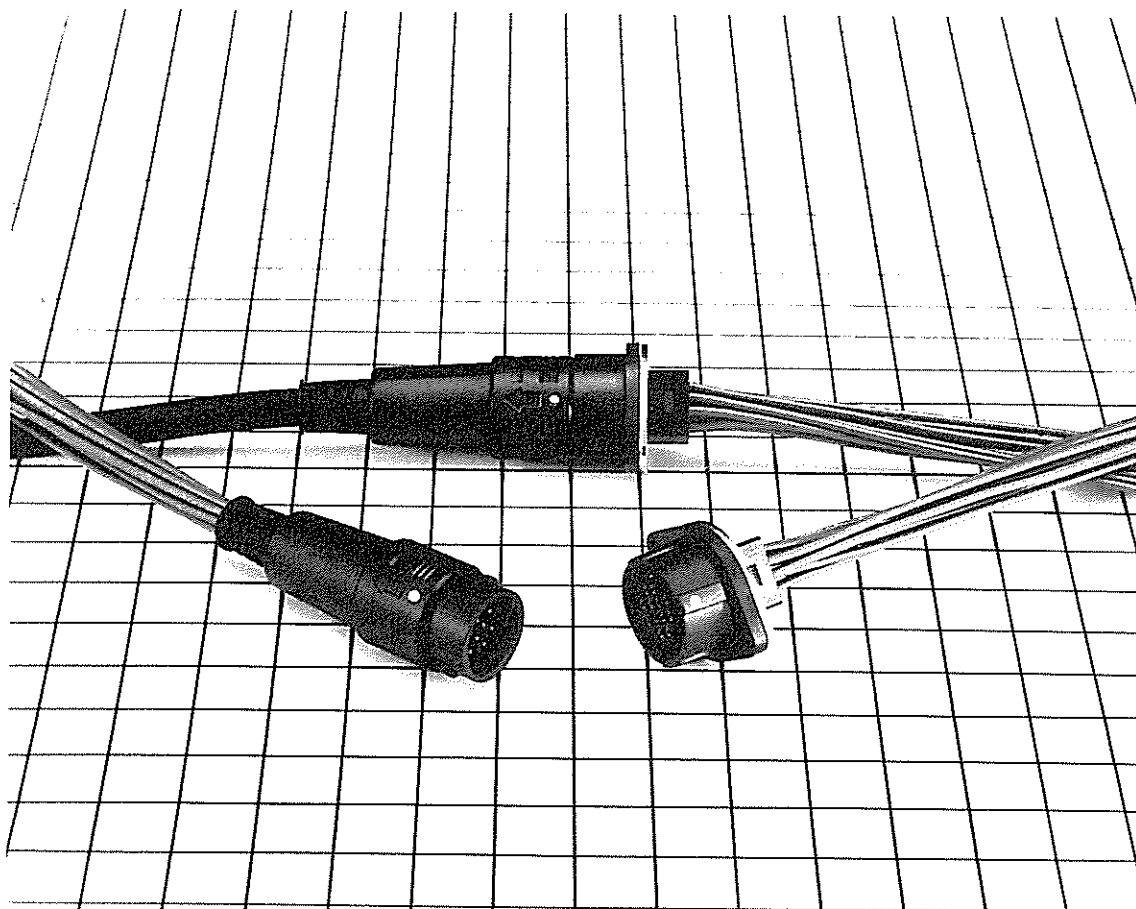


## TYPE RP17 PUSH-PULL LOCK CONNECTORS

### Scope

RP17 series connectors are designed for interfacing 8 mm video equipment and office automation equipment with miniature, lightweight, high durability 12 pin circular connectors.

RP17 series connectors are ideal for quick connection and disconnection by push-pull lock connection. The slim body will fit a variety of electrical equipment.



### Features

- (1) One touch "push-pull lock" coupling mechanism assures easy and quick connecting and disconnecting, also assure high density mounting.
- (2) Use applicable cable AWG#18~#22 (shielded outer dia. 1.7 under) to 3 pins among 12 pins and other applicable cable AWG#24~#30 (shielded outer dia. 1.2 under) to be usable due to crimp terminal.
- (3) Mating guide keys is multiple polarizing to be ensured specified position.
- (4) Simple and slender appearance with internal installed cable clamp. External appearance is matte finish black color.
- (5) Mating position mark is located with white color, assures easy and quick connection and disconnection.

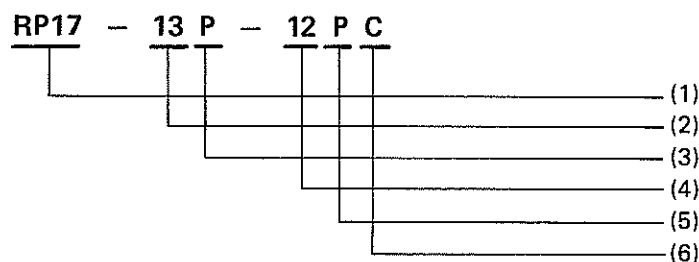
### Application

8 mm video equipment, Portable radio communications equipment, Remote Control equipment, Sound facilities and small electric devices.

## Material and Finish

| Description         | Material                                          | Finish         |
|---------------------|---------------------------------------------------|----------------|
| Shell and Insulator | Glass-filled Polycarbonate (UL94V-0) or PBT resin | Black          |
| Male Pin            | Phosphor bronze                                   | Silver plating |
| Female Pin          | Phosphor bronze                                   | Silver plating |

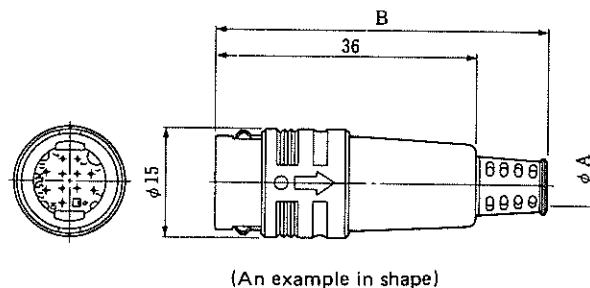
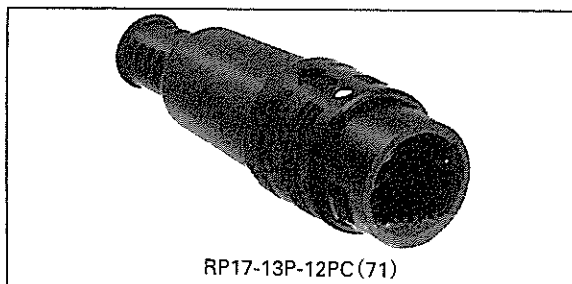
## Ordering Information



- |                                                                                                          |                                                                                  |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| (1) RP17: Name of series                                                                                 | (4) 12: Number of pins<br>12 pole only is available for this connector.          |
| (2) 13: Size of shell, or outer dia. of mating section.<br>Size 13 is only available for this connector. | (5) P: Type of pin<br>P: Male pin<br>S: Female pin                               |
| (3) P: Type of connector<br>P: Plug<br>R: Receptacle<br>J: Jack                                          | (6) C: Type of connection method or type of terminal are classified in alphabet. |

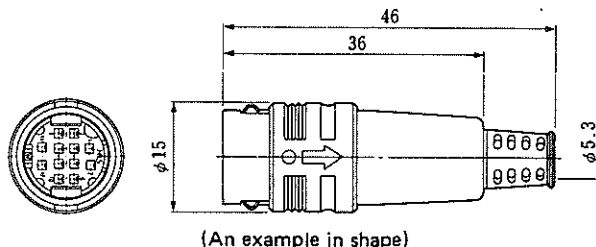
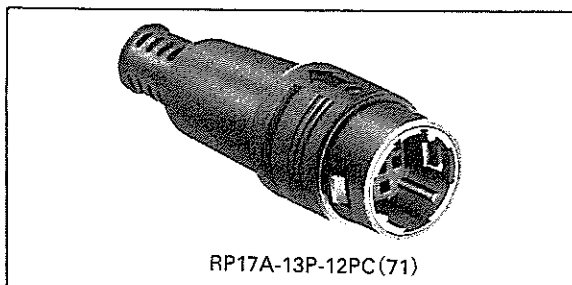
## Plug

### Plug



| HRS No.       | Part No.           | φA  | B  | RoHS |
|---------------|--------------------|-----|----|------|
| 113-0501-0-71 | RP17-13P-12PC(71)  | 5.3 | 46 | ○    |
| 113-0512-7-71 | RP17-13PA-12PC(71) | 6.1 | 51 |      |

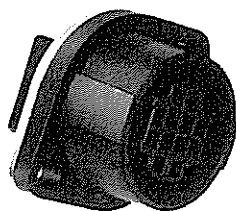
### (Electrostatic Protection Type)



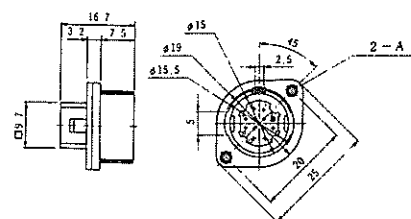
| HRS No.       | Part No.           | RoHS |
|---------------|--------------------|------|
| 113-0551-9-71 | RP17A-13P-12PC(71) | ○    |

## Receptacle

### (Crimp Type)



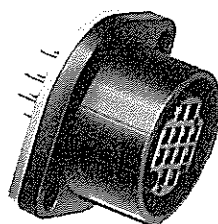
RP17-13R-12SC (71)



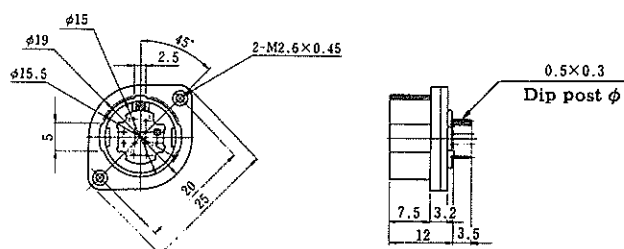
(An example in shape)

| HRS No.       | Part No.           | A         | RoHS |
|---------------|--------------------|-----------|------|
| 113-0502-3-71 | RP17-13R-12SC (71) | M2.6×0.45 | ○    |

### (Dip Type)



RP17-13RA-12SD (71)



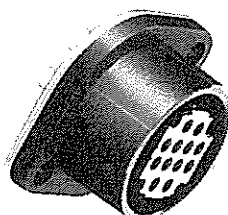
(An example in shape)

| HRS No.       | Part No.            | RoHS |
|---------------|---------------------|------|
| 113-0511-4-71 | RP17-13RA-12SD (71) | ○    |

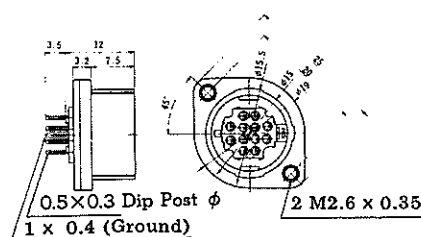
Remark: PCB layout is shown page 138.

## Receptacle(Electrostatic Protection Type)

### (Dip Type)



RP17A-13RA-12SD (71)

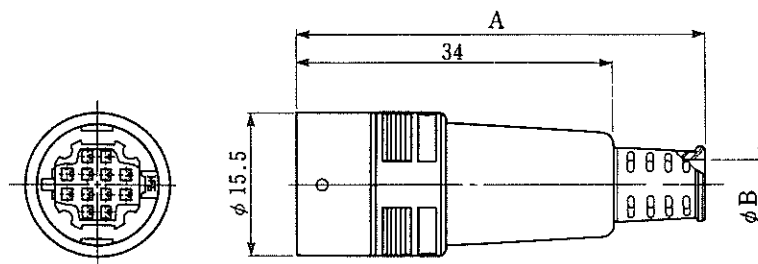
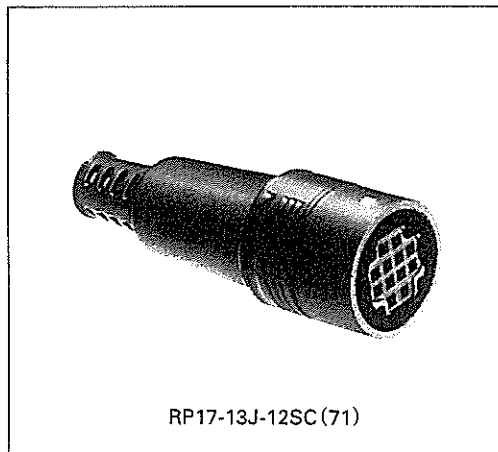


(An example in shape)

| HRS No.       | Part No.             | RoHS |
|---------------|----------------------|------|
| 113-0553-4-71 | RP17A-13RA-12SD (71) | ○    |

Remark: PCB layout is shown page 138.

## Jack

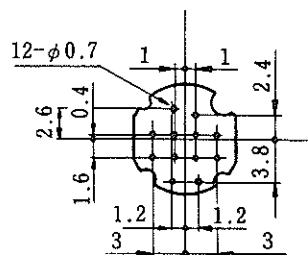


(An example in shape)

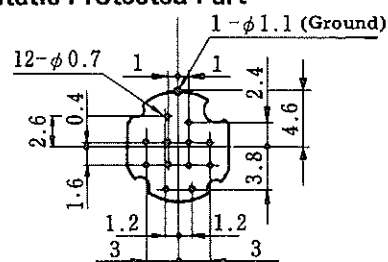
| HRS No.       | Part No.            | A  | $\phi B$ | RoHS |
|---------------|---------------------|----|----------|------|
| 113-0515-5-71 | RP17-13J-12SC (71)  | 44 | 5.3      | ○    |
| 113-0516-8-71 | RP17-13JA-12SC (71) | 49 | 6.1      |      |

## PCB Layout

### ● General Part



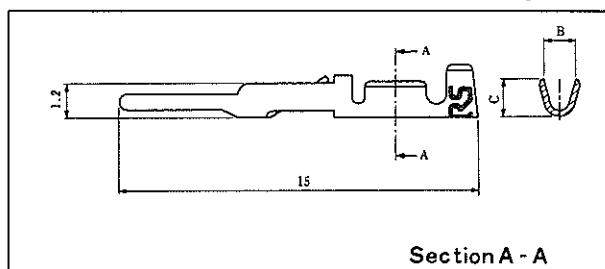
### ● Electrostatic Protected Part



Note: The contact arrangement shows from the mating side of receptacle.

## Contact

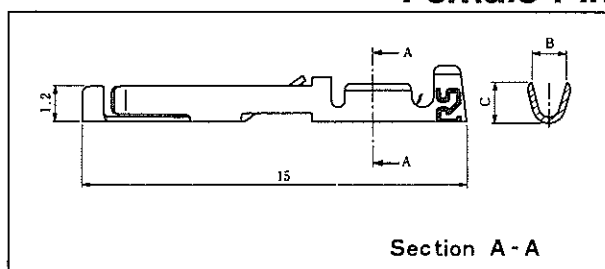
### Male Pin



Section A - A

| Type  | HRS No.    | Part No.    | B   | C    | Applicable Wire |
|-------|------------|-------------|-----|------|-----------------|
| Loose | 113-0503-6 | RP17-PC-112 | 1.6 | 2.1  | AWG#18~#22      |
|       | 113-0504-9 | RP17-PC-122 | 1.2 | 1.35 | AWG#24~#30      |
| Chain | 113-0507-7 | RP17-PC-212 | 1.6 | 2.1  | AWG#18~#22      |
|       | 113-0508-0 | RP17-PC-222 | 1.2 | 1.35 | AWG#24~#30      |

### Female Pin



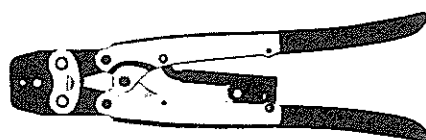
Section A - A

| Type  | HRS No.    | Part No.    | B   | C    | Applicable Wire |
|-------|------------|-------------|-----|------|-----------------|
| Loose | 113-0505-1 | RP17-SC-112 | 1.6 | 2.1  | AWG#18~#22      |
|       | 113-0506-4 | RP17-SC-122 | 1.2 | 1.35 | AWG#24~#30      |
| Chain | 113-0509-2 | RP17-SC-212 | 1.6 | 2.1  | AWG#18~#22      |
|       | 113-0510-1 | RP17-SC-222 | 1.2 | 1.35 | AWG#24~#30      |

Note: Loose piece terminals are offered in a package containing 100 pieces and terminal by reel containing 10,000 pieces.

## Applicable tools

| Type                | Item                    | HRS No.    | Part No.     | Applicable terminal                   | Applicable wire |
|---------------------|-------------------------|------------|--------------|---------------------------------------|-----------------|
| Manual              | Manual crimping tool    | 150-0043-8 | RP17-TC-11   | RP17 <sup>PC</sup> <sub>SC</sub> -112 | AWG #18～#22     |
|                     |                         | 150-0044-0 | RP17-TC-12   | RP17 <sup>PC</sup> <sub>SC</sub> -122 | AWG #24～#30     |
| Automatic           | Automatic crimping body | 901-0005-4 | CM-105       | —                                     | —               |
|                     | Applicator              | 901-2036-9 | AP105-RP17-1 | RP17 <sup>PC</sup> <sub>SC</sub> -212 | AWG #18～#22     |
|                     |                         | 901-2026-5 | AP105-RP17-2 | RP17 <sup>PC</sup> <sub>SC</sub> -222 | AWG #24～#30     |
| Cable crimping tool |                         | 150-0042-5 | RP17-TC-01   | —                                     | —               |
| Extractor           |                         | 150-0039-0 | RP6-SC-TP    | —                                     | —               |



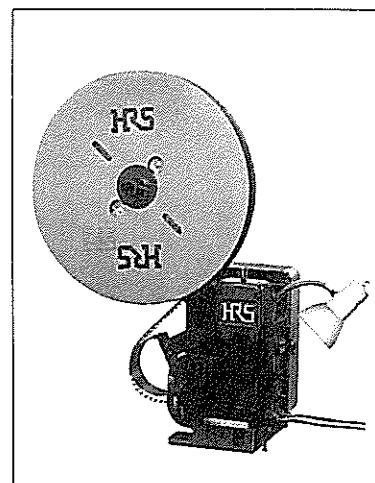
Hand Clamping Tool



Extraction Tool



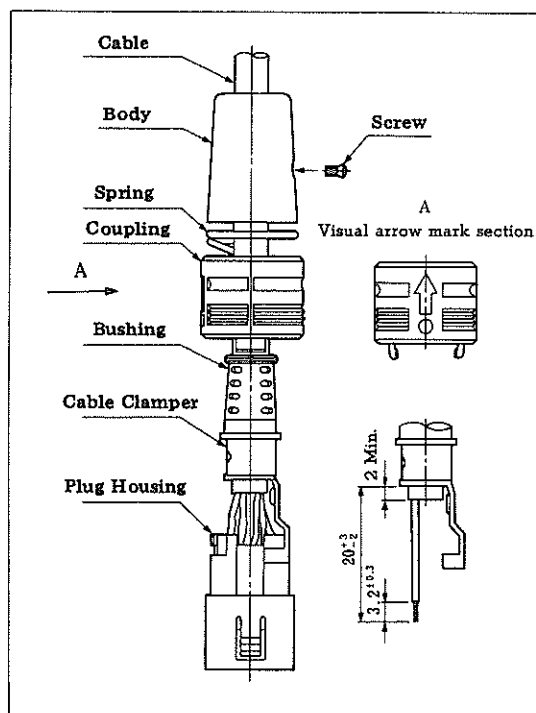
Hand Crimp Tool



Auto Crimp Tool  
CM-105

## Assembling Procedure

### Plug



1. Fit the body, spring, coupling and bushing respectively in advance on wires having ends suitably treated, and then connect wires to terminals by crimp.
2. Then mount crimped contacts into the plug housing. After mounting, pull the wire slightly and make sure if the contact is mounted.
3. Fix a cable clamper to the bushing, insert it into the plug housing, and then crimp cable clamper with tool RP17-TC-01.
4. Assemble coupling, spring and body respectively to plug housing, and mount it with the attached screw by means of torque wrench (2 kg-cm), and the work is completed.
5. Put the cable bushing over the clamp body to complete the job.

## Contact Arrangement

|                       |                              |                            |
|-----------------------|------------------------------|----------------------------|
| Contact Arrangement   |                              |                            |
| No. of Pin            | 12                           |                            |
| Withstanding Voltage  | AC 1000V for 1 minute        |                            |
| Current Capacity      | 5A (AWG #18 ~ #22)           | 2A (AWG #24 ~ #30)         |
|                       | Fit contact No. 2, 11, 12    | 1, 3, 4, 5, 6, 7, 8, 9, 10 |
| Insulation Resistance | 1000 MΩ min at DC500V        |                            |
| Contact Resistance    | 15 mΩ max at DC1A            |                            |
| Applicable Wire       | AWG #18 ~ #22 (Large barrel) |                            |
|                       | AWG #24 ~ #30 (Small barrel) |                            |

#### Remarks:

1. The figure indicates a view from the fitting face side (Plug's wire connecting) of the receptacle and jack.
2. The withstanding voltage is indicated by the test voltage value.