

JR-W Series

# Waterproof Circular Connectors



Waterproof



Corrosion Prevention



Wide Variation



# Features

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## 1. Waterproof Design

Achieves IPX7 and IPX8 waterproof standards when fully mated.

IPX7 certified for immersion at 1 meter for 30 minutes, and  
IPX8 certified for immersion at 2 meters for 14 days, ensuring  
durability in wet conditions.

## 2. Corrosion Resistance

The exterior shell is coated with corrosion resistant plating and can be used in various environments.

## Product Specifications

| Rated Current         | Shell Size          | No. of Pos. | Rated Current    |
|-----------------------|---------------------|-------------|------------------|
|                       | 13                  | 5           | 5A               |
|                       | 16                  | 7           | 10A              |
|                       |                     | 10          | 5A               |
|                       | 25                  | 3           | 15A              |
|                       |                     | 4           | 30A              |
|                       |                     | 24          | 5A               |
| Rated Voltage         | Shell Size          | No. of Pos. | Rated Voltage    |
|                       | 13                  | 5           | 100V AC, 140V DC |
|                       | 16                  | 7           |                  |
|                       |                     | 10          |                  |
|                       | 25                  | 3           | 300V AC, 420V DC |
|                       |                     | 4           |                  |
|                       |                     | 24          | 100V AC, 140V DC |
| Operating Temperature | -25 to +85°C (Note) |             |                  |
| Storage Temperature   | -10 to +60°C        |             |                  |

| Item                  | Specification                                                                                                                                                              | Conditions                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact Resistance    | 5m $\Omega$ Max.<br>JR16-10pos. crimp type: 10m $\Omega$ Max.<br>JR25-3pos.: 3m $\Omega$ Max.                                                                              | Measured at 1A DC                                                                                                                                                                                                                                                                                                                                                      |
| Insulation Resistance | 1,000M $\Omega$ Min.<br>JR25-4pos.: 10,000M $\Omega$ Min.                                                                                                                  | Measured at 500V DC                                                                                                                                                                                                                                                                                                                                                    |
| Withstanding Voltage  | No insulation breakdown                                                                                                                                                    | 1,000V AC for 1 min.<br>JR25-4pos.: 3,000V AC for 1 min.                                                                                                                                                                                                                                                                                                               |
| Vibration Resistance  | No electrical discontinuity of 10 $\mu$ s or more                                                                                                                          | 10 to 55Hz/cycle, amplitude 0.75mm, 2 hours each in 3 axis directions                                                                                                                                                                                                                                                                                                  |
| Shock Resistance      | No electrical discontinuity of 10 $\mu$ s or more                                                                                                                          | Acceleration 490m/s <sup>2</sup> , duration 11ms,<br>3 times each in 6 axis directions                                                                                                                                                                                                                                                                                 |
| Mating Durability     | Contact Resistance: 5m $\Omega$ Max.<br>JR16-10pos. crimp type: 10m $\Omega$ Max.<br>JR25-3pos.: 3m $\Omega$ Max.                                                          | 500 times                                                                                                                                                                                                                                                                                                                                                              |
| Temperature Cycles    | Insulation resistance: 1,000M $\Omega$ Min.<br>JR25-4pos.: 10,000M $\Omega$ Min.                                                                                           | -40°C : 30 minutes $\Rightarrow$ normal temperature: 10 to 15 minutes<br>$\Rightarrow$ 100°C : 30 minutes $\Rightarrow$ normal temperature: 10 to 15 minutes,<br>Repeated for 5 cycles.<br>JR25-3pos.: -30°C : 2 hours $\Rightarrow$ normal temperature: 2 hours<br>$\Rightarrow$ 80°C : 2 hours $\Rightarrow$ normal temperature: 2 hours.<br>Repeated for 50 cycles. |
| Humidity Resistance   | Insulation resistance:<br>10M $\Omega$ Min. (High Humidity)<br>100M $\Omega$ Min. (Dry)<br>JR25-4pos.:<br>100M $\Omega$ Min. (High Humidity)<br>1,000M $\Omega$ Min. (Dry) | 96 hours at temperature of 40°C and humidity of 90% to 95%                                                                                                                                                                                                                                                                                                             |
| Waterproof            | No water immersion into connector                                                                                                                                          | Mated: Immersed in 1.8 meters water depth for 48 hours                                                                                                                                                                                                                                                                                                                 |

Note: -40°C products are also available. Please contact a Hirose sales representative for details.

## Materials / Finish

| Item               | Material              | Finish                 |
|--------------------|-----------------------|------------------------|
| Outer Shell        | Aluminum Alloy, Brass | Black Chromium Plating |
| Insulator          | PPS                   | -                      |
| Contact            | Copper Alloy          | Silver Plating         |
| Waterproof Packing | Silicone Rubber       | -                      |

## Product Number Structure

Refer to the chart below when determining the product specifications from the product number.  
Please select from the product numbers listed in this catalog when placing orders.

### ■ Plug / Receptacle

**JR 13 WP A - 3 P C (##)**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

### ■ Cord Clamp

**JR 13 WCC A - 4 (##)**

① ② ③ ④ ⑧ ⑨

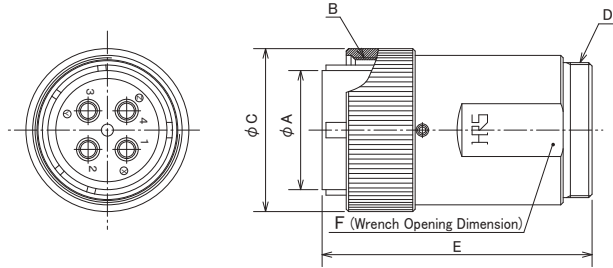
|                   |                                                                                              |                             |                                                                            |
|-------------------|----------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------|
| ① Series Name     | JR                                                                                           | ⑥ Contact Gender            | P: Male Contact<br>S: Female Contact                                       |
| ② Shell Size      | Outer diameter of the case of the plug mating part                                           | ⑦ Contact Assembly          | None: Solder Termination<br>C: Crimp Termination                           |
| ③ Shell Type      | WP: Waterproof Plug<br>WR: Waterproof Receptacle<br>WCC: Waterproof Clamp                    | ⑧ Applicable Cable Diameter |                                                                            |
| ④ Shell Variation | Connectors are distinguished by A, B, or C if a shell variation is applied in the same form. | ⑨ Other Specifications      | A two-digit character is added to indicate other specifications as needed. |
| ⑤ No. of Pos.     |                                                                                              |                             |                                                                            |

## Plug

### Plug



JR25WPH-4S



(Representative Example)

### Solder Type

Unit : mm

| Part No.      | HRS No.          | No. of Pos. | $\phi A$ | B       | $\phi C$ | D          | E    | F  | Purchase Unit  |
|---------------|------------------|-------------|----------|---------|----------|------------|------|----|----------------|
| JR13WPH-5P    | CL0114-0062-0-00 | 5           | 12.7     | M18 × 1 | 21.8     | M16 × 0.75 | 44.7 | 17 | 40pcs per tray |
| JR16WPH-7P    | CL0114-0072-0-00 | 7           | 16.3     | M22 × 1 | 25.8     | M20 × 0.75 | 46.5 | 21 |                |
| JR25WPH-4P    | CL0114-2185-0-00 | 4           | 24.7     | M30 × 1 | 33.8     | M28 × 0.75 | 56   | 29 | 30pcs per tray |
| JR25WPH-24P   | CL0114-0077-0-00 | 24          |          |         |          |            |      |    |                |
| JR13WPH-5S    | CL0114-0063-0-00 | 5           | 12.7     | M18 × 1 | 21.8     | M16 × 0.75 | 44.7 | 17 | 40pcs per tray |
| JR16WPH-7S    | CL0114-0073-0-00 | 7           | 16.3     | M22 × 1 | 25.8     | M20 × 0.75 | 46.5 | 21 |                |
| JR25WP-3S(71) | CL0114-2159-0-71 | 3           | 24.7     | M30 × 1 | 33.8     | M28 × 0.75 | 56   | 29 | 30pcs per tray |
| JR25WPH-4S    | CL0114-2183-4-00 | 4           |          |         |          |            |      |    |                |
| JR25WPH-24S   | CL0114-0078-0-00 | 24          |          |         |          |            |      |    |                |

Note: When using the plug, be sure to use it in combination with the cord clamp.

### Crimp Type

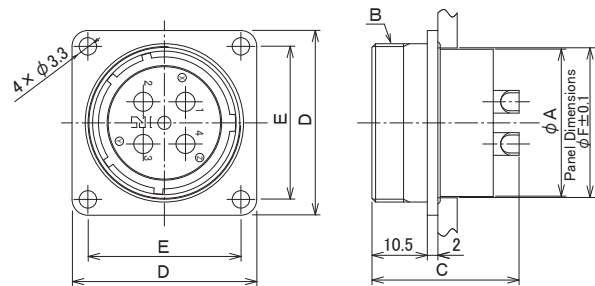
Unit : mm

| Part No.        | HRS No.          | No. of Pos. | $\phi A$ | B       | $\phi C$ | D          | E    | F  | Contact Dia. | Purchase Unit  |
|-----------------|------------------|-------------|----------|---------|----------|------------|------|----|--------------|----------------|
| JR16WP-10SC(31) | CL0114-2122-0-31 | 10          | 16.3     | M22 × 1 | 25.8     | M20 × 0.75 | 46.5 | 21 | 1            | 40pcs per tray |

Receptacle



JR25WRH-4P



(Representative Example)

Solder Type (Square Flange Type)

Unit : mm

| Part No.      | HRS No.          | No. of Pos. | φ A  | B       | C    | D  | E  | φ F  | Purchase Unit  |
|---------------|------------------|-------------|------|---------|------|----|----|------|----------------|
| JR13WRH-5P    | CL0114-0066-0-00 | 5           | 15.9 | M18 × 1 | 26.1 | 26 | 20 | 16.3 | 20pcs per bag  |
| JR16WRH-7P    | CL0114-0074-0-00 | 7           | 19.9 | M22 × 1 | 26.6 | 29 | 23 | 20.3 |                |
| JR25WR-3P(71) | CL0114-2158-7-71 | 3           | 27.9 | M30 × 1 | 29.1 | 35 | 29 | 28.3 | 30pcs per tray |
| JR25WRH-4P    | CL0114-2184-7-00 | 4           |      |         | 28   |    |    |      |                |
| JR25WRH-24P   | CL0114-0079-0-00 | 24          |      |         | 26.1 |    |    |      |                |
| JR13WRH-5S    | CL0114-0067-0-00 | 5           | 15.9 | M18 × 1 | 27   | 26 | 20 | 16.3 | 20pcs per bag  |
| JR16WRH-7S    | CL0114-0075-0-00 | 7           | 19.9 | M22 × 1 | 28   | 29 | 23 | 20.3 |                |
| JR25WRH-4S    | CL0114-2186-2-00 | 4           | 27.9 | M30 × 1 |      | 27 | 35 | 29   | 28.3           |
| JR25WRH-24S   | CL0114-0080-0-00 | 24          |      |         |      |    |    |      |                |

Crimp Type (Square Flange Type)

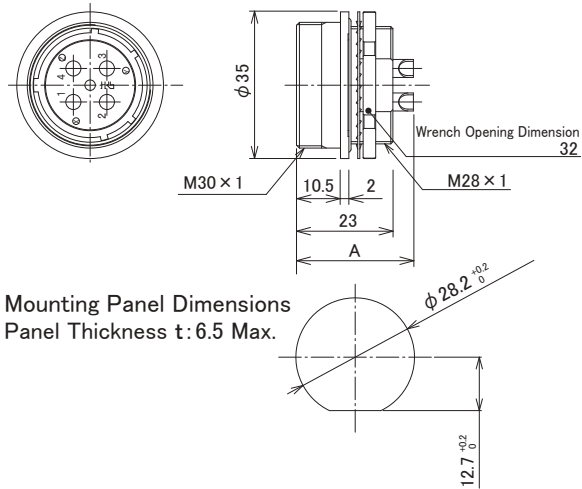
Unit : mm

| Part No.        | HRS No.          | No. of Pos. | φ A  | B       | C    | D  | E  | φ F  | Contact Dia. | Purchase Unit |
|-----------------|------------------|-------------|------|---------|------|----|----|------|--------------|---------------|
| JR16WR-10PC(31) | CL0114-2130-8-31 | 10          | 19.9 | M22 × 1 | 25.1 | 29 | 23 | 20.3 | 1            | 20pcs per bag |

Solder Type (Jam Nut Rear Panel Mount, Hex Nut Type)



JR25WRHA-4P



(Representative Example)

Unit : mm

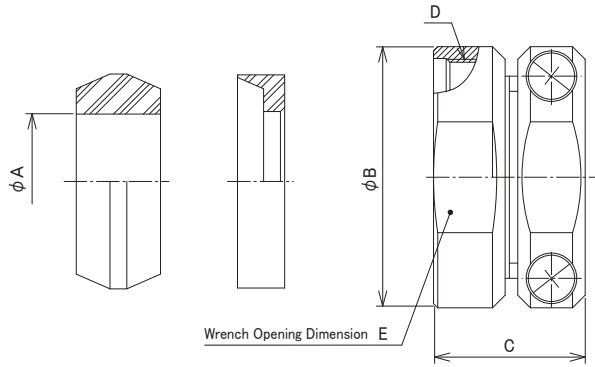
| Part No.    | HRS No.          | No. of Pos. | A  | Purchase Unit  |
|-------------|------------------|-------------|----|----------------|
| JR25WRHA-4P | CL0114-1136-9-00 | 4           | 28 | 10pcs per tray |
| JR25WRHA-4S | CL0114-1135-6-00 |             |    |                |

## Cord Clamp

### Cord Clamp (Standard Type)



JR13WCC-6(71)



(Representative Example)

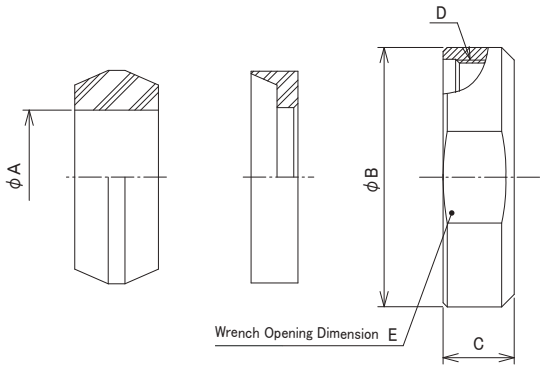
Unit : mm

| Part No.       | HRS No.          | φ A | φ B | C    | D          | E  | Purchase Unit |
|----------------|------------------|-----|-----|------|------------|----|---------------|
| JR13WCC-4(31)  | CL0114-2045-0-31 | 4   | 20  | 17   | M16 × 0.75 | 17 | 20pcs per bag |
| JR13WCC-5(31)  | CL0114-2046-3-31 | 5   |     |      |            |    |               |
| JR13WCC-6(71)  | CL0114-2047-6-71 | 6   |     |      |            |    |               |
| JR13WCC-7(31)  | CL0114-2048-9-31 | 7   |     |      |            |    |               |
| JR13WCC-8(31)  | CL0114-2049-1-31 | 8   |     |      |            |    |               |
| JR13WCC-9(31)  | CL0114-2050-0-31 | 9   |     |      |            |    |               |
| JR13WCC-10(31) | CL0114-2051-3-31 | 10  |     |      |            |    |               |
| JR16WCC-4(71)  | CL0114-2052-6-71 | 4   | 23  | 17.5 | M20 × 0.75 | 21 | 20pcs per bag |
| JR16WCC-6(71)  | CL0114-2053-9-71 | 6   |     |      |            |    |               |
| JR16WCC-8(71)  | CL0114-2054-1-71 | 8   |     |      |            |    |               |
| JR16WCC-10(71) | CL0114-2055-4-71 | 10  |     |      |            |    |               |
| JR16WCC-12(71) | CL0114-2056-7-71 | 12  |     |      |            |    |               |
| JR25WCC-8(71)  | CL0114-2063-2-71 | 8   | 31  | 18   | M28 × 0.75 | 29 | 10pcs per bag |
| JR25WCC-10(71) | CL0114-2064-5-71 | 10  |     |      |            |    |               |
| JR25WCC-12(31) | CL0114-2065-8-31 | 12  |     |      |            |    |               |
| JR25WCC-14(31) | CL0114-2066-0-31 | 14  |     |      |            |    |               |
| JR25WCC-16(31) | CL0114-2067-3-31 | 16  |     |      |            |    |               |
| JR25WCC-18(71) | CL0114-2068-6-71 | 18  |     |      |            |    |               |

Cord Clamp (Simplified Type)



JR13WCCA-6(71)



(Representative Example)

Unit : mm

| Part No.        | HRS No.          | φ A | φ B | C   | D          | E  | Purchase Unit |
|-----------------|------------------|-----|-----|-----|------------|----|---------------|
| JR13WCCA-4(31)  | CL0114-2069-9-31 | 4   | 19  | 7.5 | M16 × 0.75 | 17 | 10pcs per bag |
| JR13WCCA-5(31)  | CL0114-2070-8-31 | 5   |     |     |            |    |               |
| JR13WCCA-6(71)  | CL0114-2071-0-71 | 6   |     |     |            |    |               |
| JR13WCCA-7(31)  | CL0114-2072-3-31 | 7   |     |     |            |    |               |
| JR13WCCA-8(31)  | CL0114-2073-6-31 | 8   |     |     |            |    |               |
| JR13WCCA-9(31)  | CL0114-2074-9-31 | 9   |     |     |            |    |               |
| JR13WCCA-10(31) | CL0114-2075-1-31 | 10  |     |     |            |    |               |
| JR16WCCA-4(71)  | CL0114-2076-4-71 | 4   | 23  | 8   | M20 × 0.75 | 21 |               |
| JR16WCCA-6(71)  | CL0114-2077-7-71 | 6   |     |     |            |    |               |
| JR16WCCA-8(71)  | CL0114-2078-0-71 | 8   |     |     |            |    |               |
| JR16WCCA-10(71) | CL0114-2079-2-71 | 10  |     |     |            |    |               |
| JR16WCCA-12(71) | CL0114-2080-1-71 | 12  |     |     |            |    |               |
| JR25WCCA-8(71)  | CL0114-2087-0-71 | 8   | 31  | 8.5 | M28 × 0.75 | 29 |               |
| JR25WCCA-10(71) | CL0114-2088-3-71 | 10  |     |     |            |    |               |
| JR25WCCA-12(31) | CL0114-2089-6-31 | 12  |     |     |            |    |               |
| JR25WCCA-14(31) | CL0114-2090-5-31 | 14  |     |     |            |    |               |
| JR25WCCA-16(31) | CL0114-2091-8-31 | 16  |     |     |            |    |               |
| JR25WCCA-18(71) | CL0114-2092-0-71 | 18  |     |     |            |    |               |

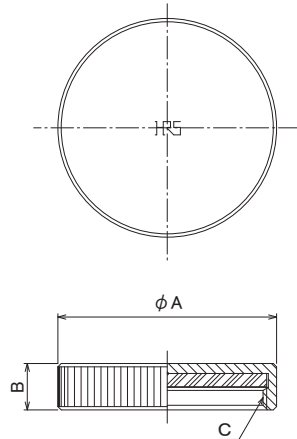
Note: The cable clamping force of the simplified type cord clamp is not very high, so please check the cable clamping force before use.

## Cap

### Cap (No Chain Type)



JR16WRC(31)



(Representative Example)

Unit : mm

| Part No.                  | HRS No.          | ϕ A | B   | C       | Purchase Unit  |
|---------------------------|------------------|-----|-----|---------|----------------|
| JR13WRC4 (Note 1)         | CL0114-2192-5-00 | 21  | 7   | M18 × 1 | 20pcs per bag  |
| JR13WRC5 (Note 1)(Note 2) | CL0114-2105-0-00 |     | 7.5 |         |                |
| JR16WRC(31)               | CL0114-2162-4-31 | 25  | 7   | M22 × 1 |                |
| JR16WRC(75) (Note 1)      | CL0114-2162-4-75 |     |     |         |                |
| JR25WRC(31)               | CL0114-2163-7-31 | 33  |     | M30 × 1 | 30pcs per tray |
| JR25WRC(75) (Note 1)      | CL0114-2163-7-75 |     |     |         |                |
| JR25WRC5 (Note 1)(Note 2) | CL0114-2175-6-00 |     |     | 7.5     | 20pcs per bag  |

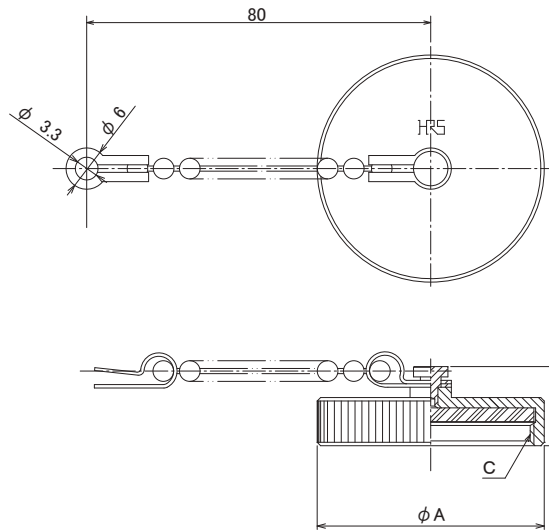
Note 1: Waterproof gaskets with a silicone rubber specification

Note 2: Plastic shell

### Cap (Chain Type)



JR25WRC3



(Representative Example)

Unit : mm

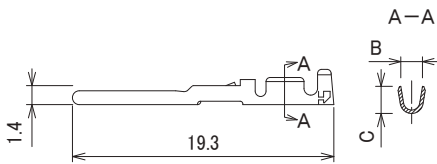
| Part No.        | HRS No.          | $\phi A$ | B    | C              | Purchase Unit |
|-----------------|------------------|----------|------|----------------|---------------|
| JR13WRC3 (Note) | CL0114-2170-2-00 | 21       | 11.5 | M18 $\times$ 1 | 20pcs per bag |
| JR16WRC3 (Note) | CL0114-2171-5-00 | 25       |      | M22 $\times$ 1 |               |
| JR25WRC3 (Note) | CL0114-2172-8-00 | 33       |      | M30 $\times$ 1 |               |

Note: Waterproof gaskets with a silicone rubber specification

## Crimp Contact

### ■ For Contact Diameter $\phi 1$

#### Male Contact

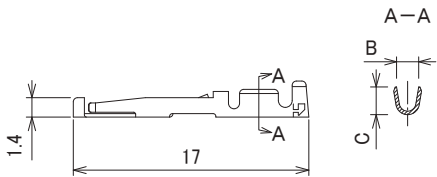


Unit : mm

| Type          | Part No.                    | HRS No.          | B    | C   | Applicable Wire | Purchase Unit     |
|---------------|-----------------------------|------------------|------|-----|-----------------|-------------------|
| Loose Contact | <a href="#">JRC-PC2-112</a> | CL0114-0243-3-00 | 1.6  | 2.0 | 20 to 24 AWG    | 100pcs per bag    |
|               | <a href="#">JRC-PC2-122</a> | CL0114-0244-6-00 | 1.45 | 1.5 | 24 to 28 AWG    |                   |
| Reel Contact  | <a href="#">JRC-PC2-212</a> | CL0114-0245-9-00 | 1.6  | 2.0 | 20 to 24 AWG    | 8,000pcs per reel |
|               | <a href="#">JRC-PC2-222</a> | CL0114-0246-1-00 | 1.45 | 1.5 | 24 to 28 AWG    |                   |

Note: Refer to the Crimp Condition for the wire structure of the applicable wire.  
The crimping condition table is available from the link of the product number.  
(If you are using a cable that is not listed in Crimp Condition Table, please contact a Hirose sales representative.)

#### Female Contact



Unit : mm

| Type          | Part No.                    | HRS No.          | B    | C   | Applicable Wire | Purchase Unit     |
|---------------|-----------------------------|------------------|------|-----|-----------------|-------------------|
| Loose Contact | <a href="#">JRC-SC2-112</a> | CL0114-0247-4-00 | 1.6  | 2.0 | 20 to 24 AWG    | 100pcs per bag    |
|               | <a href="#">JRC-SC2-122</a> | CL0114-0248-7-00 | 1.45 | 1.5 | 24 to 28 AWG    |                   |
| Reel Contact  | <a href="#">JRC-SC2-212</a> | CL0114-0249-0-00 | 1.6  | 2.0 | 20 to 24 AWG    | 8,000pcs per reel |
|               | <a href="#">JRC-SC2-222</a> | CL0114-0250-9-00 | 1.45 | 1.5 | 24 to 28 AWG    |                   |

Note: Refer to the Crimp Condition for the wire structure of the applicable wire.  
The crimping condition table is available from the link of the product number.  
(If you are using a cable that is not listed in Crimp Condition Table, please contact a Hirose sales representative.)

## Applicable Tools

| Contact Dia. | Type                       | Part No.     | HRS No.          | Applicable Contact | Applicable Cable |
|--------------|----------------------------|--------------|------------------|--------------------|------------------|
| φ 1          | Manual Crimping Tool       | HT802/RM-11  | CL0150-0401-6-00 | JRC-PC2-112        | 20 to 24 AWG     |
|              |                            |              |                  | JRC-SC2-112        |                  |
|              |                            | HT802/RM-12  | CL0150-0402-9-00 | JRC-PC2-122        | 24 to 28 AWG     |
|              |                            |              |                  | JRC-SC2-122        |                  |
|              | Automatic Crimping Machine | CM-105C      | CL0901-0001-0-00 | -                  | -                |
|              | Applicator                 | AP105-JRC2-1 | CL0901-2037-1-00 | JRC-PC2-212        | 20 to 24 AWG     |
|              |                            |              |                  | JRC-SC2-212        |                  |
|              |                            | AP105-JRC2-2 | CL0901-2038-4-00 | JRC-PC2-222        | 24 to 28 AWG     |
|              |                            |              |                  | JRC-SC2-222        |                  |
|              | Extraction Tool            | RM-TP        | CL0150-0008-7-00 | -                  | -                |

## Crimping Precautions

### ■ Items Required Prior to Crimping

The work-related documents shown below are required before starting the harness assembly.

(The ● mark represents required documents.)

Please contact your Hirose sales representative if you do not have these documents.

| Document Title                                       | Description                                                      | Automatic Crimping Machine | Hand Crimping Tool | Remarks                                                   |
|------------------------------------------------------|------------------------------------------------------------------|----------------------------|--------------------|-----------------------------------------------------------|
| (1) Main unit of crimping machine instruction manual | Explanation for main press machine unit                          | ●                          | —                  | Bundled with the purchase of the main press machine unit. |
| (2) Applicator Spare Parts Identification            | Explanation for Applicator installation                          | ●                          | —                  | Bundled with the purchase of applicator.                  |
| (3) Crimp Conditions                                 | Standard values of:<br>Crimp height Tensile strength             | ●                          | —                  |                                                           |
| (4) Crimp Quality Standards                          | Various standards for crimping conditions                        | ●                          | —                  |                                                           |
| (5) Operating Instructions for Hand Tool             | Inspection items of:<br>Crimp height Tensile strength and others | —                          | ●                  | Bundled with the purchase of hand tool.                   |
| (6) JR-W Cable Assembly Instruction                  | Cable Assembly procedure                                         | ●                          | ●                  | Please refer to our website.                              |

### ■ Tools

- Use tools designated by Hirose when crimping.
- Crimping performed using tools other than those specified is outside the scope of warranty.
- The operating instructions are available for the crimping machine and the applicator. Be sure to carefully read the operating instructions manual before beginning work.

### ■ Applicable Cables

Check that the cables to be used are within the applicable range.

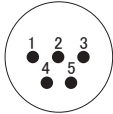
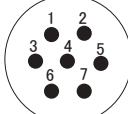
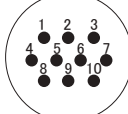
If you intend to use a cable other than those recommended, contact a sales representative.

[Precautions]

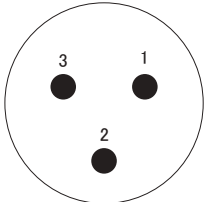
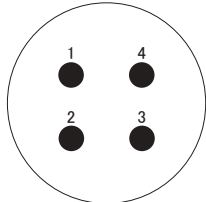
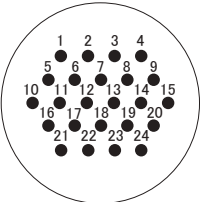
- Cables applicable to crimp connectors are tin-plated stranded soft-copper wire.
- Avoid crimping solid wire, wires with polyester threads or tin coated wires.
- Avoid crimping two cables together.
- The crimp height setting values (Note) may vary depending on the difference in the core wire configuration even if the computed cross-sectional area is the same.

Note: The crimp height is an important item that determines crimp quality. Hirose conducts crimp testing on each wire in order to set the optimum crimp height accurately.

# Contact Arrangement and Specifications

| Shell Size<br>13, 16      | 13                                                                                |  | 16                                                                                |                                                                                    |
|---------------------------|-----------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                           |  |  |  |  |
| No. of Pos.               | 5                                                                                 |  | 7                                                                                 | 10                                                                                 |
| Withstanding Voltage      | 1,000V AC / 1 minute                                                              |  |                                                                                   |                                                                                    |
| Current Rating            | 5A                                                                                |  | 10A                                                                               | 5A                                                                                 |
| Insulation Resistance     | 1,000M $\Omega$ Min.                                                              |  |                                                                                   |                                                                                    |
| Contact Resistance        | 5m $\Omega$ Max.                                                                  |  |                                                                                   |                                                                                    |
| Solder Pot Inner Diameter | $\phi$ 1.1                                                                        |  | $\phi$ 1.7                                                                        | $\phi$ 1.1                                                                         |

| Shell Size<br>25          | 25                                                                                |                                                                                   |                                                                                    |
|---------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                           |  |  |  |
| No. of Pos.               | 3                                                                                 | 4                                                                                 | 24                                                                                 |
| Withstanding Voltage      | 1,000V AC / 1 minute                                                              | 3,000V AC / 1 minute                                                              | 1,000V AC / 1 minute                                                               |
| Current Rating            | 15A                                                                               | 30A                                                                               | 5A                                                                                 |
| Insulation Resistance     | 1,000M $\Omega$ Min.                                                              | 10,000M $\Omega$ Min.                                                             | 1,000M $\Omega$ Min.                                                               |
| Contact Resistance        | 3m $\Omega$ Max.                                                                  | 5m $\Omega$ Max.                                                                  | 5m $\Omega$ Max.                                                                   |
| Solder Pot Inner Diameter | $\phi$ 3 (Receptacle), $\phi$ 3.4 (Plug)                                          | $\phi$ 3.4                                                                        | $\phi$ 1.1                                                                         |

Note 1: The figure above shows the connector with the female contact as seen from the mating side.  
 Note 2: Withstanding voltages indicate test voltage values.

## Precautions

1. Always switch off the circuit power before disconnecting or connecting the connectors.
2. Use connectors with female contacts on the power side of the circuit.
3. Ensure the coupling is fully locked.
4. Match the correct plug/receptacle for effective dust and water protection.
5. This series features silver-plated contacts. Silver may tarnish when exposed to sulfur gases under certain conditions such as:
  - \* Dusty environments
  - \* High sulfur gas concentration areas, e.g., near factory exhausts, automotive emissions
  - \* Extreme temperature variations, high humidity, proximity to heaters
  - \* Near rubber products, including adhesives.

Tarnishing does not affect electrical connections due to the contact pins' wiping effect.

### Storage Instructions:

- \* Store in original or equivalent packaging.
- \* Temperature range: -10 to +60°C, with a maximum humidity of 85%.
- \* Store in a stable temperature and humidity environment.

Use products within 6 months of delivery. After 6 months, verify solderability before use.

'Storage' refers to keeping unused products in sealed packaging before PCB assembly.

## While Taking into Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please review the Drawing and Product Specifications sheets.

Use an appropriate cable when using the connector in combination with cables.

If considering usage of a non-specified cable, please contact your sales representative.

If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.

If considering usage for below mentioned applications, please contact your sales representative.

In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/defense etc. Hirose must review before assurance of reliability can be given.

**HIROSE**



**HIROSE ELECTRIC CO.,LTD.**

2-6-3 Nakagawa Chuoh, Tsuzuki-Ku, Yokohama-Shi 224-8540, JAPAN  
<https://www.hirose.com>

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