





#### **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



## Recommended PCB layout for straight through hole type male connectors



8-contact connector



25-contact connector



16-contact connector



34-contact connector



mounted face.

50-contact connector

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



8-contact connector



25-contact connector



16-contact connector



20-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



20-contact connector







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

50-contact connector

## **Recommended PCB layout for MRH series through hole type**





-50RMD+







MRH-50MA+ -50RMA+



MRH-20FD+ -20RFD+



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



MRH-50FD+ -50RFD+













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



Connector	Α	В	С	øD	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.

## Combination of Connectors, Case, and Locking Blocks

Note 1: Product Part No. in the square brackets [ ] shows a male or female connector, which is the opposite of the male or female connector as above. Note 2: [\_\_\_] Product Part No. in the box shows a finished product Part No.

#### • Example of using vertical type or dual-purpose





#### **Product List**



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

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



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

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



Soldering type female connector with locking block for panel MR-()RF()+ **M-24** MR series...22



Straight through hole type female connector with locking block for PCB MR-( )RFD2( )+ **M-28** MR series...26



Soldering type female connector with brace for panel MR-( )SRF( )+ **M-32** MR series...30



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

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



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

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



Soldering type male connector with locking block for panel MR-()RM()+ **M-25** MR series...23



Straight through hole type male connector with locking block for PCB MR-( )RMD2( )+ **M-29** MR series...27



Soldering type male connector with brace for panel MR-( )SRM( )+ **M-33** MR series...31



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

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



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

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



Wire wrapping type female connector with locking block for panel MR-()RFW()+ **M-26** MR series...24



Right-angle through hole type female connector with locking block for PCB MR-( )RFA( )+ **M-30** MR series...28



Wire wrapping type female connector with brace for panel MR-( )SRFW( )+ **M-34** MR series...32



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

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



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

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



Wire wrapping type male connector with locking block for panel MR-( )RMW( )+ **M-27** MR series...25



Right-angle through hole type male connector with locking block for PCB MR-()RMA()+ **M-31** MR series...29



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



Vertical type plastic case MR-( )L+

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



Skew type plastic case MR-( )NSA+

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



Brace kit MR-( )SRA( )+

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



Crimping type female insulator for panel MRP-( )F01

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



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



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

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



Skew type plastic case MR-( )NSB+

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



Dust cover for female connector MR-( )CF

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



Crimping type male insulator for panel MRP-( )M01





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



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

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



Locking block kit MR-R( )+

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



Key for preventing misinsertion MR-PK

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



Crimping type female insulator with locking block for panel MRP-( )RF01+ **M-54** MR series...52



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



Skew type plastic case MR-( )NS+

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



Brace kit MR-( )SR+

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



Tool for extracting male contact MR-K1





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



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

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



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 for PCB MRF-96FL()+

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



Crimping type male contact MRP-M1()()

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



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

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



Right-angle through hole type female connector with locking block for PCB MRH-( )RFA( )+ **M-65** MR series...63



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

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



Crimping type contact extraction tool MRP-MF+

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



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

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



Right-angle through hole type male connector with locking block for PCB MRH-()RMA()+ **M-66** MR series...64



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

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



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

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



Straight through hole type female connector with locking block for PCB MRH-()RFD()+ **M-63** MR series...61



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

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



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

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



Soldering SMT IDC Crimping Wire Press-in

Others



Mating connectors: MR and MRH series female connectors Applicable case: MR-()L+, etc.

Others Wire

Crimping

Soldering IDC

Press-in

Throu hole

SMT



Applicable case: MR-()L+, etc. Applicable cable sizes: Ø0.32-0.40 mm



0 mm

Others Wire

Crimping

Soldering IDC

SMT Thro

Press-in



<sup>gh</sup> SMT Press-in IDC Soldering Crimping Wire Others

Through hole



Others Wire Crimping

Soldering IDC Press-in

hol

SMT

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

**Rectangular connector** 

For PCB

**Right-angle Through hole** 



ough SMT Press-in IDC Soldering Crimping Wire



Others Wire Crimping

IDC Press-in

Soldering

hole

SMT



ough SMT Press-in IDC Soldering Crimping Wire Others

hole



Others Wire

Soldering IDC

Crimping

Press-in SMT



<sup>Ih</sup> SMT Press-in IDC Soldering Crimping Wire Wire



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

Others Wire

Crimping

Soldering

IDC Press-in

SMT Thro





Others Wire Crimping IDC Press-in hroug



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

\_\_\_\_\_



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

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

Others Wire

Crimping Soldering

IDC

Press-in SMT



ough SMT Press-in IDC Soldering Crimping Wire Others



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

Others Wire

Crimping Soldering

IDC Press-in SMT



#### Mating case: MR-( )NS+

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

SMT IDC Soldering Crimping Wire wrapping Others Press-in



#### Others Wire wrapping

Soldering IDC

Crimping

SMT Throu

Press-in



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

Through SMT Press-in IDC Soldering Crimping Wire Others



Others

Wire rapping Crimping Soldering IDC Press-in SMT

hrou



#### Mating case: MR-( )NSA+

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


#### Mating case: MR-( )NS+

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

Others Wire Crimping

IDC Press-in

Soldering

Throughold

SMT



Through SMT Press-in IDC Soldering Crimping Wire hole



Others Wire Crimping

Soldering IDC

Press-in

SMT Throu





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

			Part No.	Α	В	С	D	E
• (	Components		MR-8LW+	25.6	17	38.0	6.0	—
1	Case body	Note 2: In the MR-8LW+ plastic case,	MR-16LW+	36.7	17	47.0	9.0	(42.3)
2	Spring lock	the male or female connectors	MR-20LW+	39.3	18	47.0	11.0	(44.9)
3	Cable clamp	with mounting hardware, such	MR-25LW+	44.5	19	56.0	13.5	(50.1)
4	Сар	asMR-8RM()orMR-8RF(),which have an "R" sign at the head	MR-34LW+	52.3	19	58.3	15.0	(57.9)
5	Small-sized Phillips head screw	of the M or F in the Product	MR-50LW+	67.9	20	66.1	16.0	(73.5)
6	Hexagon nut	Part No., may not be used.	MR-60LW+	66.9	22	68.0	18.0	(71.7)

Dimensions

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



 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( )+

> hers Wire wrapping Crimping

Soldering IDC

Press-in

SMT



Male : MR-()M(), MR-()MW() Mating connectors (PCB mounted type): Female: MR-()SRFD2()+, MR-()SRFA()+ Male : MR-()SRMD2()+, MR-()SRFA()+





Others Wire wrapping Crimping

g Soldering IDC

SMT T

Press-in

### ( HONDA TSUSHIN KOGYO CO., LTD. Accessory Locking block kit Locking block kit **MR-R()+** (RoHS) • Configuration of product Part No. MR- R ()+ $\frac{}{2}$ $\frac{}{3}$ 1 ① Series name ② Locking block 3 For use with connector 4: 8, 16, 20, 34 or 50 contacts 6:60 contacts 6.2 7.6 7.6 8.4 8.4 M2.6 2.5 2.1 9.8 9.8 6.1 4.7 7.1 5.6 MR-R4+ MR-R6+ Note 1: Included in this kit are, locking block (MR-R+), Note 2: Included in this kit are, locking block (MR-R2+), a small-sized Phillips head screw and a spring a small-sized Phillips head screw and a spring washer. 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( ) SMT IDC Soldering Crimping Wire Press-in Others



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

Others Wire wrapping Crimping Soldering IDC

Press-in

SMT

Through hole



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Others



Others Wire wrapping

Crimping Soldering

IDC Press-in SMT

# Key for preventing misinsertion MR-PK

Accessory

Key for preventing misinsertion

RoHS







Applicable case: MR-()L+, MR-()LW+
Mating connectors: MR and MRH series male connectors



Mating connectors: MR and MRH series female connectors

Others Wire wrapping Crimping

oing Soldering

IDC

Press-in SMT

Through



<sup>h</sup> SMT Press-in IDC Soldering Crimping Wire Others



Others

Crimping Soldering IDC

Press-in SMT





Others Wire Crimping

Soldering IDC Press-in

SMT Thr

## Crimping type contact extraction tool MRP-MF+

Tool **Contact extraction tool** 

(RoHS)



Wire wrapping SMT Press-in IDC Soldering Crimping

Others



Others Wire

Crimp

Soldering IDC Press-ir

SMT Throug hole



hrough SMT Press-in IDC Soldering Crimping Wire Others

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



For PCB

**Right-angle Through hole** 

(RoHS)



Wirę

Crimpi

Solderi

Others

IDC

Press-ir

SMT

Throug hole

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



RoHS



Through SMT Press-in IDC Soldering Crimping Wire Others



Others Wire wrapping Crimp

IDC Press-in

SMT Throug hole



hrough SMT Press-in IDC Soldering Crimping Wire Others








Wire

Crimping

Soldering

IDC

Press-in

SMT

Throug hole

Others

### ( HONDA TSUSHIN KOGYO CO., LTD.

Rectangular connector



<sup>gh</sup> SMT Press-in IDC Soldering Crimping Wire Others





rrough SMT Press-in IDC Soldering Crimping Wire Others





ing Crimping Soldering

Press-in SMT

Throug hole

IDC