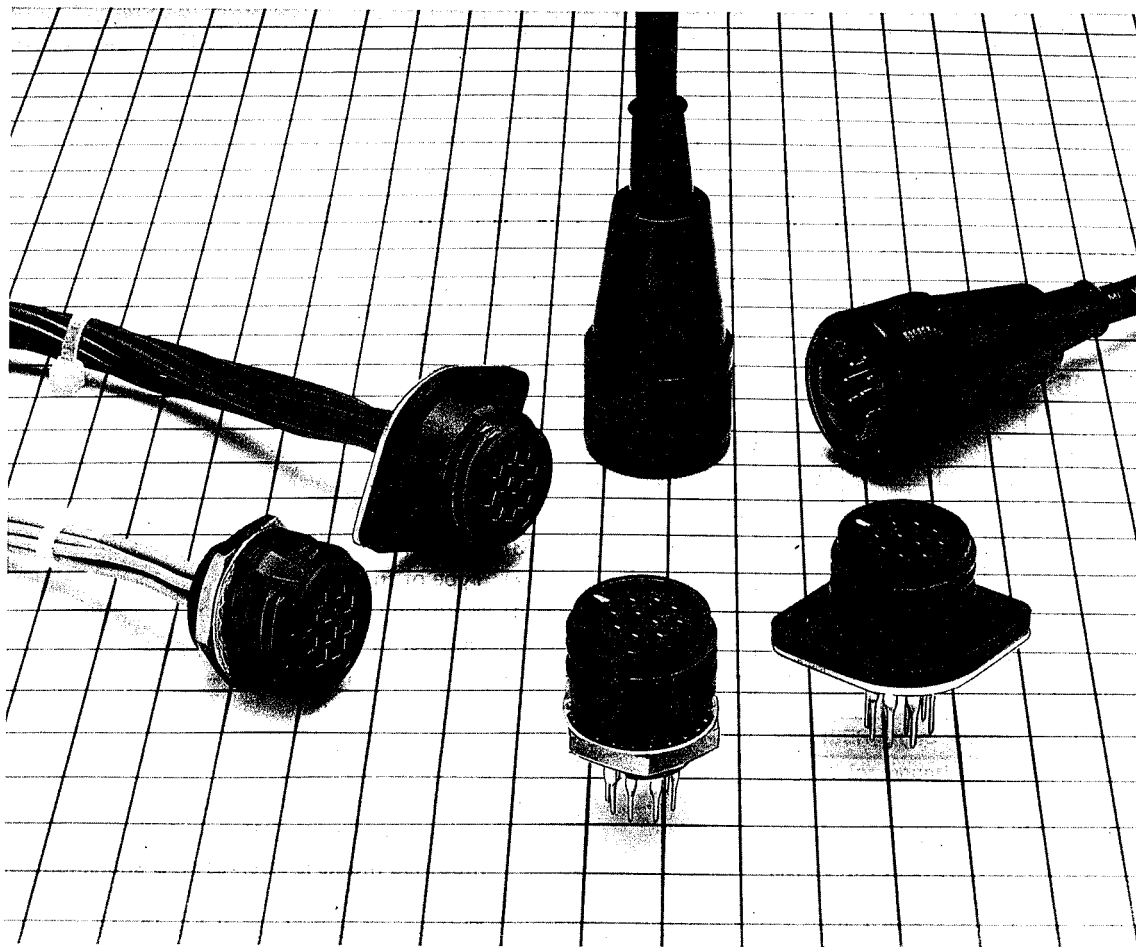


# RM515E SERIES "PUSH-PULL" CIRCULAR PLASTIC CONNECTORS

## Scope

RM515 "SNAP-IN" Circular Plastic Connectors are designed to fill the needs of small size and light weight in video equipment and OA equipment. The RM515E series

is compatible with current metal RM15T series, plastic RM215 and RM315 series.



## Features

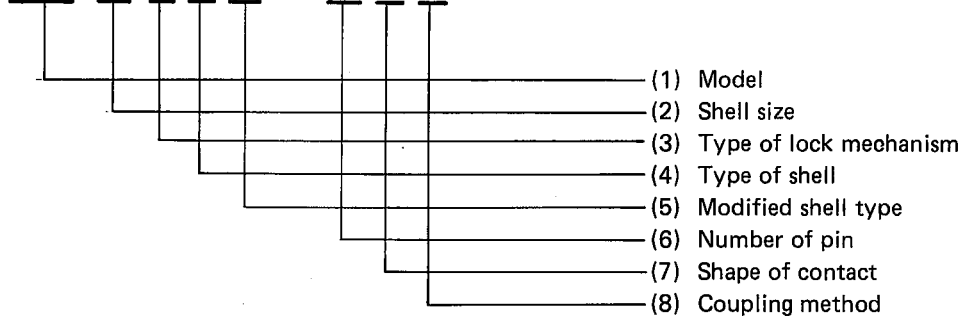
- (1) "Snap-in" coupling mechanism assures easy and quick connection and disconnection.
- (2) Receptacle with "PUSH-PULL" coupling mechanism is compatible with current metal RM15T series thread coupling type and used as "PUSH-PULL" or "Thread" coupling mechanism.
- (3) Multiple polarizing keys ensure positive engagement.
- (4) Connector pins are arranged in a deep location in order to prevent bending of contacts when handling.
- (5) Molding of glass-filled polycarbonate provides light and robust body.
- (6) Compact design is suitable with any equipment.
- (7) Crimping type is available for plug and both crimping and Dip types are available for receptacles.
- (8) Available connection systems include solderless plug, and solderless and substrate dip-type receptacles, allowing the user to select the most suitable one for quick connection and for the model to be used.

## Material and Finish

Description	Material	Finish
Molding and insulator	Glass-filled polycarbonate (UL94V-0)	(Black)
Male pin	Phosphor bronze	Silver plated
Female pin	Phosphor bronze	Silver plated

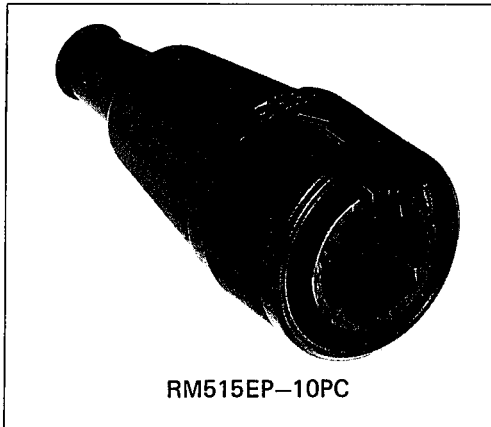
## Ordering Information

RM5 15 E P A - 10 P C

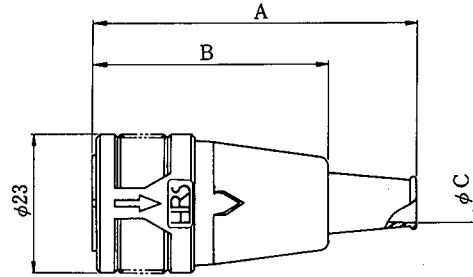


- |  |   |
|--|---|
| <p>(1) Model<br/>Round Miniature series name<br/>There are two types in RM series.</p> <p>(2) Shell size<br/>Sizes are shown external diameter of mating.<br/>RM2 and RM3 is available only for 15 size.</p> <p>(3) Type of lock mechanism<br/>E is shown as push-pull system.</p> <p>(4) Shell type<br/>P: Plug<br/>R: Receptacle</p> | <p>(5) Modified shell identification<br/>If the molding is different from standard type,<br/>modified marks is given as A, B and so on.</p> <p>(6) Number of pin<br/>This connector only available 10 pin.</p> <p>(7) Shape of contact<br/>P: Pin<br/>S: Socket</p> <p>(8) Coupling method of pin</p> |
|--|---|

## Plug



RM515EP-10PC

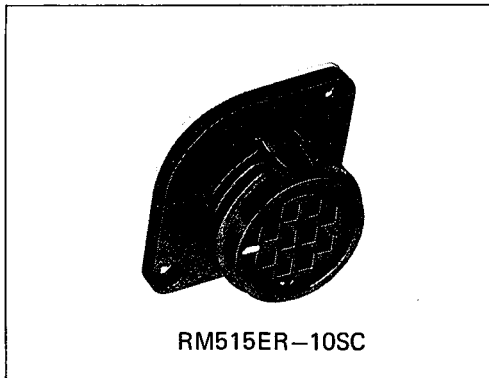


(An example in shape)

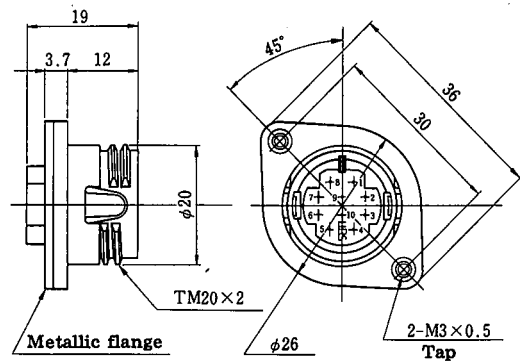
HRS No.	Part No.	A	B	$\phi C$	No. of pins	Weight
109-5003-1	RM515EP-10PC	55	40.5	6.8	10	11.5g
109-5005-7	RM515EPA-10PC	67.5	40.5	5.7	10	11.5g

## Receptacle

### Flange/Crimp



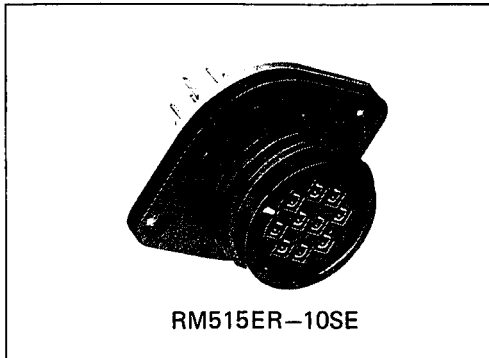
RM515ER-10SC



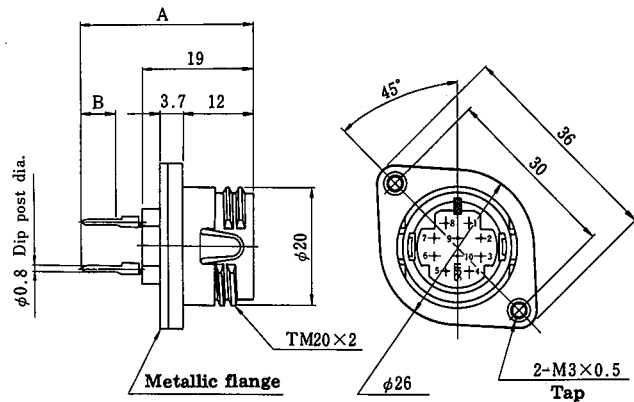
HRS No.	Part No.	No. of pins	Weight
109-5004-4	RM515ER-10SC	10	11g

Remark: Refer to page 73 for mounting hole size.

### Flange/PCB



RM515ER-10SE

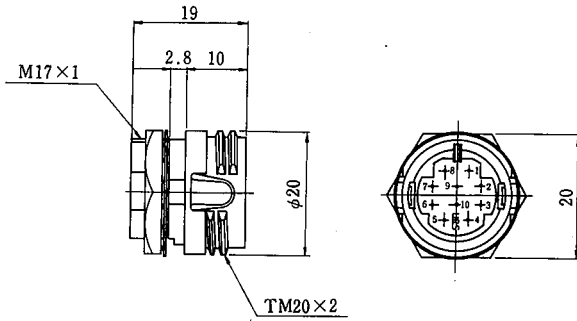
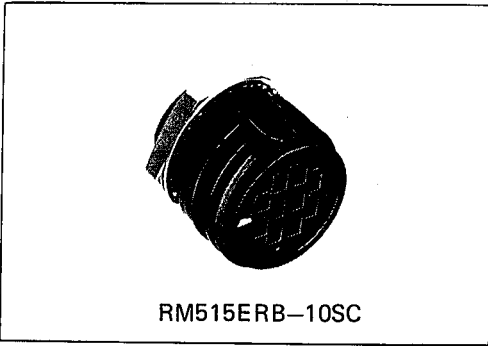


HRS No.	Part No.	A	B	No. of pins	Weight
109-5002-9	RM515ER-10SE	29.3	5.3	10	12g

Remark: Refer to page 73 for mounting hole size and Dip soldering pattern.

# Receptacle

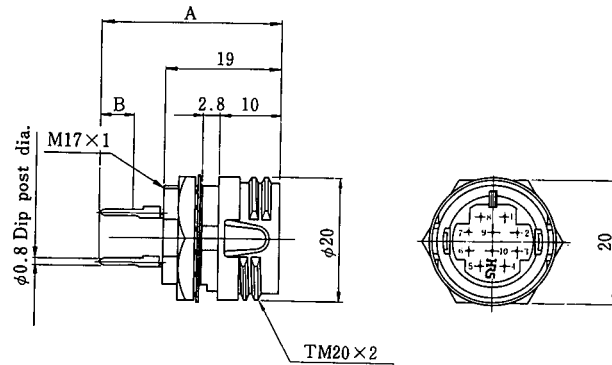
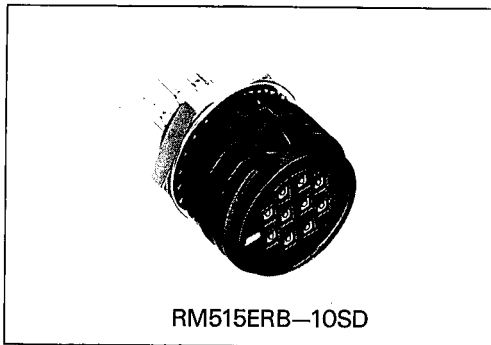
## Crimp Type



HRS No.	Part No.	No. of pins	Weight
109-5001-6	RM515ERB-10SC	10	9g

Remark: Refer to page 73 for mounting hole size.

## Dip Type

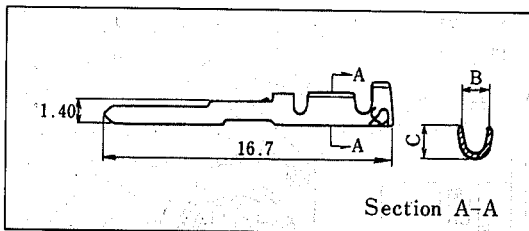


HRS No.	Part No.	A	B	No. of pins	Weight
109-5006-0	RM515ERB-10SD	27.8	3.8	10	10g

Remark: Refer to page 73 for mounting hole size and dip soldering pattern.

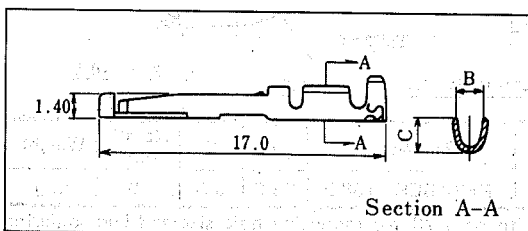
# Contact

## Male pin



Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	109-0668-7	RM-PC-112	1.6	2	AWG#20~#24
	109-0672-4	RM-PC-122	1.45	1.5	AWG#24~#28
Chain contact	109-0670-9	RM-PC-212	1.6	2	AWG#20~#24
	109-0674-0	RM-PC-222	1.45	1.5	AWG#24~#28

## Female pin

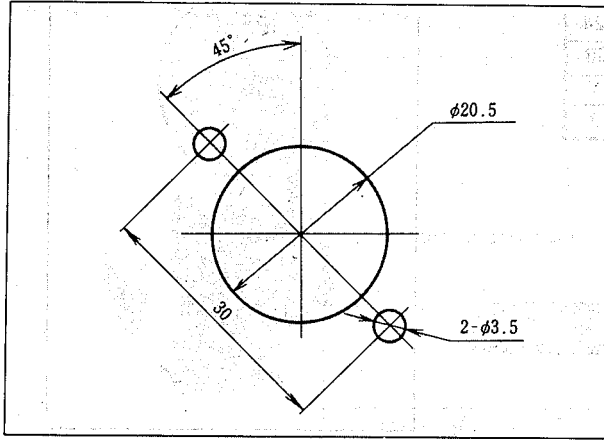


Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	109-0669-0	RM-SC-112	1.6	2	AWG#20~#24
	109-0673-7	RM-SC-122	1.45	1.5	AWG#24~#28
Chain contact	109-0671-1	RM-SC-212	1.6	2	AWG#20~#24
	109-0675-2	RM-SC-222	1.45	1.5	AWG#24~#28

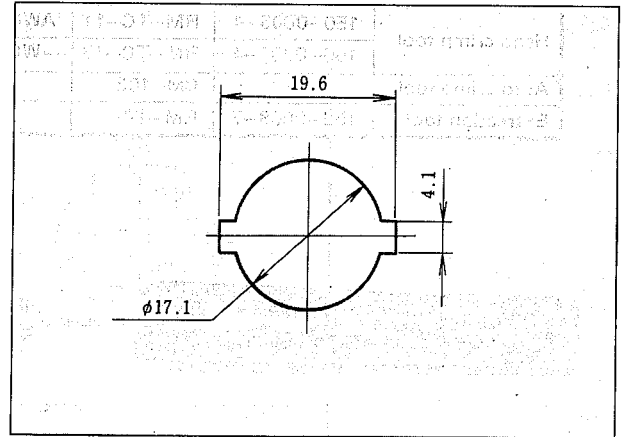
Note: Loose-piece pins are available in pack. Each pack contains 100 pieces.  
Reel pins are available, one reel contains 8,000 pieces.

## Panel Dimension diameter Cutout

### ● RM 515ER Flange type



### ● RM 515ERB Jam nut type



### ● Applicable connector

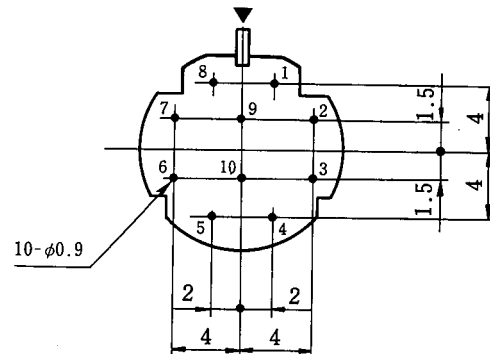
HRS No.	Part No.
109-5002-9	RM515ER-10SE
109-5004-4	RM515ER-10SC

### ● Applicable connector

HRS No.	Part No.
109-5001-6	RM515ERB-10SC
109-5006-0	RM515ERB-10SD

- Note 1. Above appearance shows the panel surface and the mating key is located on top position.  
 2. The applicable panel thickness for a flange type receptacle is maximum 2 mm, because this type is mounted on the back surface of panel.  
 3. The applicable panel thickness for a Jam nut fastening type is maximum 6 mm and minimum 3 mm.

## Panel Cutout



- Remarks: 1. The contact arrangement shows the mating surface of a receptacle.  
 2. Dimensional tolerance of dip post arrangement is recommended  $\pm 0.05$ .

# Tools

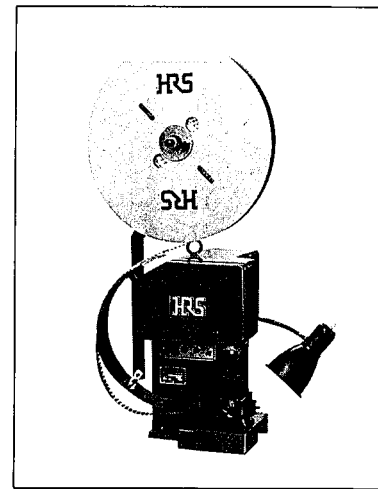
Type	HRS No.	Part No.	Applicable wire
Hand crimp tool	150-0006-1	RM-TC-11	AWG #20~#24
	150-0007-4	RM-TC-12	AWG #24~#28
Auto crimp tool	-	CM-103	-
Extraction tool	150-0008-7	RM-TP	-



Hand Crimp Tool

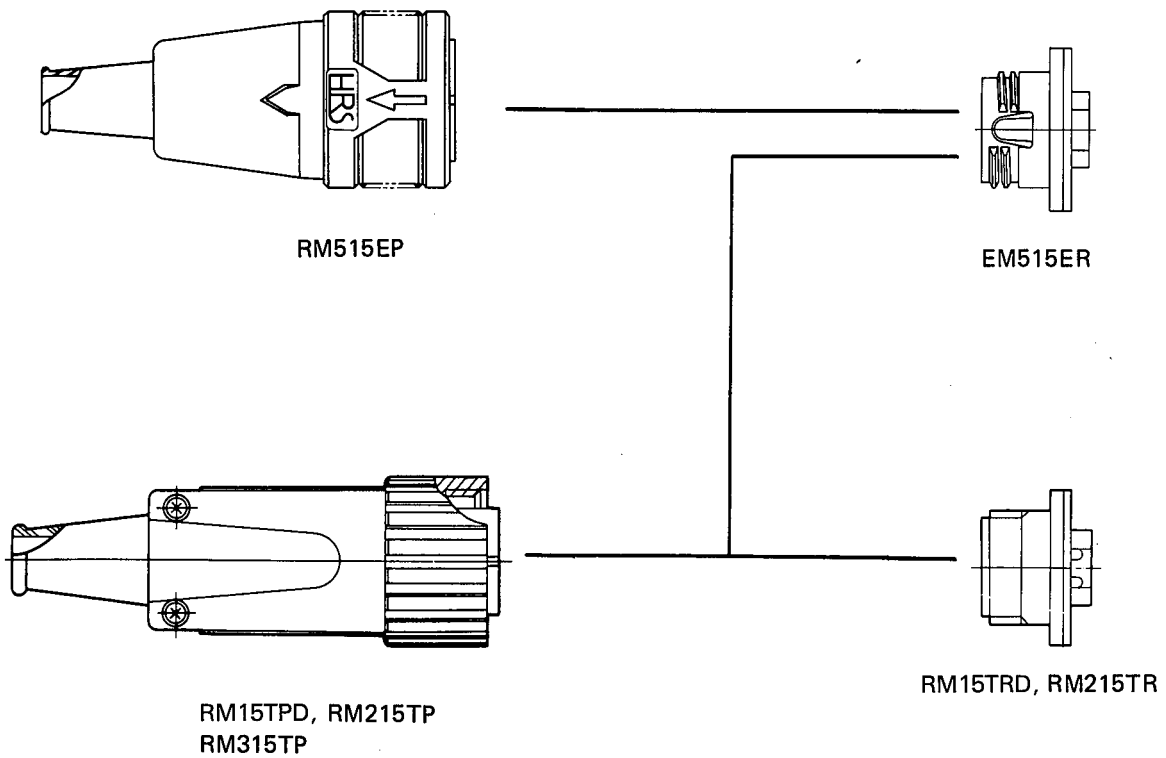


Extraction Tool



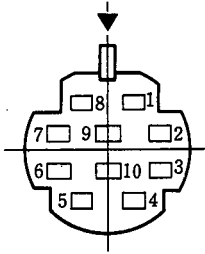
Semi-Auto Machine CM-103

# Coupling Combination



Note: Above figures show an example in shape.

## Contact Arrangement

Contact arrangement	
No. of pin	10
Withstanding voltage	AC 1000V for a minute
Current rating	5A (at AWG 20 cable)
Insulation resistance	1000M $\Omega$ (min. at DC 500V)
Contact resistance	7m $\Omega$ (max. at DC 1A)
Applicable cable	AWG #20— #24(big Barrel) AWG #24— #28(small Barrel)

- Note 1. The contact arrangement shows the mating surface of a receptacle or a jack.
2. The value of voltage withstanding is test voltage. The voltage rating in general use shall be lower than one hand of the value.