

# Archer Kontrol Specification

## Materials

Housings:	High Temperature Plastic UL94V-0
Contacts:	Phosphor Bronze
Retaining strap:	Brass
Finish:	See individual pages
Contacts:	Gold on contact area, Tin on tails
Retaining strap:	Tin

## Electrical

Current:	1.2A max per contact
Voltage proof:	500V AC for 1 minute
Contact resistance:	25mΩ max
Insulation resistance:	10GΩ min
Data rate:	Up to 3GBits/s

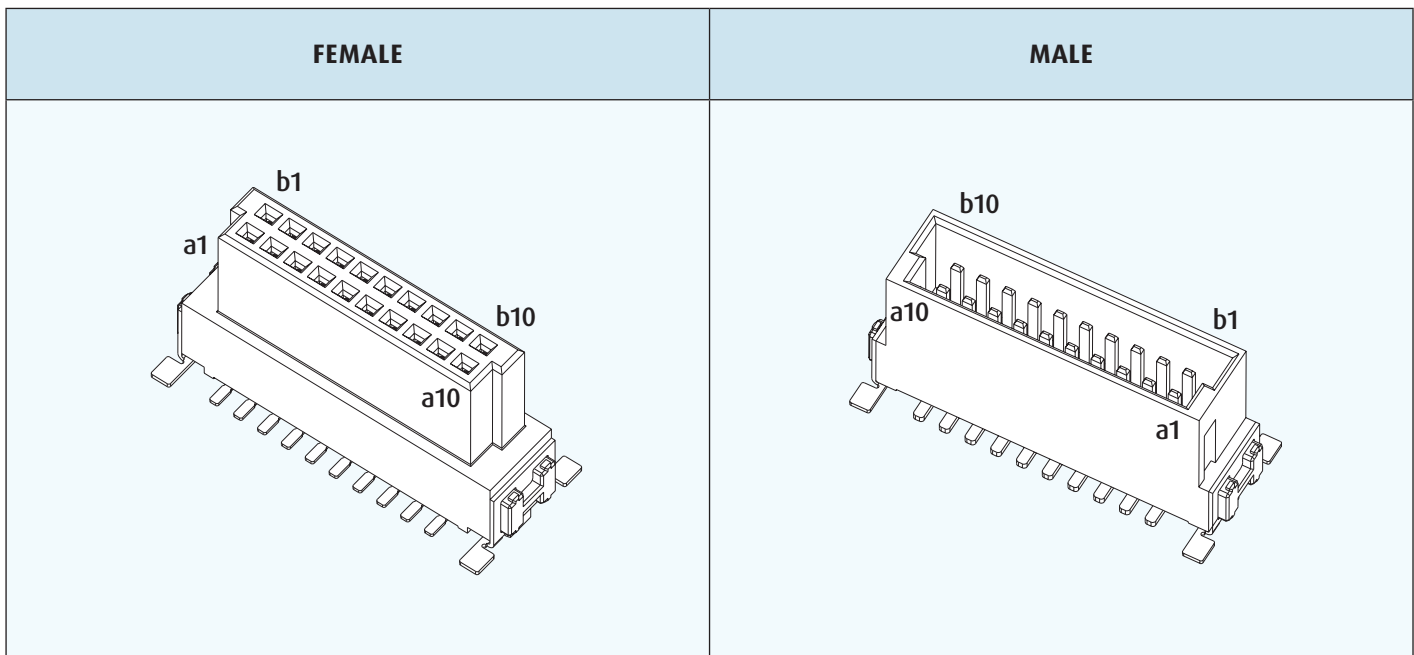
## Mechanical

Durability:	500 operations
Insertion force (max):	0.8N per contact
Withdrawal force (min):	0.2N per contact

## Environmental

Operating temperature:	-55°C to +125°C
Vibration sensitivity:	10Hz to 2000Hz, 1.52mm, 196m/s <sup>2</sup> (20G), duration 12h
Solderability:	245°C for 5 seconds
Soldering heat resistance:	260°C for 10 seconds

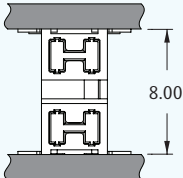
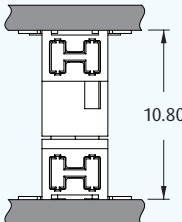
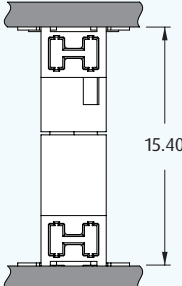
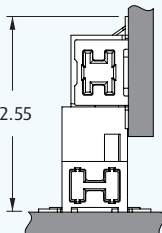
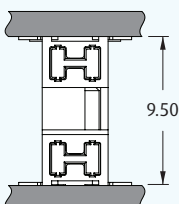
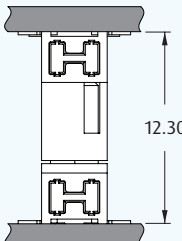
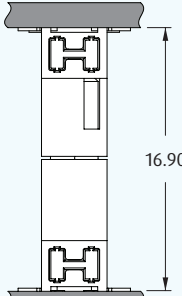
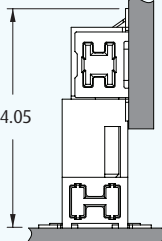
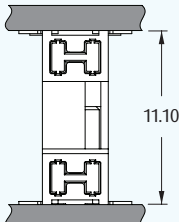
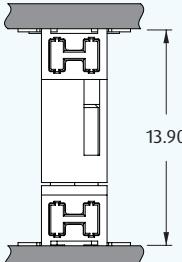
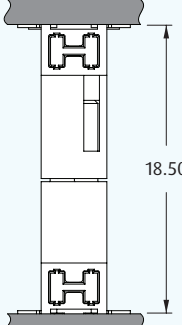
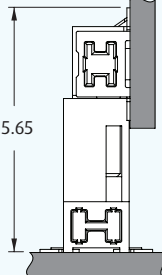
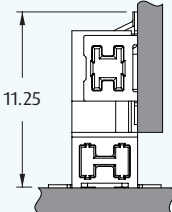
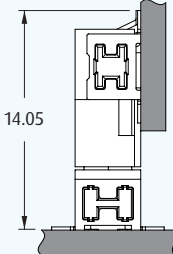
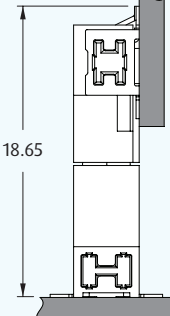
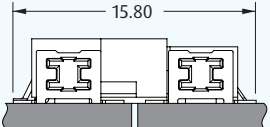
## Pin Numbering



All dimensions in mm.

# Archer Kontrol Mating Profiles

❖ Mating heights shown in fully mated condition. Product can be used up to 1.5mm separated and still perform to the same specifications.

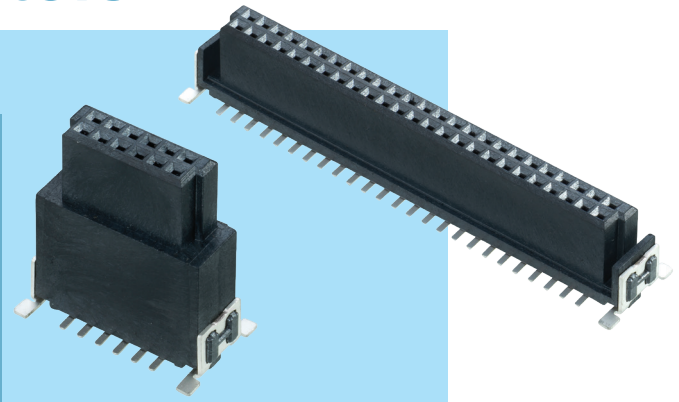
MALE			FEMALE				
			VERTICAL SMT			HORIZONTAL SMT	
			6.25mm HEIGHT	9.05mm HEIGHT	13.65mm HEIGHT		
VERTICAL SMT			6.75mm HEIGHT				
			8.25mm HEIGHT				
			9.85mm HEIGHT				
HORIZONTAL SMT							

All dimensions in mm.

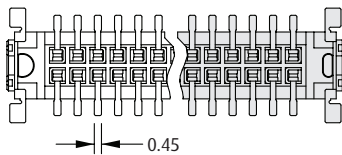
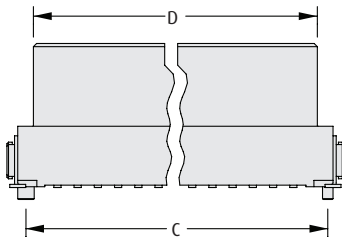
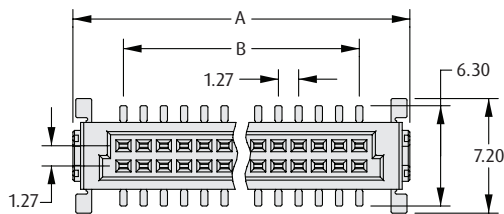
# Archer Kontrol Connectors

## Female Vertical Surface Mount

- ❖ Suitable for parallel board-to-board (mezzanine stacking) or motherboard-to-daughterboard configurations.
- ❖ Choice of three height options.
- ❖ Polarized and shrouded housing design.
- ❖ Location pegs and tape & reel packaging for automated assembly processes.

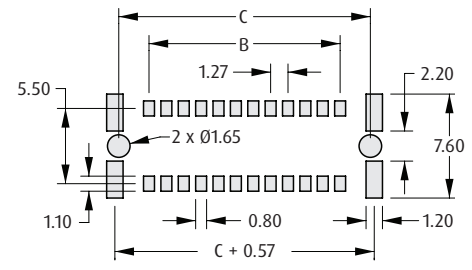


### VERTICAL



### CALCULATION

<b>A</b>	$B + 6.35$
<b>B</b>	$0.635 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 4.42$
<b>D</b>	$B + 3.02$



Recommended PC Board Pattern

### HOW TO ORDER

**M55 - 60 X XX 42 R**

#### SERIES CODE

#### CONNECTOR HEIGHT

<b>0</b>	H = 6.25mm
<b>1</b>	H = 9.05mm
<b>2</b>	H = 13.65mm

#### PACKAGING

<b>R</b>	Tape & Reeled
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#### FINISH

<b>42</b>	Gold + Tin
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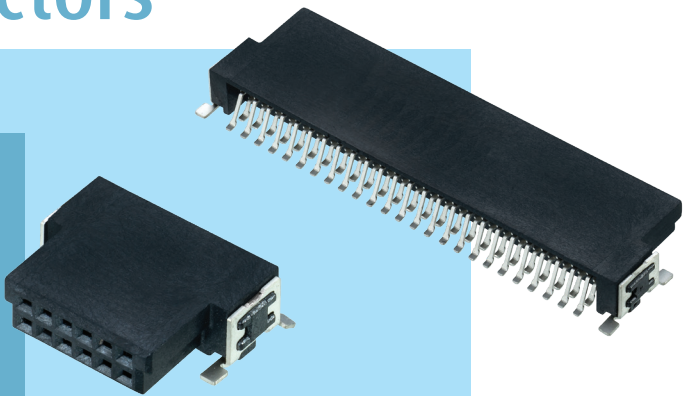
#### TOTAL NO. OF CONTACTS

12, 16, 20, 26, 32, 40, 50, 68, 80

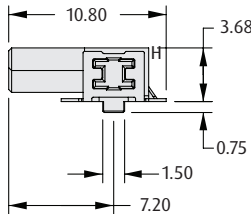
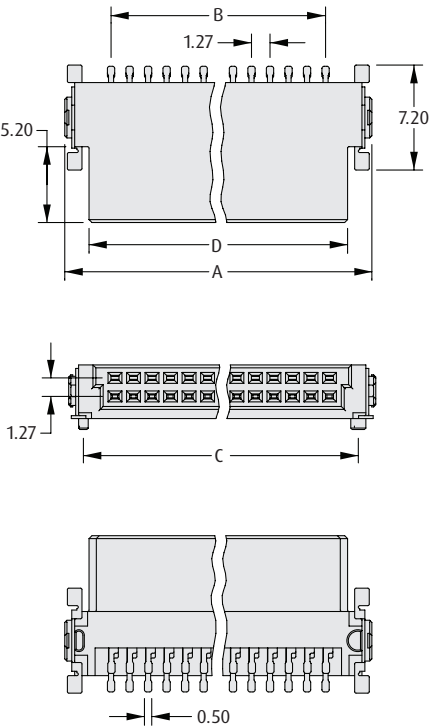
# Archer Kontrol Connectors

## Female Horizontal Surface Mount

- ❖ Suitable for coplanar (edge-to-edge) or motherboard-to-daughterboard configurations.
- ❖ Hold-down SMT retaining straps for additional retention to the board.
- ❖ Polarized and shrouded housing design.
- ❖ Location pegs and tape & reel packaging for automated assembly processes.

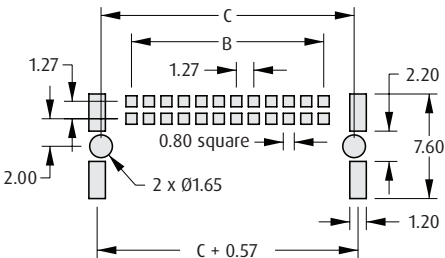


### HORIZONTAL



### CALCULATION

<b>A</b>	$B + 6.35$
<b>B</b>	$0.635 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 4.42$
<b>D</b>	$B + 3.02$



Recommended PC Board Pattern

### HOW TO ORDER

**M55 - 610 XX 42 R**

**SERIES CODE**

### PACKAGING

**R** Tape & Reeled

### FINISH

**42** Gold + Tin

### TOTAL NO. OF CONTACTS

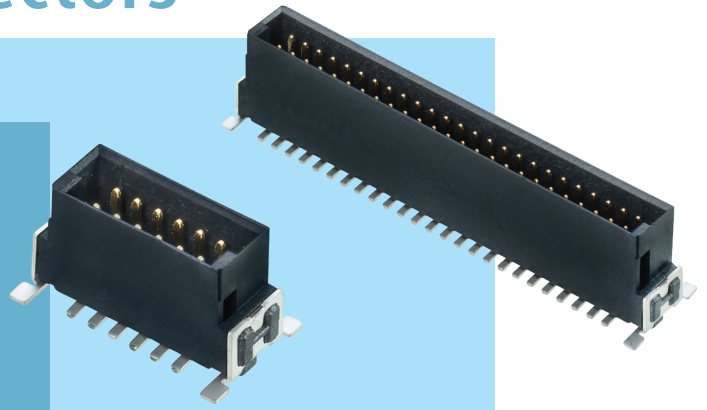
12, 16, 20, 26, 32, 40, 50, 68, 80

All dimensions in mm.

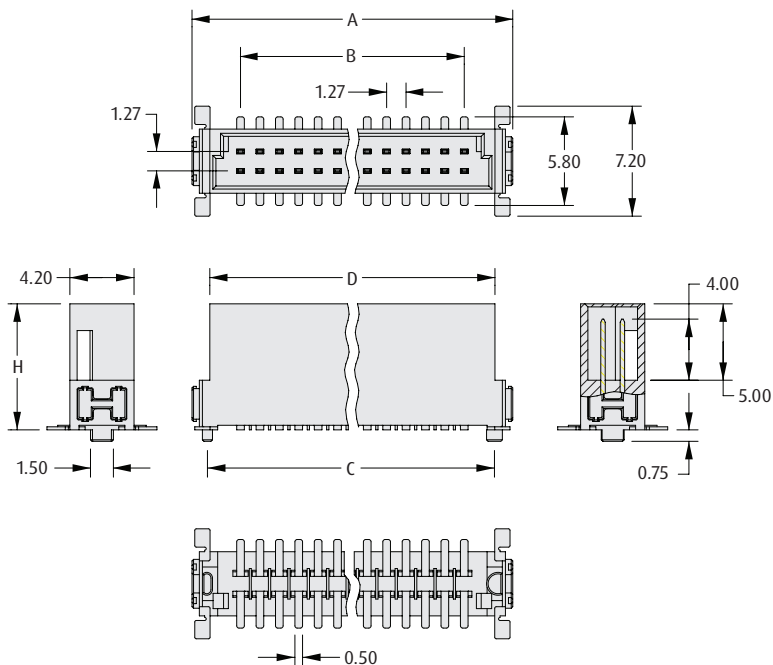
# Archer Kontrol Connectors

## Male Vertical Surface Mount

- ❖ Suitable for parallel board-to-board (mezzanine stacking) or motherboard-to-daughterboard configurations.
- ❖ Choice of three height options.
- ❖ Polarized and shrouded housing design.
- ❖ Location pegs and tape & reel packaging for automated assembly processes.

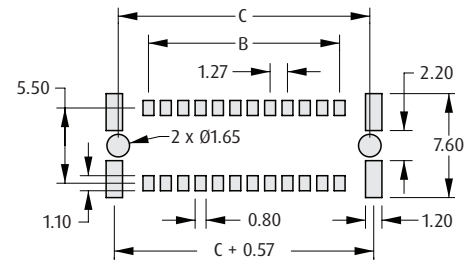


### VERTICAL



### CALCULATION

<b>A</b>	$B + 6.35$
<b>B</b>	$0.635 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 4.42$
<b>D</b>	$B + 4.02$



Recommended PC Board Pattern

### HOW TO ORDER

**M55 - 70 X XX 42 R**

#### SERIES CODE

#### CONNECTOR HEIGHT

<b>0</b>	H = 6.75mm
<b>1</b>	H = 8.25mm
<b>2</b>	H = 9.85mm

#### PACKAGING

<b>R</b>	Tape & Reeled
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#### FINISH

<b>42</b>	Gold + Tin
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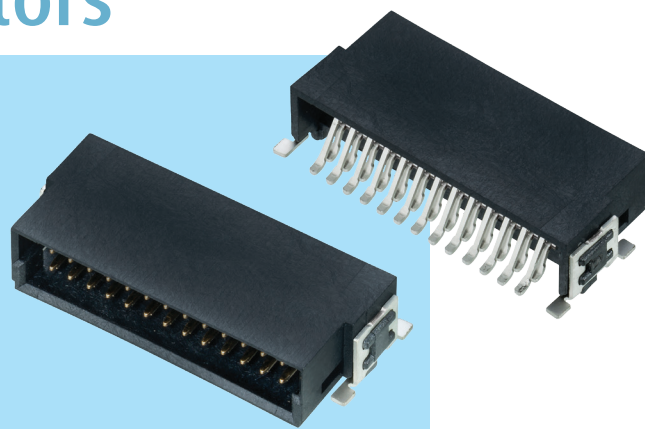
#### TOTAL NO. OF CONTACTS

12, 16, 20, 26, 32, 40, 50, 68, 80

# Archer Kontrol Connectors

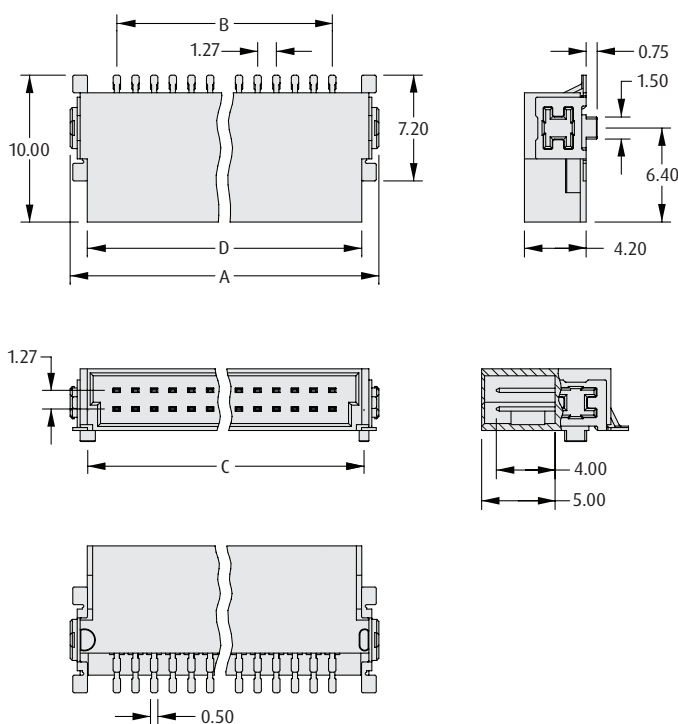
## Male Horizontal Surface Mount

- ❖ Suitable for coplanar (edge-to-edge) or motherboard-to-daughterboard configurations.
- ❖ Hold-down SMT retaining straps for additional retention to the board.
- ❖ Polarized and shrouded housing design.
- ❖ Location pegs and tape & reel packaging for automated assembly processes.



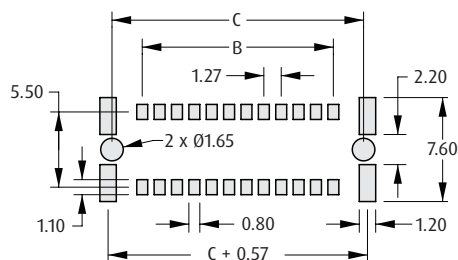
ARCHER KONTROL

### HORIZONTAL



### CALCULATION

<b>A</b>	$B + 6.35$
<b>B</b>	$0.635 \times (\text{Total No. of contacts} - 2)$
<b>C</b>	$B + 4.42$
<b>D</b>	$B + 4.02$



Recommended PC Board Pattern

### HOW TO ORDER

**M55 - 710 XX 42 R**

**SERIES CODE**

### PACKAGING

**R** Tape & Reeled

### FINISH

**42** Gold + Tin

### TOTAL NO. OF CONTACTS

12, 16, 20, 26, 32, 40, 50, 68, 80

All dimensions in mm.