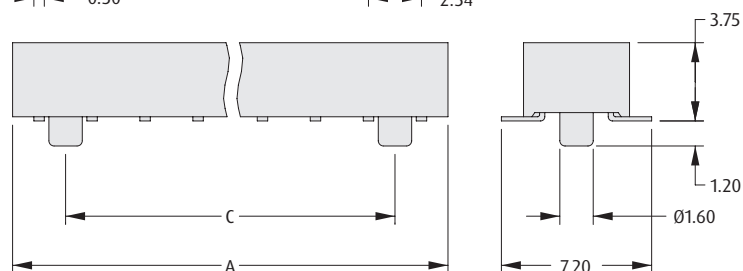
### DOUBLE ROW

### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)
<b>C</b>	B - 2.54



Recommended PC Board Pattern



### HOW TO ORDER

**M20 - 781 XX 45 X**

**SERIES CODE**

**NO. OF CONTACTS PER ROW**

02 to 10, 12, 15, 20

### PACKAGING

<b>Blank</b>	Loose
<b>R</b>	Tape & Reeled

### FINISH

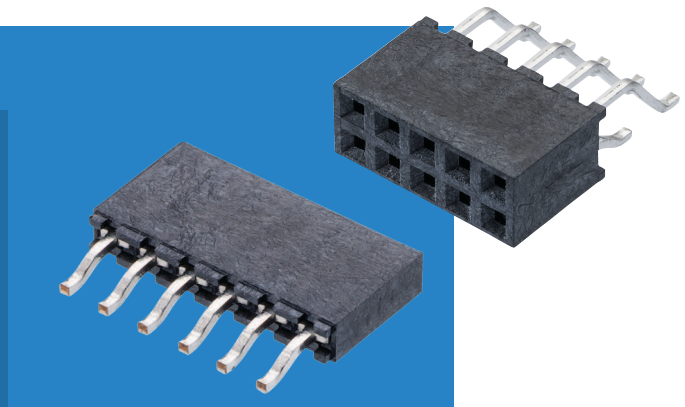
<b>45</b>	Gold
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All dimensions in mm.

# M20 Connectors

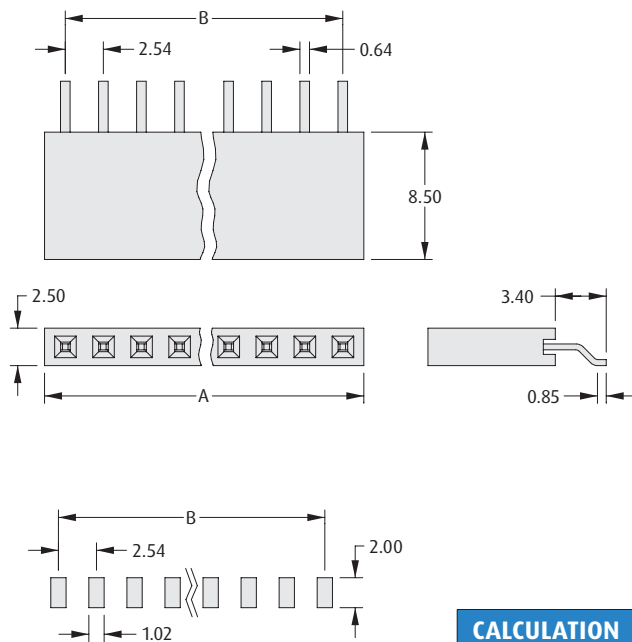
## Female Horizontal Surface Mount

- Rear tail configuration, to allow mounting right up to the edge of the PCB.
- Supplied in Tape and Reel packaging as standard for use in automated assembly systems.



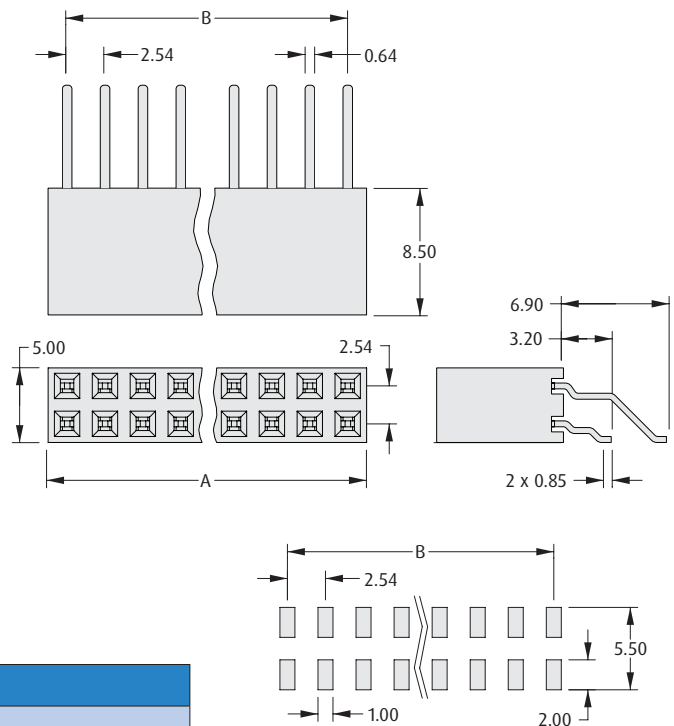
2.54mm (.100") PITCH

### SINGLE ROW



Recommended PC Board Pattern

### DOUBLE ROW



Recommended PC Board Pattern

#### CALCULATION

A	$B + 2.79$
B	$2.54 \times (\text{No. of contacts per row} - 1)$

### HOW TO ORDER

#### SERIES CODE

#### NO. OF ROWS

1	Single Row
2	Double Row

**M20 - 79 X XX 42 R**

#### PACKAGING

R	Tape & Reeled
---	---------------

#### FINISH

42	Gold + Tin
----	------------

#### NO. OF CONTACTS PER ROW

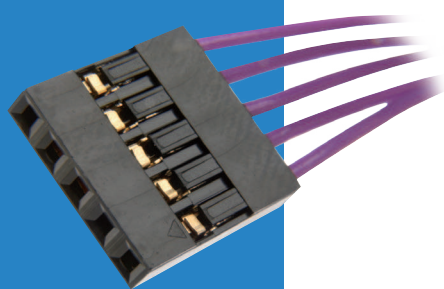
02 to 06, 08, 10

All dimensions in mm.

# M20 Connectors

## Female Crimp Housings

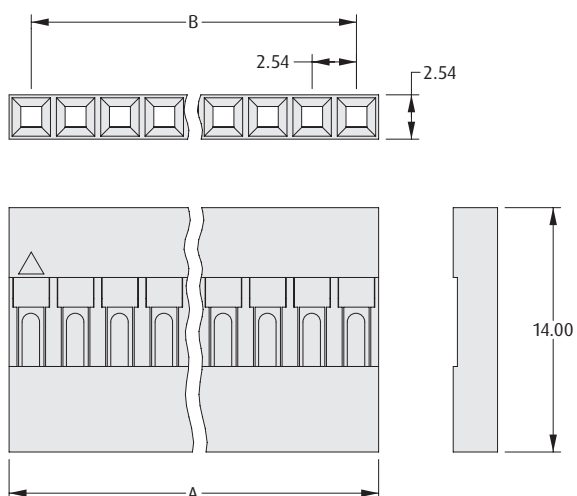
- ❖ Female crimp housing - contacts are ordered separately (shown on following page).
- ❖ For polarising key use **order code M20-003**



### SINGLE ROW

#### CALCULATION

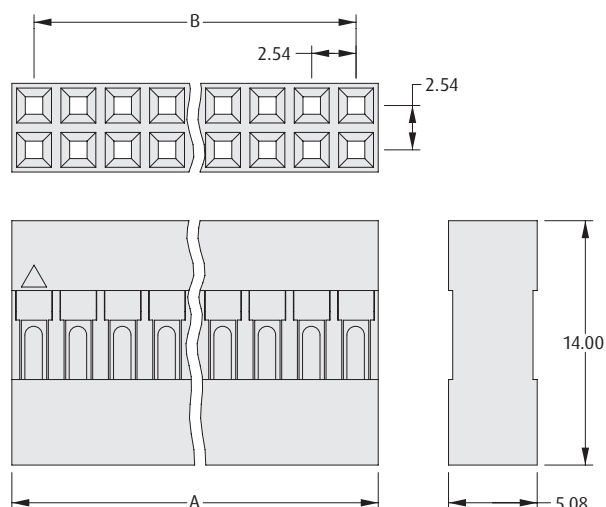
<b>A</b>	$B + 2.74$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$



### DOUBLE ROW

#### CALCULATION

<b>A</b>	$2.54 \times \text{No. of contacts per row}$
<b>B</b>	$2.54 \times (\text{No. of contacts per row} - 1)$



### HOW TO ORDER

**M20 - 10 X XX 00**

**SERIES CODE**

**TYPE**

<b>6</b>	Single Row
<b>7</b>	Double Row

**NO. OF CONTACTS PER ROW**

**02 to 12**

All dimensions in mm.

# M20 Connectors

## Female Crimp Contacts, Polarising Key

- ❖ Loose or reeled contacts.
- ❖ Open crimp design, ideal for automation.
- ❖ Use with female crimp housings shown on previous page.

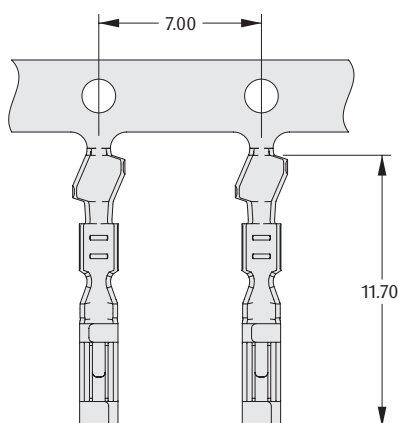


2.54mm (.100") PITCH

### CONTACTS

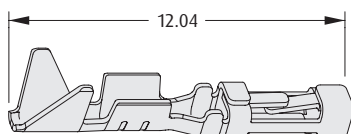
#### Reeled (continuous strip)

- ❖ Order code is for one reel of 10,000 contacts.



#### Loose (cropped)

- ❖ Order code is for one pack of 100 contacts.



### HAND CRIMP TOOL

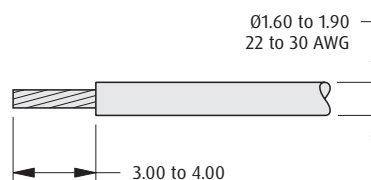
- ❖ Instruction sheet is available at [www.harwin.com/instructions](http://www.harwin.com/instructions).
- ❖ For use with loose contacts.



#### ORDER CODE

Z20-320

### WIRE STRIPPING DETAILS



### HOW TO ORDER

**M20 - 11 X 00 XX**

#### SERIES CODE

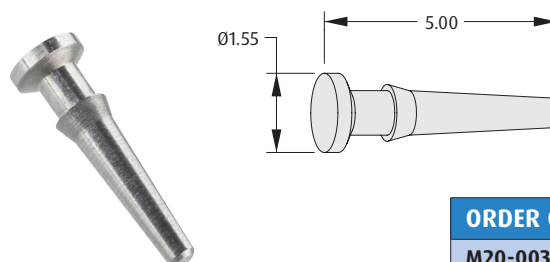
#### TYPE

6	Reeled Contacts
8	Loose Contacts

#### FINISH

42	Gold + Tin
46	Tin

### POLARISING KEY



#### ORDER CODE

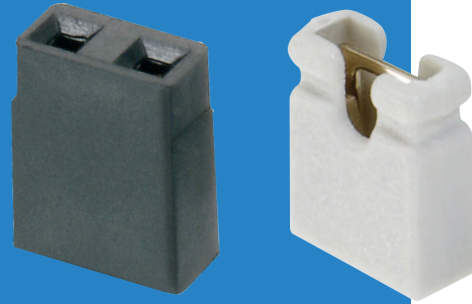
M20-003

All dimensions in mm.

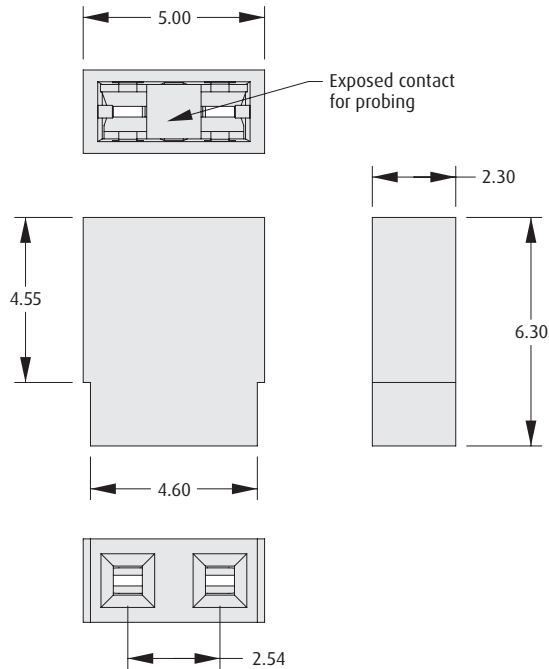
# M20 Connectors

## Jumper Sockets - Open Top

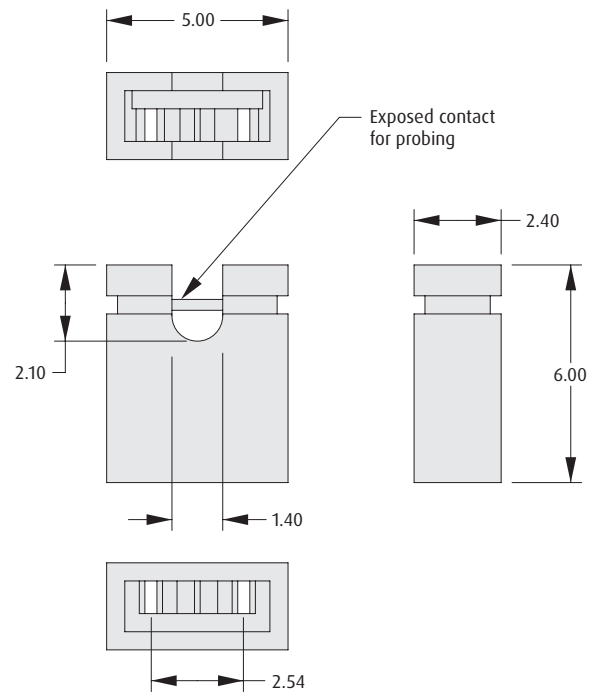
- ❖ Can be fitted by hand, giving an alternative on-board programming method to DIP switches.
- ❖ Open top for use with test probes.
- ❖ Choice of colours available.
- ❖ Multi-use socket provides up to 300 operations (Gold).
- ❖ Twin beam contact for cost-effective reliability.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.



### MULTI-USE



### HIGH FORCE, SINGLE OPERATION



### HOW TO ORDER

#### SERIES CODE

MULTI-USE	SINGLE OPERATION	
65		Grey
66	81	Red
67	82	Black
71	83	Blue

**M75 XX - XX**

#### FINISH

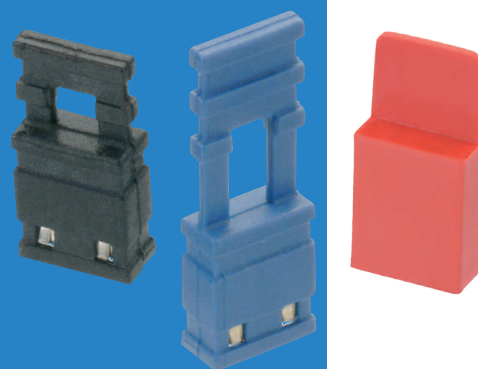
05	Gold
46	Tin

All dimensions in mm.

# M20 Connectors

## Jumper Sockets - Closed Top

- ❖ Can be fitted by hand, giving an alternative on-board programming method to DIP switches.
- ❖ Twin beam contact for cost-effective reliability.
- ❖ Suitable for use with mating M20 male pin headers, with 0.64mm square pins.
- ❖ Choice of colours available.
- ❖ Flexible handle for ease of location and withdrawal.



2.54mm (.100") PITCH

14mm FLEXIBLE HANDLE	10mm FLEXIBLE HANDLE	SOLID HANDLE

### HOW TO ORDER

**M7 XXX - XX**

#### SERIES CODE

14mm HANDLE	10mm HANDLE	SOLID HANDLE	
680	684	965	Grey
681	685	966	Red
682	686	967	Black
683	687		Blue

#### FINISH

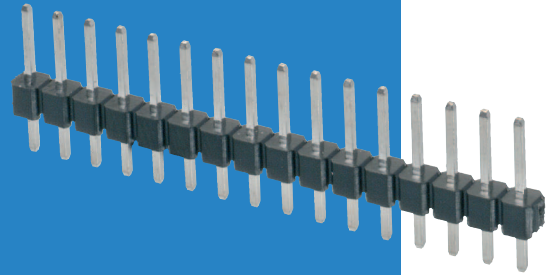
05	Gold
46	Tin

All dimensions in mm.

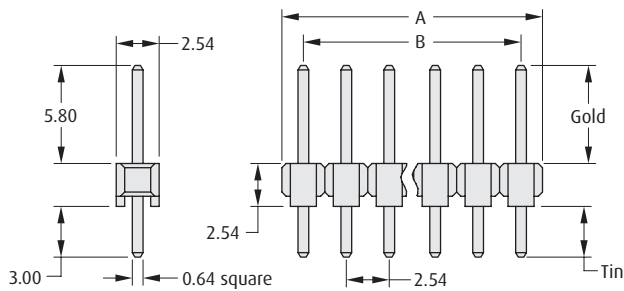
# M20 Connectors

## Male Vertical Single Row PC Tail

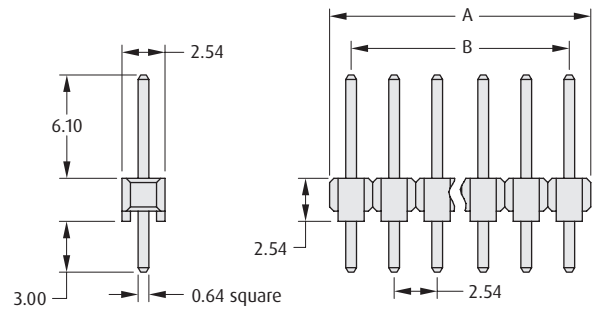
- ❖ Suitable for use with female connectors and jumper sockets shown on previous pages.
- ❖ Choice of mating pin lengths.
- ❖ Pin headers can be cut into smaller sizes.
- ❖ Also available with variable dimensions.



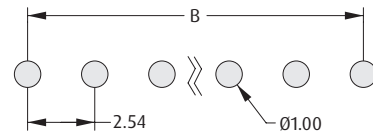
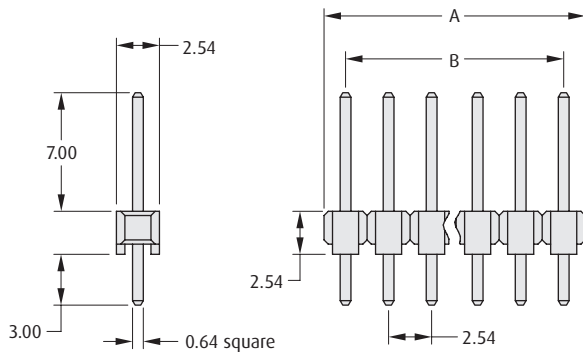
### 5.8mm



### 6.1mm



### 7.0mm



Recommended PC Board Pattern

#### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)

## HOW TO ORDER

**M20 - 9 XX XX XX**

#### SERIES CODE

#### TYPE

<b>73</b>	7.0mm Mating Height
<b>77</b>	5.8mm Mating Height
<b>99</b>	6.1mm Mating Height

#### FINISH

<b>42</b>	Gold + Tin (M20-977)
<b>45</b>	Gold (M20-973, 999)
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

<b>02 to 20, 25 to 28, 36, 40</b>	7.0mm Mating Height
<b>02 to 20, 25, 26, 32, 36, 40</b>	5.8mm Mating Height
<b>02 to 20, 23, 25, 30 to 33, 36, 40</b>	6.1mm Mating Height

All dimensions in mm.

# M20 Connectors

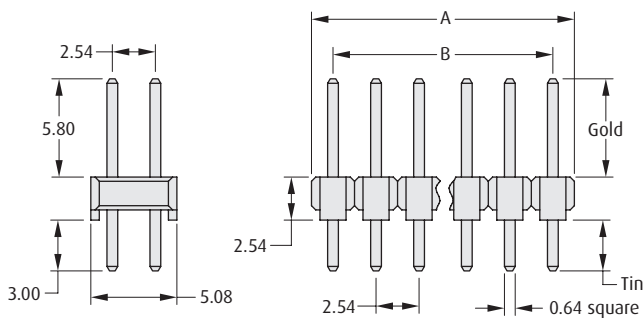
## Male Vertical Double Row PC Tail

- ❖ Suitable for use with female connectors and jumper sockets shown on previous pages.
- ❖ Choice of mating pin lengths.
- ❖ Pin headers can be cut into smaller sizes.
- ❖ Also available with variable dimensions.

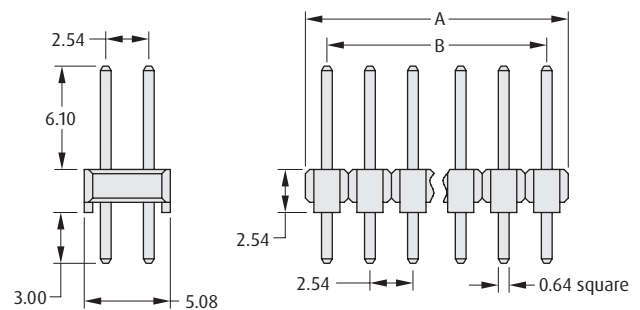


2.54mm (.100") PITCH

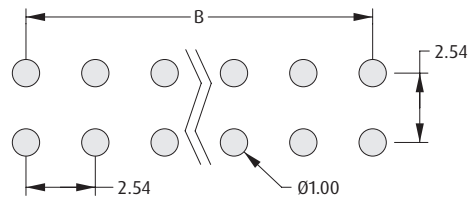
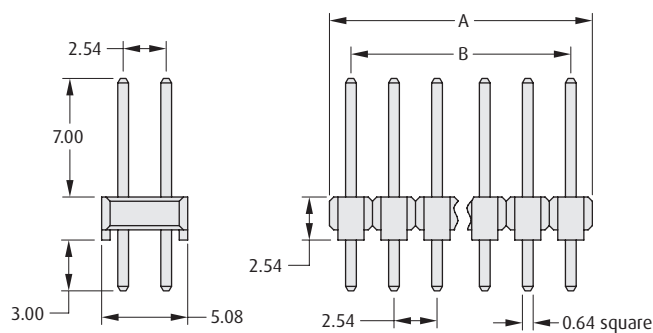
### 5.8mm



### 6.1mm



### 7.0mm



Recommended PC Board Pattern

#### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)

## HOW TO ORDER

**M20 - 9 XX XX XX**

#### SERIES CODE

#### TYPE

<b>72</b>	7.0mm Mating Height
<b>76</b>	5.8mm Mating Height
<b>98</b>	6.1mm Mating Height

#### FINISH

<b>42</b>	Gold + Tin (M20-976)
<b>45</b>	Gold (M20-972, 998)
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

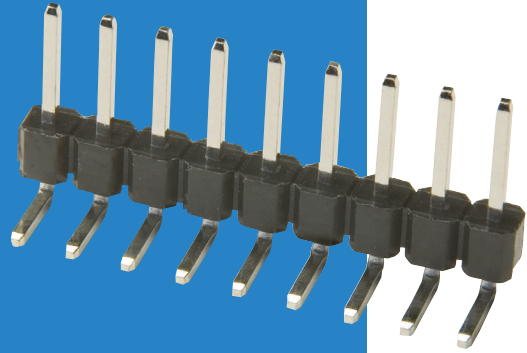
<b>02 to 20, 24, 25, 36, 40</b>	7.0mm Mating Height
<b>02 to 20, 25, 36, 40</b>	5.8mm Mating Height
<b>02 to 20, 23 to 25, 32, 36, 40</b>	6.1mm Mating Height

All dimensions in mm.

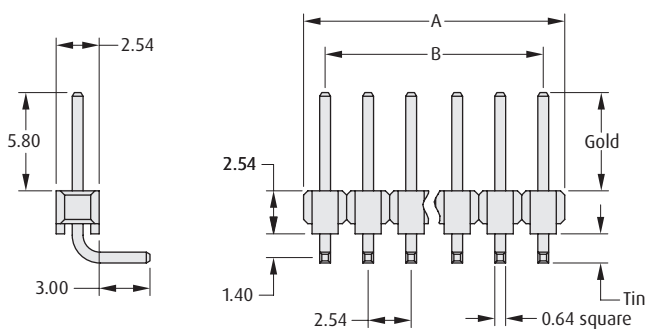
# M20 Connectors

## Male Horizontal Single Row PC Tail

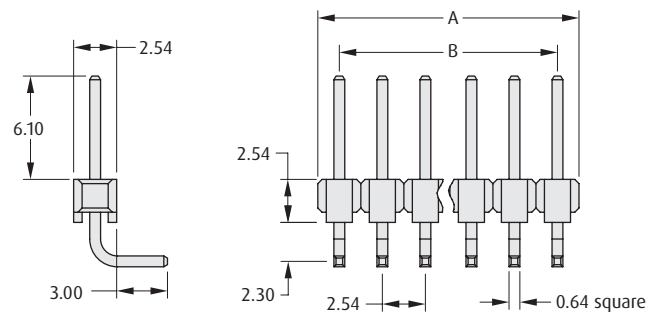
- ❖ Horizontal orientation for 90° board-to-board applications.
- ❖ Suitable for use with female connectors and jumper sockets shown on previous pages.
- ❖ Choice of mating pin lengths.
- ❖ Pin headers can be cut into smaller sizes.
- ❖ Also available with variable dimensions.



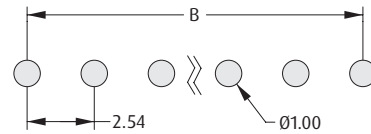
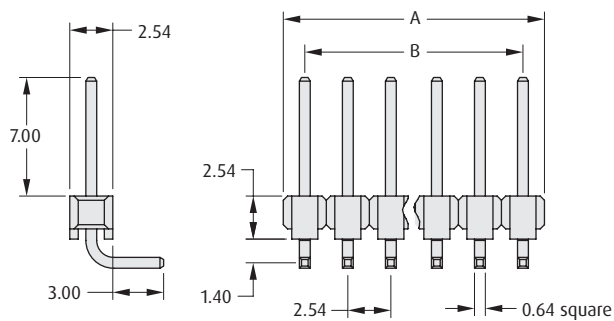
### 5.8mm



### 6.1mm



### 7.0mm



Recommended PC Board Pattern

#### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)

## HOW TO ORDER

**M20 - 9 XX XX XX**

#### SERIES CODE

#### TYPE

<b>71</b>	7.0mm Mating Height
<b>75</b>	5.8mm Mating Height
<b>96</b>	6.1mm Mating Height

#### FINISH

<b>42</b>	Gold + Tin (M20-975)
<b>45</b>	Gold (M20-971, 996)
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

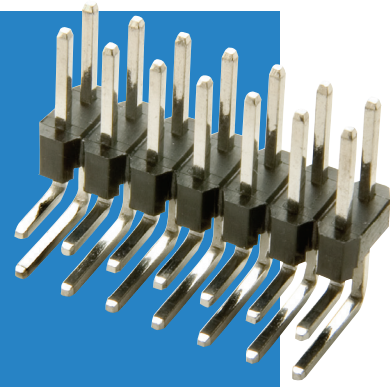
<b>02 to 20, 22, 23, 26, 36, 40</b>	7.0mm Mating Height
<b>02 to 20, 25, 36, 40</b>	5.8mm Mating Height
<b>02 to 20, 24, 25, 36, 40</b>	6.1mm Mating Height

All dimensions in mm.

# M20 Connectors

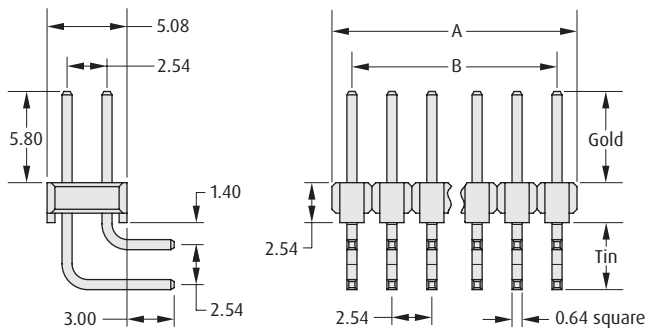
## Male Horizontal Double Row PC Tail

- Horizontal orientation for 90° board-to-board applications.
- Suitable for use with female connectors and jumper sockets shown on previous pages.
- Choice of mating pin lengths.
- Pin headers can be cut into smaller sizes.
- Also available with variable dimensions.

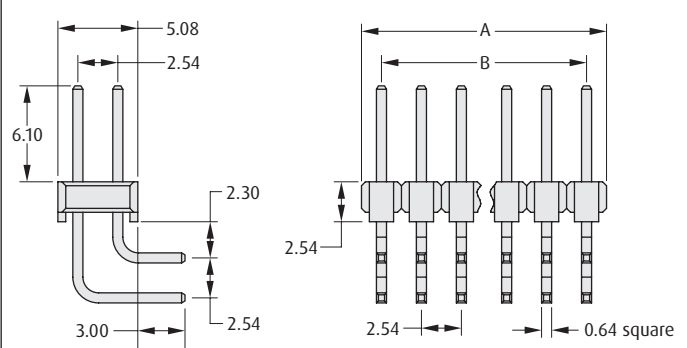


2.54mm (.100") PITCH

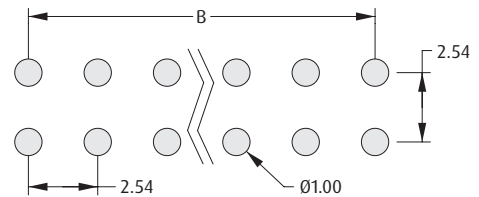
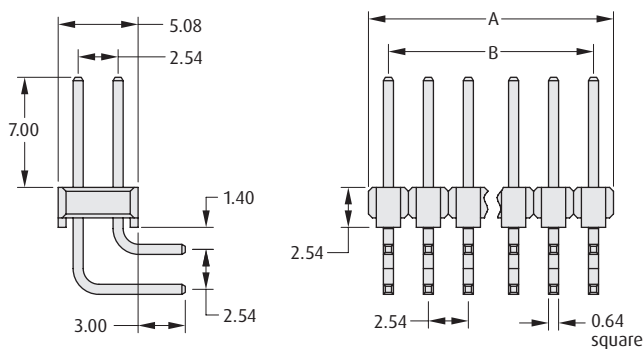
### 5.8mm



### 6.1mm



### 7.0mm



Recommended PC Board Pattern

#### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)

## HOW TO ORDER

**M20 - 9 XX XX XX**

#### SERIES CODE

#### TYPE

<b>70</b>	7.0mm Mating Height
<b>74</b>	5.8mm Mating Height
<b>95</b>	6.1mm Mating Height

#### FINISH

<b>42</b>	Gold + Tin (M20-974)
<b>45</b>	Gold (M20-970, 995)
<b>46</b>	Tin

#### NO. OF CONTACTS PER ROW

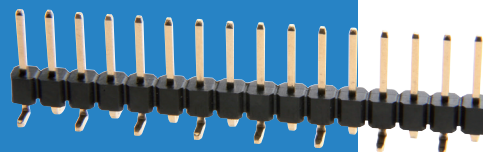
<b>02 to 20, 22, 25, 27, 36, 40</b>	7.0mm Mating Height
<b>02 to 20, 25, 36, 40</b>	5.8mm Mating Height
<b>02 to 20, 24, 25, 32, 36, 40</b>	6.1mm Mating Height

All dimensions in mm.

# M20 Connectors

## Male Vertical Surface Mount Single Row

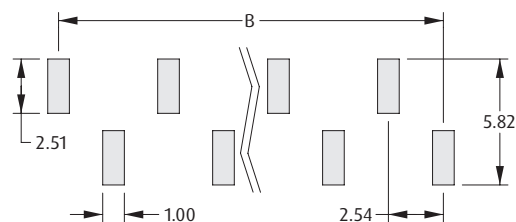
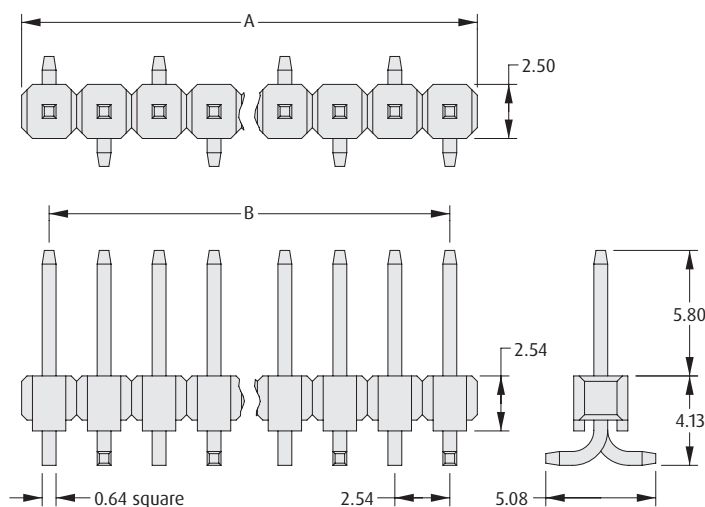
- Pin headers can be cut into smaller sizes.
- Also available with variable dimensions.
- Tape and Reel option supplied fitted with Pick and Place cap, contact [technical@harwin.com](mailto:technical@harwin.com) for availability.
- Suitable for use with female connectors and jumper sockets shown on previous pages.



### SINGLE ROW

### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)



Recommended PC Board Pattern

### HOW TO ORDER

**M20 - 877 XX XX X**

#### SERIES CODE

#### NO. OF CONTACTS PER ROW

02 to 20, 25, 36	Loose
02 to 20	Pick and Place cap, tube
02, 03, 04, 06, 08, 10, 15, 19	Tape & Reeled

#### PACKAGING

<b>Blank</b>	Loose
<b>P</b>	Pick and Place cap, tube
<b>R</b>	Tape & Reeled

#### FINISH

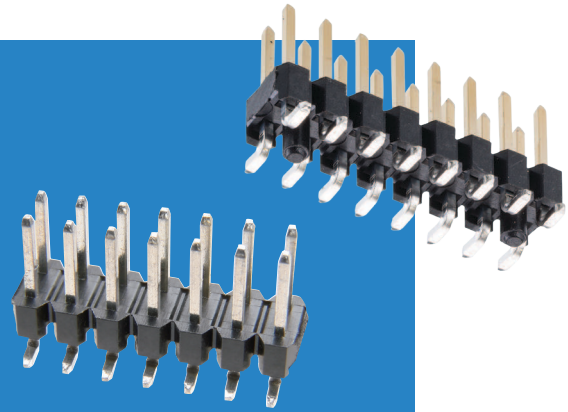
<b>42</b>	Gold + Tin
<b>46</b>	Tin

All dimensions in mm.

# M20 Connectors

## Male Vertical Surface Mount Double Row

- Pin headers without pegs can be cut into smaller sizes.
- Peg option to assist with location during surface mount process.
- Also available with variable dimensions.
- Tape and Reel option supplied fitted with Pick and Place cap, contact [technical@harwin.com](mailto:technical@harwin.com) for availability.
- Suitable for use with female connectors and jumper sockets shown on previous pages.



2.54mm (.100") PITCH

WITHOUT PEGS	CALCULATION	WITH PEGS	CALCULATION
	<b>A</b> 2.54 x No. of contacts per row		<b>A</b> 2.54 x No. of contacts per row
	<b>B</b> 2.54 x (No. of contacts per row - 1)		<b>B</b> 2.54 x (No. of contacts per row - 1)
			<b>C</b> B - 2.54
<p>Recommended PC Board Pattern</p>		<p>Recommended PC Board Pattern</p>	

## HOW TO ORDER

**M20 - 87 X XX XX X**

### SERIES CODE

### TYPE

<b>6</b>	Without Pegs
<b>5</b>	With Pegs

### NO. OF CONTACTS PER ROW

<b>02 to 20, 25, 36</b>	Without Pegs (Loose)
<b>02 to 20, 23</b>	Without Pegs (Tube)
<b>02 to 08, 10</b>	With Pegs (Loose)
<b>02, 03, 05, 07, 08, 10</b>	With Pegs (Reeled)

### PACKAGING

<b>Blank</b>	Loose
<b>P</b>	Pick and Place cap, tube (Without Pegs)
<b>R</b>	Tape & Reeled

### FINISH

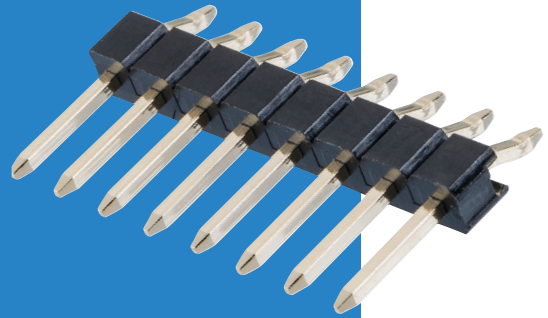
<b>42</b>	Gold + Tin
<b>46</b>	Tin (Without Pegs)

All dimensions in mm.

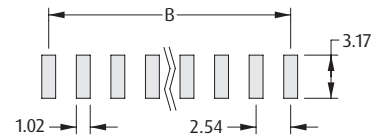
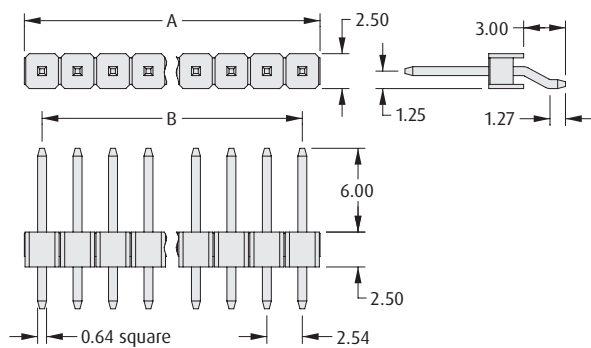
# M20 Connectors

## Male Horizontal Surface Mount Single Row

- Pin headers can be cut into smaller sizes.
- Contact [technical@harwin.com](mailto:technical@harwin.com) for Tape and Reel options.
- Suitable for use with female connectors and jumper sockets shown on previous pages.
- Horizontal orientation for 90°C board-to-board applications.



### STANDARD PROFILE

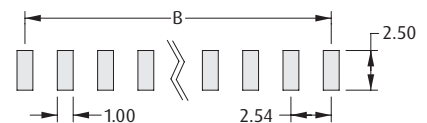
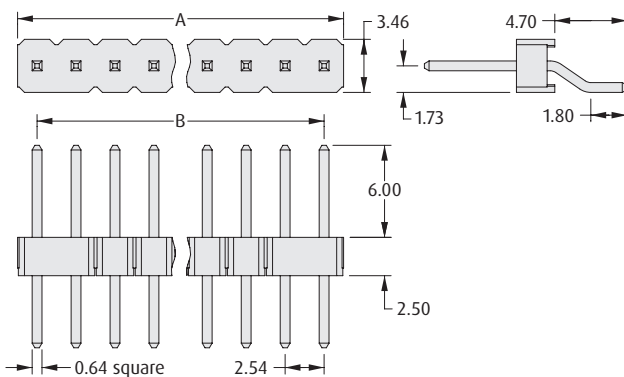


Recommended PC Board Pattern

#### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)

### HIGH PROFILE



Recommended PC Board Pattern

### HOW TO ORDER

**M20 - 8XX XX 05 X**

#### SERIES CODE

#### TYPE

<b>889</b>	Standard Profile
<b>890</b>	High Profile

#### NO. OF CONTACTS PER ROW

<b>02 to 06, 08, 10</b>	Standard Profile
<b>03 to 20</b>	High Profile

#### PACKAGING

<b>Blank</b>	Loose
<b>R</b>	Tape & Reeled (Standard Profile)

#### FINISH

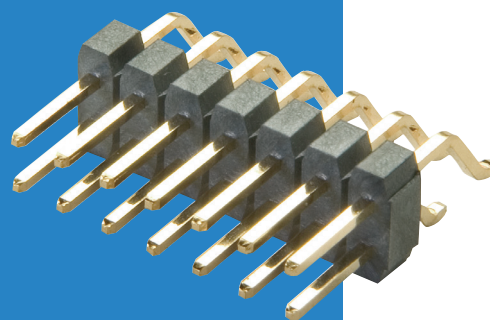
<b>05</b>	Gold (High Profile)
<b>45</b>	Gold (Standard Profile)

All dimensions in mm.

# M20 Connectors

## Male Horizontal Surface Mount Double Row

- Pin headers can be cut into smaller sizes.
- Contact [technical@harwin.com](mailto:technical@harwin.com) for Tape and Reel options.
- Suitable for use with female connectors and jumper sockets shown on previous pages.
- Horizontal orientation for 90° board-to-board applications.

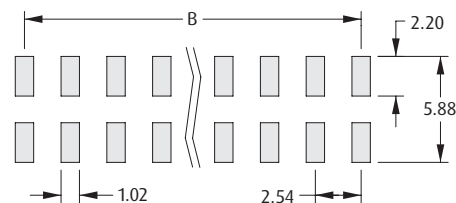
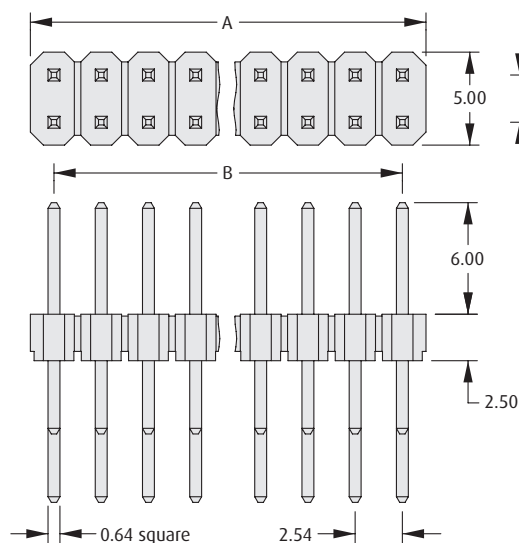


2.54mm (.100") PITCH

### DOUBLE ROW

### CALCULATION

<b>A</b>	2.54 x No. of contacts per row
<b>B</b>	2.54 x (No. of contacts per row - 1)



Recommended PC Board Pattern

### HOW TO ORDER

**M20 - 891 XX 05**

SERIES CODE

FINISH

05 Gold

NO. OF CONTACTS PER ROW

02 to 20

All dimensions in mm.

# M20 Connectors

## Pin Header Variants

- ❖ If you are unable to specify the connector you require from our standard range of M20 connectors, use the order code below to create an application-specific connector.
- ❖ Contact [technical@harwin.com](mailto:technical@harwin.com) for further information, or search online for M20-XXX.
- ❖ Suitable for use with female connectors shown on previous pages.

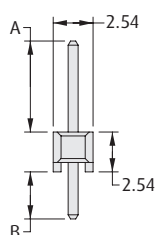


## TERMINATION STYLES

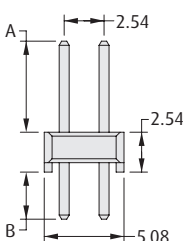
### Vertical PC Tail

- ❖ Pin section is 0.64mm square.
- ❖ PCB mounting hole is Ø1.00mm.

#### V Series



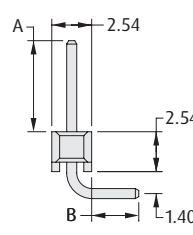
#### W Series



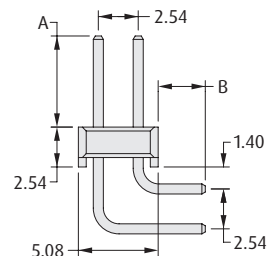
### Horizontal PC Tail

- ❖ Pin section is 0.64mm square.
- ❖ PCB mounting hole is Ø1.00mm.
- ❖ Maximum B dimension is 6.00mm.

#### H Series



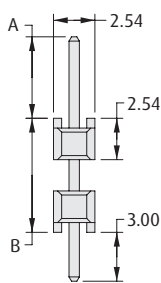
#### J Series



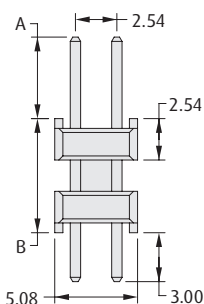
### Extended PC Tail

- ❖ Pin section is 0.64mm square.
- ❖ PCB mounting hole is Ø1.00mm.

#### E Series



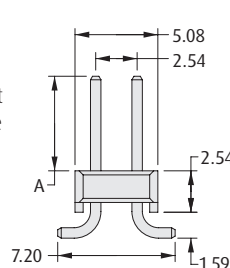
#### F Series



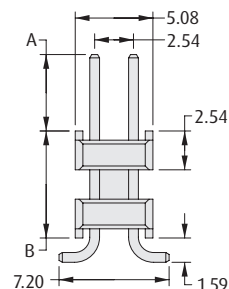
### Vertical SMT Extended SMT

- ❖ Pin section is 0.64mm square.
- ❖ For PCB pad layout see standard Male SMT pin header.
- ❖ B dimension is 000 on S series.

#### S Series



#### T Series



## HOW TO ORDER

**M20 - XXX XXX X XX XX**

**SERIES CODE**

**DIMENSION A**

Example: 7.8mm = 078

**DIMENSION B**

Example: 5.0mm = 050

### FINISH

45	Gold
46	Tin

### NO. OF CONTACTS PER ROW

02 to 40

SINGLE ROW	DOUBLE ROW	
V	W	Vertical
H	J	Horizontal
E	F	Extended
-	S	Surface Mount
-	T	Extended Surface Mount

All dimensions in mm.