

# MR series

## Rectangular Connectors

### Outline

The MR series of connectors are small-sized rectangular connectors developed for data terminal equipment. The connector provides highly reliable flat terminals, and has been developed with a view of improving cost efficiency.

### Features

- Provides a dual mechanism of screws and spring-locks to withstand any shock.
- Provides a dust-tight mechanism capable of withstanding environments.
- Best suited for downsizing equipment due to the robust smaller-size, lightweight, and high density.
- Provides a case for relay connections.

### Principal Applications

Factory automation, communications equipment, data terminal equipment, instrumentation equipment, medical equipment, leisure electronic equipment, etc.

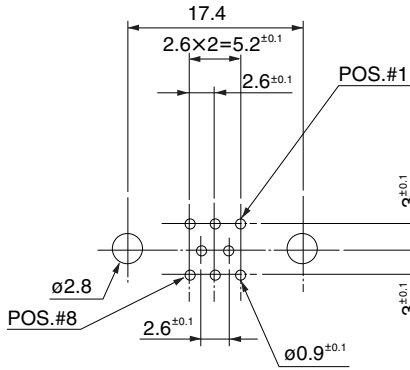
### Electrical Characteristics

Rated voltage	300V AC (r.m.s.)
Rated current	3 A/pin
Insulation resistance	Over 1000 megohms (at 500V DC)
Dielectric withstanding voltage	1000V AC (r.m.s.)
Contact resistance	7 (30) milliohms or less The value enclosed within parentheses ( ) is the contact resistance for right-angle type connectors.

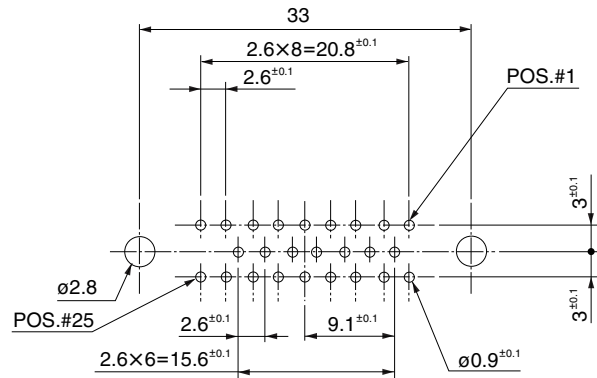
#### Document Disclaimer

- When placing orders with us, minimum order quantities are set for every product.
- Be sure to contact us before starting preliminary design of PCBs using our connectors.
- The specifications and information shown in the catalog are subject to change without notice.

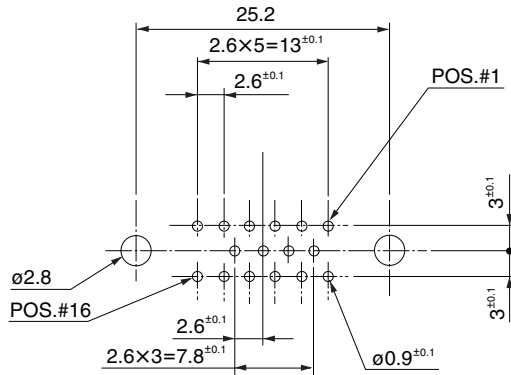
# Recommended PCB layout for straight through hole type female connectors



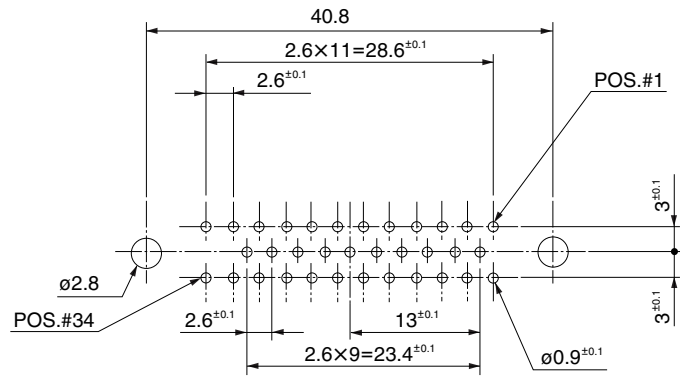
8-contact connector



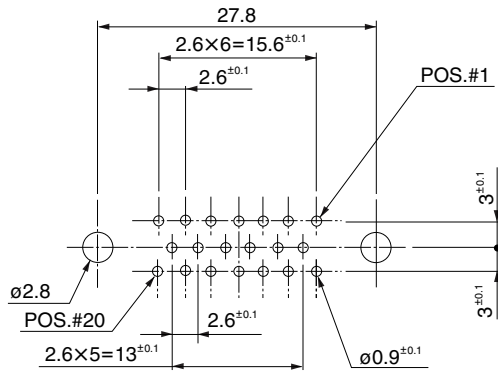
25-contact connector



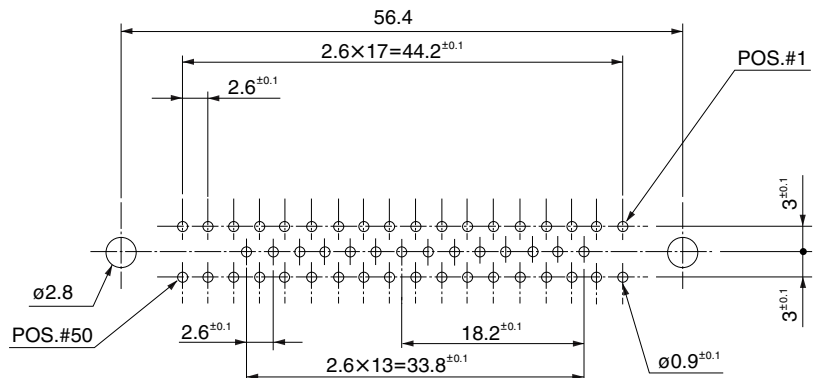
16-contact connector



34-contact connector



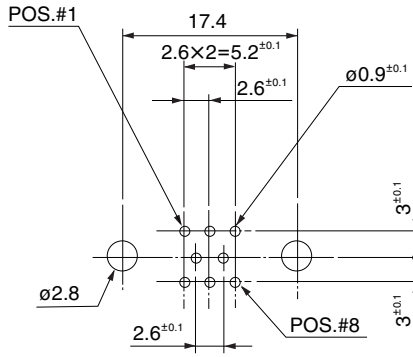
20-contact connector



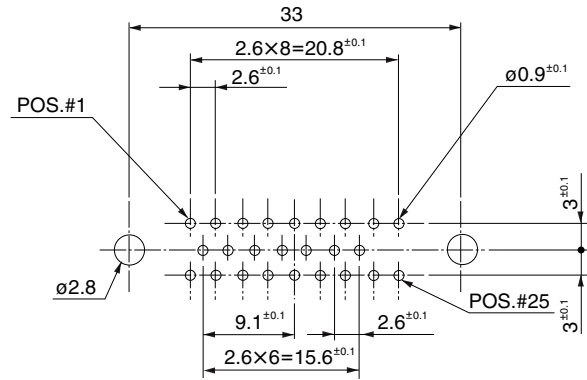
50-contact connector

**Note:** The dimensions shown in these figures are on the PCB mounted face.

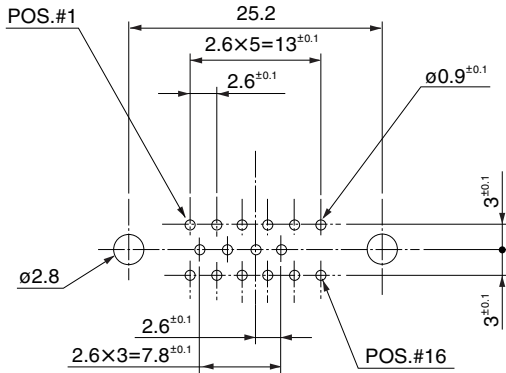
# Recommended PCB layout for straight through hole type male connectors



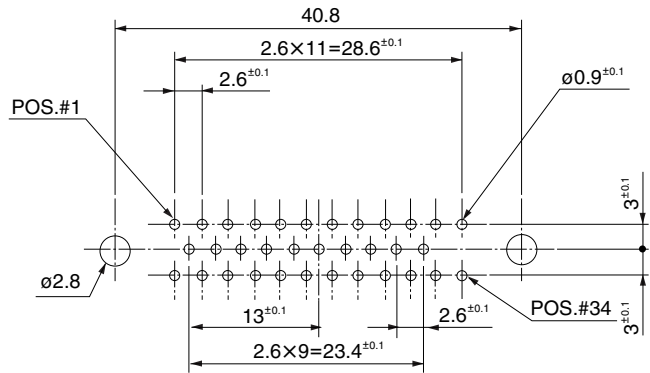
8-contact connector



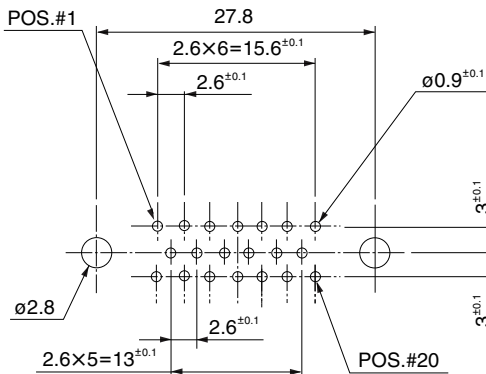
25-contact connector



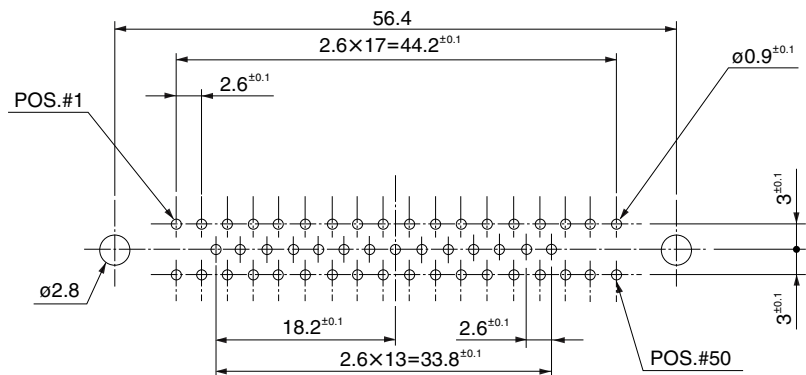
16-contact connector



34-contact connector



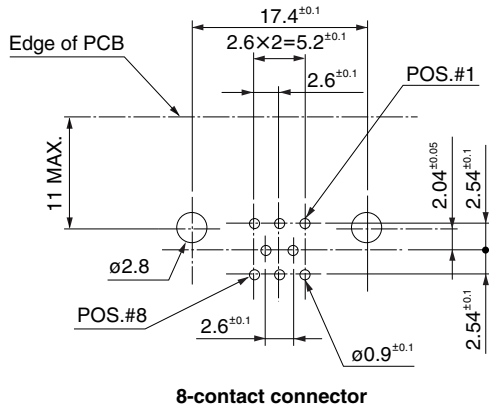
20-contact connector



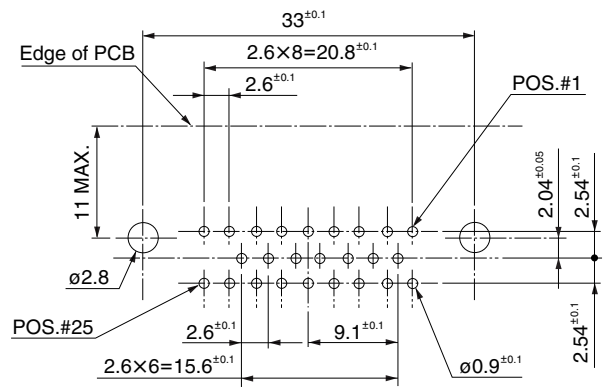
50-contact connector

**Note:** The dimensions shown in these figures are on the PCB mounted face.

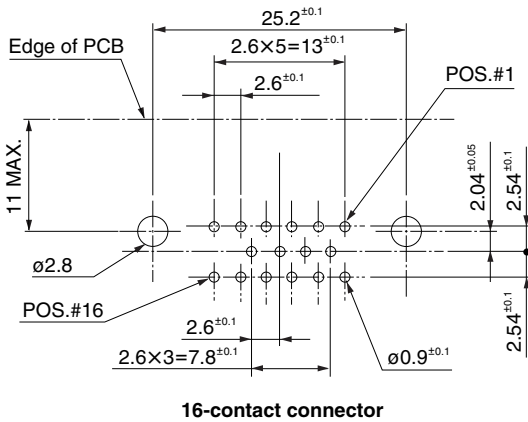
# Recommended PCB layout for right-angle through hole female connectors



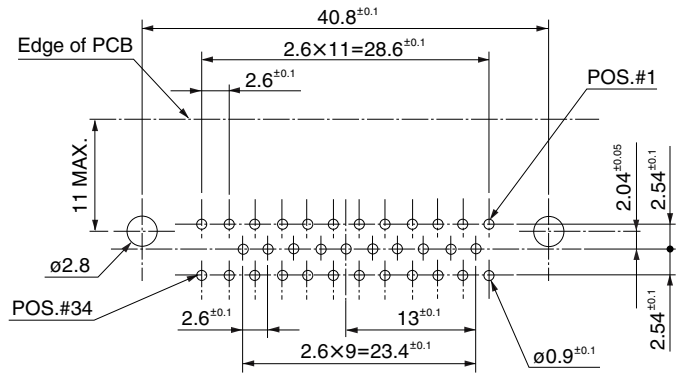
8-contact connector



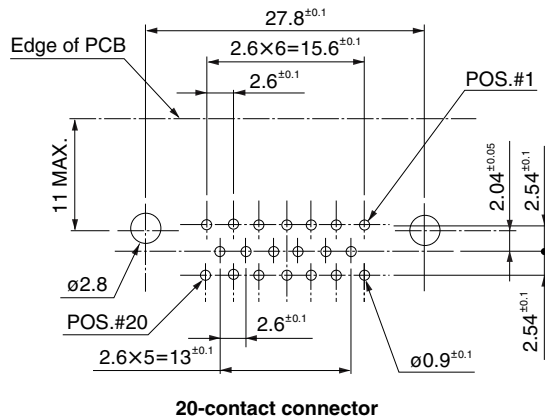
25-contact connector



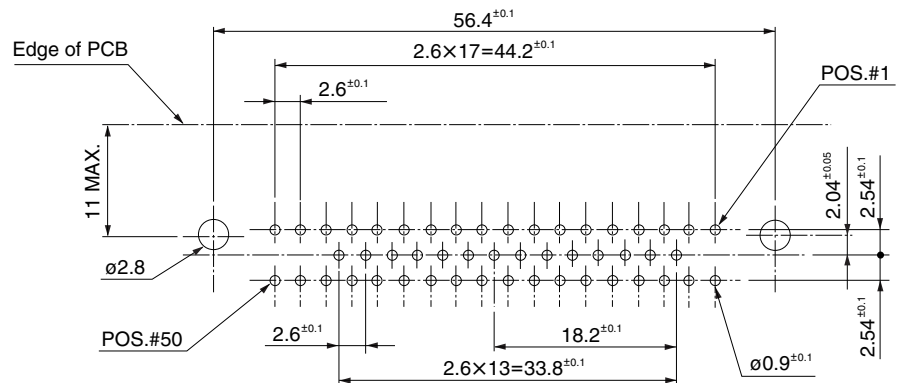
16-contact connector



34-contact connector



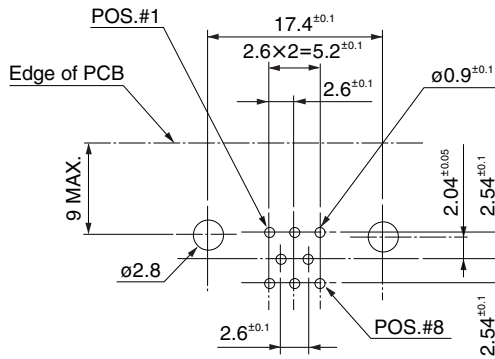
20-contact connector



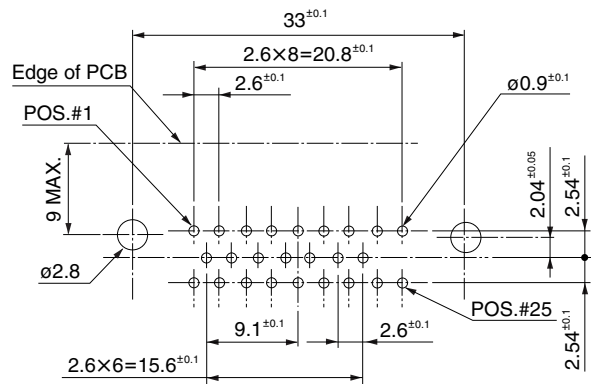
50-contact connector

**Note:** The dimensions shown in these figures are on the PCB mounted face.

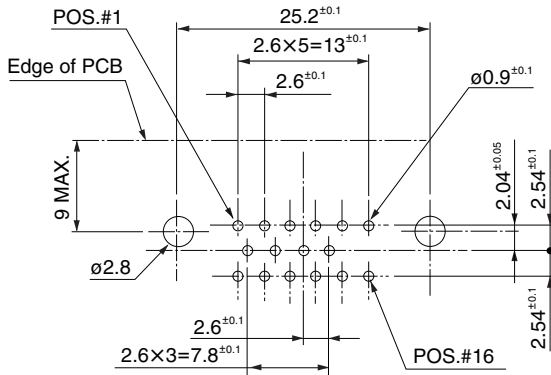
# Recommended PCB layout for right-angle through hole type male connectors



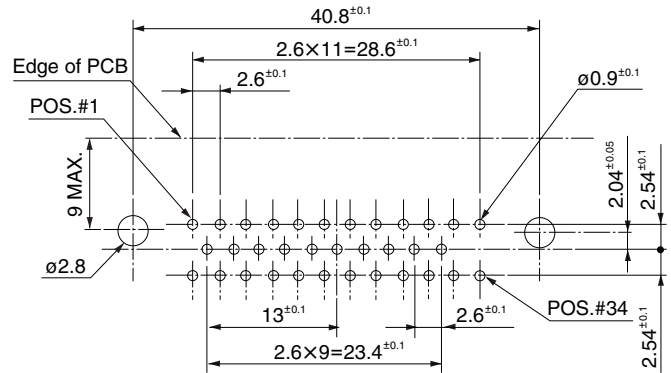
8-contact connector



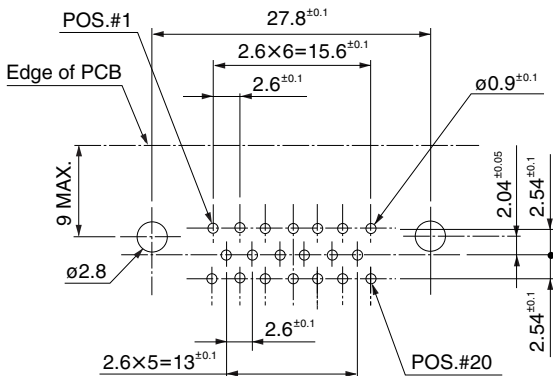
25-contact connector



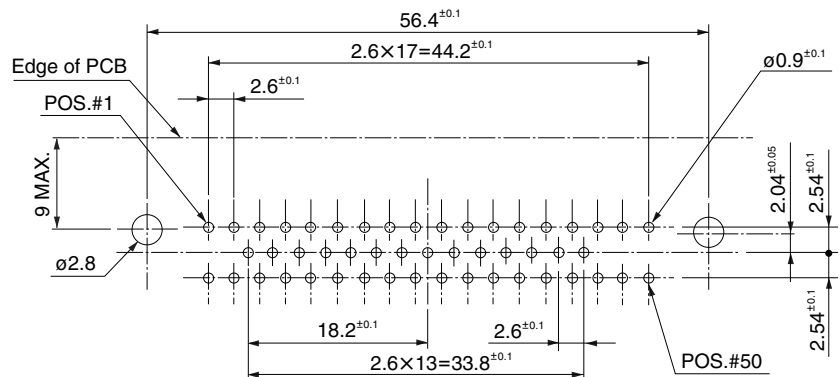
16-contact connector



34-contact connector



20-contact connector



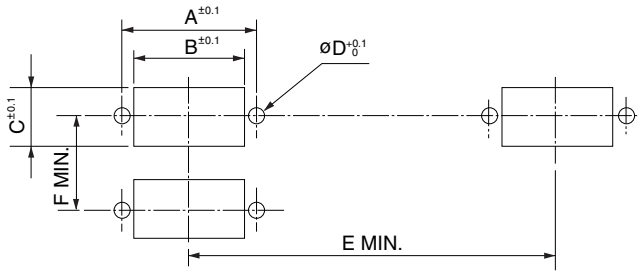
50-contact connector

**Note:** The dimensions shown in these figures are on the PCB mounted face.





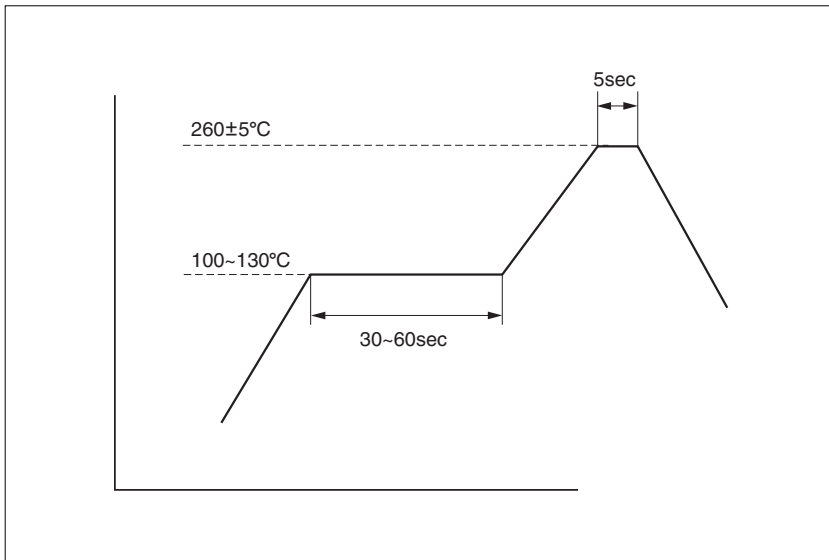
# Recommended panel cut-out dimensions for soldering type, wire wrapping or crimping type



Connector	A	B	C	∅D	E (Reference)	F
8-contact connector	17.4	12.4	11.5	2.8	63.6	20
16-contact connector	25.2	20.2			72.3	19
20-contact connector	27.8	22.8			74.9	
25-contact connector	33.0	28.0			80.1	20
34-contact connector	40.8	35.8			87.9	
50-contact connector	56.4	51.4			103.5	21
60-contact connector	52.6	46.8	14.5	3.3	98.7	23

Recommended panel cut-out dimensions for soldering type, wire wrapping or crimping type

## Flow temperature profile (for reference purposes)



The flow temperature profile as shown above is for reference purposes. This profile depends on requirements such as the PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own flow temperature profile.

### ●Applicable products

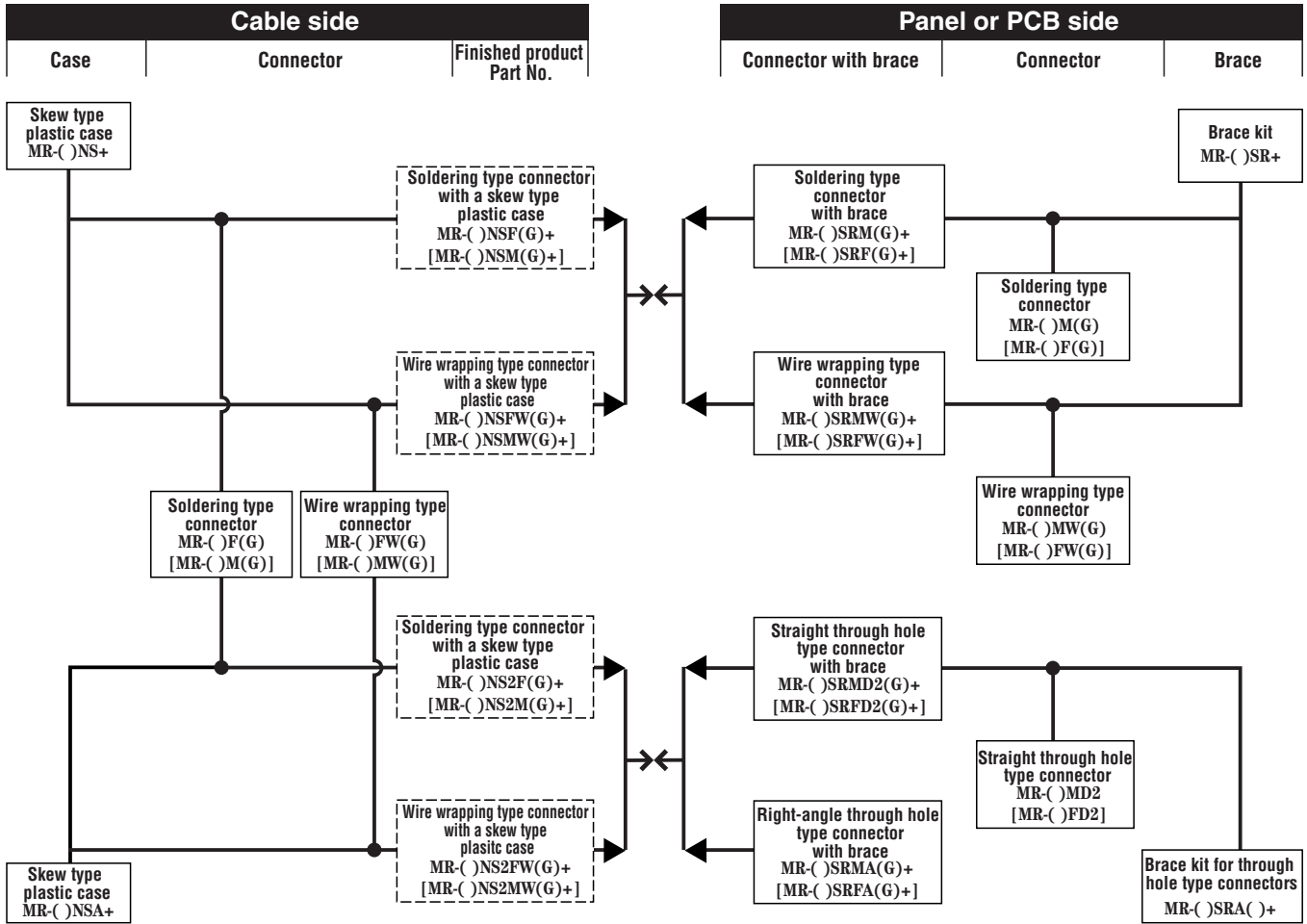
- MR series through hole type connector
- MRH series through hole type connector
- MRF series through hole type connector

The profile shown in this drawing is applicable only for those products shown above.

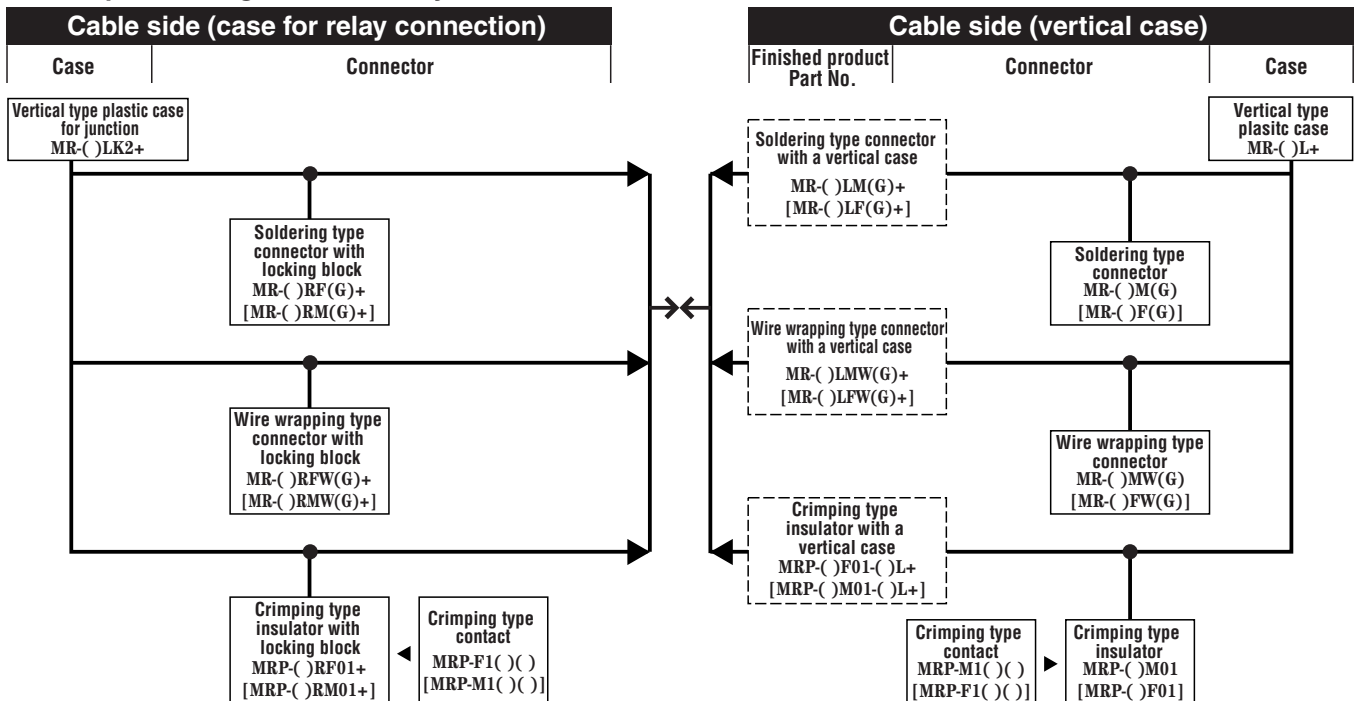




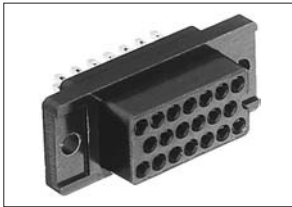
● Example of using skew type cases



● Example of using cases for relay connections



## Product List



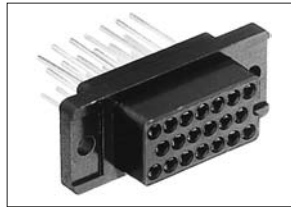
Soldering type  
female connector for panel  
MR-( )F( )

**M-16**  
MR series...14



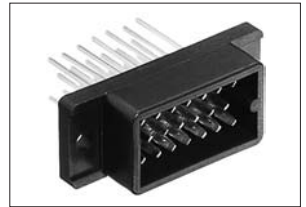
Soldering type  
male connector for panel  
MR-( )M( )

**M-17**  
MR series...15



Wire wrapping type  
female connector for panel  
MR-( )FW( )

**M-18**  
MR series...16



Wire wrapping type  
male connector for panel  
MR-( )MW( )

**M-19**  
MR series...17



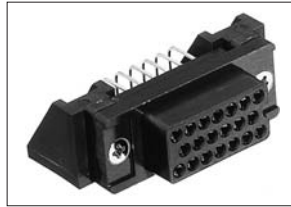
Straight through hole type  
female connector for PCB  
MR-( )FD2( )

**M-20**  
MR series...18



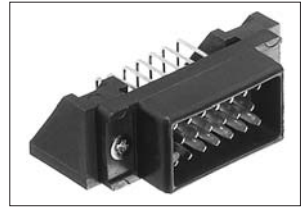
Straight through hole type  
male connector for PCB  
MR-( )MD2( )

**M-21**  
MR series...19



Right-angle through hole type  
female connector for PCB  
MR-( )FA( )

**M-22**  
MR series...20



Right-angle through hole type  
male connector for PCB  
MR-( )MA( )

**M-23**  
MR series...21



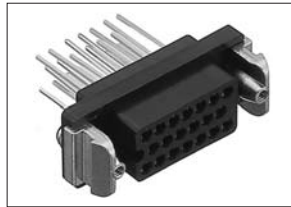
Soldering type  
female connector with locking  
block for panel  
MR-( )RF( )+

**M-24**  
MR series...22



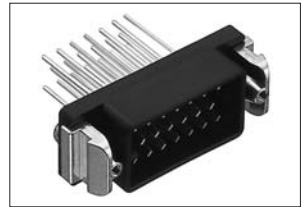
Soldering type  
male connector with locking  
block for panel  
MR-( )RM( )+

**M-25**  
MR series...23



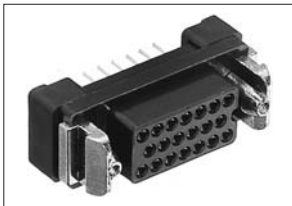
Wire wrapping type  
female connector with locking  
block for panel  
MR-( )RFW( )+

**M-26**  
MR series...24



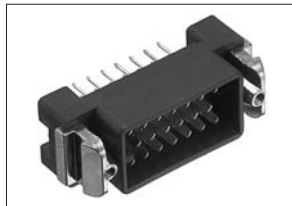
Wire wrapping type  
male connector with locking  
block for panel  
MR-( )RMW( )+

**M-27**  
MR series...25



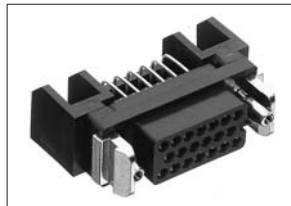
Straight through hole type  
female connector with locking  
block for PCB  
MR-( )RFD2( )+

**M-28**  
MR series...26



Straight through hole type  
male connector with locking  
block for PCB  
MR-( )RMD2( )+

**M-29**  
MR series...27



Right-angle through hole type  
female connector with locking  
block for PCB  
MR-( )RFA( )+

**M-30**  
MR series...28



Right-angle through hole type  
male connector with locking  
block for PCB  
MR-( )RMA( )+

**M-31**  
MR series...29



Soldering type  
female connector with brace  
for panel  
MR-( )SRF( )+

**M-32**  
MR series...30



Soldering type  
male connector with brace  
for panel  
MR-( )SRM( )+

**M-33**  
MR series...31



Wire wrapping type  
female connector with brace  
for panel  
MR-( )SRFW( )+

**M-34**  
MR series...32



Wire wrapping type  
male connector with brace  
for panel  
MR-( )SRMW( )+

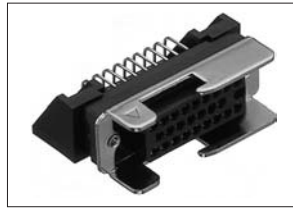
**M-35**  
MR series...33



Straight through hole type female connector with brace for PCB  
MR-( )SRFD2( )+  
**M-36**  
MR series...34



Straight through hole type male connector with brace for PCB  
MR-( )SRMD2( )+  
**M-37**  
MR series...35



Right-angle through hole type female connector with brace for PCB  
MR-( )SRFA( )+  
**M-38**  
MR series...36



Right-angle through hole type male connector with brace for PCB  
MR-( )SRMA( )+  
**M-39**  
MR series...37



Vertical type plastic case  
MR-( )L+

**M-40**  
MR series...38



Vertical type plastic case for junction  
MR-( )LK2+

**M-41**  
MR series...39



Dual-purpose vertical and horizontal type plastic case  
MR-( )LW+

**M-42**  
MR series...40



Skew type plastic case  
MR-( )NS+

**M-43**  
MR series...41



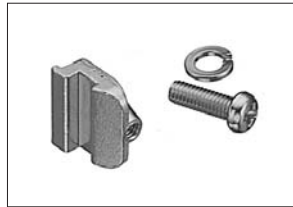
Skew type plastic case  
MR-( )NSA+

**M-44**  
MR series...42



Skew type plastic case  
MR-( )NSB+

**M-45**  
MR series...43



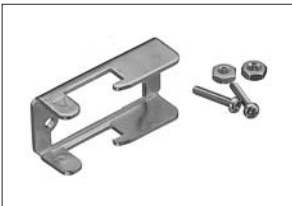
Locking block kit  
MR-R( )+

**M-46**  
MR series...44



Brace kit  
MR-( )SR+

**M-47**  
MR series...45



Brace kit  
MR-( )SRA( )+

**M-48**  
MR series...46



Dust cover for female connector  
MR-( )CF

**M-49**  
MR series...47



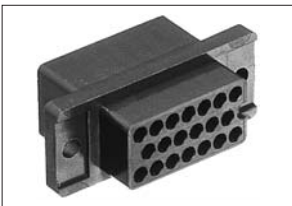
Key for preventing misinsertion  
MR-PK

**M-50**  
MR series...48



Tool for extracting male contact  
MR-K1

**M-51**  
MR series...49



Crimping type female insulator for panel  
MRP-( )F01

**M-52**  
MR series...50



Crimping type male insulator for panel  
MRP-( )M01

**M-53**  
MR series...51



Crimping type female insulator with locking block for panel  
MRP-( )RF01+

**M-54**  
MR series...52



Crimping type male insulator with locking block for panel  
MRP-( )RM01+

**M-55**  
MR series...53



Crimping type female contact  
MRP-F1( )( )

**M-56**  
MR series...54



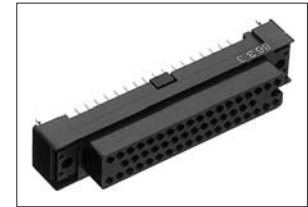
Crimping type male contact  
MRP-M1( )( )

**M-57**  
MR series...55



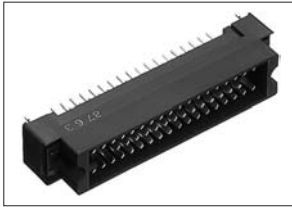
Crimping type contact extraction  
tool  
MRP-MF+

**M-58**  
MR series...56



Straight through hole type  
female connector for PCB  
MRH-( )FD( )+

**M-59**  
MR series...57



Straight through hole type  
male connector for PCB  
MRH-( )MD( )+

**M-60**  
MR series...58



Right-angle through hole type  
female connector for PCB  
MRH-( )FA( )+

**M-61**  
MR series...59



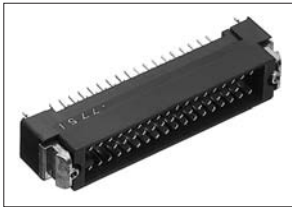
Right-angle through hole type  
male connector for PCB  
MRH-( )MA( )+

**M-62**  
MR series...60



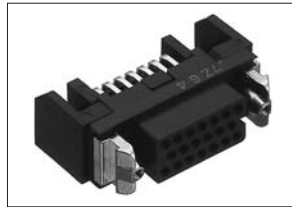
Straight through hole type  
female connector with locking  
block for PCB  
MRH-( )RFD( )+

**M-63**  
MR series...61



Straight through hole type  
male connector with locking  
block for PCB  
MRH-( )RMD( )+

**M-64**  
MR series...62



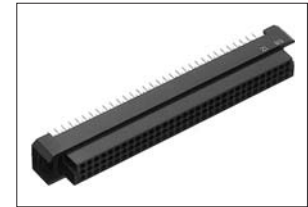
Right-angle through hole type  
female connector with locking  
block for PCB  
MRH-( )RFA( )+

**M-65**  
MR series...63



Right-angle through hole type  
male connector with locking  
block for PCB  
MRH-( )RMA( )+

**M-66**  
MR series...64



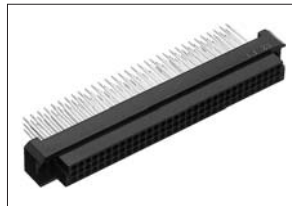
Straight through hole type  
female connector for PCB  
MRF-96FD( )+

**M-67**  
MR series...65



Right-angle through hole type  
female connector for PCB  
MRF-96FL( )+

**M-68**  
MR series...66



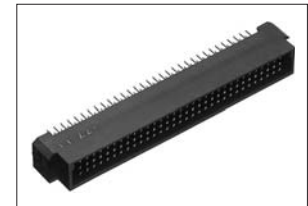
Wire wrapping type  
female connector for PCB  
MRF-96FDW( )

**M-69**  
MR series...67



Right-angle through hole type  
male connector PCB  
MRF-96ML( )+

**M-70**  
MR series...68



Straight through hole type  
male connector for PCB  
MRF-96MD( )+

**M-71**  
MR series...69

Soldering type female connector for panel  
MR-( )F( )

For panel

Soldering

RoHS

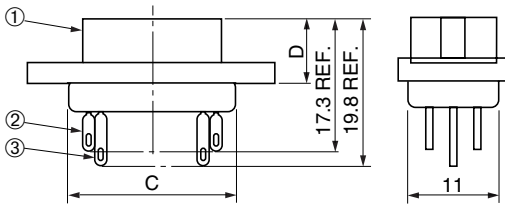
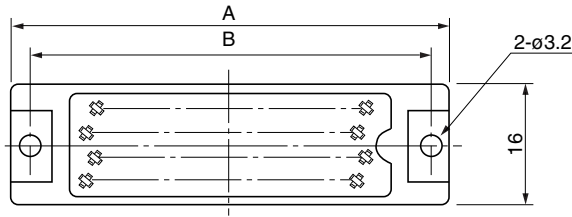
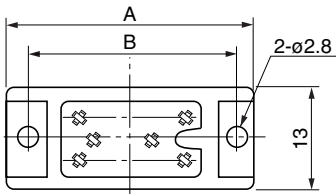


● Configuration of product Part No.

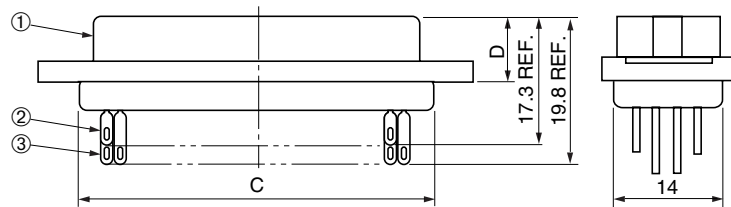
MR- ( ) F ( )

① ② ③ ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type of contact: Soldering, female
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector



60-contact connector

● Components

①	Insulator
②	Contact (short)
③	Contact (long)

● Dimensions

Part No.	A	B	C	D
MR-8F( )	22.4	17.4	11.9	9.4
MR-16F( )	30.2	25.2	19.7	9
MR-20F( )	32.8	27.8	22.3	
MR-25F( )	38.0	33.0	27.5	
MR-34F( )	45.8	40.8	35.3	
MR-50F( )	61.4	56.4	50.9	
MR-60F( )	59.6	52.6	46.3	

Mating connectors: MR and MRH series male connectors

Applicable case: MR-( )L+, etc.



Soldering type male connector for panel  
MR-( )M( )

For panel

Soldering

RoHS

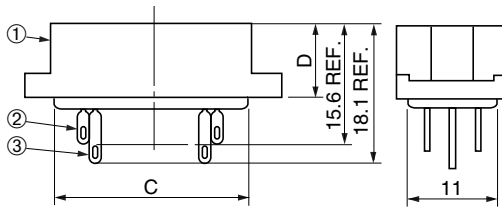
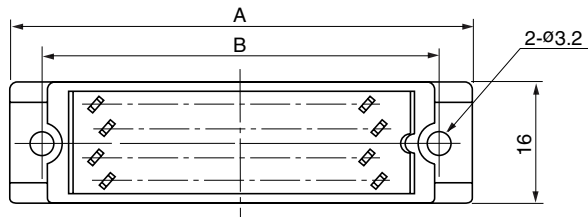
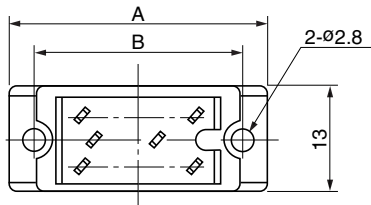


● Configuration of product Part No.

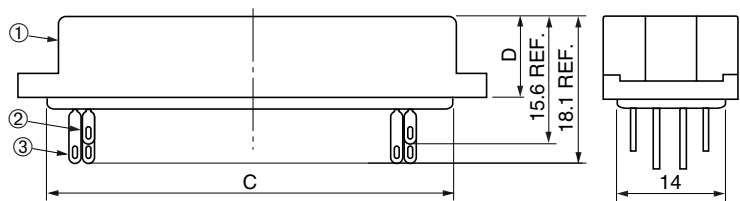
**MR- ( ) M ( )**

① ② ③ ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type of contact: Soldering, male
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector



60-contact connector

● Components

①	Insulator
②	Contact (short)
③	Contact (long)

● Dimensions

Part No.	A	B	C	D
MR-8M( )	22.4	17.4	11.9	10.0
MR-16M( )	30.2	25.2	19.7	9.6
MR-20M( )	32.8	27.8	22.3	
MR-25M( )	38.0	33.0	27.5	
MR-34M( )	45.8	40.8	35.3	
MR-50M( )	61.4	56.4	50.9	
MR-60M( )	59.6	52.6	46.3	

Mating connectors: MR and MRH series female connectors

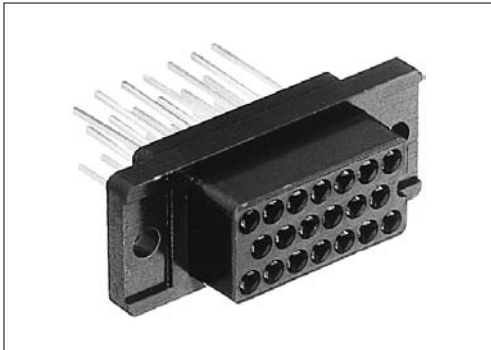
Applicable case: MR-( )L+, etc.

Wire wrapping type female connector for panel  
MR-( )FW( )

For panel

Wire wrapping

RoHS

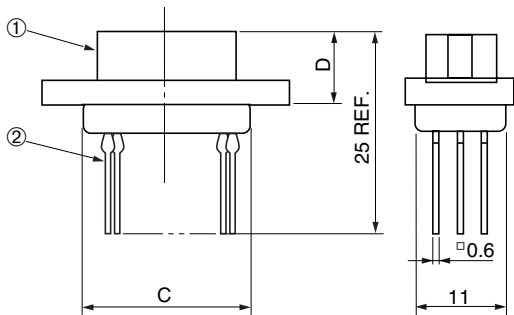
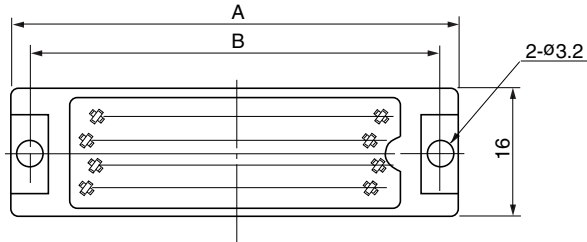
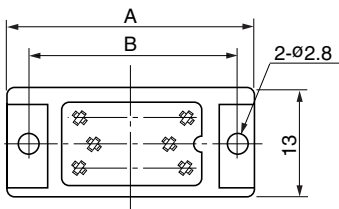


● Configuration of product Part No.

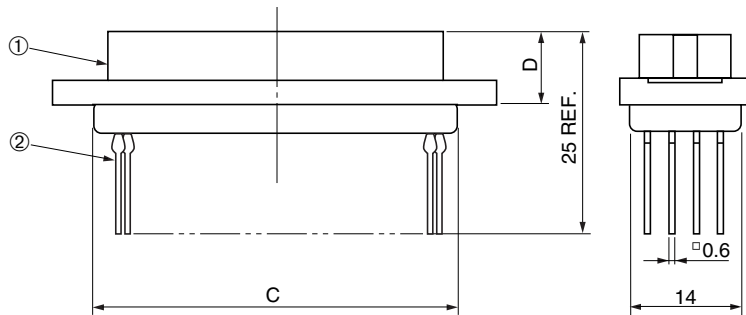
MR- ( ) FW ( )

① ② ③ ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type of contact: Wire wrapping, female
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector



60-contact connector

● Dimensions

Part No.	A	B	C	D
MR-8FW( )	22.4	17.4	11.9	9.4
MR-16FW( )	30.2	25.2	19.7	9
MR-20FW( )	32.8	27.8	22.3	
MR-25FW( )	38.0	33.0	27.5	
MR-34FW( )	45.8	40.8	35.3	
MR-50FW( )	61.4	56.4	50.9	
MR-60FW( )	59.6	52.6	46.3	

● Components

①	Insulator
②	Contact

Mating connectors: MR and MRH series male connectors

Applicable case: MR-( )L+, etc.

Applicable cable sizes: ø0.32-0.40 mm



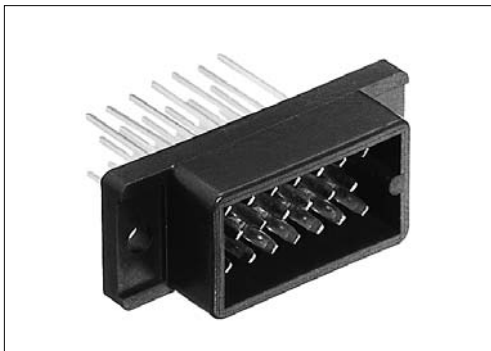
Wire wrapping type male connector for panel

For panel

MR-( )MW( )

Wire wrapping

RoHS

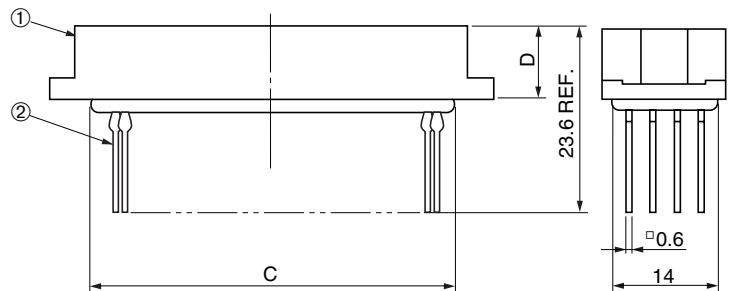
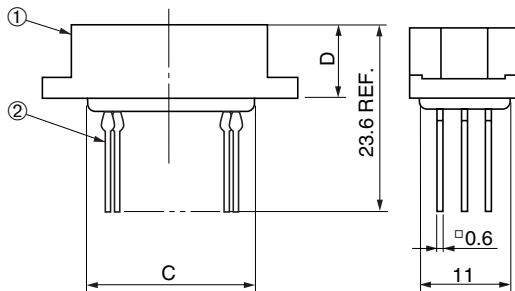
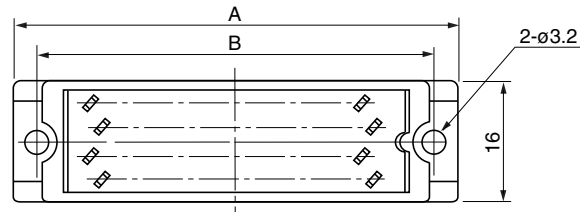
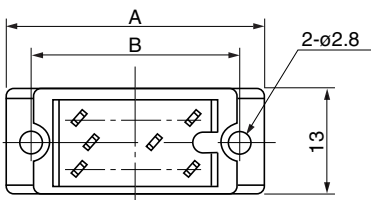


● Configuration of product Part No.

MR- ( ) MW ( )

① ② ③ ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type of contact: Wire wrapping, male
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector

60-contact connector

● Components

①	Insulator
②	Contact

● Dimensions

Part No.	A	B	C	D
MR-8MW( )	22.4	17.4	11.9	10.0
MR-16MW( )	30.2	25.2	19.7	9.6
MR-20MW( )	32.8	27.8	22.3	
MR-25MW( )	38.0	33.0	27.5	
MR-34MW( )	45.8	40.8	35.3	
MR-50MW( )	61.4	56.4	50.9	
MR-60MW( )	59.6	52.6	46.3	

Mating connectors: MR and MRH series female connectors

Applicable case: MR-( )L+, etc.

Applicable cable sizes: ø0.32-0.40 mm

Straight through hole type female connector for PCB  
MR-( )FD2( )

For PCB

Through hole

RoHS

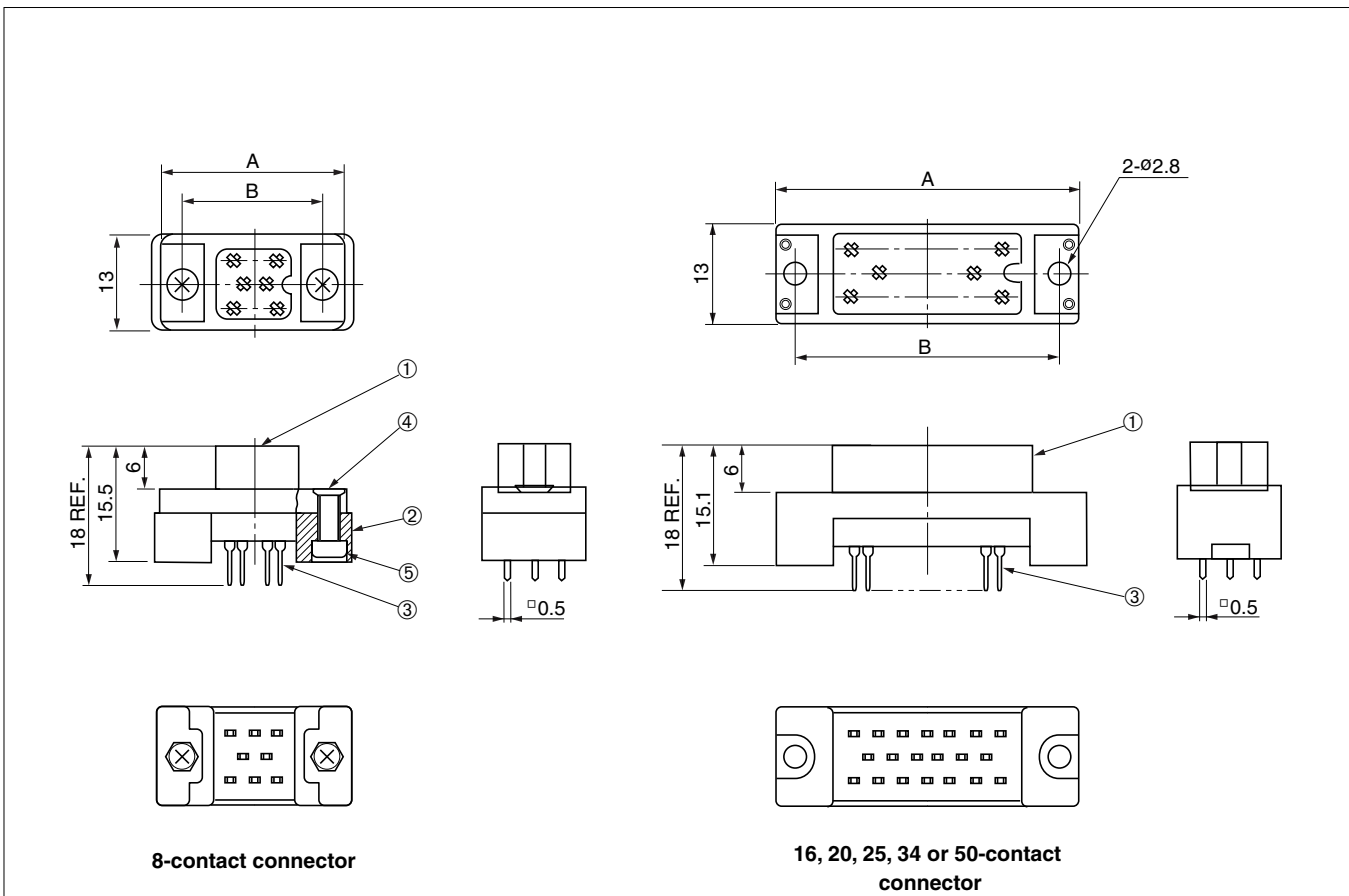


● Configuration of product Part No.

MR- ( ) FD2 ( )

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of contact: Through hole, female
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



● Dimensions

Part No.	A	B
MR-8FD2( )	22.4	17.4
MR-16FD2( )	30.2	25.2
MR-20FD2( )	32.8	27.8
MR-25FD2( )	38.0	33.0
MR-34FD2( )	45.8	40.8
MR-50FD2( )	61.4	56.4

● Components

①	Insulator
②	Spacer
③	Contact
④	Small-sized Phillips flat head screw
⑤	Hexagon nut

Mating connectors: MR and MRH series male connectors

Straight through hole type male connector for PCB

For PCB

MR-( )MD2( )

Through hole

RoHS

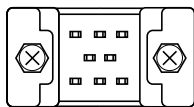
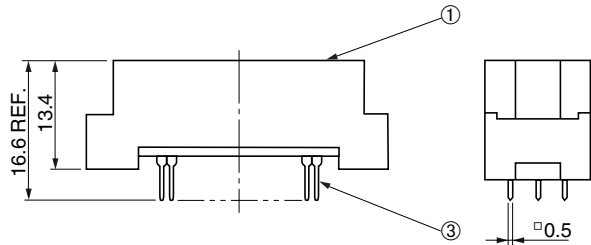
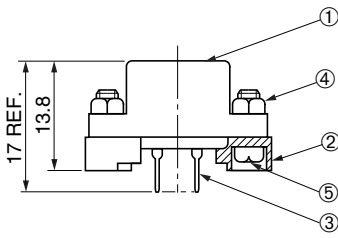
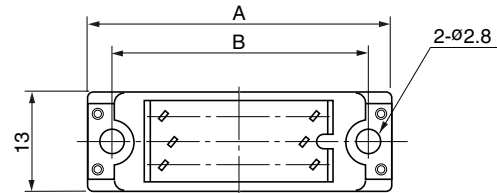
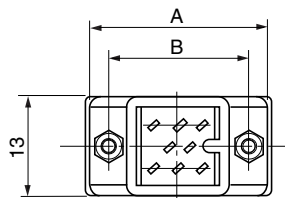


● Configuration of product Part No.

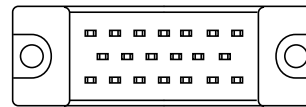
MR- ( ) MD2 ( )

①    ②    ③    ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of contact: Through hole, male
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8-contact connector



16, 20, 25, 34 or 50-contact connector

● Components

①	Insulator
②	Spacer
③	Contact
④	Hexagon nut
⑤	Small-sized Phillips head screw

● Dimensions

Part No.	A	B
MR-8MD2( )	22.4	17.4
MR-16MD2( )	30.2	25.2
MR-20MD2( )	32.8	27.8
MR-25MD2( )	38.0	33.0
MR-34MD2( )	45.8	40.8
MR-50MD2( )	61.4	56.4

Mating connectors: MR and MRH series female connectors

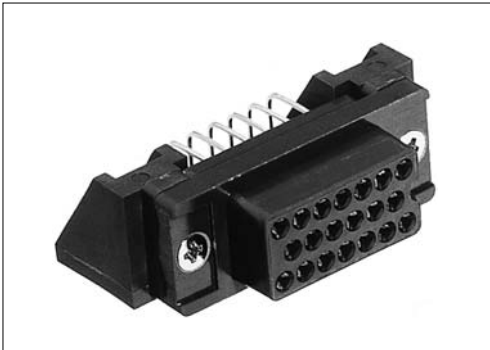
# Right-angle through hole type female connector for PCB MR-( )FA( )

**Rectangular connector**

**For PCB**

**Right-angle Through hole**

RoHS

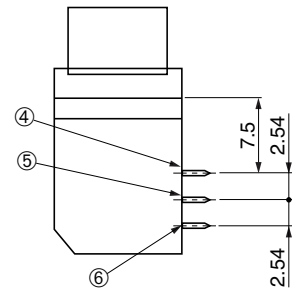
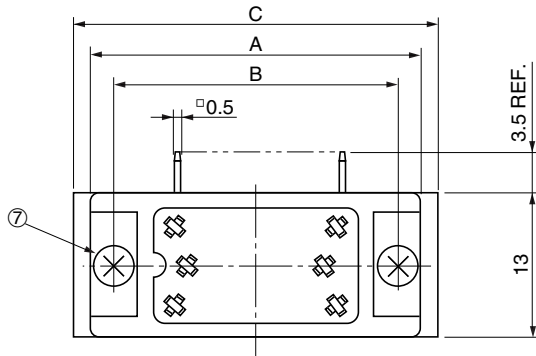


● Configuration of product Part No.

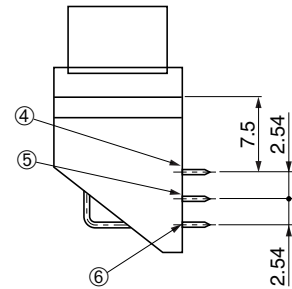
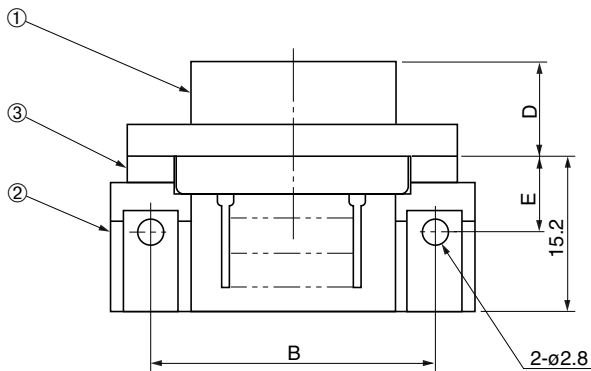
**MR- ( ) FA ( )**

①    ②    ③    ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of contact: Right-angle through hole, female
- ④ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 25 or 34-contact connector



20 or 50-contact connector

● Components

①	Insulator
②	Bracket
③	Spacer
④	Contact (short)
⑤	Contact (middle)
⑥	Contact (long)
⑦	Tapping screw

● Dimensions

Part No.	A	B	C	D	E
MR-8FA( )	22.4	17.4	26.6	9.4	7.6
MR-16FA( )	30.2	25.2	34.4	9	8
MR-20FA( )	32.8	27.8	37.0		
MR-25FA( )	38.0	33.0	42.2		
MR-34FA( )	45.8	40.8	50.0		
MR-50FA( )	61.4	56.4	65.6		

Mating connectors: MR and MRH series male connectors

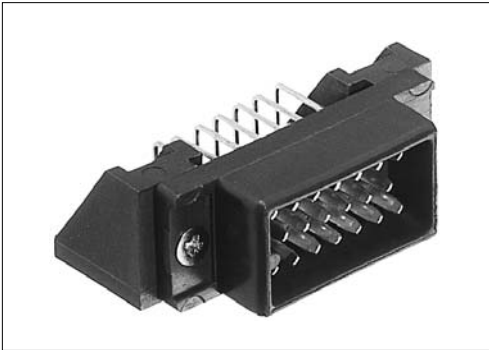
**Right-angle through hole type male connector for PCB**  
**MR-( )MA( )**

**Rectangular connector**

**For PCB**

**Right-angle Through hole**

**RoHS**

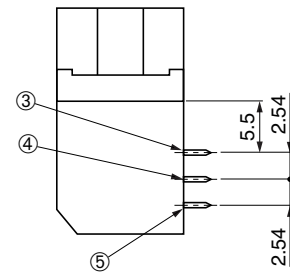
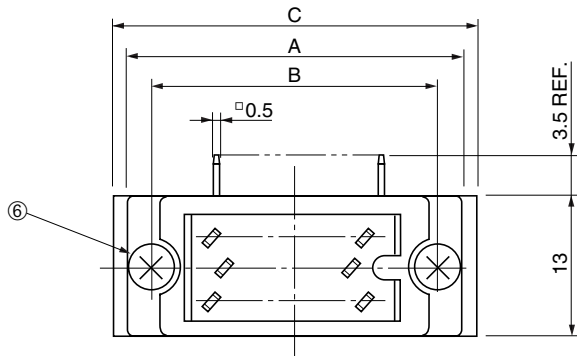


● Configuration of product Part No.

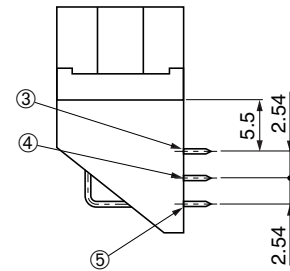
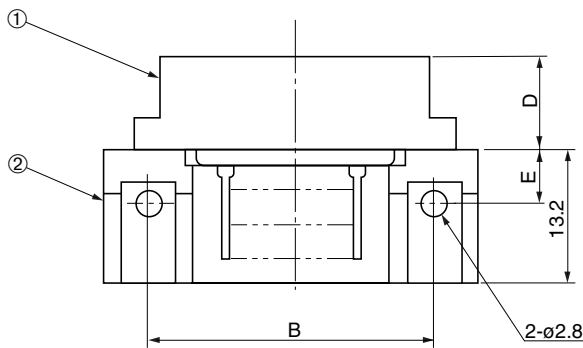
**MR- ( ) MA ( )**

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of contact: Right-angle through hole, male
- ④ Contact plating  
 None: Silver plate (standard)  
 G : Gold plate



**8, 16, 25 or 34-contact connector**



**20 or 50-contact connector**

● Components

①	Insulator
②	Bracket
③	Contact (short)
④	Contact (middle)
⑤	Contact (long)
⑥	Tapping screw

● Dimensions

Part No.	A	B	C	D	E
MR-8MA( )	22.4	17.4	26.6	10.0	5.6
MR-16MA( )	30.2	25.2	34.4		
MR-20MA( )	32.8	27.8	37.0		
MR-25MA( )	38.0	33.0	42.2	9.6	6
MR-34MA( )	45.8	40.8	50.0		
MR-50MA( )	61.4	56.4	65.6		

Mating connectors: MR and MRH series female connectors

Soldering type female connector with locking block for panel

For panel

MR-( )RF( )+

Soldering

RoHS

With locking block

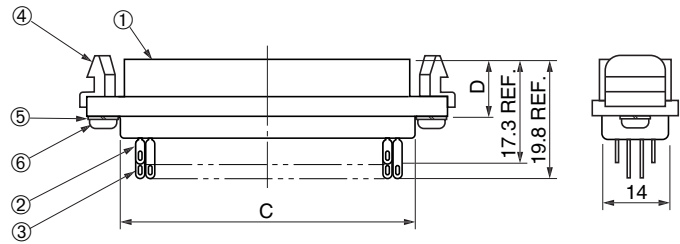
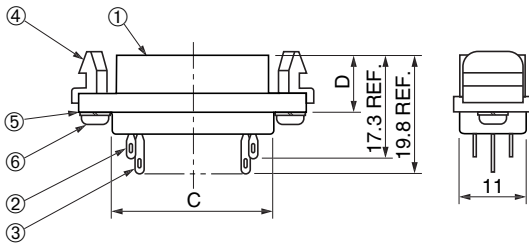
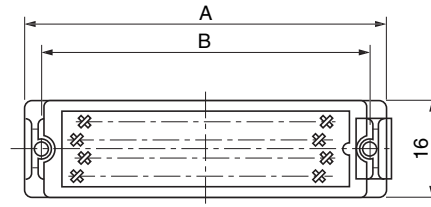
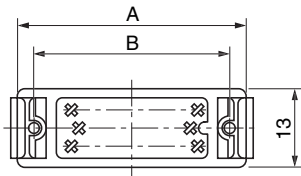


● Configuration of product Part No.

MR- ( ) R F ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ With locking block
- ④ Type of contact: Soldering, female
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector

60-contact connector

● Components

①	Insulator
②	Contact (short)
③	Contact (long)
④	Locking block (Appended)
⑤	Spring washers (Appended)
⑥	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B	C	D
MR-8RF( )+	22.4	17.4	11.9	9.4
MR-16RF( )+	30.2	25.2	19.7	9.0
MR-20RF( )+	32.8	27.8	22.3	
MR-25RF( )+	38.0	33.0	27.5	
MR-34RF( )+	45.8	40.8	35.3	
MR-50RF( )+	61.4	56.4	50.9	
MR-60R2F( )+	59.6	52.6	46.3	

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LM( )+, etc.

Soldering type male connector with locking block for panel

For panel

MR-( )RM( )+

Soldering

RoHS

With locking block

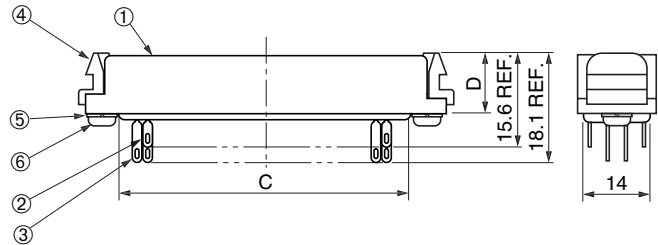
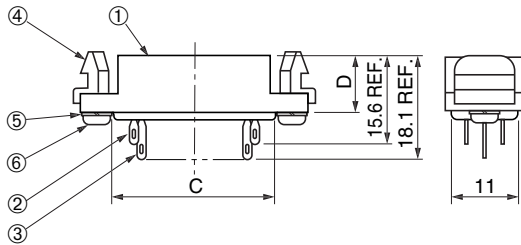
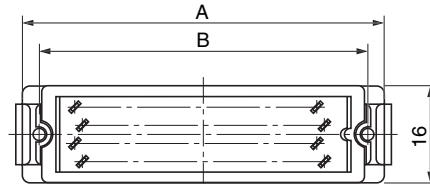
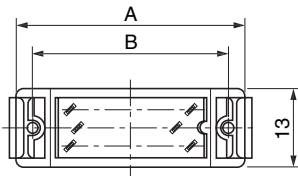


● Configuration of product Part No.

MR- ( ) R M ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ With locking block
- ④ Type of contact: Soldering, male
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector

60-contact connector

● Components

①	Insulator
②	Contact (short)
③	Contact (long)
④	Locking block (Appended)
⑤	Spring washers (Appended)
⑥	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B	C	D
MR-8RM( )+	22.4	17.4	11.9	10.0
MR-16RM( )+	30.2	25.2	19.7	9.6
MR-20RM( )+	32.8	27.8	22.3	
MR-25RM( )+	38.0	33.0	27.5	
MR-34RM( )+	45.8	40.8	35.3	
MR-50RM( )+	61.4	56.4	50.9	
MR-60R2M( )+	59.6	52.6	46.3	

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LF( )+, etc.

Wire wrapping type female connector with locking block for panel

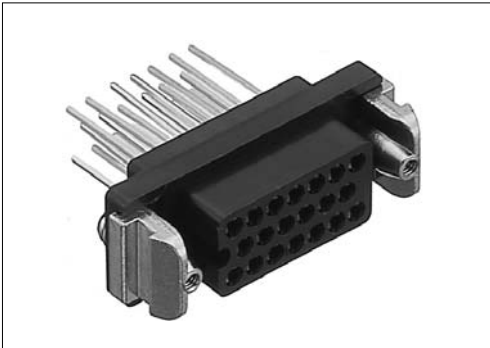
For panel

MR-( )RFW( )+

Wire wrapping

RoHS

With locking block

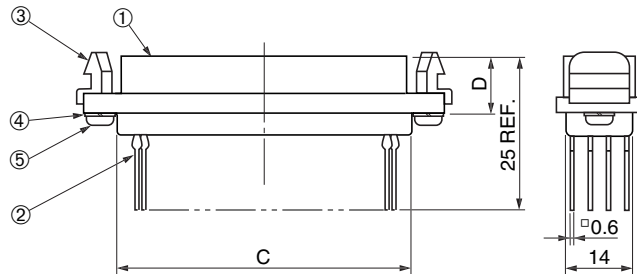
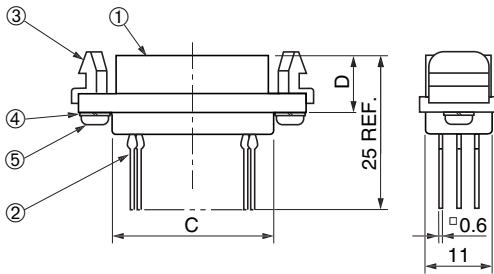
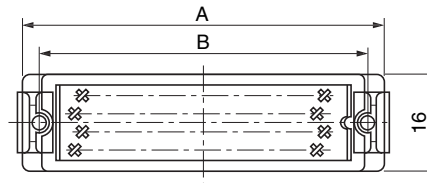
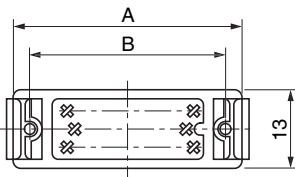


● Configuration of product Part No.

MR- ( ) R FW ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ With locking block
- ④ Type of contact: Wire wrapping, female
- ⑤ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 20, 25, 34 or 50-contact connector

60-contact connector

● Components

①	Insulator
②	Contact
③	Locking block (Appended)
④	Spring washers (Appended)
⑤	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B	C	D
MR-8RFW( )+	22.4	17.4	11.9	9.4
MR-16RFW( )+	30.2	25.2	19.7	9.0
MR-20RFW( )+	32.8	27.8	22.3	
MR-25RFW( )+	38.0	33.0	27.5	
MR-34RFW( )+	45.8	40.8	35.3	
MR-50RFW( )+	61.4	56.4	50.9	
MR-60R2FW( )+	59.6	52.6	46.3	

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LM( )+, etc.



Wire wrapping type male connector with locking block for panel

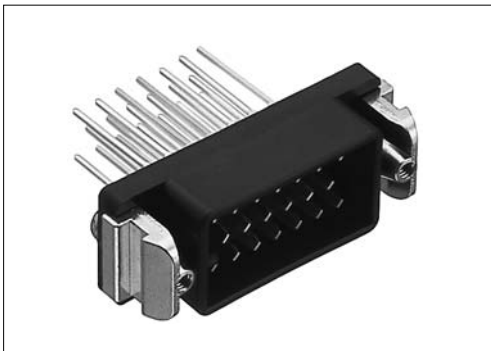
For panel

Wire wrapping

MR-( )RMW( )+

RoHS

With locking block

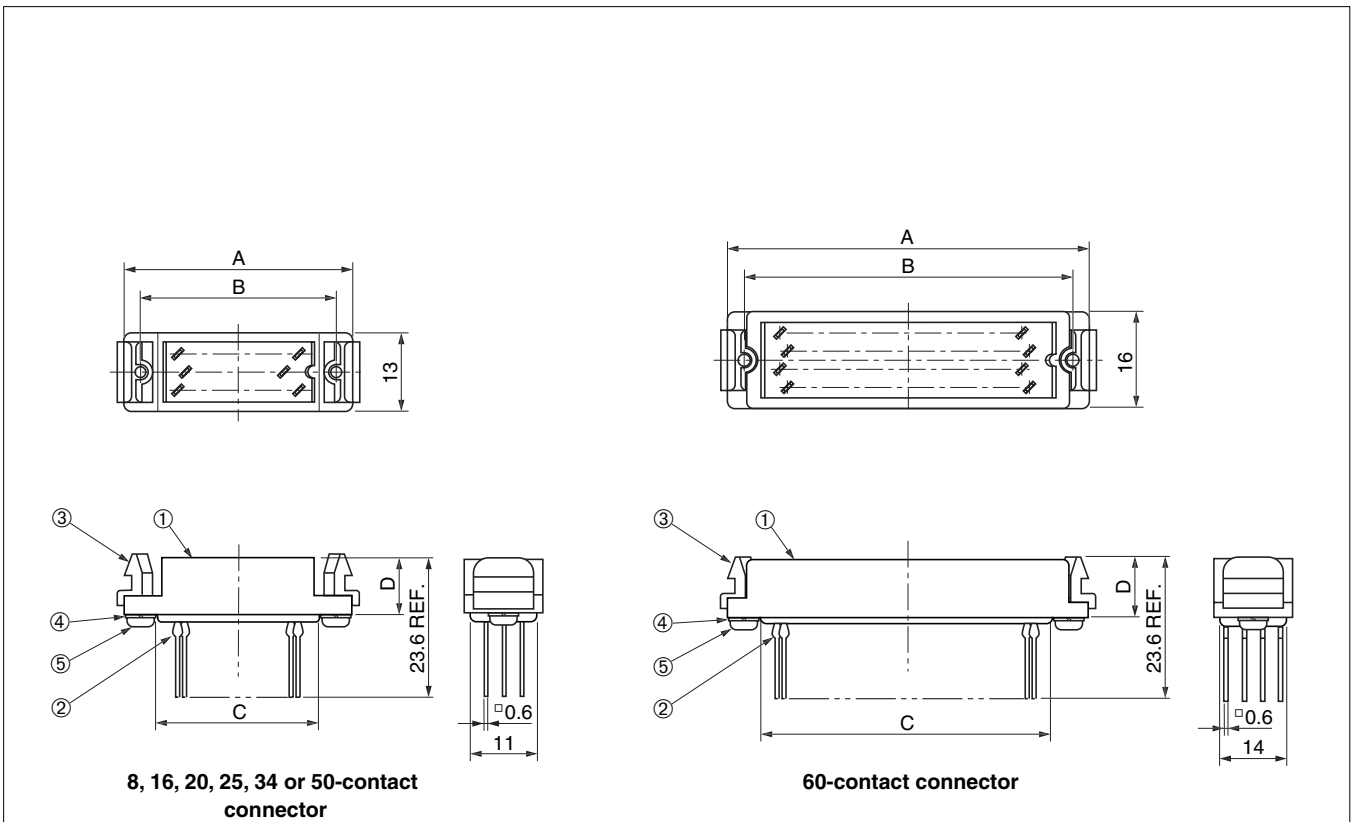


● Configuration of product Part No.

MR- ( ) R MW ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type locking block
- ④ Form of contact: Wire wrapping, male
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



● Components

①	Insulator
②	Contact
③	Locking block (Appended)
④	Spring washers (Appended)
⑤	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B	C	D
MR-8RMW( )+	22.4	17.4	11.9	10.0
MR-16RMW( )+	30.2	25.2	19.7	9.6
MR-20RMW( )+	32.8	27.8	22.3	
MR-25RMW( )+	38.0	33.0	27.5	
MR-34RMW( )+	45.8	40.8	35.3	
MR-50RMW( )+	61.4	56.4	50.9	
MR-60R2MW( )+	59.6	52.6	46.3	

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LF( )+, etc.

**Straight through hole type female connector  
with locking block for PCB  
MR-( )RFD2( )+**

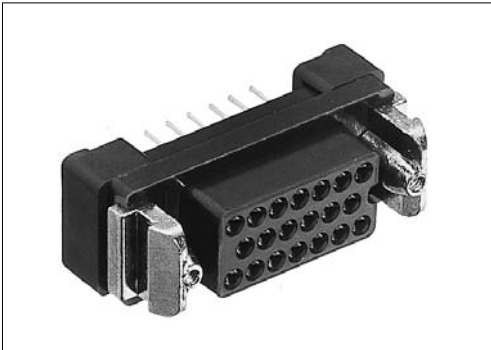
RoHS

**Rectangular connector**

**For PCB**

**Through hole**

**With locking block**

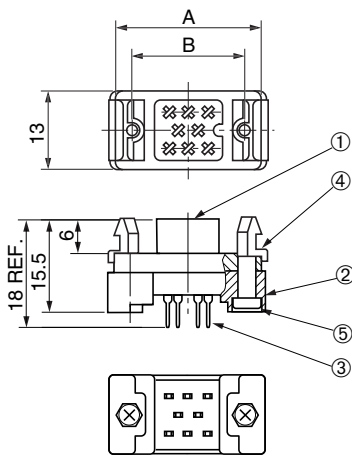


● Configuration of product Part No.

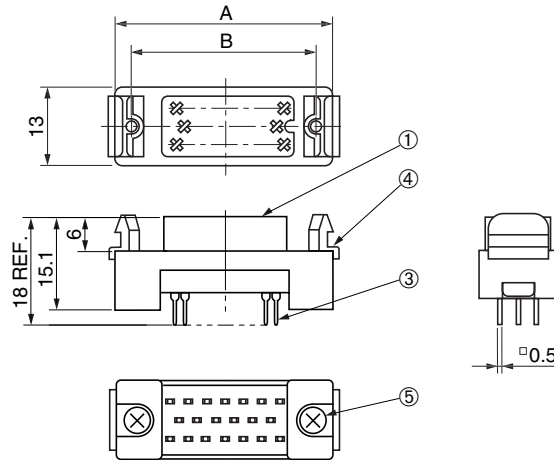
**MR- ( ) R FD2 ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Type of contact: Through hole, male
- ⑤ Contact plating  
None: Silver plate (standard)  
G : Gold plate



**8-contact connector**



**16, 20, 25, 34 or 50-contact connector**

● Components

①	Insulator
②	Spacer
③	Contact
④	Locking block (Appended)
⑤	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B
MR-8RFD2( )+	22.4	17.4
MR-16RFD2( )+	30.2	25.2
MR-20RFD2( )+	32.8	27.8
MR-25RFD2( )+	38.0	33.0
MR-34RFD2( )+	45.8	40.8
MR-50RFD2( )+	61.4	56.4

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LM( )+, etc.

Straight through hole type male connector  
with locking block for PCB

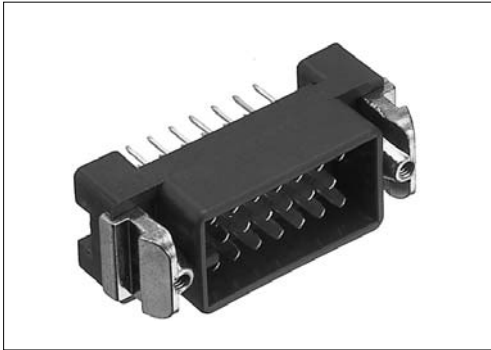
For PCB

MR-( )RMD2( )+

Through hole

RoHS

With locking block



● Configuration of product Part No.

**MR- ( ) R MD2 ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Type of contact: Through hole, male
- ⑤ Contact plating  
None: Silver plate (standard)  
G : Gold plate

**8-contact connector**

**16, 20, 25, 34 or 50-contact connector**

● Components

①	Insulator
②	Spacer
③	Contact
④	Locking block (Appended)
⑤	Small-sized Phillips head screws (Appended)

● Dimensions

Part No.	A	B
MR-8RMD2( )+	22.4	17.4
MR-16RMD2( )+	30.2	25.2
MR-20RMD2( )+	32.8	27.8
MR-25RMD2( )+	38.0	33.0
MR-34RMD2( )+	45.8	40.8
MR-50RMD2( )+	61.4	56.4

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LF( )+, etc.

**Right-angle through hole type female connector with locking block for PCB**  
**MR-( )RFA( )+**

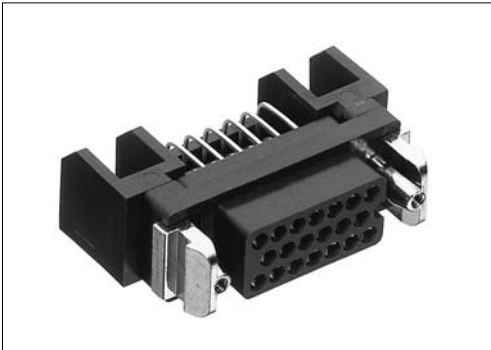
**Rectangular connector**

**For PCB**

**Right-angle Through hole**

**With locking block**

**RoHS**

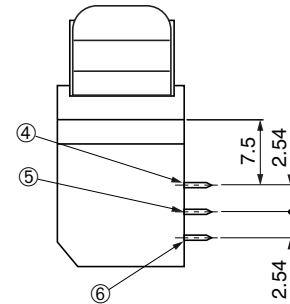
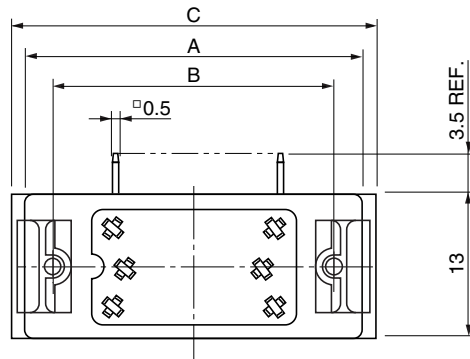


● Configuration of product Part No.

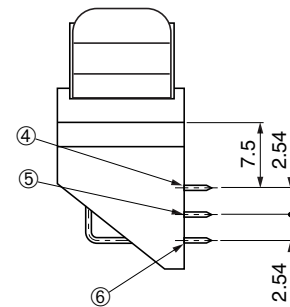
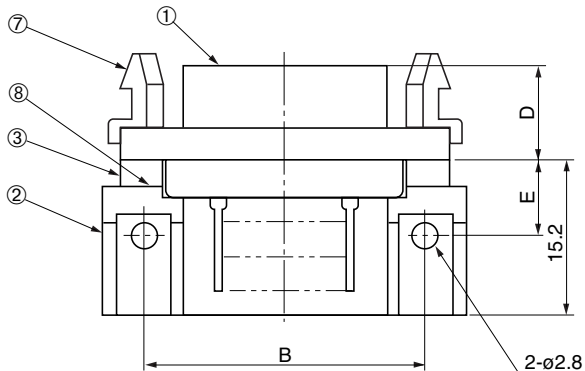
**MR- ( ) R FA ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Type of contact: Right-angle through hole, female
- ⑤ Contact plating  
 None: Silver plate (standard)  
 G : Gold plate



**8, 16, 25 or 34-contact connector**



**20 or 50-contact connector**

● Components

①	Insulator
②	Bracket
③	Spacer
④	Contact (short)
⑤	Contact (middle)
⑥	Contact (long)
⑦	Locking block
⑧	Small-sized Phillips flat head screw

● Dimensions

Part No.	A	B	C	D	E
MR-8RFA( )+	22.4	17.4	26.6	9.4	7.6
MR-16RFA( )+	30.2	25.2	34.4		
MR-20RFA( )+	32.8	27.8	37.0		
MR-25RFA( )+	38.0	33.0	42.2	9	8
MR-34RFA( )+	45.8	40.8	50.0		
MR-50RFA( )+	61.4	56.4	65.6		

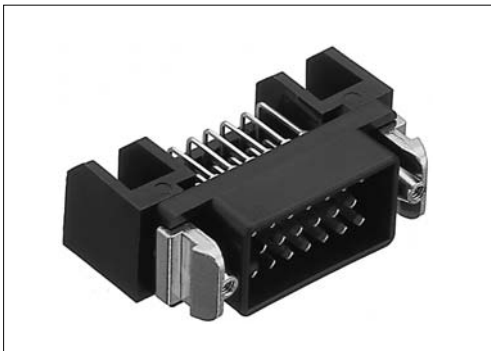
Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LM( )+, etc.

Right-angle through hole type male connector with locking block for PCB

MR-( )RMA( )+

RoHS

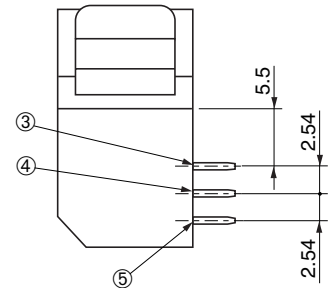
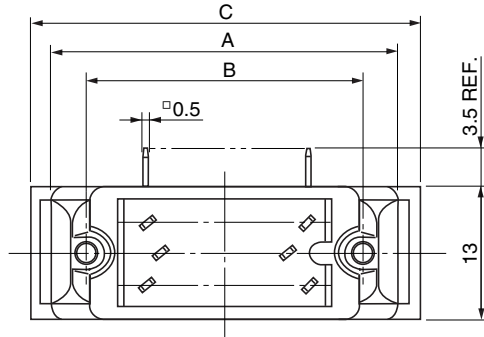


● Configuration of product Part No.

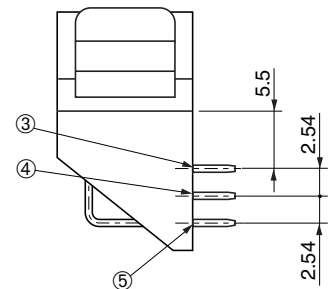
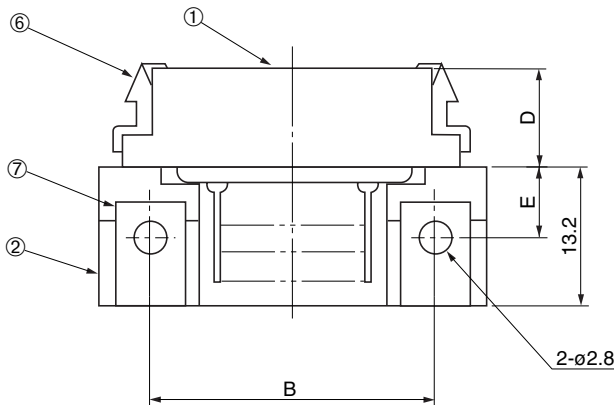
MR- ( ) R MA ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Type of contact: Right-angle through hole, male
- ⑤ Contact plating  
None: Silver plate (standard)  
G : Gold plate



8, 16, 25 or 34-contact connector



20 or 50-contact connector

● Components

①	Insulator
②	Bracket
③	Contact (short)
④	Contact (middle)
⑤	Contact (long)
⑥	Locking block
⑦	Small-sized Phillips flat head screw

● Dimensions

Part No.	A	B	C	D	E
MR-8RMA( )+	22.4	17.4	26.6	10.0	5.6
MR-16RMA( )+	30.2	25.2	34.4		
MR-20RMA( )+	32.8	27.8	37.0		
MR-25RMA( )+	38.0	33.0	42.2	9.6	6
MR-34RMA( )+	45.8	40.8	50.0		
MR-50RMA( )+	61.4	56.4	65.6		

Mating case: MR-( )L+, MR-( )LW+

Mating connectors with case: MR-( )LF( )+, etc.

Soldering type female connector with brace for panel  
MR-( )SRF( )+

For panel

Soldering

With brace

RoHS

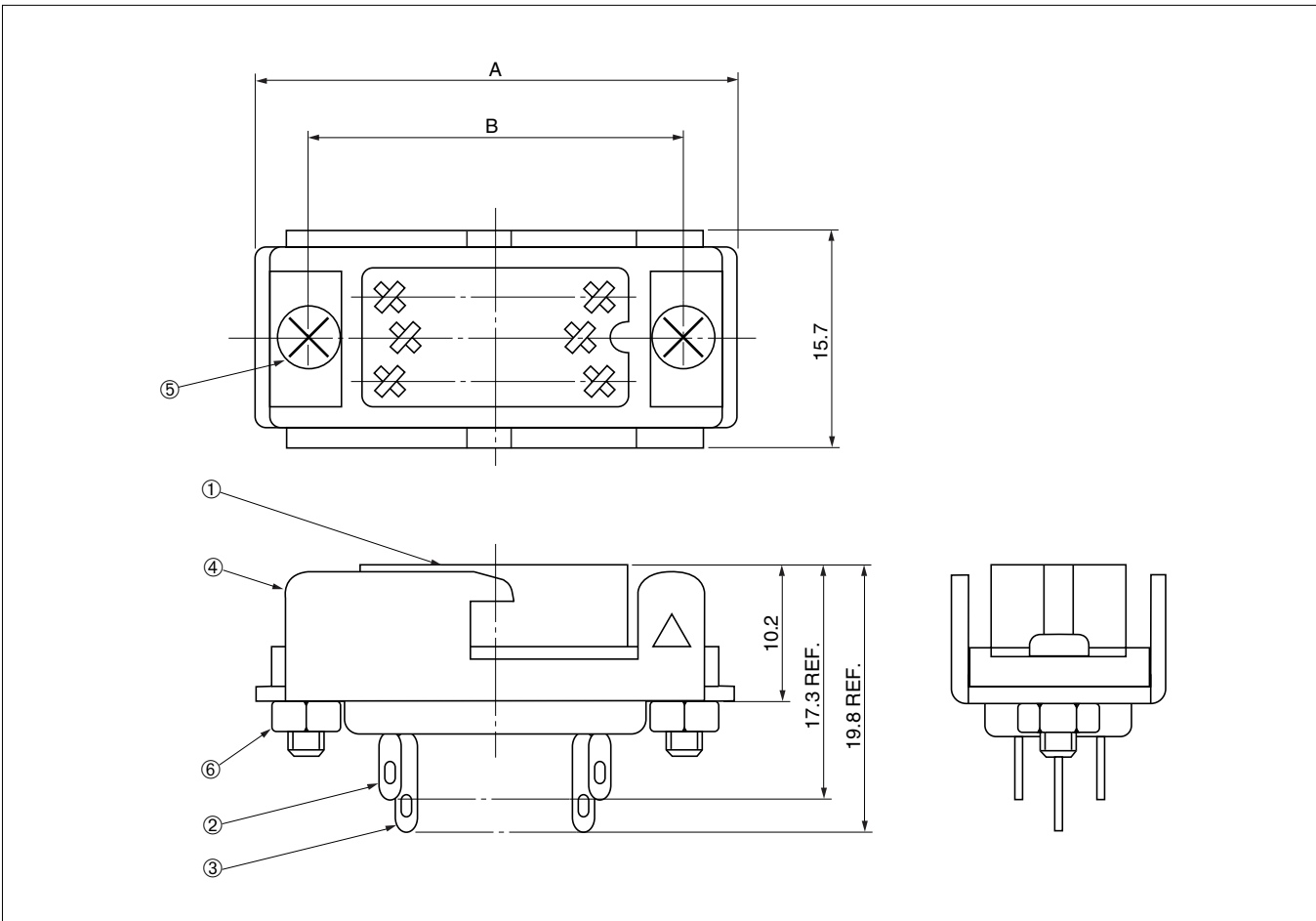


● Configuration of product Part No.

**MR- ( ) SR F ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace
- ④ Type of contact: Soldering, female
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



● Components

①	Insulator
②	Contact (short)
③	Contact (long)
④	Brace (Appended)
⑤	Small-sized Phillips head screws (Appended)
⑥	Hexagon nuts (Appended)

● Dimensions

Part No.	A	B
MR-16SRF ( )+	33.0	25.2
MR-20SRF ( )+		27.8
MR-25SRF ( )+	40.0	33.0
MR-34SRF ( )+	45.0	40.8
MR-50SRF ( )+	67.0	56.4

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NSM( )+, etc.

**Soldering type male connector with brace for panel**  
**MR-( )SRM( )+**

**Rectangular connector**

**For panel**

**Soldering**

**With brace**

RoHS

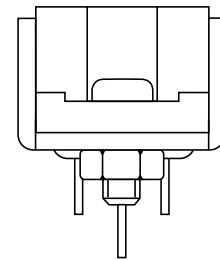
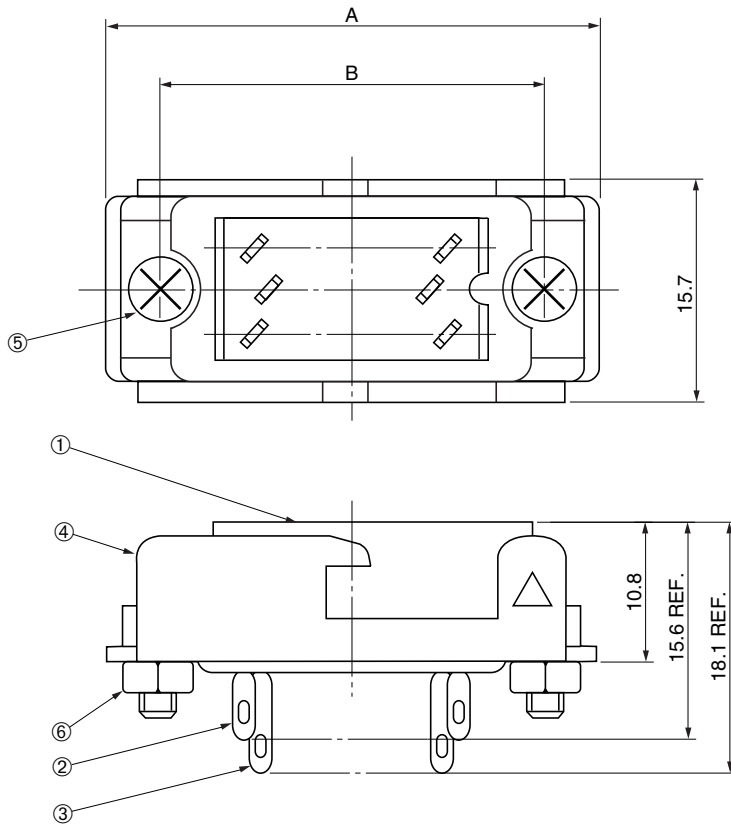


● Configuration of product Part No.

**MR- ( ) SR M ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace
- ④ Type of contact: Soldering, male
- ⑤ Contact plating  
 None: Silver plate  
 G : Gold plate



● Components

①	Insulator
②	Contact (short)
③	Contact (long)
④	Brace (Appended)
⑤	Small-sized Phillips head screws (Appended)
⑥	Hexagon nuts (Appended)

● Dimensions

Part No.	A	B
MR-16SRM( )+	33.0	25.2
MR-20SRM( )+		27.8
MR-25SRM( )+	40.0	33.0
MR-34SRM( )+	45.0	40.8
MR-50SRM( )+	67.0	56.4

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NSF( )+, etc.

Wire wrapping type female connector with brace for panel  
MR-( )SRFW( )+

For panel

Wire wrapping

With brace

RoHS

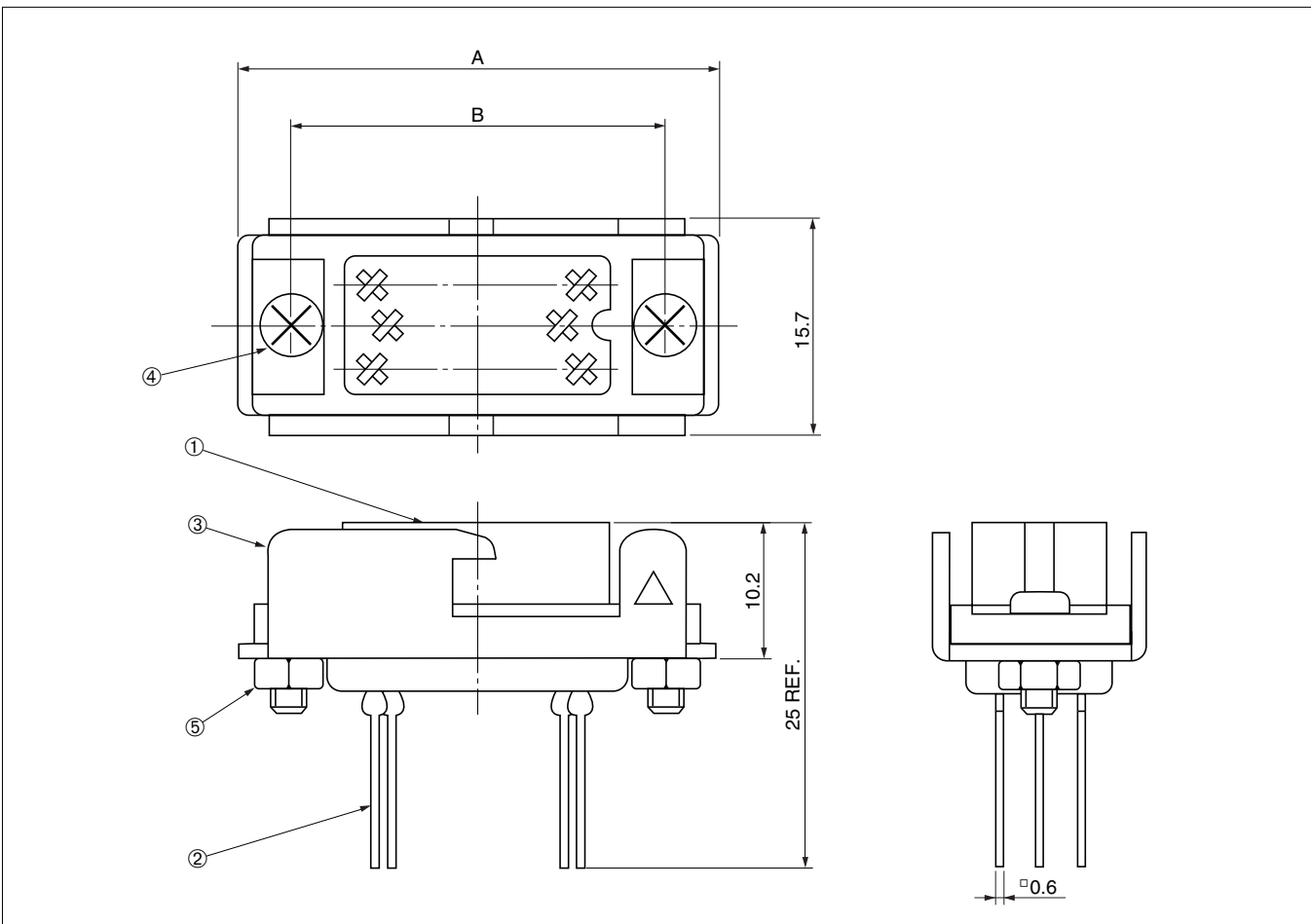


● Configuration of product Part No.

MR- ( ) SR FW ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace
- ④ Type of contact: Wire wrapping, female
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



● Components

①	Insulator
②	Contact
③	Brace (Appended)
④	Small-sized Phillips head screws (Appended)
⑤	Hexagon nuts (Appended)

● Dimensions

Part No.	A	B
MR-16SRFW( )+	33.0	25.2
MR-20SRFW( )+		27.8
MR-25SRFW( )+	40.0	33.0
MR-34SRFW( )+	45.0	40.8
MR-50SRFW( )+	67.0	56.4

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NSM( )+, etc.



Wire wrapping type male connector with brace for panel  
MR-( )SRMW( )+

For panel

Wire wrapping

With brace

RoHS

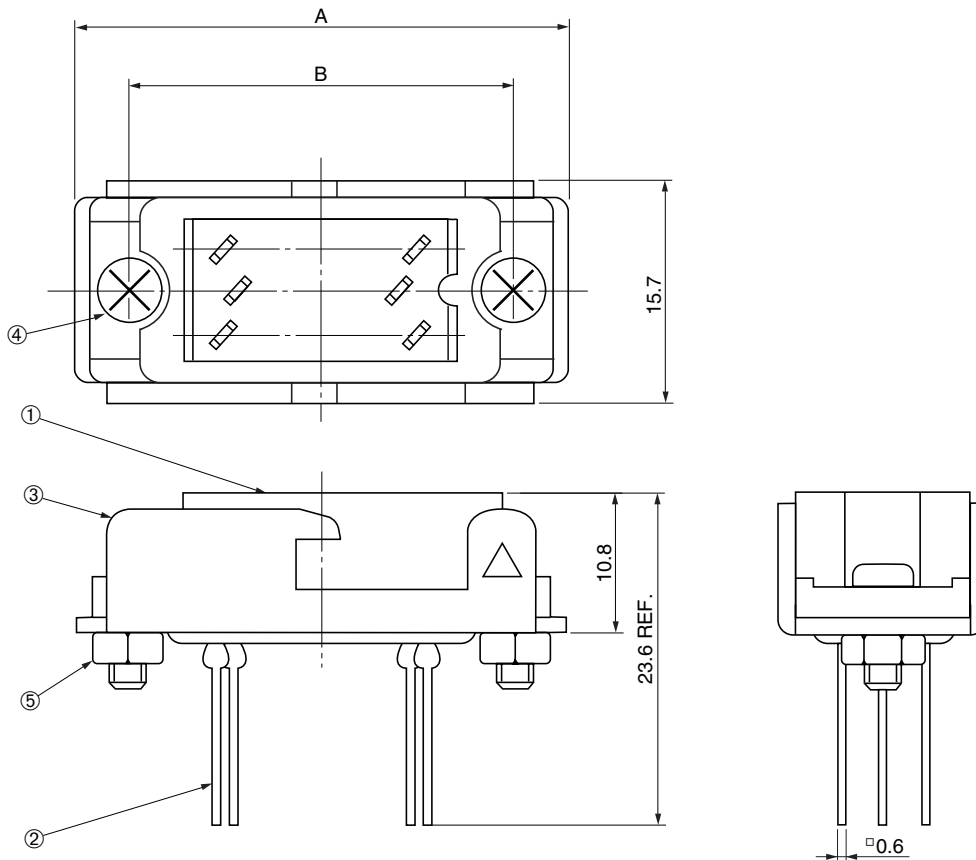


● Configuration of product Part No.

MR- ( ) SR MW ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace
- ④ Type of contact: Wire wrapping, male
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



● Components

①	Insulator
②	Contact
③	Brace (Appended)
④	Small-sized Phillips head screw (Appended)
⑤	Hexagon nut (Appended)

● Dimensions

Part No.	A	B
MR-16SRMW( )+	33.0	25.2
MR-20SRMW( )+		27.8
MR-25SRMW( )+	40.0	33.0
MR-34SRMW( )+	45.0	40.8
MR-50SRMW( )+	67.0	56.4

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NSF( )+, etc.

Straight through hole type female connector with brace  
for PCB

For PCB

MR-( )SRFD2( )+

Straight Through hole

RoHS

With brace



● Configuration of product Part No.

MR- ( ) SR FD2 ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace for skew type case
- ④ Type of contact: Straight through hole, female
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate

① Insulator

② Contact

③ Brace

④ Small-sized Phillips head screw

⑤ Hexagon nut

● Dimensions

Part No.	A	B
MR-16SRFD2( )+	33.0	25.2
MR-20SRFD2( )+		27.8
MR-25SRFD2( )+	40.0	33.0
MR-34SRFD2N( )+	45.0	40.8
MR-50SRFD2( )+	67.0	56.4

Mating case: MR-( )NSA+

Mating connectors with case: MR-( )NS2M( )+, etc.

**Straight through hole type male connector with brace  
for PCB**

**MR-( )SRMD2( )+**

RoHS

**Rectangular connector**

**For PCB**

**Straight Through hole**

**With brace**

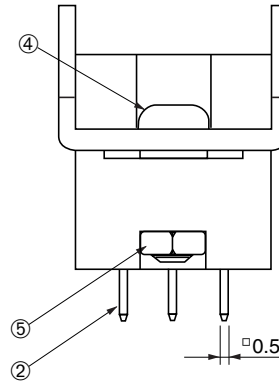
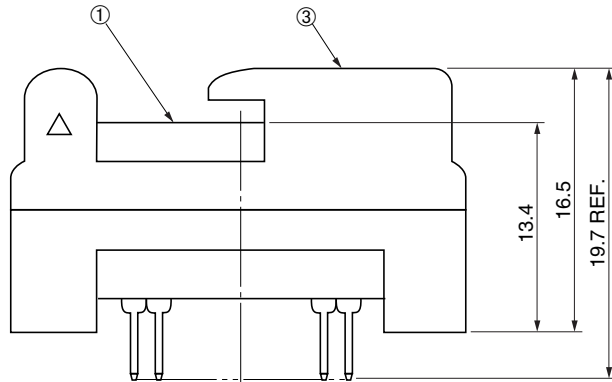
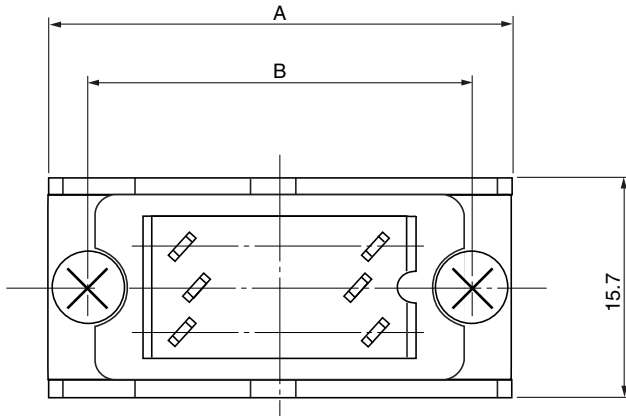


● Configuration of product Part No.

**MR- ( ) SR MD2 ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace for skew type case
- ④ Type of contact: Straight through hole, male
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



● Components

①	Insulator
②	Contact
③	Brace
④	Small-sized Phillips head screw
⑤	Hexagon nut

● Dimensions

Part No.	A	B
MR-16SRMD2( )+	33.0	25.2
MR-20SRMD2( )+		27.8
MR-25SRMD2( )+	40.0	33.0
MR-34SRMD2N( )+	45.0	40.8
MR-50SRMD2( )+	67.0	56.4

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NS2F( )+, etc.

**Right-angle through hole type female connector with brace for PCB**

**MR-( )SRFA( )+**

RoHS

**Rectangular connector**

**For PCB**

**Right-angle Through hole**

**With brace**



● Configuration of product Part No.

**MR- ( ) SR FA ( )+**

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace for skew type case
- ④ Type of contact: Right-angle through hole, female
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate

**16, 25 or 34-contact connector**

**20 or 50-contact connector**

● Components

① Insulator
② Bracket
③ Spacer
④ Contact (short)
⑤ Contact (middle)
⑥ Contact (long)
⑦ Brace
⑧ Tapping screw

\* 25 contacts are rivets.

● Dimensions

Part No.	A	B	C
MR-16SRFA( )+	33.0	25.2	34.4
MR-20SRFA( )+		27.8	37.0
MR-25SRFA( )+	40.0	33.0	42.2
MR-34SRFA( )+	45.0	40.8	50.0
MR-50SRFA( )+	67.0	56.4	65.6

Mating case: MR-( )NSA+

Mating connectors with case: MR-( )NS2M( )+, etc.

Right-angle through hole type male connector with brace for PCB

MR-( )SRMA( )+

RoHS

Rectangular connector

For PCB

Right-angle Through hole

With brace

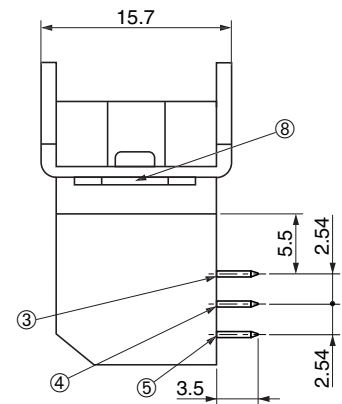
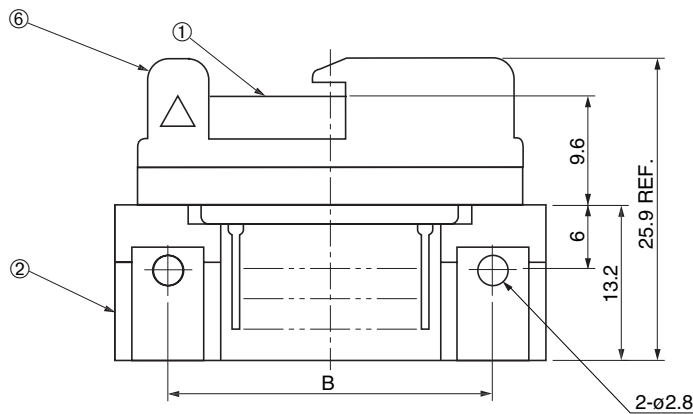
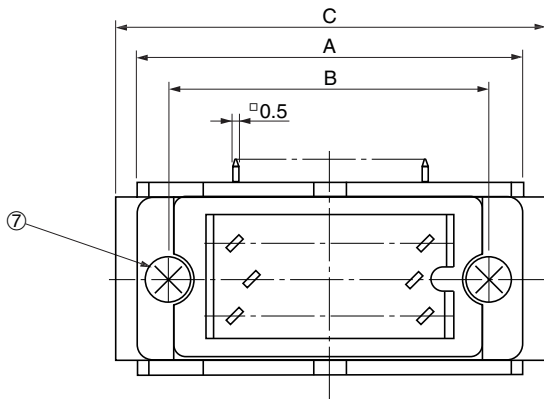


● Configuration of product Part No.

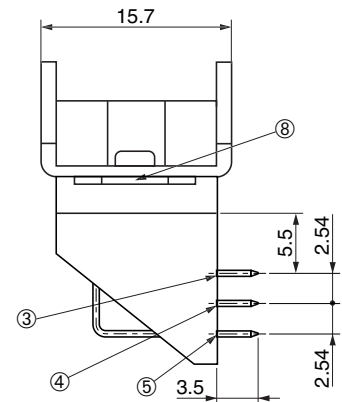
MR- ( ) SR MA ( )+

① ② ③ ④ ⑤

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With brace for skew type case
- ④ Type of contact: Right-angle through hole, male
- ⑤ Contact plating  
None: Silver plate  
G : Gold plate



16, 25 or 34-contact connector



20 or 50-contact connector

● Components

①	Insulator
②	Bracket
③	Contact (short)
④	Contact (middle)
⑤	Contact (long)
⑥	Brace
⑦	Tapping screw
⑧	Spring washer

● Dimensions

Part No.	A	B	C
MR-16SRMA( )+	33.0	25.2	34.4
MR-20SRMA( )+		27.8	37.0
MR-25SRMA( )+	40.0	33.0	42.2
MR-34SRMA( )+	45.0	40.8	50.0
MR-50SRMA( )+	67.0	56.4	65.6

Mating case: MR-( )NS+

Mating connectors with case: MR-( )NS2F( )+, etc.

Vertical type plastic case  
MR-( )L+

Rectangular connector

Case

Vertical type

Dual spring and screw locking

RoHS

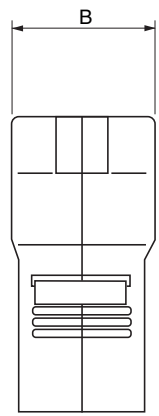
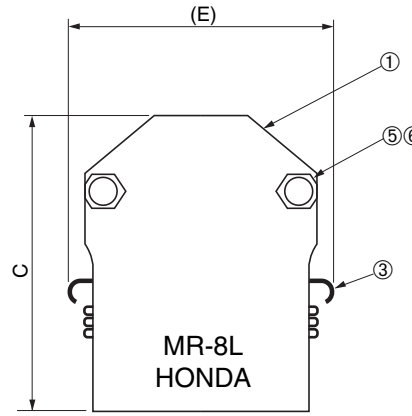
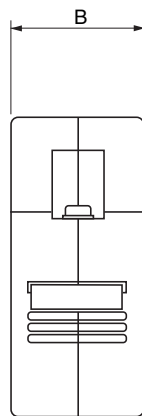
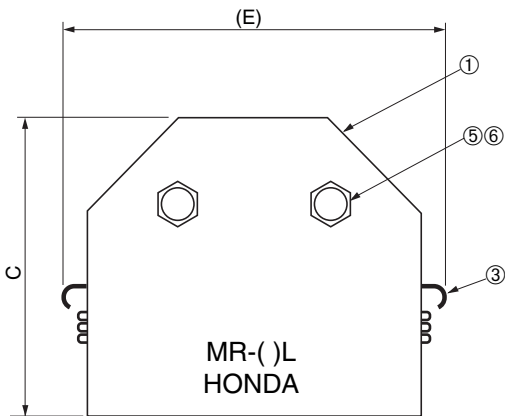
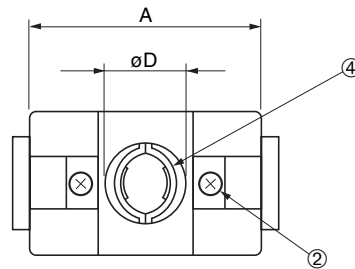
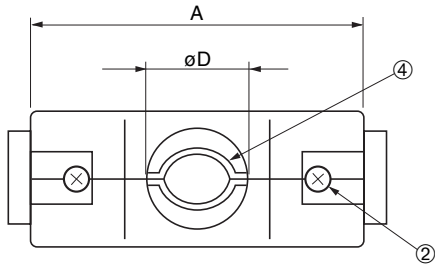


● Configuration of product Part No.

MR- ( ) L+

① ② ③

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of case: Vertical



Note: Capable of dual spring and screw locking

For MR-(16~50)L+

For MR-8L+

● Components

①	Case body
②	Locking screw
③	Spring lock
④	Cable clamp
⑤	Small-sized Phillips head screw
⑥	Hexagon nut

● Dimensions

Part No.	A	B	C	øD	E (Reference)
MR-8L+	31.0	19	39.8	11	36.6
MR-16L+	36.7	18		9	42.3
MR-20L+	39.3		11	44.9	
MR-25L+	44.5		13.5	50.1	
MR-34L+	52.3		15	57.9	
MR-50L+	67.9		16	73.5	

Applicable connectors: Female : MR-( )F( ), MR-( )FW( ), MRP-( )F01

Male : MR-( )M( ), MR-( )MW( ), MRP-( )M01

Mating connectors: Female : MR-( )RF( )+, MR-( )RFW( )+, MR-( )RFD2( )+, MR-( )RFA( )+, etc.

Male : MR-( )RM( )+, MR-( )RMW( )+, MR-( )RMD2( )+, MR-( )RMA( )+, etc.

Vertical type plastic case for junction  
MR-( )LK2+

Case

Junction

RoHS

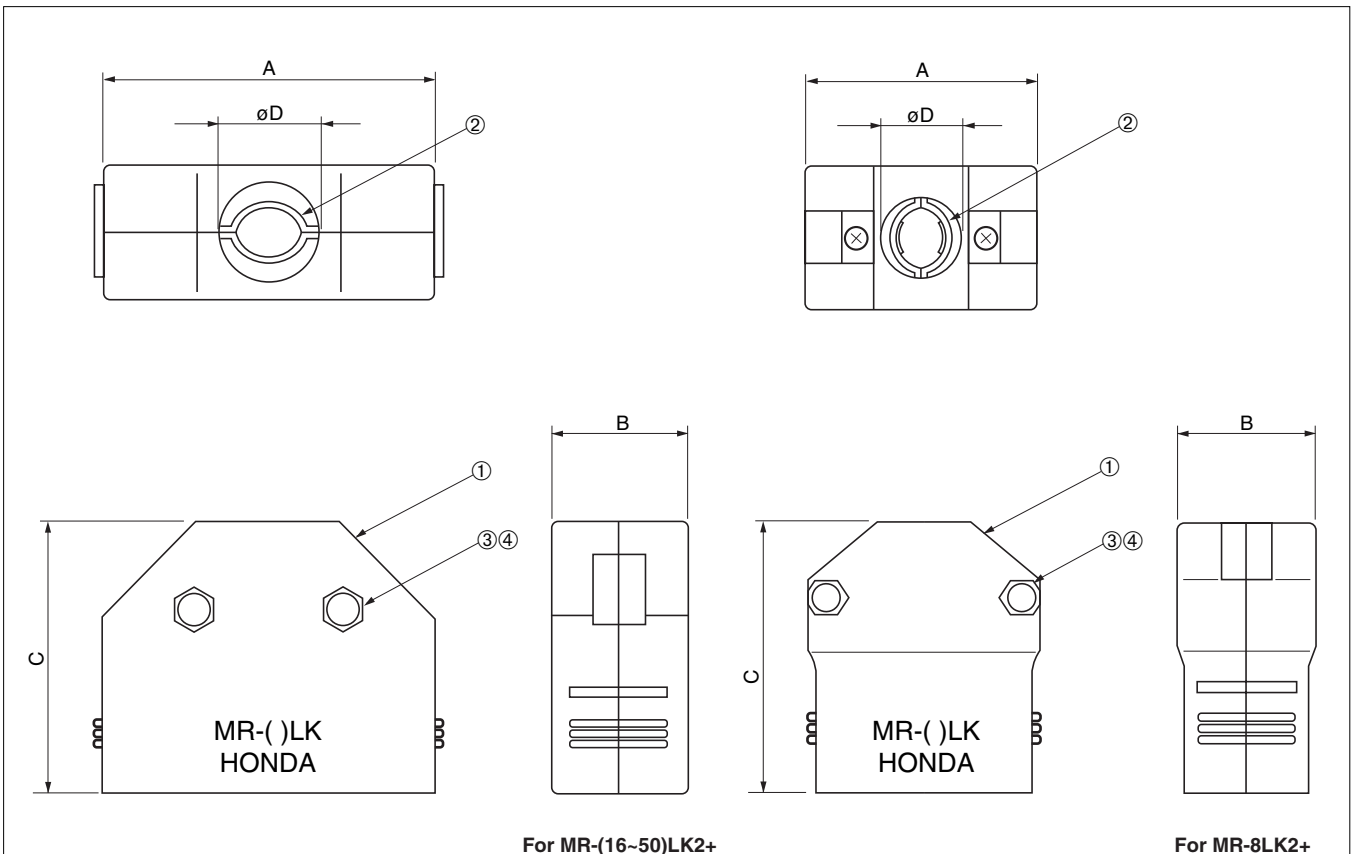


● Configuration of product Part No.

**MR- ( ) LK2+**

① ② ③

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Type of case: For junction



Note: For 8, 25 or 34-contact connector, the Part No. of MR-( )L is marked on the case instead of MR-( )LK.

● Components

①	Case body
②	Cable clamp
③	Small-sized Phillips head screw
④	Hexagon nut

● Dimensions

Part No.	A	B	C	øD
MR-8LK2+	31	19	36.1	11
MR-16LK2+	36.7	18	35.8	9
MR-20LK2+	39.3			11
MR-25LK2+	44.5		36.5	13.5
MR-34LK2+	52.3			15
MR-50LK2+	67.9		40.8	16

Applicable connectors: Female: MR-( )RF(+), MR-( )RFW(+), MRP-( )RF01+

Male : MR-( )RM(+), MR-( )RMW(+), MRP-( )RM01+

Mating connectors with case: Female: MR-( )LF(+), MR-( )LFW(+), etc.

Male : MR-( )LM(+), MR-( )LMW(+), etc.

# Dual-purpose vertical and horizontal type plastic case MR-( )LW+

Rectangular connector

Case

Dual-purpose vertical and horizontal type

Spring lock

RoHS

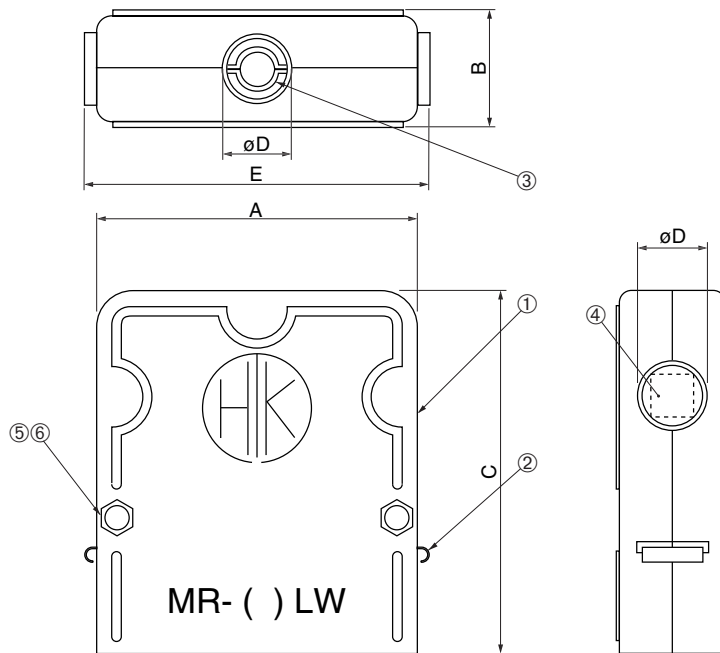


● Configuration of product Part No.

**MR- ( ) LW+**

①      ②      ③

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34, 50 or 60
- ③ Type of case: Dual-purpose vertical and horizontal type



Note 1: Plate spring for latching is not provided for the MR-8LW+ products.

● Dimensions

Part No.	A	B	C	D	E
MR-8LW+	25.6	17	38.0	6.0	—
MR-16LW+	36.7		47.0	9.0	(42.3)
MR-20LW+	39.3	18	56.0	11.0	(44.9)
MR-25LW+	44.5	19		58.3	13.5
MR-34LW+	52.3		20	66.1	15.0
MR-50LW+	67.9	22	68.0	16.0	(73.5)
MR-60LW+	66.9	22	68.0	18.0	(71.7)

● Components

①	Case body
②	Spring lock
③	Cable clamp
④	Cap
⑤	Small-sized Phillips head screw
⑥	Hexagon nut

Note 2: In the MR-8LW+ plastic case, the male or female connectors with mounting hardware, such as MR-8RM( ) or MR-8RF( ), which have an "R" sign at the head of the M or F in the Product Part No., may not be used.

Applicable connectors: Female: MR-(8~60)F( ), MR-(8~60)FW( ), MRP-( )F01

Male : MR-(8~60)M( ), MR-(8~60)MW( ), MRP-( )M01

Mating connectors: Female: MR-8F( ), MR-8FW( ), MR-8FD2( )

MR-(16~60)RF( )+, MR-(16~60)RFW( )+, MR-(16~50)RFD2( )+, MR-(16~50)RFA( )+

Male : MR-8M( ), MR-8MW( ), MR-8MD2( )

MR-(16~60)RM( )+, MR-(16~60)RMW( )+, MR-(16~50)RMD2( )+, MR-(16~50)RMA( )+



Skew type plastic case  
MR-( )NS+

Rectangular connector

Case

Skew type

RoHS

Push button lock for panel mounted connector

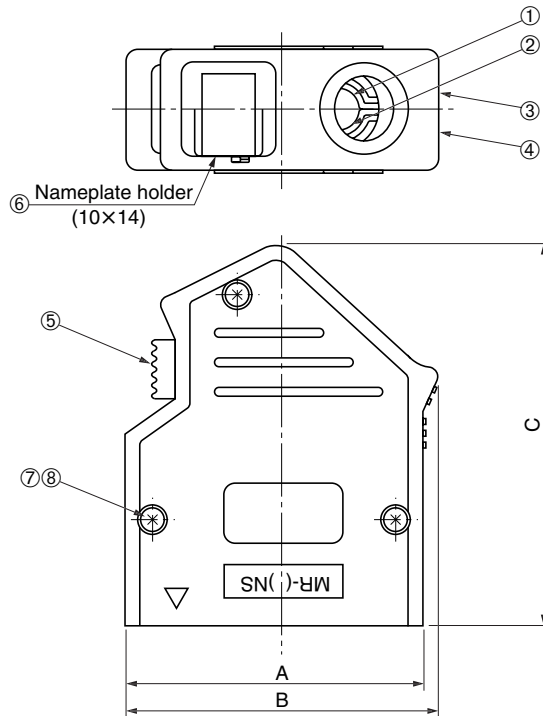


● Configuration of product Part No.

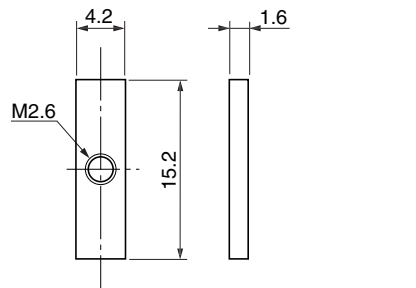
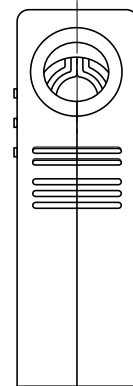
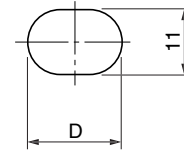
**MR- ( ) NS+**

① ② ③

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ Type of case: Skew type (with push button lock)



Cable hole dimensions



Mounting block (included with the product)

● Components

①	Cable clamp A
②	Cable clamp B
③	Case A
④	Case B
⑤	Push button
⑥	Clear board
⑦	Small-sized Phillips head screw
⑧	Hexagon nut

● Dimensions

Part No.	A	B	C	D
MR-16NS+	37	39	59	11
MR-20NS+				
MR-25NS+	44	46	62	13
MR-34NS+	49	51	64	16
MR-50NS+	71	73	76	24

Applicable connectors: Female : MR-( )F, MR-( )FW( )

Male : MR-( )M( ), MR-( )MW( )

Mating connectors (panel mounted type): Female : MR-( )SRF( )+, MR-( )SRFW( )+

Male : MR-( )SRM( )+, MR-( )SRMW( )+

Skew type plastic case  
MR-( )NSA+

Rectangular connector

Case

Skew type

RoHS

Push button lock for PCB mounted connector

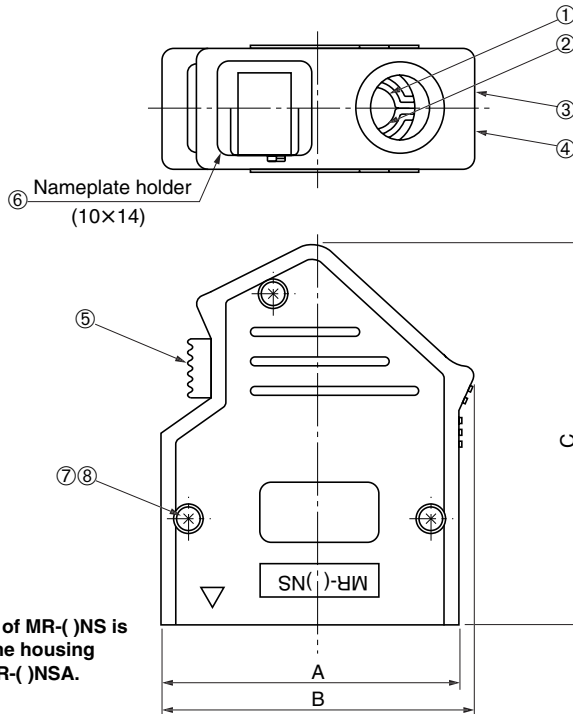


● Configuration of product Part No.

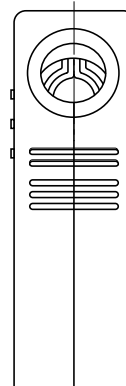
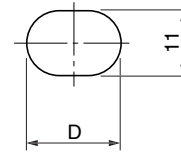
MR- ( ) NSA+

① ② ③

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ Type of case: Skew type (with push button lock)



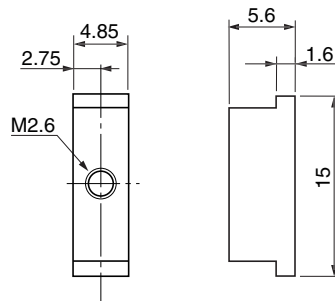
Cable hole dimensions



Note: The Part No. of MR-( )NS is marked on the housing instead of MR-( )NSA.

● Components

①	Cable clamp A
②	Cable clamp B
③	Case A
④	Case B
⑤	Push button
⑥	Clear board
⑦	Small-sized Phillips head screw
⑧	Hexagon nut



Mounting block (included with the product)

● Dimensions

Part No.	A	B	C	D
MR-16NSA+	37	39	59	11
MR-20NSA+				
MR-25NSA+	44	46	62	13
MR-34NSA+	49	51	64	16
MR-50NSA+	71	73	76	24

Applicable connectors: Female: MR-( )F( ), MR-( )FW( )

Male : MR-( )M( ), MR-( )MW( )

Mating connectors (PCB mounted type): Female: MR-( )SRFD2( )+, MR-( )SRFA( )+

Male : MR-( )SRMD2( )+, MR-( )SRFA( )+

Skew type plastic case  
MR-( )NSB+

<b>Rectangular connector</b>
<b>Case</b>
<b>Skew type</b>
<b>Spring lock</b>

RoHS

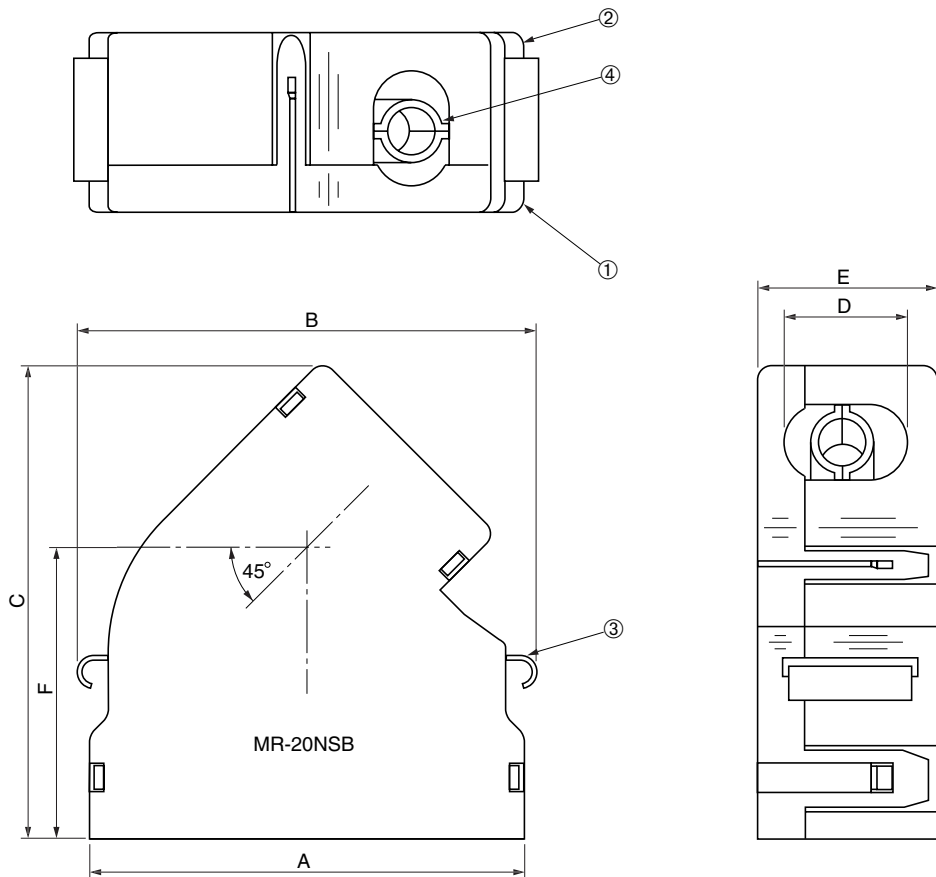


● Configuration of product Part No.

**MR- ( ) NSB+**

① ② ③

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Type of case: Skew type



● Components

①	Case A
②	Case B
③	Spring lock
④	Cable clamp

● Dimensions

Part No.	A	B	C	D	E	F
MR-20NSB+	42.3	46	47	11	17	28.2
MR-50NSB+	71.3	75	61	16		27

Applicable connectors: Female: MR-( )F( ), MR-( )FW( ), MRP-( )F01

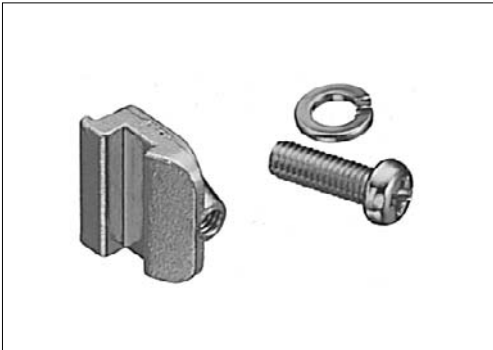
Male : MR-( )M( ), MR-( )MW( ), MRP-( )M01

Mating connectors: Female: MR-( )RF( )+, MR-( )RFW( )+, MR-( )RFD2( )+, MR-( )RFA( )+, etc.

Male : MR-( )RM( )+, MR-( )RMW( )+, MR-( )RMD2( )+, MR-( )RMA( )+, etc.

**Locking block kit**  
**MR-R( )+**

RoHS

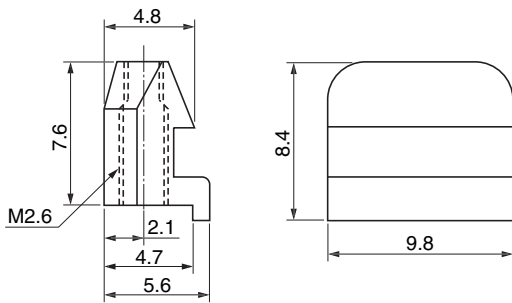
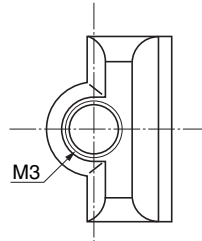
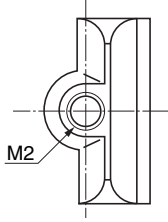


● Configuration of product Part No.

**MR- R ( )+**

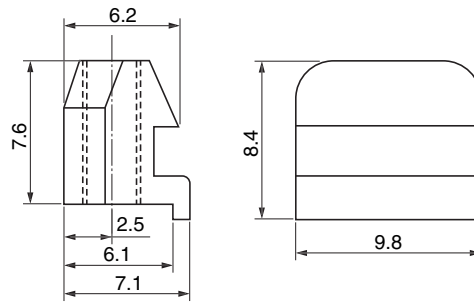
① ② ③

- ① Series name
- ② Locking block
- ③ For use with connector  
 4: 8, 16, 20, 34 or 50 contacts  
 6: 60 contacts



**MR-R4+**

**Note 1:** Included in this kit are, locking block (MR-R+), a small-sized Phillips head screw and a spring washer.



**MR-R6+**

**Note 2:** Included in this kit are, locking block (MR-R2+), a small-sized Phillips head screw and a spring washer.

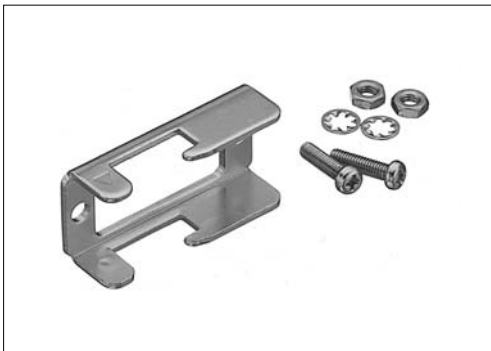
**Note 3:** This kit cannot be used for right-angle type connectors. Two kits are required for one connector.

● Components

①	Locking block
②	Spring washers (Appended)
③	Small-sized Phillips head screws (Appended)

Applicable connectors: MR-( )F( ), MR-( )M( ), MR-( )FW, MR-( )MW, MR-( )FD2( ), MR-( )MD2( )

Brace kit  
MR-( )SR+

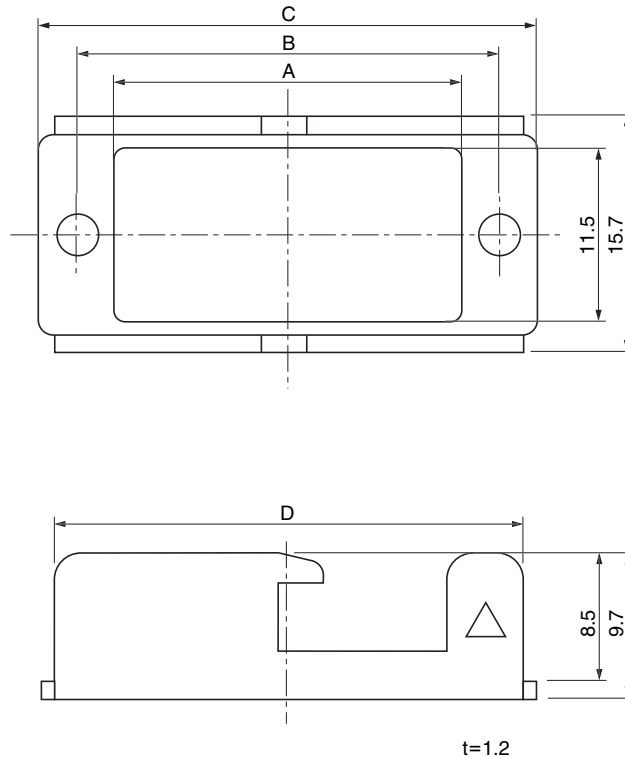


● Configuration of product Part No.

**MR- ( ) SR+**

①      ②      ③

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ Brace for panel mounted connector



● Components

①	Brace
②	Hexagon nuts (Appended)
③	Small-sized Phillips head screws (Appended)
④	Toothed lock washers (Appended)

Note : Included in this kit are brace, two small-sized Phillips head screws, two hexagon nuts, and two toothed lock washers.

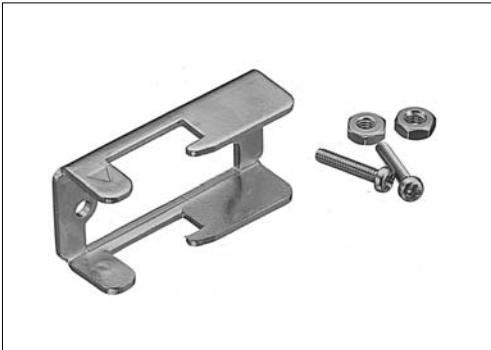
● Dimensions

Part No.	A	B	C	D
MR-16SR+	20.0	25.2	33.0	31.0
MR-20SR+	22.6	27.8		
MR-25SR+	27.8	33.0	40.0	36.0
MR-34SR+	35.6	40.8	45.0	41.0
MR-50SR+	51.2	56.4	67.0	63.0

Applicable connectors: MR-( )F( ), MR-( )M( ), MR-( )FW, MR-( )MW

**Brace kit**  
**MR-( )SRA( )+**

RoHS

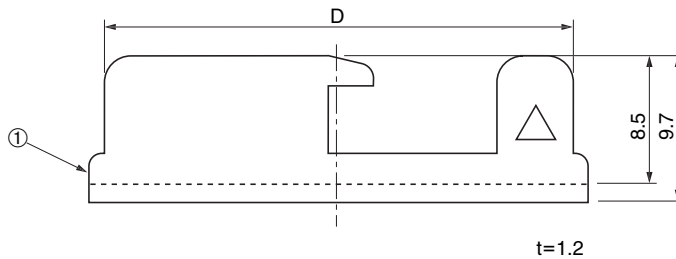
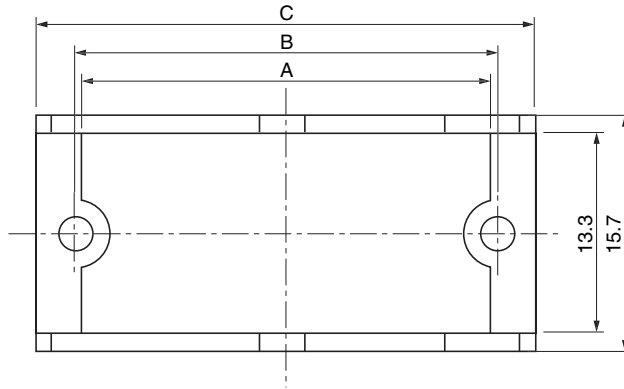


● Configuration of product Part No.

**MR- ( ) SRA ( )+**

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ Brace for through hole type connector
- ④ For use with connector  
None: 16 or 20 contacts  
N : 25, 34 or 50 contacts



● Components

①	Brace
②	Hexagon nuts (Appended)
③	Small-sized Phillips head screws (Appended)

Note 1: This kit cannot be used for right-angle type connectors.

Note 2: Included in this kit are brace, two small-sized Phillips head screws and two hexagon nuts.

● Dimensions

Part No.	A	B	C	D
MR-16SRA+	24.6	25.2	33.0	31.0
MR-20SRA+	27.2	27.8		
MR-25SRAN+	32.4	33.0	40.0	36.0
MR-34SRAN+	40.2	40.8	45.0	41.0
MR-50SRAN+	55.8	56.4	67.0	63.0

Applicable connectors: MR-( )FD2( ), MR-( )MD2( )

Dust cover for female connector  
MR-( )CF

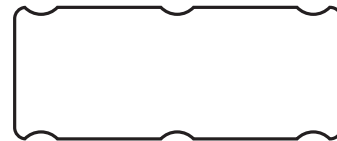
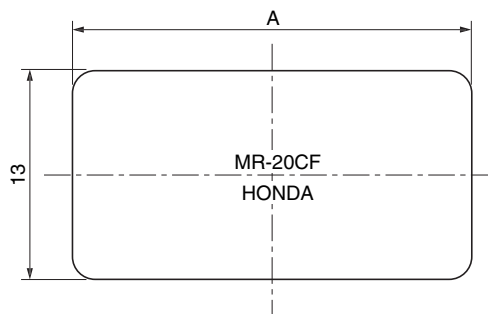


● Configuration of product Part No.

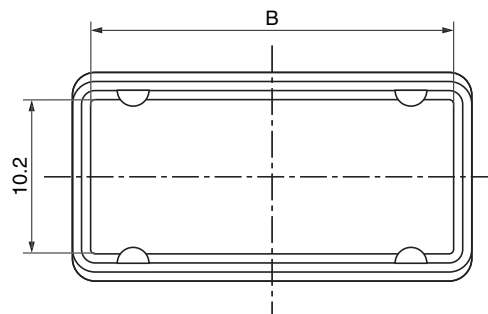
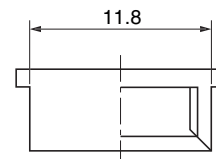
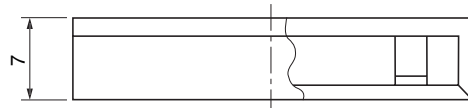
**MR- ( ) CF**

①      ②      ③

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ Dust cover for female connector



For the MR-34 and MR-50CF dust covers, six protrusions are provided on the edge of the cover instead of four as shown above.



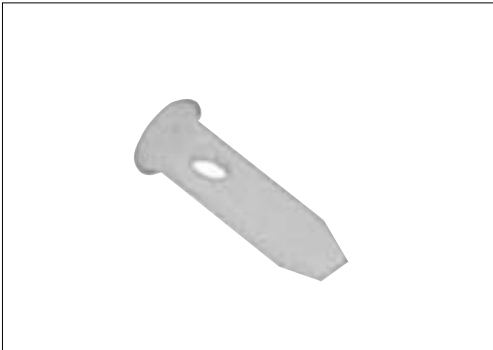
● Dimensions

Part No.	A	B
MR-16CF	19.6	18.0
MR-20CF	22.2	20.6
MR-25CF	27.4	25.8
MR-34CF	35.2	33.6
MR-50CF	50.8	49.2

Applicable connectors: MR and MRH series female connectors

**Key for preventing misinsertion**  
**MR-PK**

RoHS

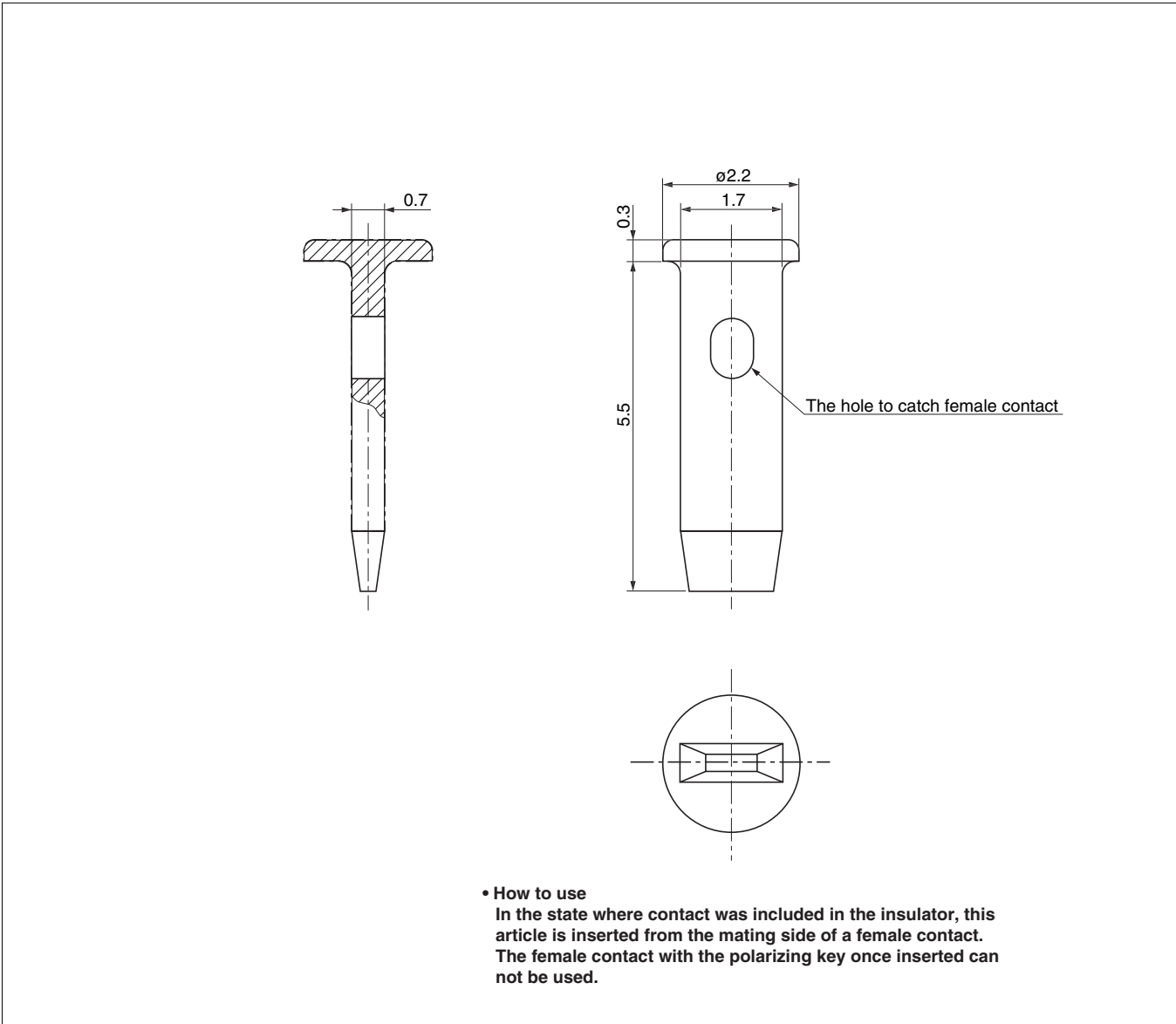


● Configuration of product Part No.

**MR- PK**

①      ②

- ① Series name
- ② Key for preventing misinsertion



• How to use  
 In the state where contact was included in the insulator, this article is inserted from the mating side of a female contact. The female contact with the polarizing key once inserted can not be used.

Applicable connectors: MR and MRH series female connectors



Tool for extracting male contact  
MR-K1

Tool for extracting male contact

RoHS

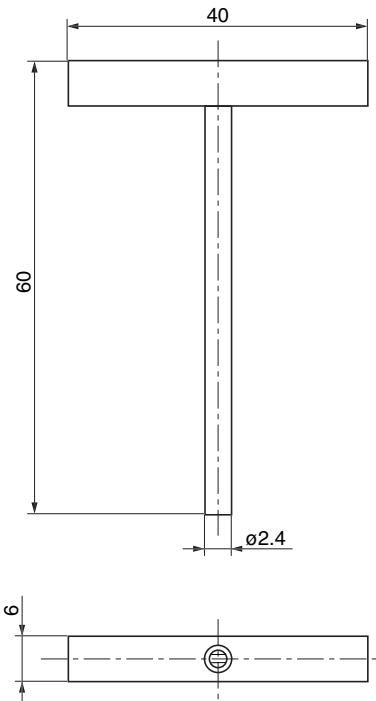


● Configuration of product Part No.

**MR- K1**

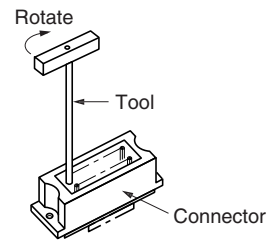
① ②

- ① Series name
- ② Tool for extracting male contact



• How to use

1. The male contact insertion hole of this tool is inserted in a male contact from a mating side.
2. Rotate the handle while pushing the tool to the bottom of insulator and twist the male contact cut.
3. Remove twisted male contact tip part from the tool.



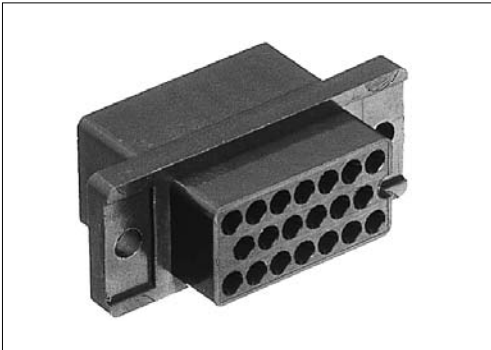
Applicable connectors: MR and MRH series male connectors

Crimping type female insulator for panel  
MRP-( )F01

For panel

Crimping

RoHS

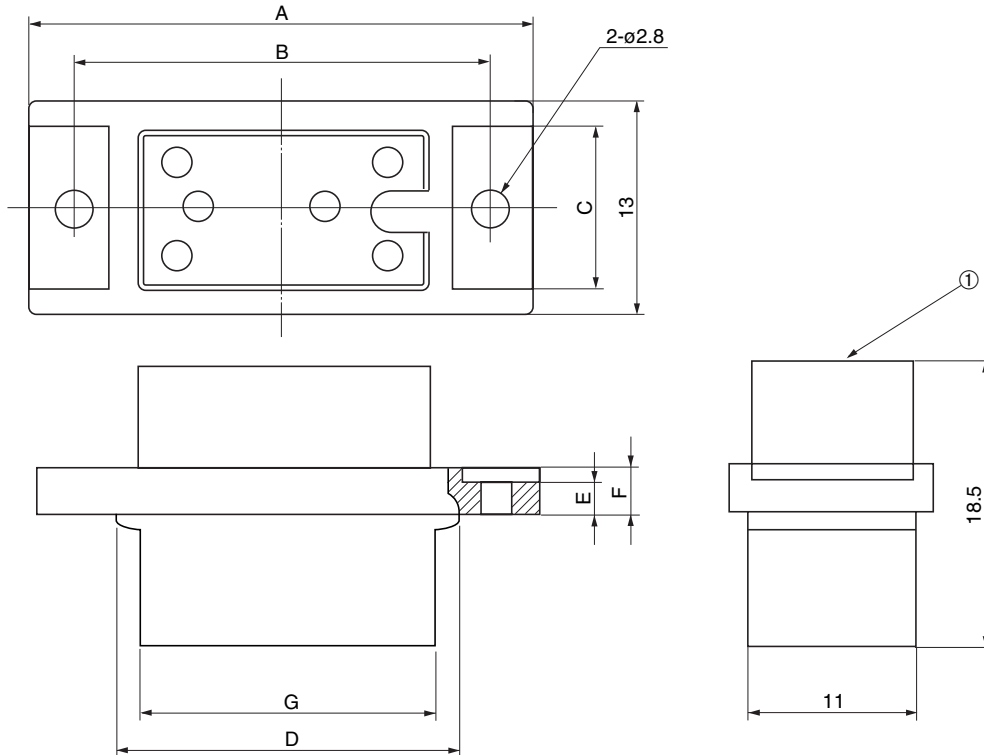


● Configuration of product Part No.

**MRP- ( ) F01**

①      ②      ③

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Female insulator



● Dimensions

Part No.	A	B	C	D	E	F	G
MRP-8F01	22.4	17.4	5	11.9	1.9	3.4	—
MRP-16F01	30.2	25.2	10	19.7	2.4	3	21.3
MRP-20F01	32.8	27.8		22.3			
MRP-25F01	38.0	33.0		27.5			
MRP-34F01	45.8	40.8		35.3			
MRP-50F01	61.4	56.4	50.9	—	—	—	—

● Components

- ① Insulator

Applicable contacts: MRP-F1( ) ( )

Applicable case: MR-( )L+, MR-( )LW+

Mating connectors: MR and MRH series male connectors

Crimping type male insulator for panel  
MRP-( )M01

For panel

Crimping

RoHS

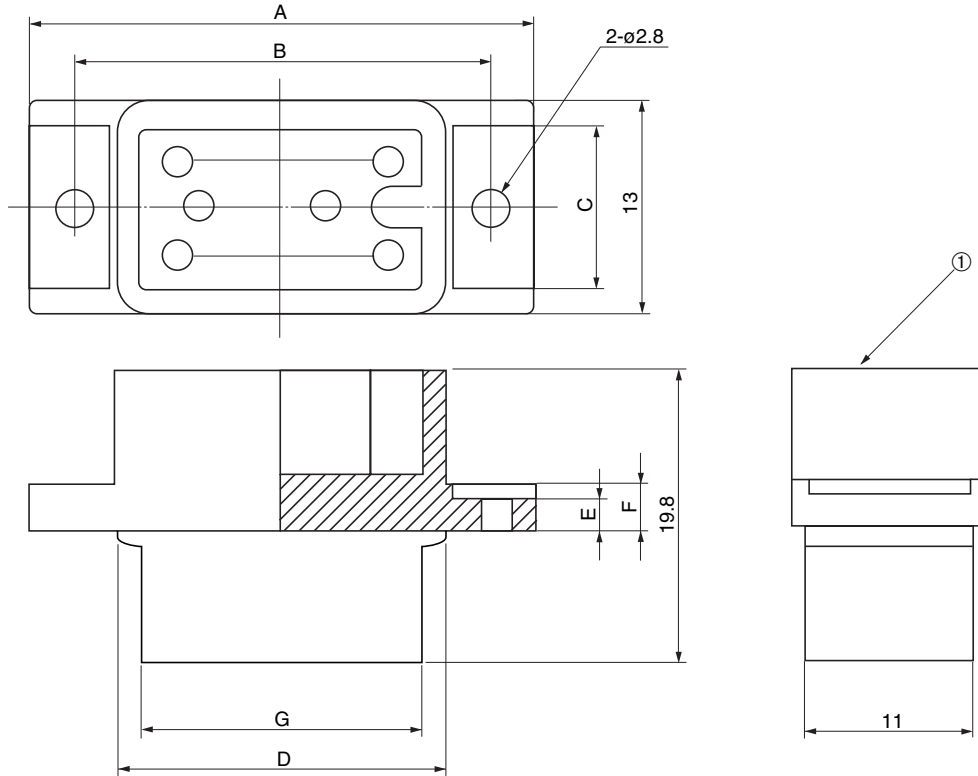


● Configuration of product Part No.

**MRP- ( ) M01**

① ② ③

- ① Series name
- ② No. of contacts: 8, 16, 20, 25, 34 or 50
- ③ Male insulator



● Dimensions

Part No.	A	B	C	D	E	F	G
MRP-8M01	22.4	17.4	5	11.9	2.8	3.4	—
MRP-16M01	30.2	25.2		19.7			21.3
MRP-20M01	32.8	27.8		22.3			
MRP-25M01	38.0	33.0	10	27.5	2.4	3	—
MRP-34M01	45.8	40.8		35.3			
MRP-50M01	61.4	56.4		50.9			

● Components

- ① Insulator

Applicable contacts: MRP-M1( ) ( )

Applicable case: MR-( )L+, MR-( )LW+

Mating connectors: MR and MRH series female connectors

Crimping type female insulator with locking block for panel

For panel

MRP-( )RF01+

Crimping

RoHS

With locking block

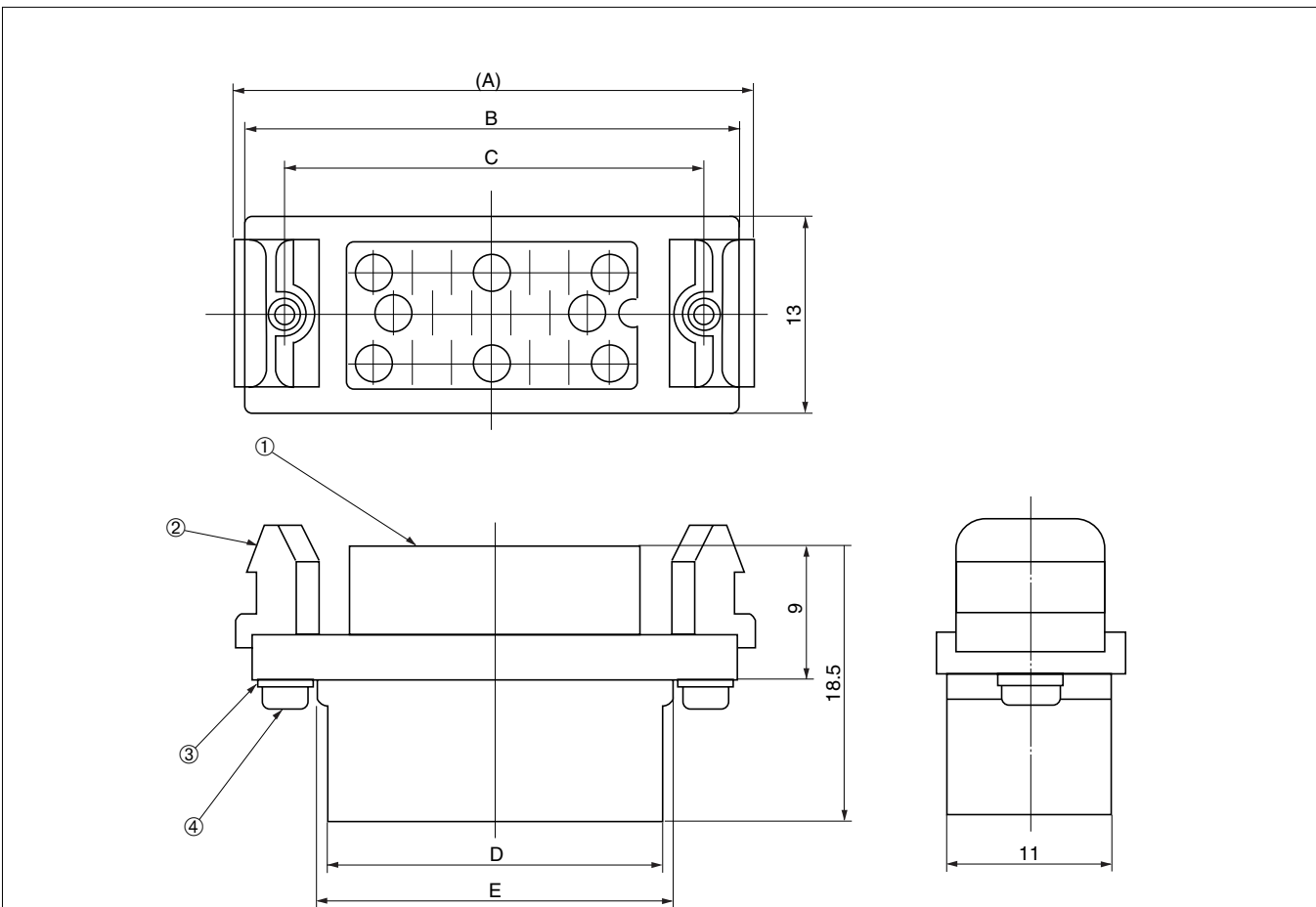


● Configuration of product Part No.

MRP- ( ) R F01+

① ② ③ ④

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Female insulator



● Dimensions

Part No.	A	B	C	D	E
MRP-16RF01+	32.4	30.2	25.2	—	19.7
MRP-20RF01+	35.0	32.8	27.8	21.3	22.3
MRP-25RF01+	40.2	38	33	—	27.5
MRP-34RF01+	48.0	45.8	40.8	—	35.3
MRP-50RF01+	63.6	61.4	56.4	—	50.9

● Components

①	Female insulator
②	Locking block (Appended)
③	Spring washer (Appended)
④	Small-sized Phillips head screw (Appended)

Applicable contacts: MRP-F1( )()

Crimping type male insulator with locking block for panel  
MRP-( )RM01+

For panel

Crimping

With locking block

RoHS

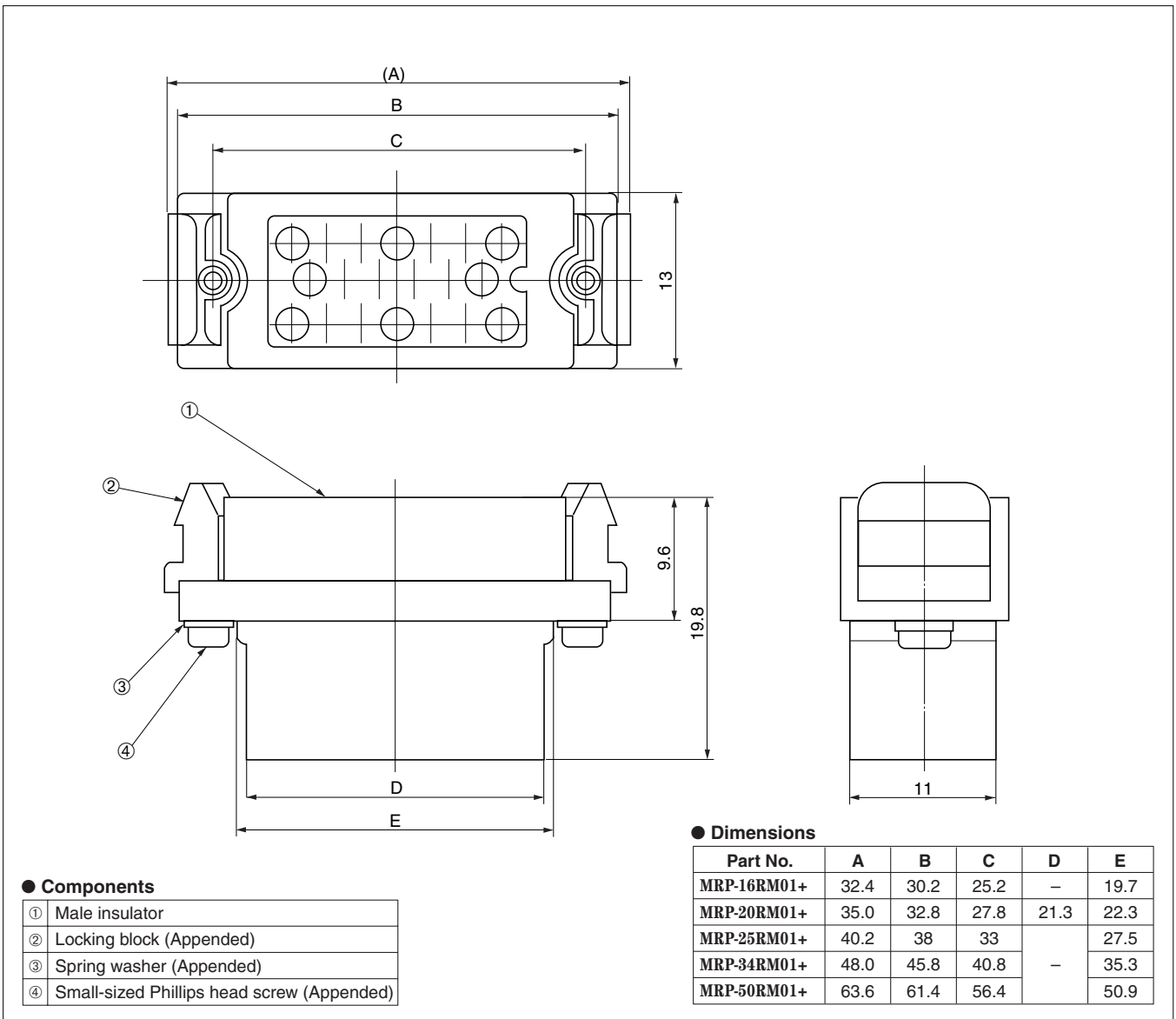


● Configuration of product Part No.

**MRP- ( ) R M01+**

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 16, 20, 25, 34 or 50
- ③ With locking block
- ④ Male insulator



Applicable contacts: MRP-M1( ) ( )

**Crimping type female contact**  
**MRP-F1( ) ( )**

Contact

Crimping

RoHS

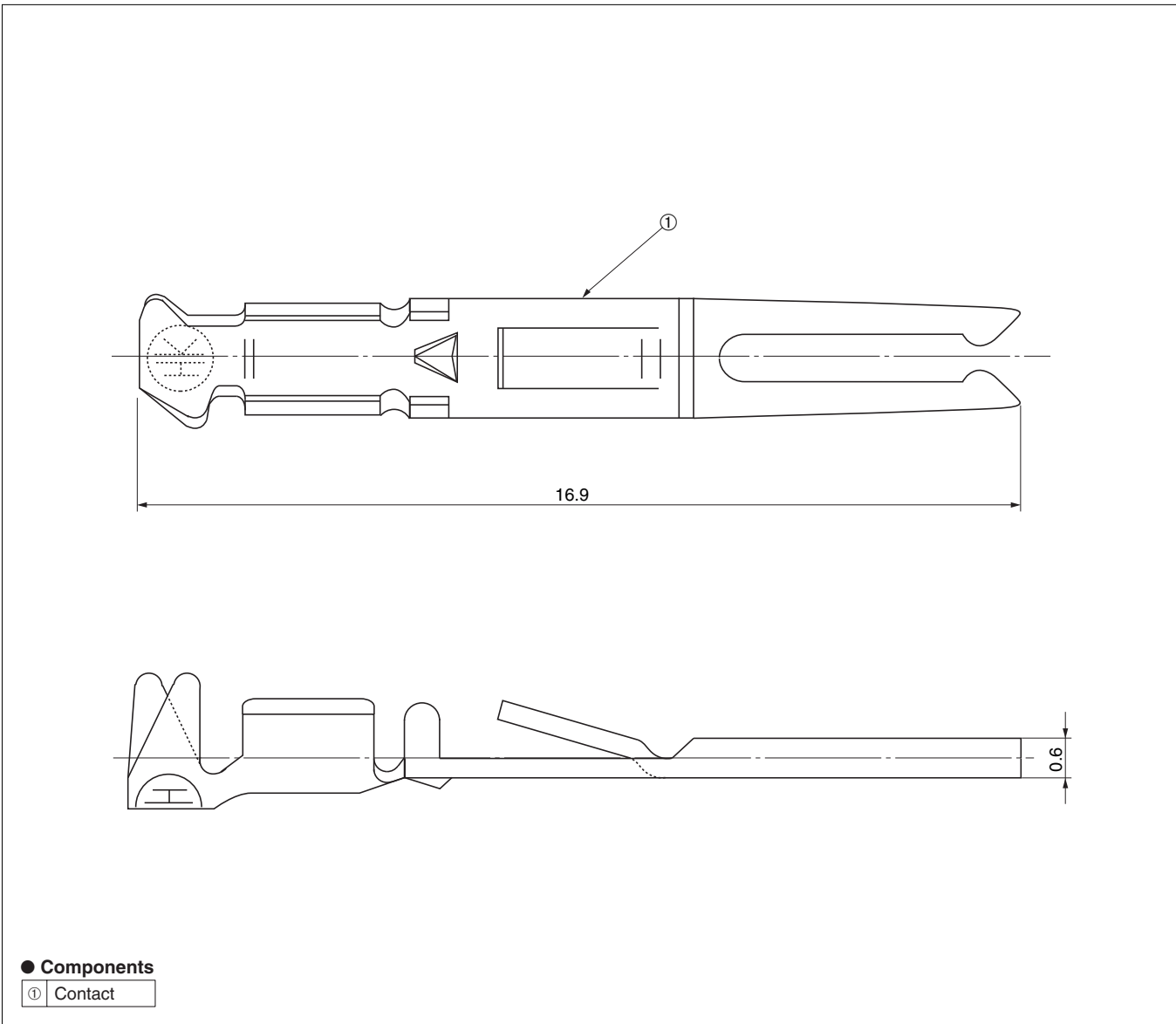


● Configuration of product Part No.

**MRP- F1 ( ) ( )**

①      ②      ③      ④

- ① Series name
- ② Female contact
- ③ Type of contact
  - 0: Strip form terminal (1 reel: 10,000 contacts)
  - 1: Loose piece terminal
- ④ Contact plating
  - 2: Silver plate
  - 3: Gold plate



● Components

- ① Contact

Applicable insulators: MRP-( )F01

For use with cable: AWG#24~28 (Outside diameter:  $\phi 1.2\text{-}\phi 1.5\text{mm}$ )

Automatic crimping machine: Press body: HTK-211, Applicator: KP-202

Manual crimping tool: KP-308 (Refer to page Tool-7)

**Crimping type male contact**  
**MRP-M1( ) ( )**

Contact

Crimping

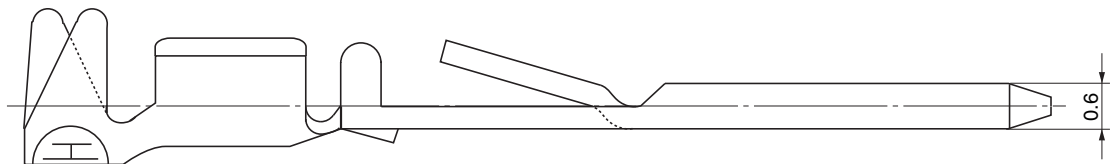
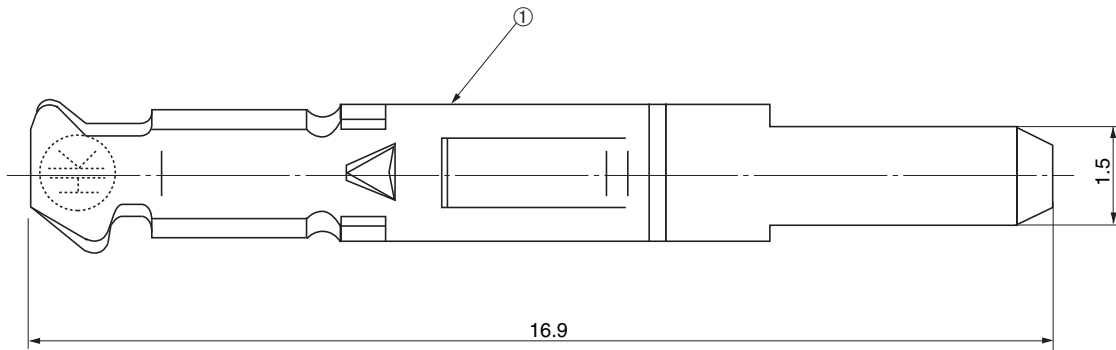
RoHS



● Configuration of product Part No.

**MRP- M1 ( ) ( )**

- ① Series name  
 ② Male contacts  
 ③ Type of contact  
 0: Strip form terminal (1 reel: 10,000 contacts)  
 1: Loose piece terminal  
 ④ Contact plating  
 2: Silver plate  
 3: Gold plate



● Components

- ① Contact

Applicable insulators: MRP-( )M01

For use with cable: AWG#24-28 (Outside diameter:  $\phi 1.2$ - $\phi 1.5$ mm)

Automatic crimping machine: Press body: HTK-211, Applicator: KP-202

Manual crimping tool: KP-308 (Refer to page Tool-7)

**Crimping type contact extraction tool**  
**MRP-MF+**

<b>Tool</b>
<b>Contact extraction tool</b>

RoHS

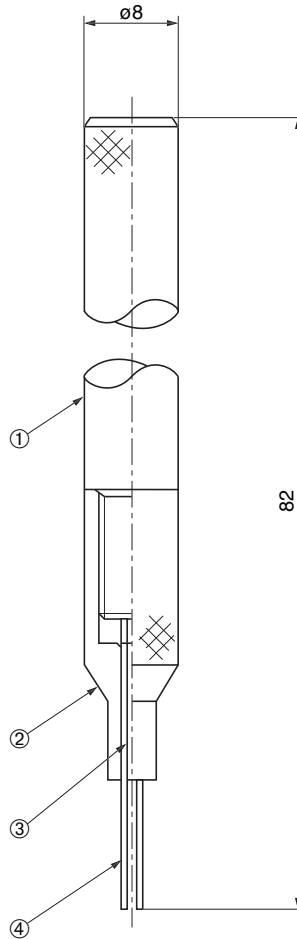


● Configuration of product Part No.

**MRP- MF+**

①      ②

- ① Series name
- ② Contact extraction tool



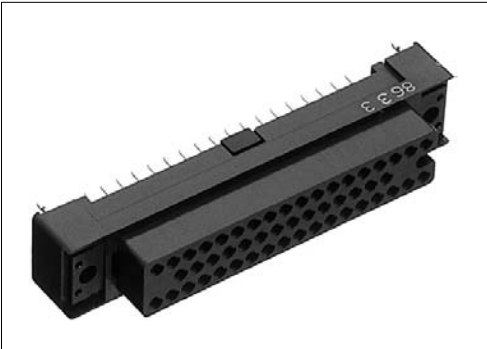
● Components

①	Body B
②	Body A
③	Spacer
④	Pushing pin

Applicable connectors: MRP series crimping type connectors



Straight through hole type female connector for PCB  
MRH-( )FD+

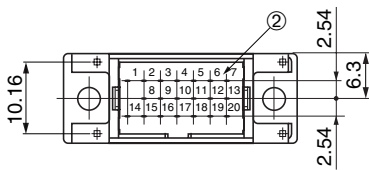
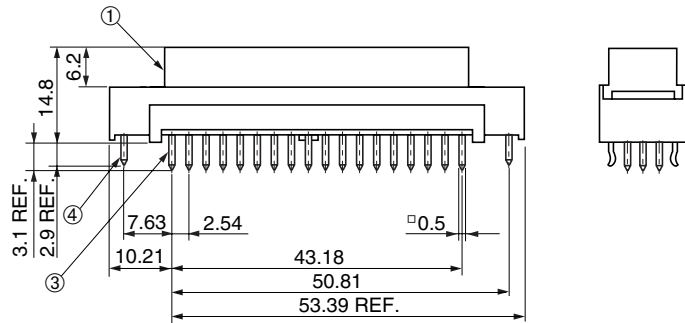
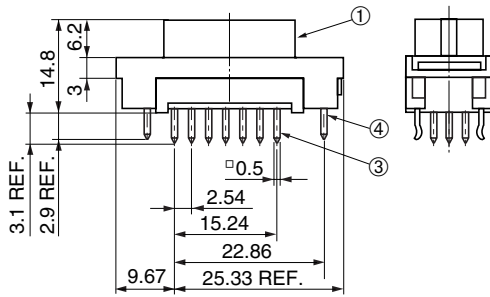
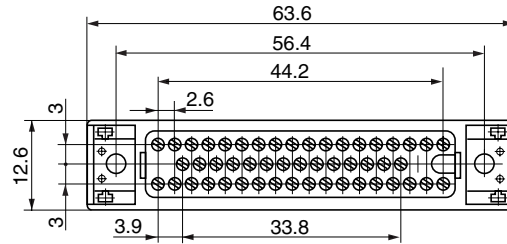
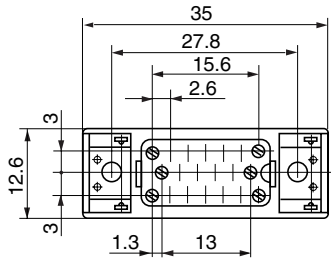


● Configuration of product Part No.

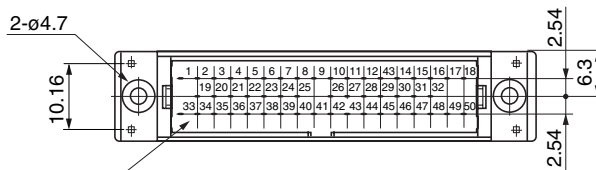
MRH- ( ) FD+

①      ②      ③

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Type of contact: Straight through hole, female



MRH-20FD+



MRH-50FD+

● Components

①	Insulator A
②	Insulator B
③	Contact
④	Locking piece

Note: These connectors are compatible with the MR series of connectors.

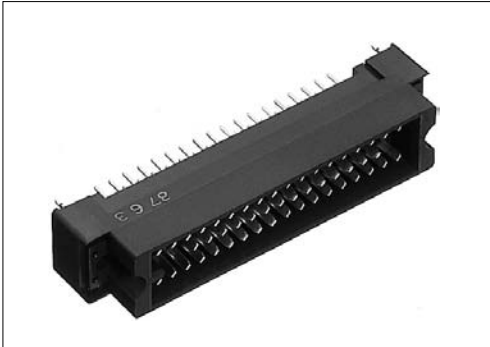
Mating connectors: MRH-( )MD+, MRH-( )MA+

Straight through hole type male connector for PCB  
MRH-( )MD+

For PCB

Straight Through hole

RoHS

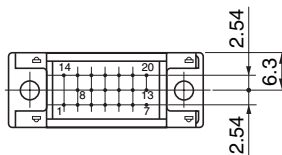
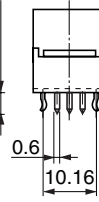
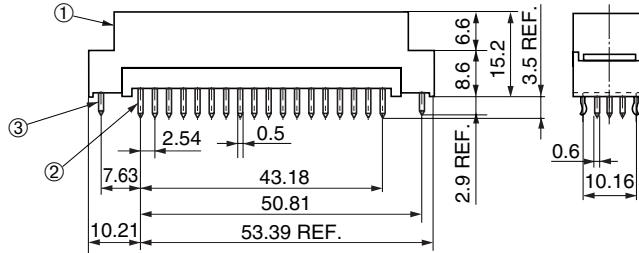
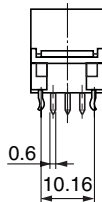
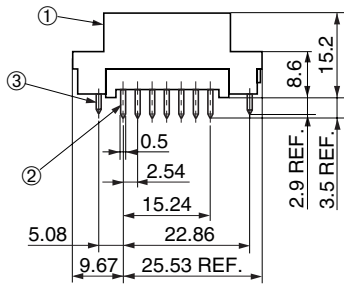
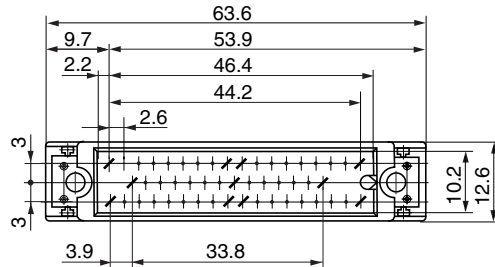
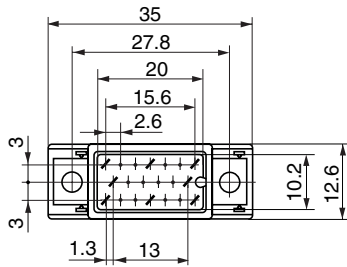


● Configuration of product Part No.

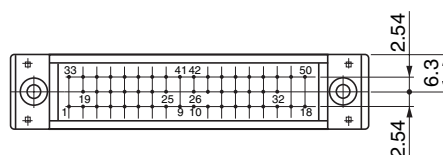
MRH- ( ) MD+

①      ②      ③

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Type of contact: Straight through hole, male



MRH-20MD+



MRH-50MD+

● Components

①	Insulator
②	Contact
③	Locking piece

Note: These connectors are compatible with the MR series of connectors.

Mating connectors: MRH-( )FD+, MRH-( )FA+

# Right-angle through hole type female connector for PCB MRH-( )FA+

Rectangular connector

For PCB

Right-angle Through hole

RoHS

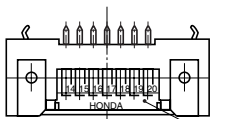
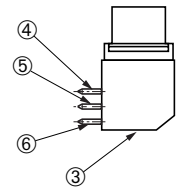
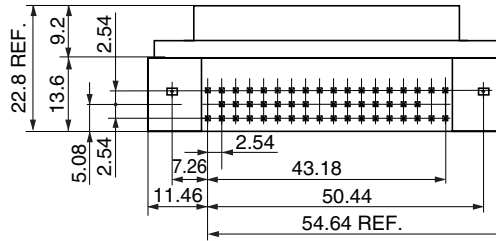
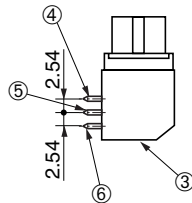
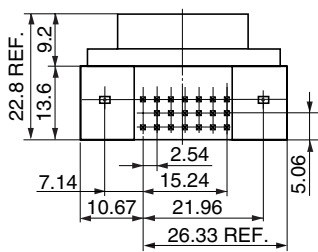
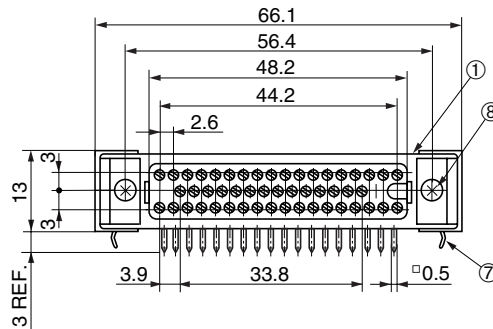
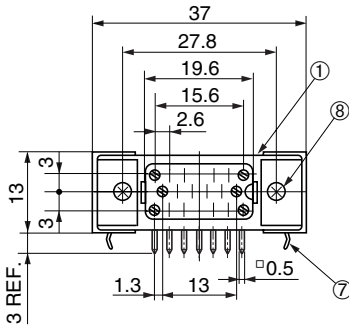


● Configuration of product Part No.

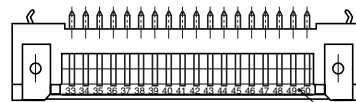
## MRH- ( ) FA+

①      ②      ③

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Type of contact: Right-angle through hole, female



MRH-20FA+



MRH-50FA+

● Components

①	Insulator A
②	Insulator B
③	Bracket
④	Contact (short)
⑤	Contact (middle)
⑥	Contact (long)
⑦	Locking piece
⑧	Tapping screw

Note: These connectors are compatible with the MR series of connectors.

Mating connectors: MRH-( )MD+, MRH-( )MA+

# Right-angle through hole type male connector for PCB MRH-( )MA+

RoHS

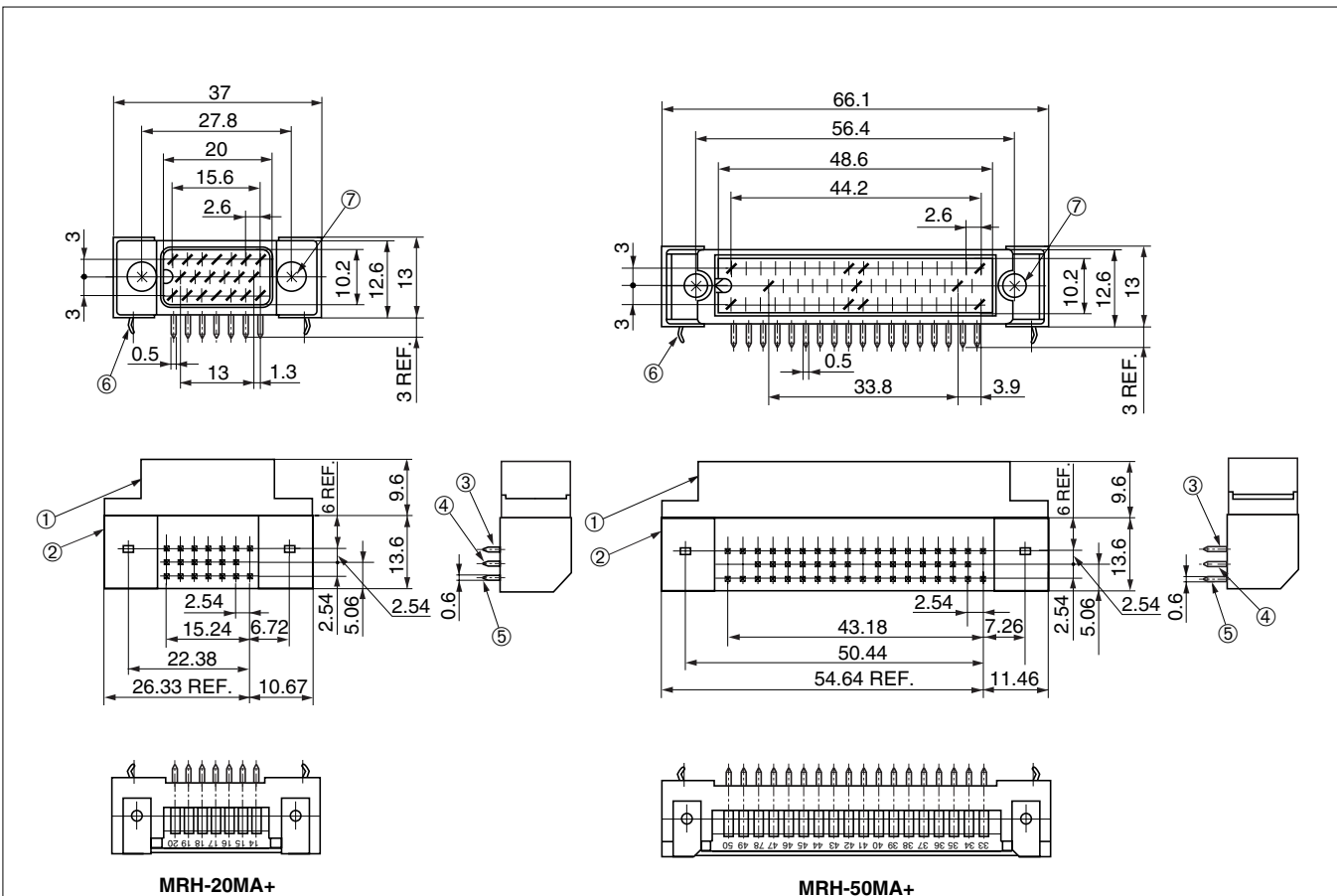


● Configuration of product Part No.

## MRH- ( ) MA+

①      ②      ③

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Type of contact: Right-angle through hole, male



MRH-20MA+

MRH-50MA+

● Components

①	Insulator
②	Bracket
③	Contact (short)
④	Contact (middle)
⑤	Contact (long)
⑥	Locking piece
⑦	Tapping screw

Note: These connectors are compatible with the MR series of connectors.

Mating connectors with case: MRH-( )FD+, MRH-( )FA+

**Straight through hole type female connector  
with locking block for PCB  
MRH-( )RFD+**

**Rectangular connector**

**For PCB**

**Straight Through hole**

**With locking block**

**RoHS**

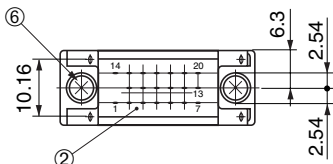
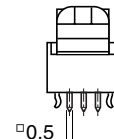
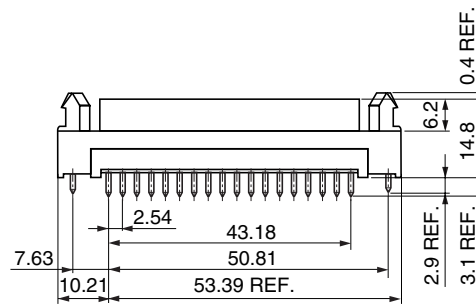
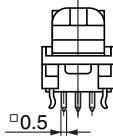
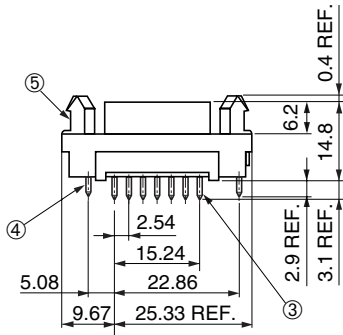
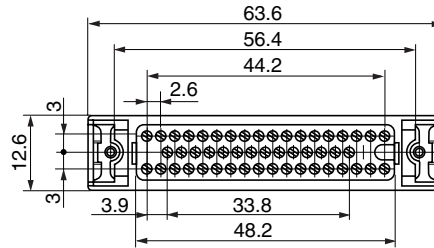
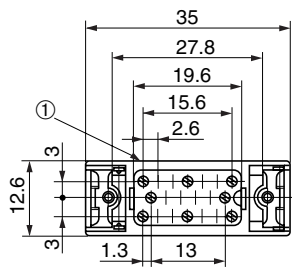


● Configuration of product Part No.

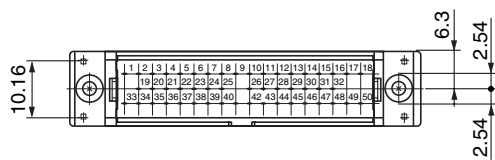
**MRH- ( ) R FD+**

① ② ③ ④

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Locking block
- ④ Type of contact: Straight through hole, female



MRH-20RFD+



MRH-50RFD+

● Components

①	Insulator A
②	Insulator B
③	Contact
④	Locking piece
⑤	Locking block
⑥	Small-sized Phillips head screw

**Note:** These connectors are compatible with the MR series of connectors.

Mating connectors with case: MR-( )LM+, MR-( )LMW+, MRP-( )M01-( )L+

**Straight through hole type male connector  
with locking block for PCB  
MRH-( )RMD+**

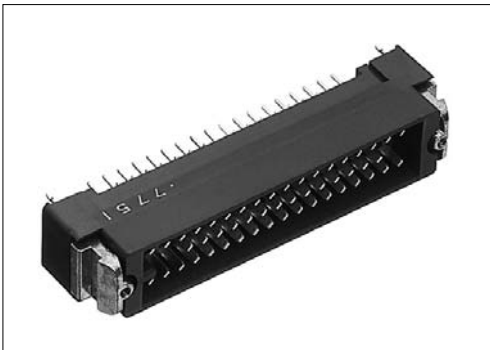
RoHS

**Rectangular connector**

**For PCB**

**Straight Through hole**

**With locking block**

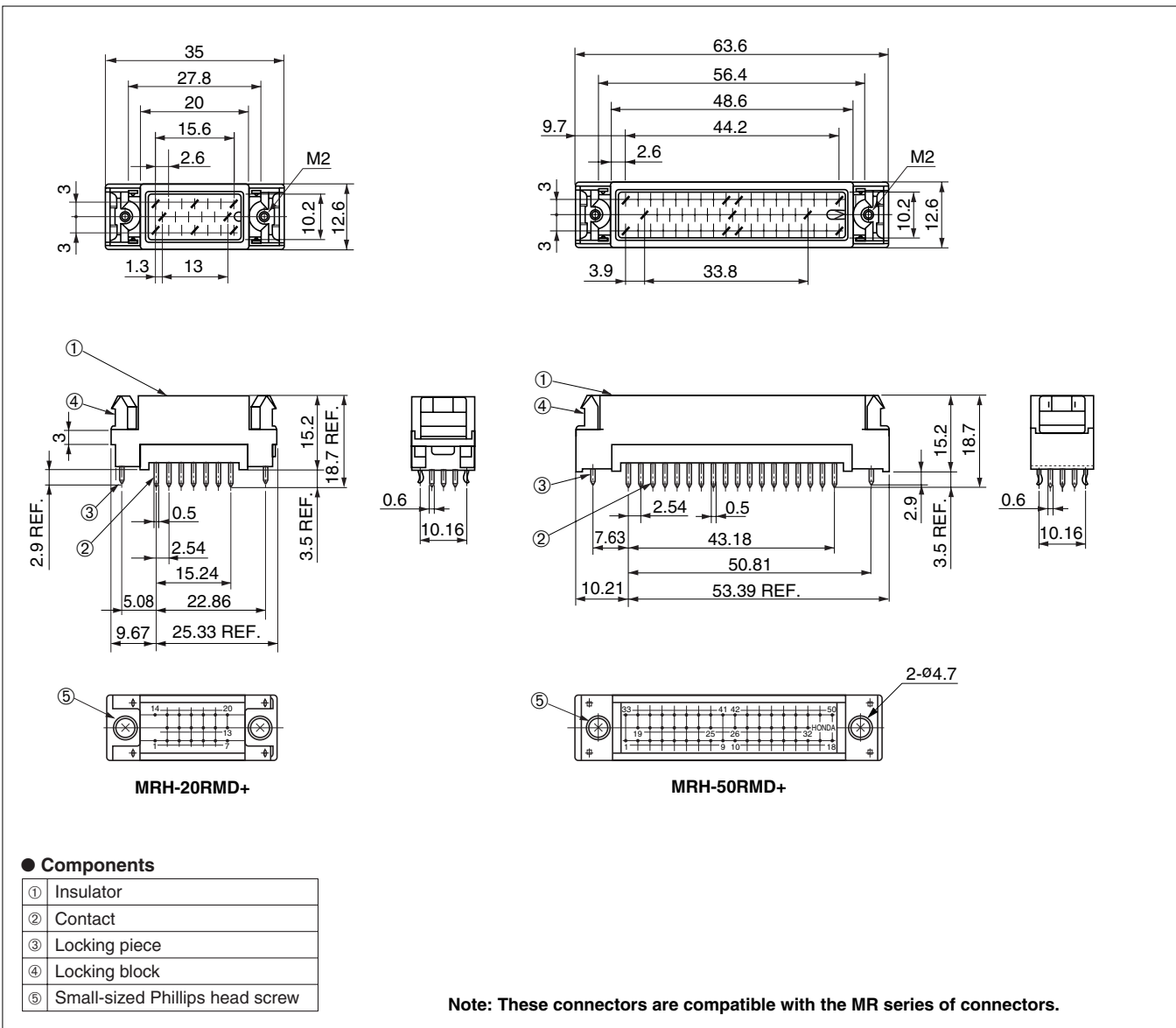


● Configuration of product Part No.

**MRH- ( ) R MD+**

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Locking block
- ④ Type of contact: Straight through hole, male

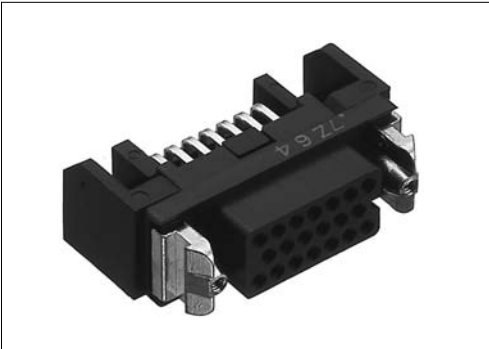


Mating connectors with case: MR-( )LF+, MR-( )LFW+, MRP-( )F01-( )L+

**Right-angle through hole type female connector  
with locking block for PCB  
MRH-( )RFA+**

**Rectangular connector**  
**For PCB**  
**Right-angle Through hole**  
**With locking block**

RoHS

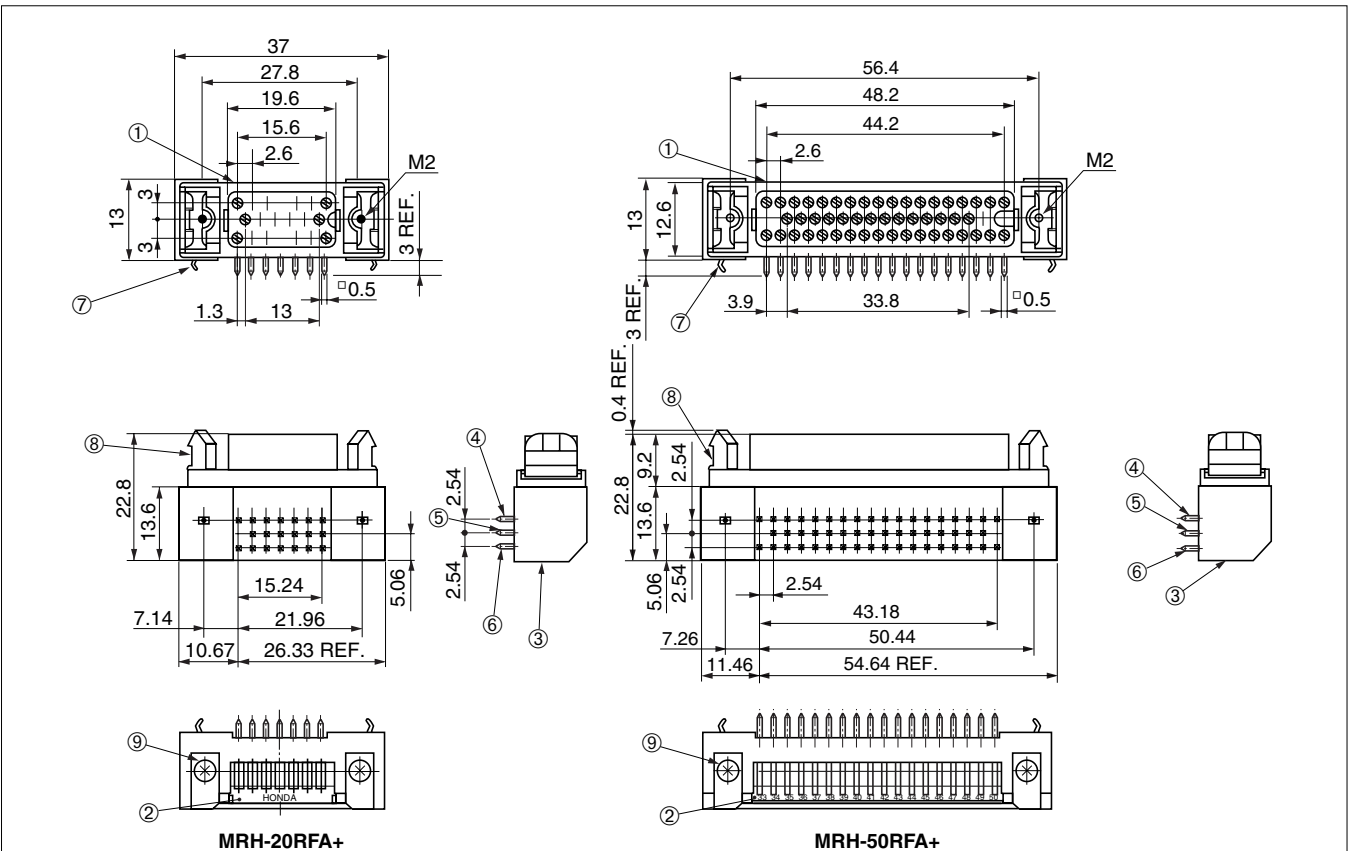


● Configuration of product Part No.

**MRH- ( ) R FA+**

① ② ③ ④

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Locking block
- ④ Type of contact: Right-angle through hole, female



MRH-20RFA+

MRH-50RFA+

● Components

①	Insulator A
②	Insulator B
③	Bracket
④	Contact (short)
⑤	Contact (middle)
⑥	Contact (long)
⑦	Locking piece
⑧	Locking block
⑨	Small-sized Phillips head screw

Note: These connectors are compatible with the MR series of connectors.

Mating connectors with case: MR-( )LM+, MR-( )LMW+, MRP-( )M01-( )L+

# Right-angle through hole type male connector with locking block for PCB MRH-( )RMA+

Rectangular connector

For PCB

Right-angle Through hole

With locking block

RoHS

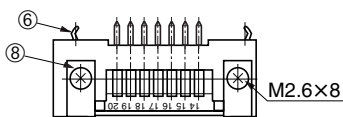
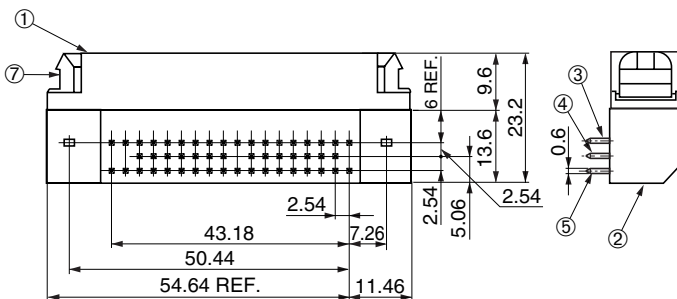
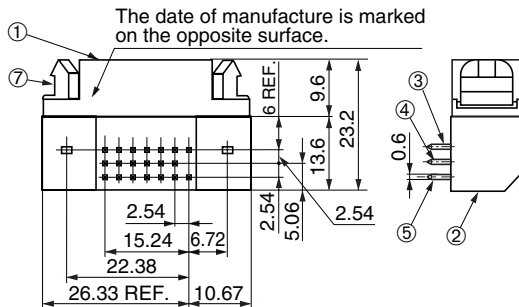
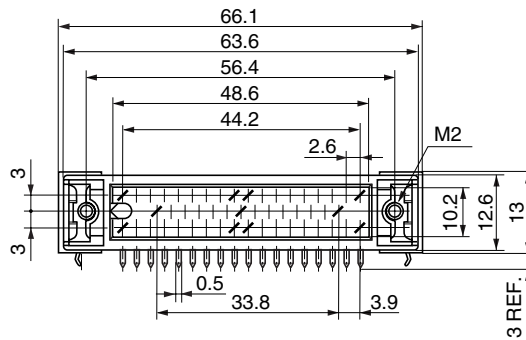
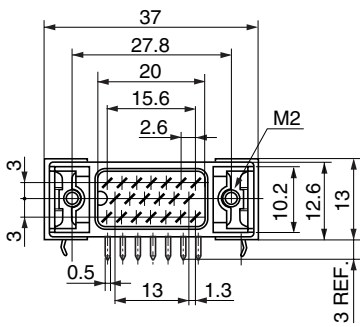


● Configuration of product Part No.

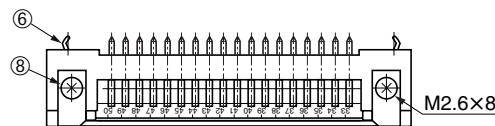
## MRH- ( ) R MA+

① ② ③ ④

- ① Series name
- ② No. of contacts: 20 or 50
- ③ Locking block
- ④ Type of contact: Right-angle through hole, male



MRH-20RMA+



MRH-50RMA+

● Components

①	Insulator
②	Bracket
③	Contact (short)
④	Contact (middle)
⑤	Contact (long)
⑥	Locking piece
⑦	Locking block
⑧	Small-sized Phillips head screw

Note: These connectors are compatible with the MR series of connectors.

Mating connectors with case: MR-( )LF+, MR-( )LFW+, MRP-( )F01-( )L+

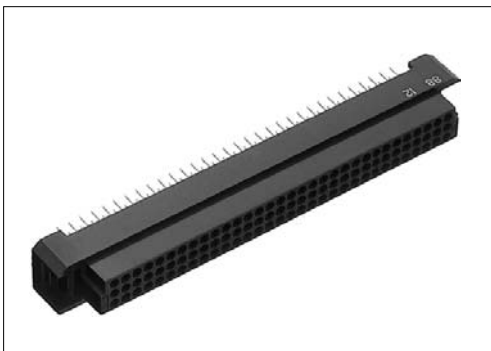


Straight through hole type female connector for PCB  
MRF-96FD( )+

For PCB

Straight Through hole

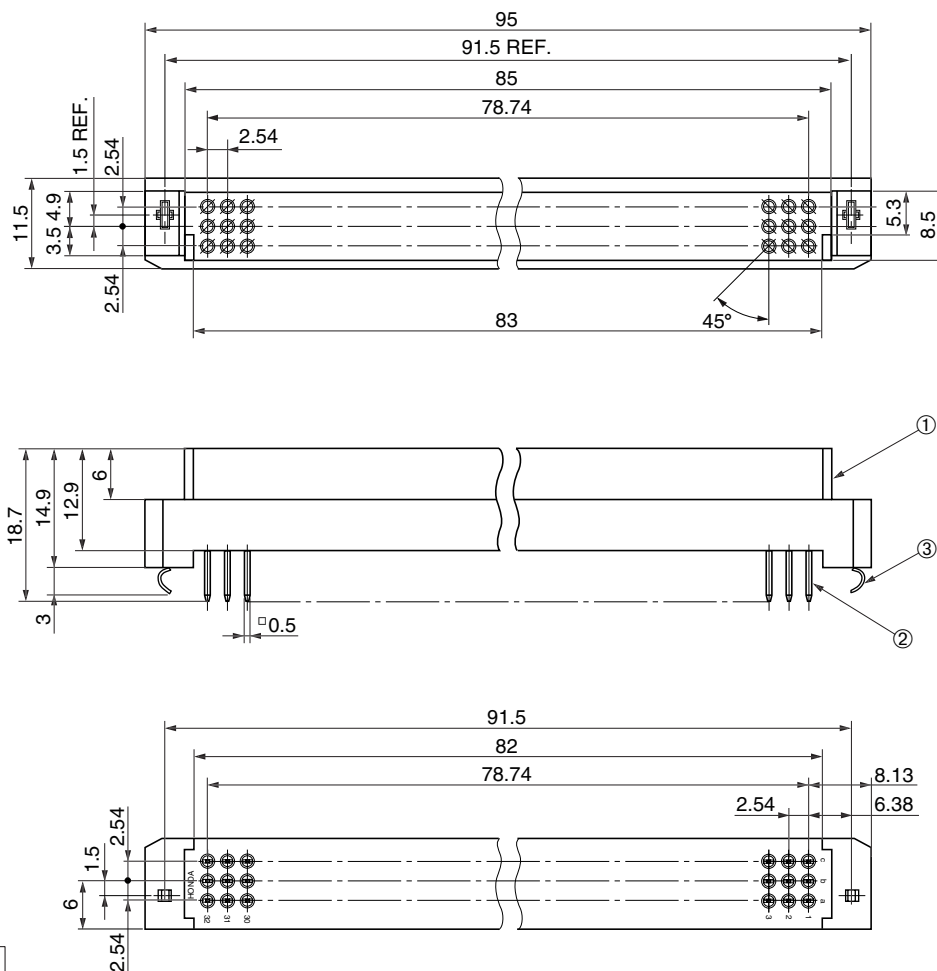
RoHS



● Configuration of product Part No.

**MRF- 96 FD ( )+**

- ① Series name  
 ② No. of contacts: 96  
 ③ Type of contact: Straight through hole, female  
 ④ Contact plating  
 None: Silver plate  
 G : Gold plate



● Components

- |   |               |
|---|---------------|
| ① | Insulator     |
| ② | Contact       |
| ③ | Locking piece |

Mating connectors: MRF-96MD( )+, MRF-96ML( )+

Right-angle through hole type female connector for PCB  
**MRF-96FL( )+**

For PCB

Right-angle through hole

RoHS

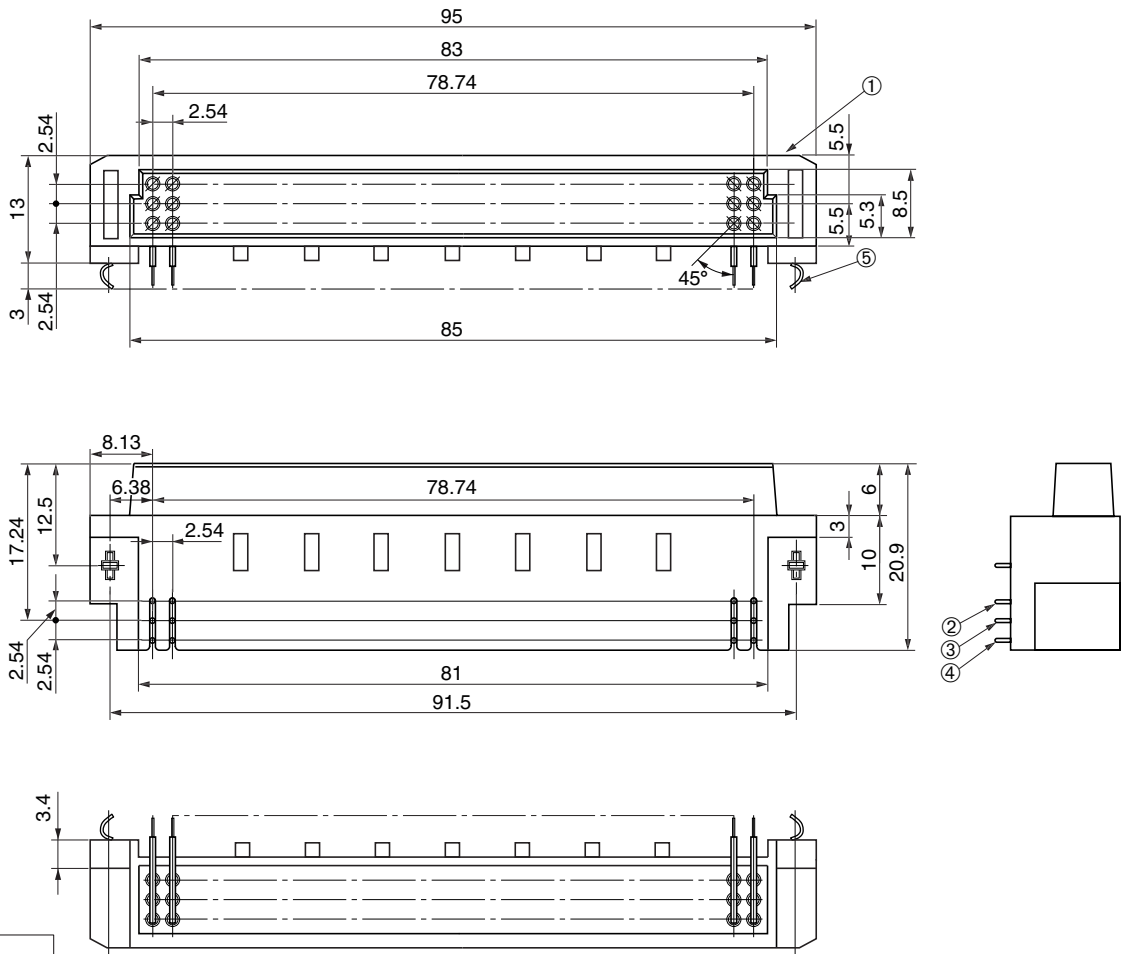


● Configuration of product Part No.

**MRF- 96 FL ( )+**

① ② ③ ④

- ① Series name
- ② No. of contacts: 96
- ③ Type of contact: Right-angle through hole, female
- ④ Contact plating  
 None: Silver plate  
 G : Gold plate



● Components

①	Insulator
②	Contact (short)
③	Contact (middle)
④	Contact (longer)
⑤	Locking piece

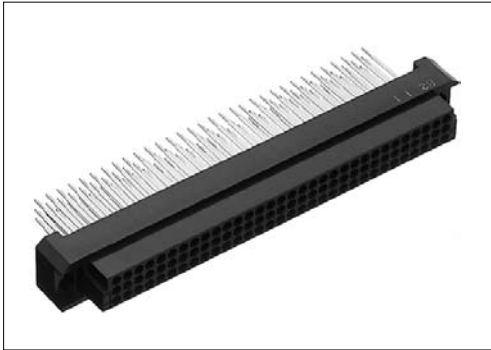
Mating connectors: MRF-96MD( )+, MRF-96ML( )+

Wire wrapping type female connector for PCB  
MRF-96FDW( )

For PCB

Wire wrapping

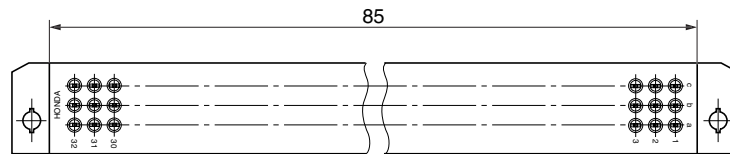
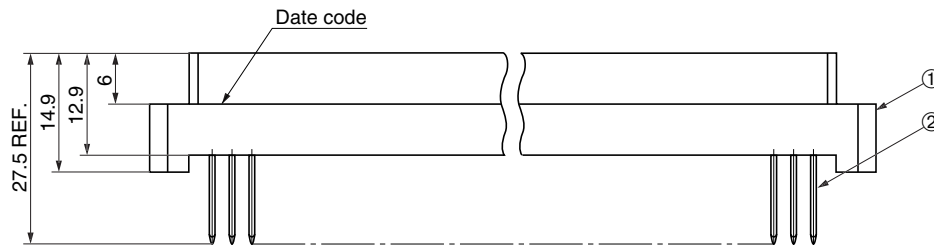
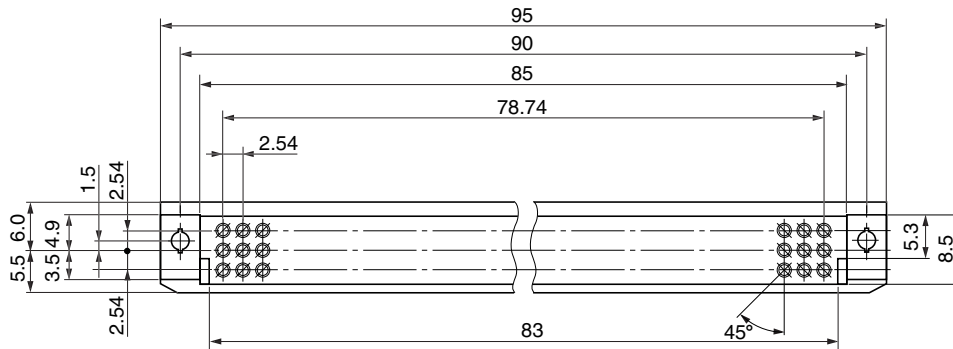
RoHS



● Configuration of product Part No.

**MRF- 96 FDW ( )**

- ① Series name
- ② No. of contacts: 96
- ③ Type of contact: Wire wrapping, female
- ④ Contact plating  
None: Silver plate  
G+ : Gold plate



● Components

①	Insulator
②	Contact

Mating connectors: MRF-96MD( )+, MRF-96ML( )+

Right-angle through hole type male connector PCB  
MRF-96ML( )+

For PCB

Right-angle Through hole

RoHS

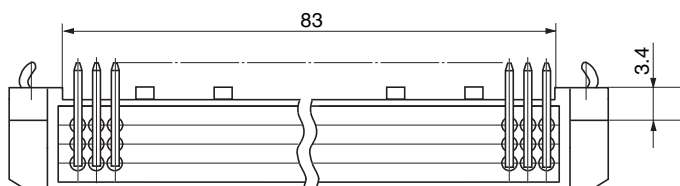
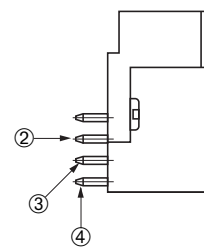
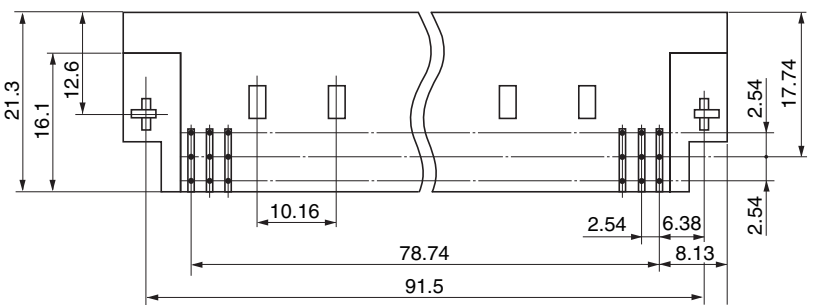
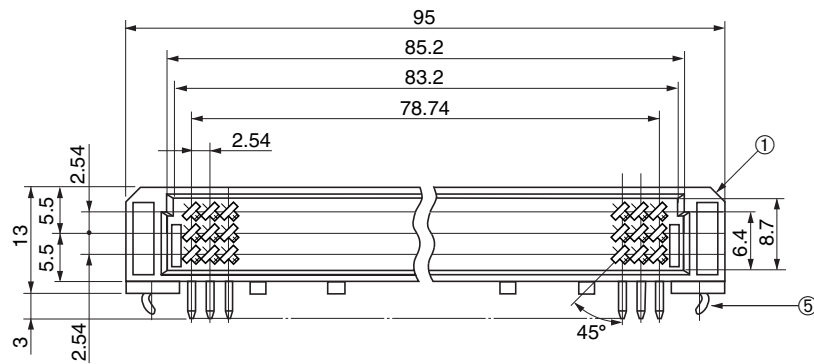


● Configuration of product Part No.

**MRF- 96 ML ( )+**

①      ②      ③      ④

- ① Series name
- ② No. of contacts: 96
- ③ Type of contact: Right-angle through hole, male
- ④ Contact plating  
None: Silver plate  
G : Gold plate

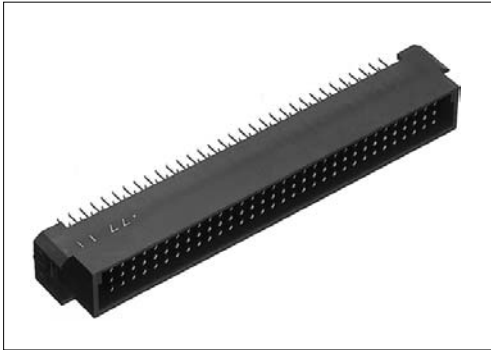


● Components

①	Insulator
②	Contact (short)
③	Contact (middle)
④	Contact (long)
⑤	Locking piece

Mating connectors: MRF-96FD( )+, MRF-96FL( )+, MRF-96FDW( )

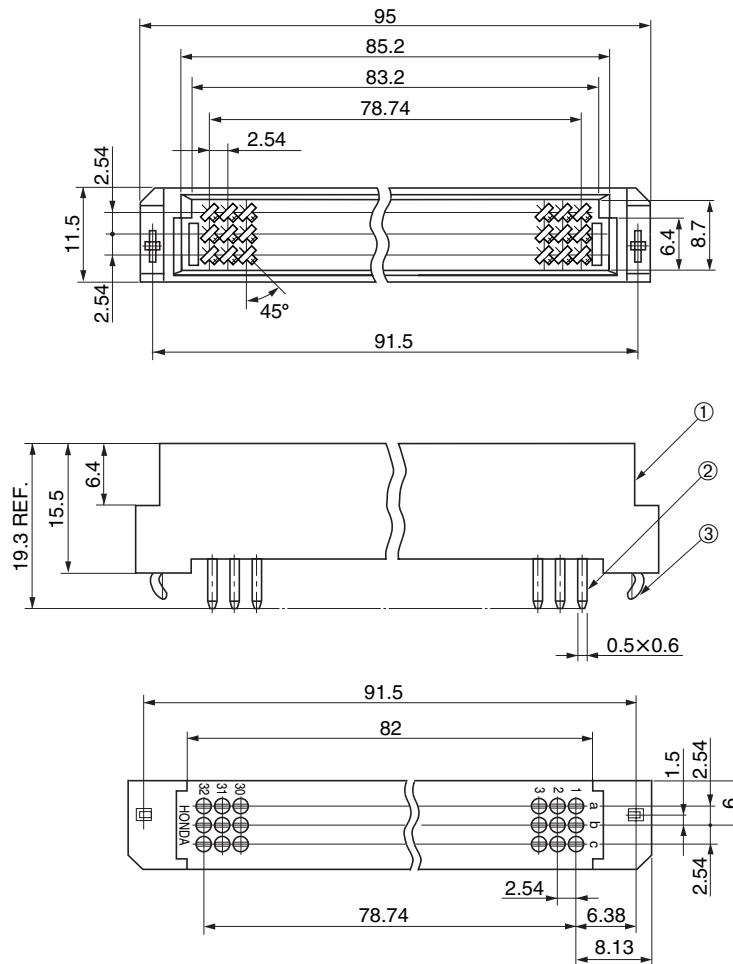
Straight through hole type male connector for PCB  
MRF-96MD( )+



● Configuration of product Part No.

**MRF- 96 MD ( )+**

- ① Series name  
 ② No. of contacts: 96  
 ③ Type of contact: Straight through hole, male  
 ④ Contact plating  
 None: Silver plate  
 G : Gold plate



● Components

①	Insulator
②	Contact
③	Locking piece

Mating connectors: MRF-96FD( )+, MRF-96FL( )+, MRF-96FDW( )