



# RM-H series

## Metal Miniature Push Pull Self-locking Connector

- *Secure high performance push pull self-locking system*
- *High pin density and light weight construction*
- *Alignment key and polarized keying system to avoid cross-interface*
- *360° EMC shielded*
- *Robust and shock resistant designs*
- *Available solder, PCB contact*



# RM-H series

## Plugs



HR10A



HR10A

## Receptacles



HR10A



HR10A

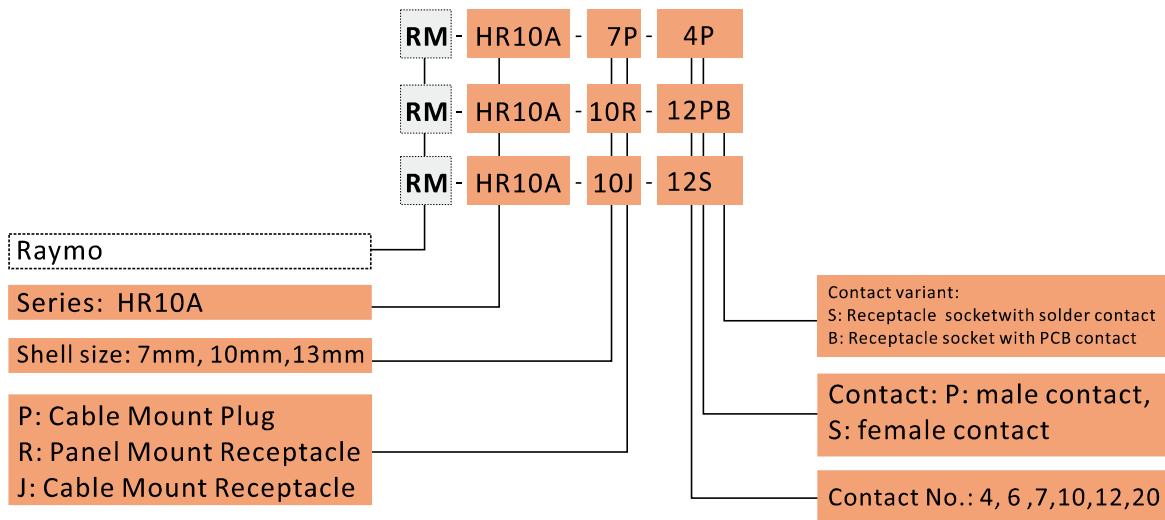


HR10A



HR10A

## Part Numbering System



## Part No. Example

### Straight plug with cable collet

RM-HR10A-7P-6P Cable Mount plug, HR10A series, 7mm shell, multipole 6 contacts, male in solder type, brass-alloyed shell with nickel plated, PPS insulator, black colour bend relief for OD4.2-5.0mm cable.

### Fixed receptacle

RM-HR10A-10R-12PN Fixed receptacle, 10mm shell size, 12pin male contact in PCB type, outshell in nickel-plated brass, PPS insulator.

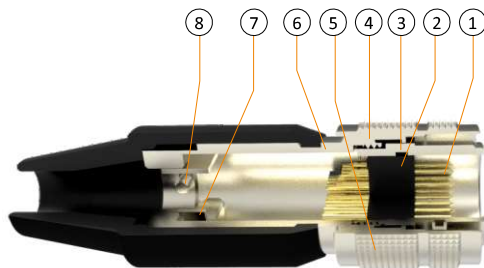
### Free cable receptacle

RM-HR10A-10J-12S Free cable receptacle with cable collet, 10mm shell size, 12female contact outshell in nickel-plated brass, PPS insulator, with a black colour bend relief.

## Part Section Showing Internal Components

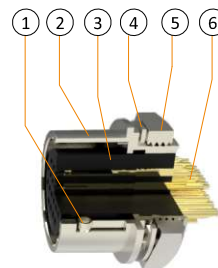
### Straight Plug

- ① Male contact
- ② Insulator
- ③ Inner shell
- ④ Snap Spring
- ⑤ Outer shell
- ⑥ Ground crown
- ⑦ Screw
- ⑧ U collet nut



### Fixed Receptacle

- ① Locking spring
- ② Outer shell
- ③ Insulator
- ④ Locking gasket
- ⑤ Hexagonal nut
- ⑥ Female contact

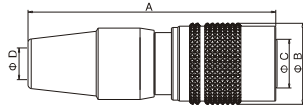


## Technical Characteristics

Component	Material	Surface Treatment
Shell	Brass	Nickel
Insulator	PPS	
Male Contact	Brass	Gold or silver
Female Contact	Brass	Gold or silver

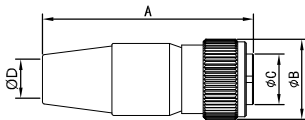
## Electrical Characteristics

Description	Test Data
Resistance	50 $\Omega$
Insulator Resistance	1000M $\Omega$ or more at DC250V
Contact Resistance	Center 6.5m $\Omega$ or less and outer 4m $\Omega$ or less at DC1A
Test Voltage	AC 250V r.m.s for 1minute
V.S.W.R	1.3 Or less for 0 to 1000MHZ
Force	4.9N 500gf or more



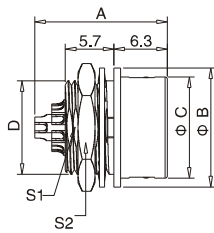
HR10A Cable mount plug

Reference		Dimensions(mm)			
Model	No. of pins	A	B	C	D
7mm	4,6	35	11.5	7.5	5
10mm	10,12	43	14.7	9	7
13mm	20	58.8	19	13	7



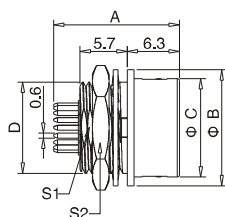
HR10A Cable mount plug

Reference		Dimensions(mm)			
Model	No. of pins	A	B	C	D
10mm	10,12	39.5	14.7	9.5	7



HR10A Panel mount receptacle

Reference		Dimensions(mm)				
Model	No. of pins	A	B	C	D	E
7mm	4,6	14	11	8.85	M11*0.75	10
10mm	10,12	16	14	11.9	M11*0.75	13
13mm	20	19.2	18	15.4	M8*0.5	17

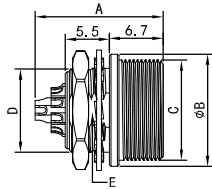


HR10A Panel mount receptacle, printed PCB contact

Reference		Dimensions(mm)				
Model	No. of pins	A	B	C	D	E
7mm	4,6	15.6	11	8.85	M8*0.5	10
10mm	10,12	15.6	14	11.9	M11*0.75	13
13mm	20	17.8	18	15.4	M14*0.5	17



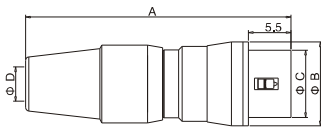
**HR10A** Panel mount receptacle



Reference		Dimensions(mm)				
Model	No.of pins	A	B	C	D	E
10mm	10,12	16	14	M11*0.75	M11*0.75	9.6



**HR10** Cable mount receptacle



Reference		Dimensions(mm)			
Model	No.of pins	A	B	C	D
7mm	4,6	35.3	11	8.85	10
10mm	10,12	43	14	11.9	13

## Insulator Configuration

Shell size	7 mm			10 mm	
Contact No. view					
Contact No.	4	5	6	10	12
Test Voltage	AC500V for a minute	AC300V for a minute		AC300V for a minute	
Test Current	2A	2A		2A	
Insulation Resistance	MIN 1,000M $\Phi$	MIN 1,000M $\Phi$		MIN 1,000M $\Phi$	
Contact Resistance	MAX 10m $\Phi$	MAX 10m $\Phi$		MAX 10m $\Phi$	
Solder cup OD	$\Phi$ 0.8	$\Phi$ 0.8		$\Phi$ 0.8	

Shell size	13 mm
Contact No. view	
Contact No.	20
Test Voltage	AC300V for a minute
Test Current	2A
Insulation Resistance	MIN 1,000M $\Phi$
Contact Resistance	MAX 10m $\Phi$
Solder cup OD	$\Phi$ 0.8

### Note:

- Above view is from socket front view.
- Voltae is test voltage.
- Insulator resistance is tested based on DC100V.
- Contact resistance is tested based on DC100V.

### Receptacle PCB type pinout

