

ATI ELECTRONIQUE

# CONNECTORS 2MM SERIES

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# 210 **SERIES**

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## INTRODUCTION

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210 series is a range of 2 mm pitch connectors for printed-circuit, created for low intensity applications.

Its small mass allows a self-using in severe environment. Its low profile allows a miniaturized layout.

211 series is available in 1 row from 2 to 17 ways in 7 sizes and 212 series is available in 2 rows from 4 to 34 ways in 11 sizes.

male

female



LF contacts /

### 212 series

### 211 series

4 LF contacts min.



2 LF contacts min.



6 LF contacts



3 LF contacts



8 LF contacts



4 LF contacts



10 LF contacts



5 LF contacts



12 LF contacts



6 LF contacts



14 LF contacts



7 LF contacts



16 LF contacts



17 LF contacts max.



18 LF contacts



20 LF contacts



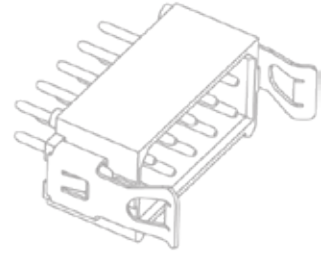
26 LF contacts



34 LF contacts max.



# 210 SERIES

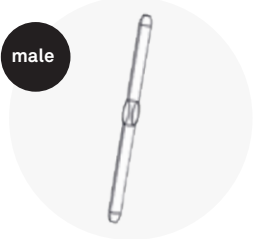


## An Introduction to the 210 SERIES

This series of connectors have a large range termination styles :

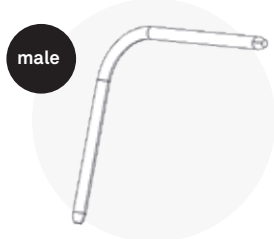
- PCB mounting (straight and right angle)
- SMT
- Crimp contacts

### Terminations



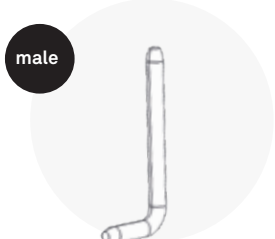
male

*Straight  
PCB contacts  
T - X - Y*



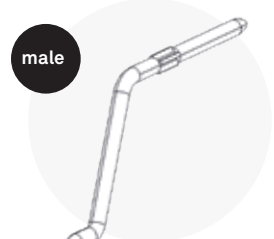
male

*Right angle  
PCB contacts  
L*



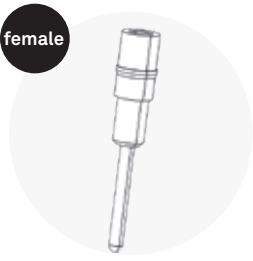
male

*Straight  
SMT contacts  
R*



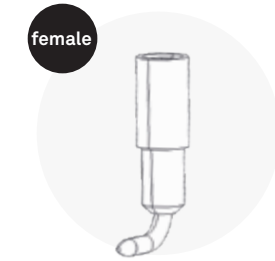
male

*Right angle  
SMT contacts  
S*



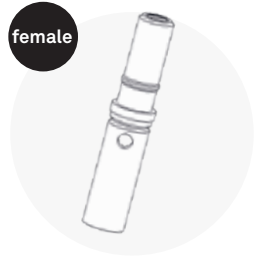
female

*Straight  
PCB contacts  
T - N*



female

*Straight  
SMT contacts  
R (212 series only)*



female

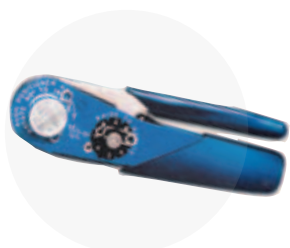
*Crimp  
contacts  
C/D*

### Accessories and tooling



*Latches and straps*

P. 19-21-23-25



*Tooling*

P. 109 to 110

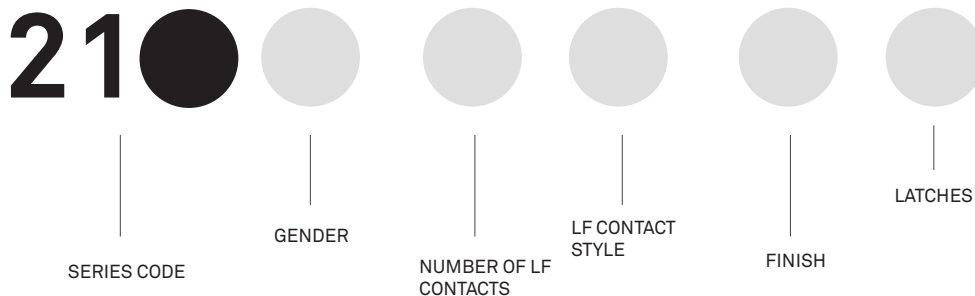


## SPACING CONNECTOR / MALE & FEMALE

F M	STRAIGHT T/N	STRAIGHT SMT R	CRIMP C/D
PCB STRAIGHT T/X/Y	 7.23	 7.85	 10.2 max
PCB RIGHT ANGLE L	 7.98	 10.60	 15.1 max.
STRAIGHT SMT R	 7.85	 8.45	 10.50
RIGHT ANGLE SMT S	 11.85	 12.45	 14.50
CRIMP C/D	 10.94 Max	 11.28	 13.60 max.

### HOW TO ORDER / ASSEMBLED

FOR 211 SERIES please contact us



### GLOSSARY / HOW TO ORDER

#### SERIES CODE

211/One row  
212/Two rows

#### GENDER

F/Female  
M/Male

#### NUMBER OF LF CONTACTS

02 - 03 - 04 - 05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

#### LF CONTACT STYLES

T/Straight on PCB male or female  
X-Y/Straight on PCB male  
N/Straight on PCB short female  
L/Right angle on PCB male  
R/Straight SMT male or female  
S/Right angle SMT male  
C/Crimp 24-28 AWG female  
D/Crimp 22 AWG female

#### FINISH

- 01/Gold (crimp contacts)
- 03/Gold + Tin/Lead
- 04/Gold + Tin

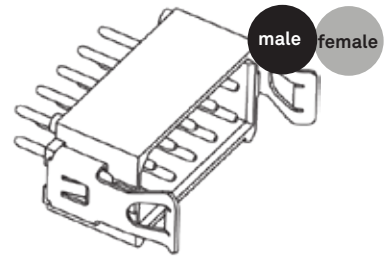
RoHS RULES (w/ lead) :

- No RoHS (with lead)
- RoHS (without lead)

#### LATCHES

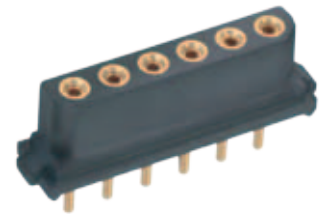
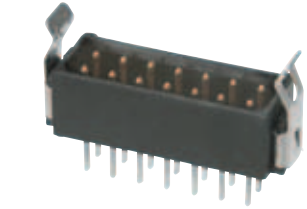
U/Unlatched (male or female)  
L/Latched (male only)  
LC/Latches for straight SMT (male only)  
LR/Latches for right angle SMT (male only)

# 210 SERIES

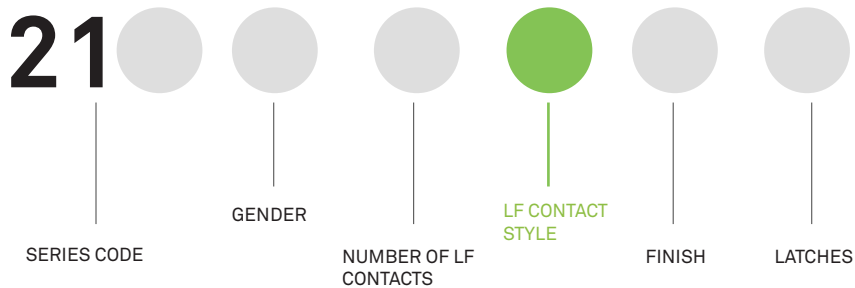


## PCB Connectors with straight LF contacts

- 1 Polarised mouldings
- 2 Fully shrouded male contacts
- 3 3 tail lengths
- 4 Retaining strap in option for male connector



### HOW TO ORDER / ASSEMBLED



### GLOSSARY / HOW TO ORDER

**GENDER**  
F/Female  
M/Male

**SERIES CODE**  
211/One row  
212/Two rows

**NUMBER OF LF CONTACTS**  
02 - 03 - 04 -05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

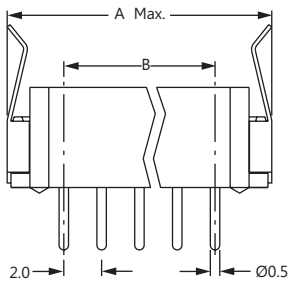
**LF CONTACT STYLE**  
N/1.1mm Tail, female only  
T/3mm Tail, male or female  
X/9.3mm Tail, male only  
Y/5.3mm Tail, male only

**LATCHES**  
U/Unlatched (male or female)  
L/Latched (male only)

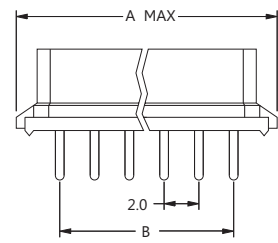
**FINISH**  
● 03/Gold + Tin/Lead  
● 04/Gold + Tin

**RoHS RULES (w/ lead) :**  
● No RoHS (with lead)  
● RoHS (without lead)

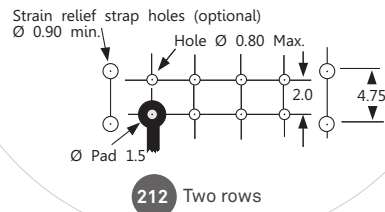
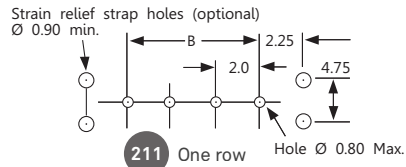
## DIMENSIONS / MALE



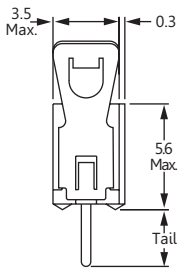
## DIMENSIONS / FEMALE



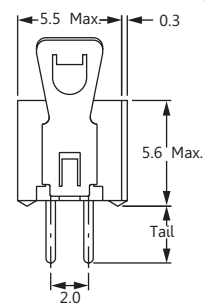
### PCB LAYOUT



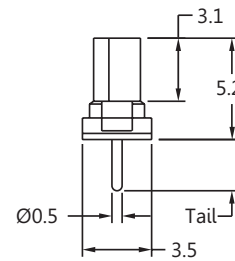
211 One row



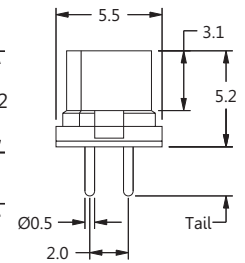
212 Two rows



211 One row



212 Two rows



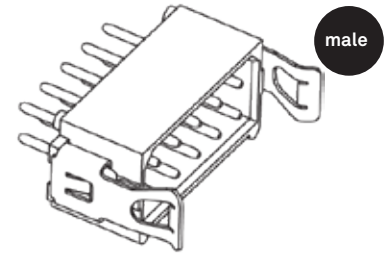
## RETAINING STRAP / MALE



Strap MP 6759 can be supplied with male connector.

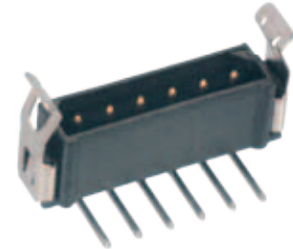


# 210 SERIES

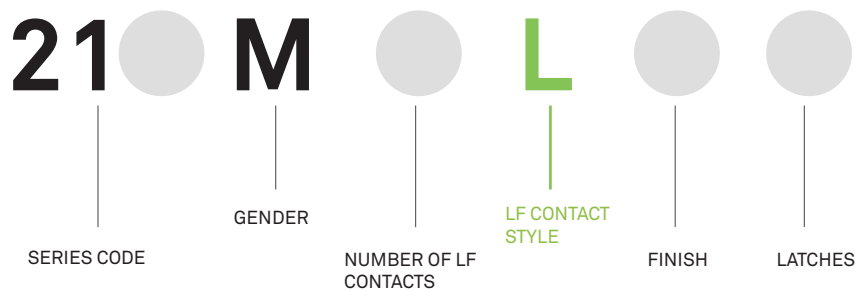


## PCB Male Connectors with right angle LF contacts

- 1 Polarised mouldings
- 2 Fully shrouded male contacts
- 3 Retaining strap in option for male connector



### HOW TO ORDER / ASSEMBLED



### GLOSSARY / HOW TO ORDER

**GENDER**  
M/Male

**SERIES CODE**  
211/One row  
212/Two rows

**NUMBER OF LF CONTACTS**  
02 - 03 - 04 - 05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

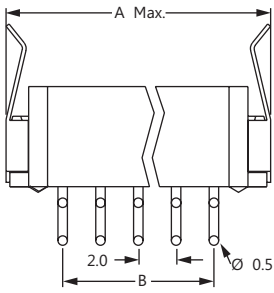
**LF CONTACT STYLE**  
L/Right angle male

**LATCHES**  
U/Unlatched (male or female)  
L/Latched (male only)

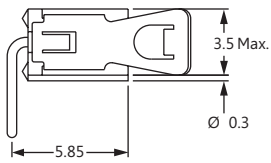
**FINISH**  
● 03/Gold + Tin/Lead  
● 04/Gold + Tin

**RoHS RULES (w/ lead) :**  
● No RoHS (with lead)  
● RoHS (without lead)

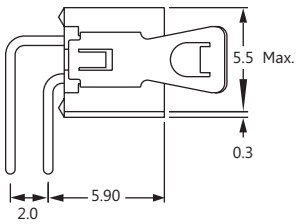
## DIMENSIONS / MALE



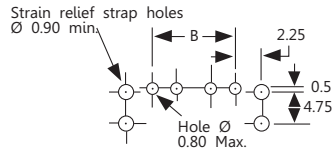
211 One row



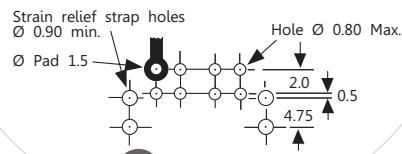
212 Two rows



## PCB LAYOUT



211 One row



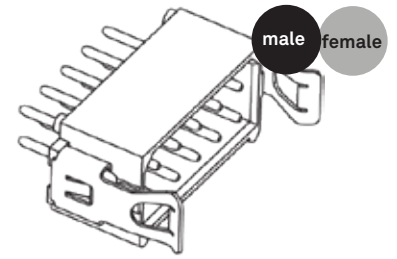
212 Two rows

## RETAINING STRAP / MALE



Strap MP 6759 can be supplied with male connector.

# 210 SERIES

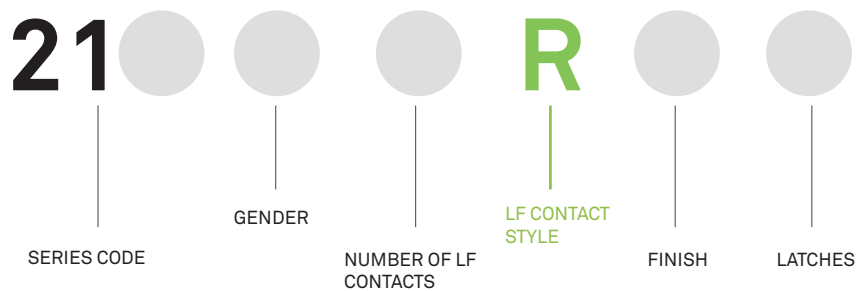


## PCB Connectors with straight SMT LF contacts

- 1 Polarised mouldings
- 2 Fully shrouded male contacts
- 3 SMT latches



### HOW TO ORDER / ASSEMBLED



### GLOSSARY / HOW TO ORDER

**GENDER**  
F/Female  
M/Male

**SERIES CODE**  
211/One row  
212/Two rows

**NUMBER OF LF CONTACTS**  
03 - 04 - 05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

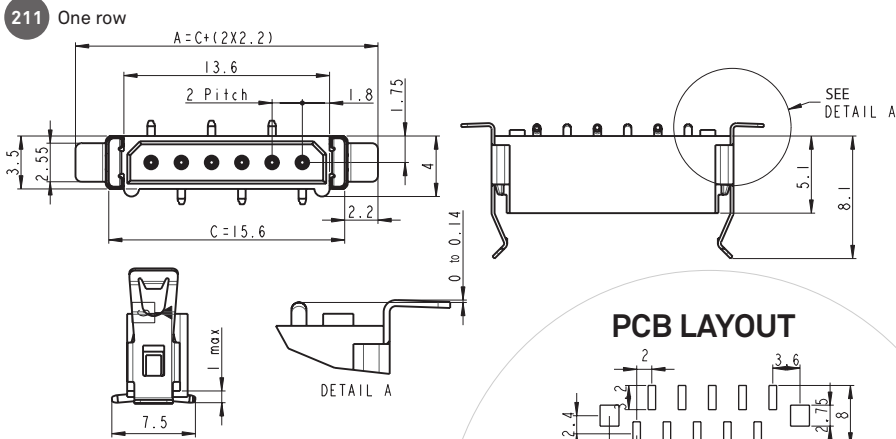
**LF CONTACT STYLE**  
R/Straight SMT

**LATCHES**  
U/Unlatched (male or female)  
L/Latched (male only)  
LC/Straight SMT Latches (male only)

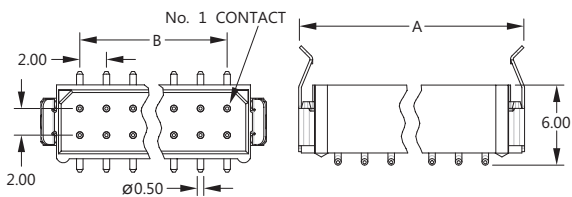
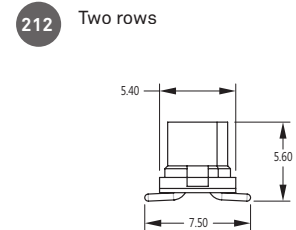
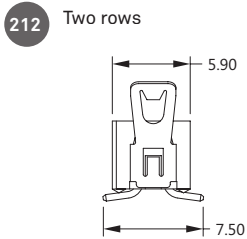
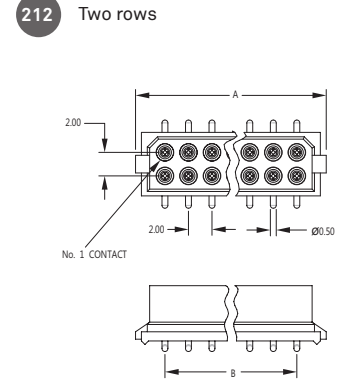
**FINISH**  
● 03/Gold + Tin/Lead  
● 04/Gold + Tin

**RoHS RULES (w/ lead) :**  
● No RoHS (with lead)  
● RoHS (without lead)

## DIMENSIONS / MALE



## DIMENSIONS / FEMALE



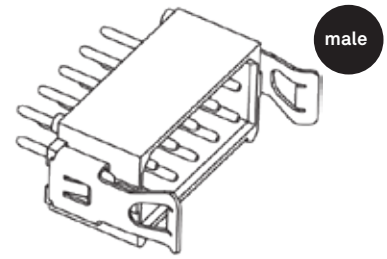
## SMT LATCHES / MALE



SMT latches are recommended but you can order the connector with traditional latches (code L instead of LC). In this case, strain relief strap can be ordered separately (code MP 6759).

*Pick and place option : consult us.*

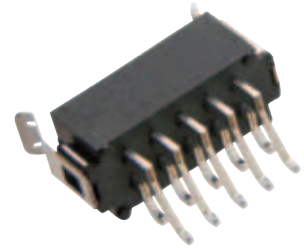
# 210 SERIES



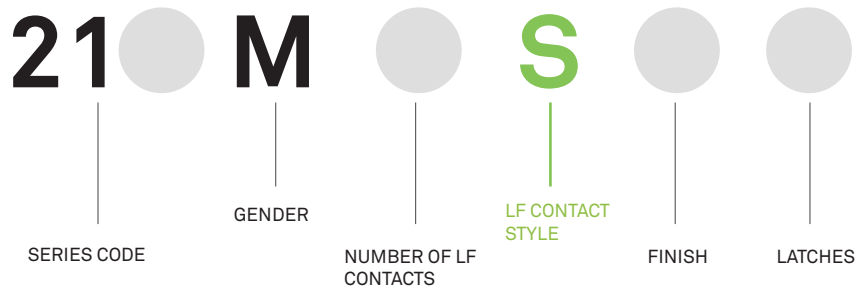
## PCB Connectors with right angle SMT LF contacts

- 1 Polarised mouldings
- 2 Fully shrouded male contacts
- 3 SMT latches

male



### HOW TO ORDER / ASSEMBLED



### GLOSSARY / HOW TO ORDER

**GENDER**  
M/Male

**SERIES CODE**  
211/One row  
212/Two rows

**NUMBER OF LF CONTACTS**  
02 - 03 - 04 - 05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

**LF CONTACT STYLE**  
S/Right angle SMT male

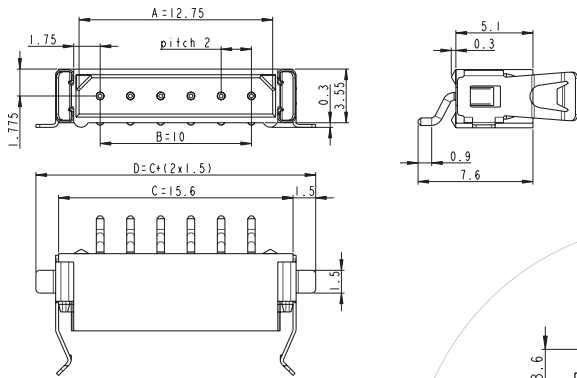
**LATCHES**  
U/Unlatched (male or female)  
L/Latched (male only)  
LR/Right angle SMT Latches (male only)

**FINISH**  
● 03/Gold + Tin/Lead  
● 04/Gold + Tin

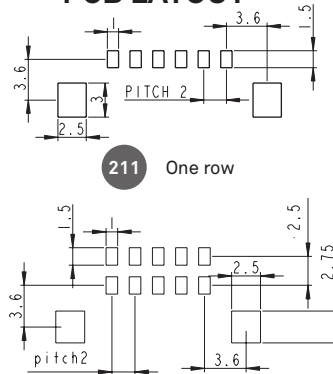
**RoHS RULES (w/ lead) :**  
● No RoHS (with lead)  
● RoHS (without lead)

## DIMENSIONS / MALE

### 211 One row



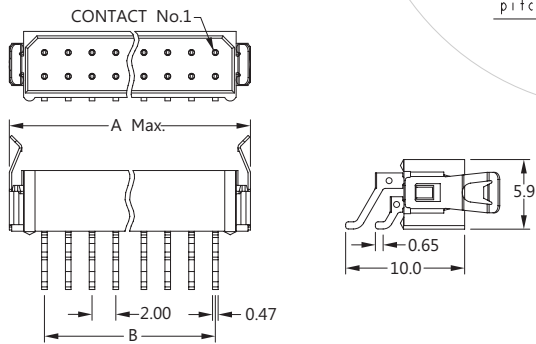
### PCB LAYOUT



### 211 One row

### 212 Two rows

### 212 Two rows



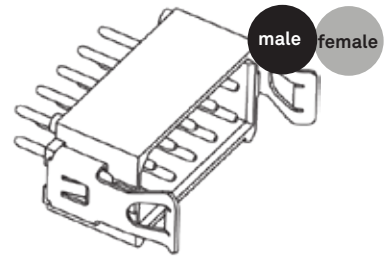
## SMT LATCHES / MALE



SMT latches are recommended but you can order the connector with traditional latches (code L instead of LR). In this case, strain relief strap can be ordered separately (code MP 6759).

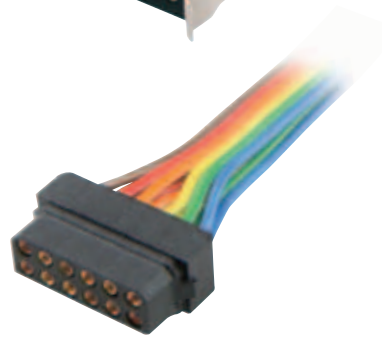
*Pick and place option : consult us.*

# 210 SERIES

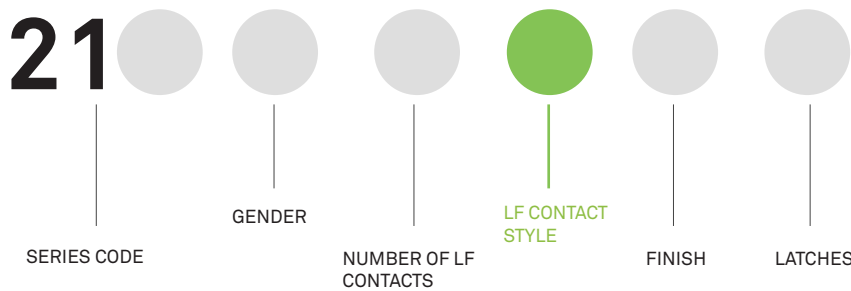


## Wire connectors with crimp LF contacts

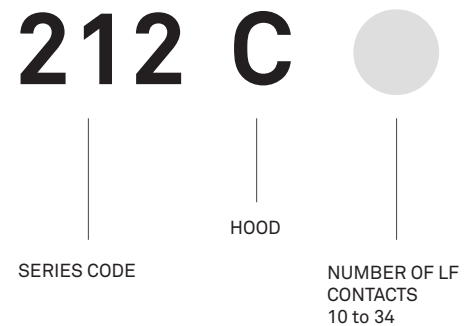
- 1 Contacts are rear insertable
- 2 Spare contacts available
- 3 Available hoods for 2 row connectors



### HOW TO ORDER / ASSEMBLED



### HOW TO ORDER / HOOD



### GLOSSARY / HOW TO ORDER

**GENDER**  
F/Female  
M/Male

**SERIES CODE**  
211/One row  
212/Two rows

**NUMBER OF LF CONTACTS**

Female :  
02 - 03 - 04 - 05 - 06 - 07 - 17/One row  
04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 26 - 34/Two rows

Male :  
02 - 03/One row  
04 - 06 - 08 - 10 - 12/Two rows

**LF CONTACT STYLE**

Spare female contacts are available : see part number below.  
C/Crimp 24-28 AWG  
D/Crimp 22 AWG

**LATCHES**

U/Unlatched (male or female)  
L/Latched (male only)

**FINISH**

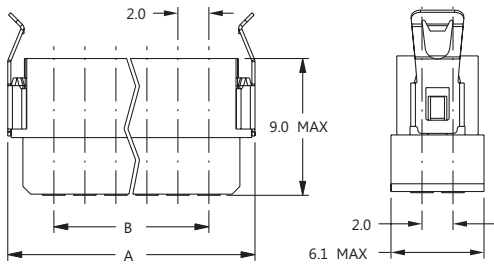
● 01/Gold

RoHS RULES (w/ lead) :

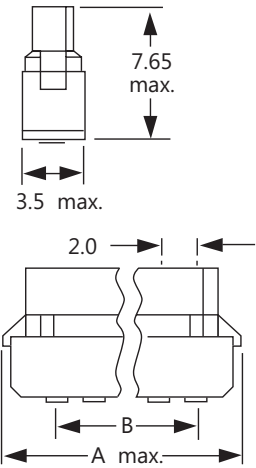
● No RoHS (with lead)

● RoHS (without lead)

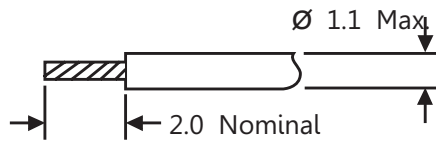
## DIMENSIONS / MALE



## DIMENSIONS / FEMALE



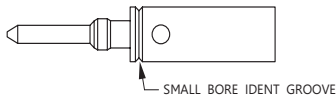
### WIRE STRIPPING DETAILS



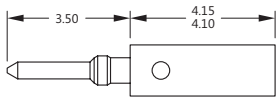
Crimp tool **M22520/2-01**  
 Positioner **MP6818**  
 Contact insertion/removal tool **220S03**

## CONTACT / MALE

C - Small Bore (24-28 AWG) : Code B741 C21

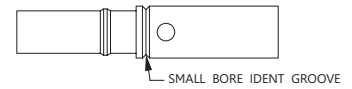


D - Large Bore (22 AWG) : Code B741 C22

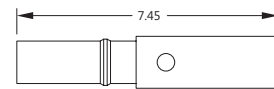


## CONTACT / FEMALE

C - Small Bore (24-28 AWG) : Code B741 C01



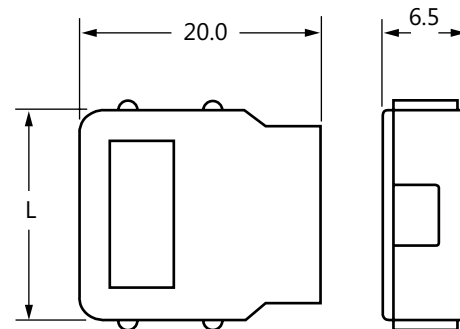
D - Large Bore (22 AWG) : Code B741 C03



## HOODS / (for 212 connector only)

Available from 10 to 34 contacts.

For use with female crimp connectors and unlatched crimp male connectors.



L = Number of LF contacts + 7



FOR TOOLS SEE TECHNICAL INDEX (PAGE 109)



ATI reserves the right to discontinue the manufacture or change specifications without prior notice, or any parts illustrated in this data sheet.

For more information, please take advice.

Edité en 1500 exemplaires par la société ATI ELECTRONIQUE  
Réalisé par Aircorp-Média et Imprimédia  
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Avril 2011

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