

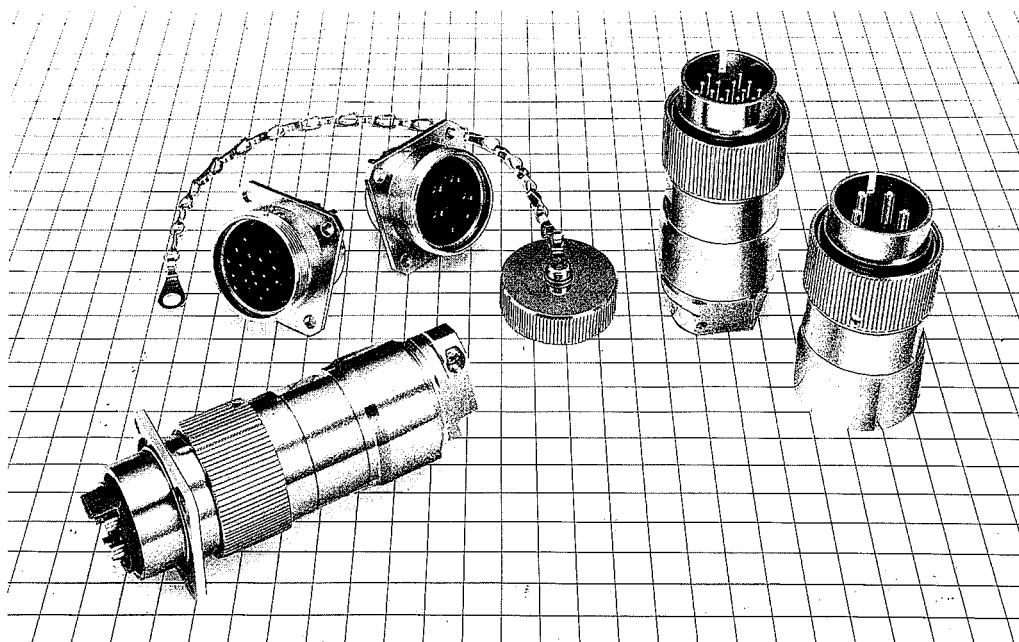
# HR5 HR21 SERIES

## CIRCULAR WATER-PROOF CONNECTORS FOR OUTDOOR USE

### ■ Scope

The HR21 Series are circular, multi-pin water-proof connectors developed for power switching devices.

They are chrome plated and have superior corrosion resistance and are suitable for outdoor use.



### ■ Features

#### 1. Water-Proof

Both the plug and receptacle are water-proof and prevent water penetration into equipment, plug and connector. (They are free from water penetration for 48 hours if submersed in water to a depth of 1.8 meters.)

#### 2. Environmentally Sealed Connector

The connector sheath is chrome-plated for superior withstandability and corrosion resistance in outdoor use.

#### 3. Grounding Terminal

The connector sheath is provided with a special grounding terminal for easy connection of a shielded wire.

#### 4. Variable orientation

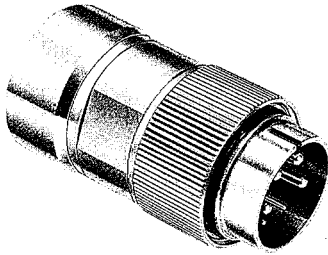
A single connector may be used as three types by changing the insertion position by 45° or 90° to avoid mis-engagement if multiple connectors are used in a line.

### ■ Major Applications

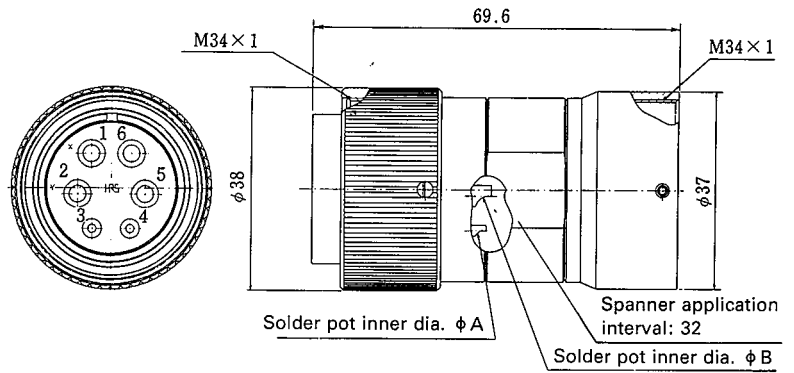
Power switching devices for outdoor connections.



## ■ Plug



HR21-27TP-6P

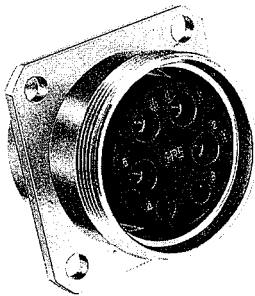


(An example in shape)

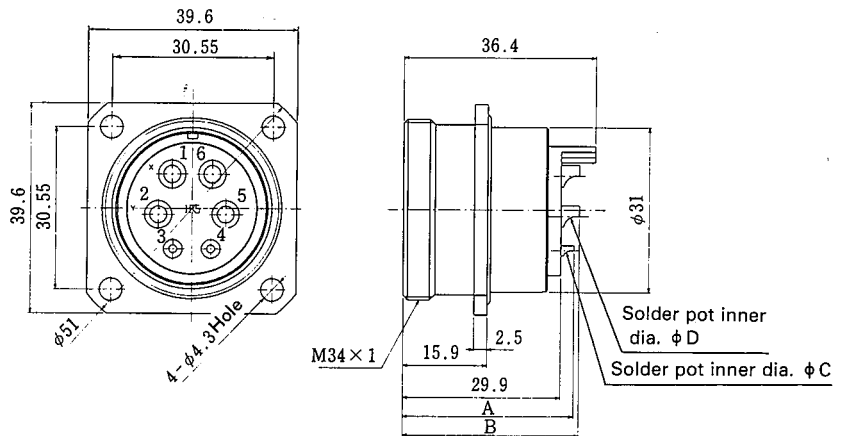
| HRS No.    | Part No.      | No. of pins | φA  | φB  |
|------------|---------------|-------------|-----|-----|
| 121-0001-2 | HR21-27TP-6P  | 6           | 1.5 | 3.4 |
| 121-0002-5 | HR21-27TP-6S  | 6           | 1.5 | 3.4 |
| 121-0011-6 | HR21-27TP-17P | 17          | 1.5 | —   |
| 121-0012-9 | HR21-27TP-17S | 17          | 1.5 | —   |

Note: When plug is used, use the clamp in combination.

## ■ Receptacle



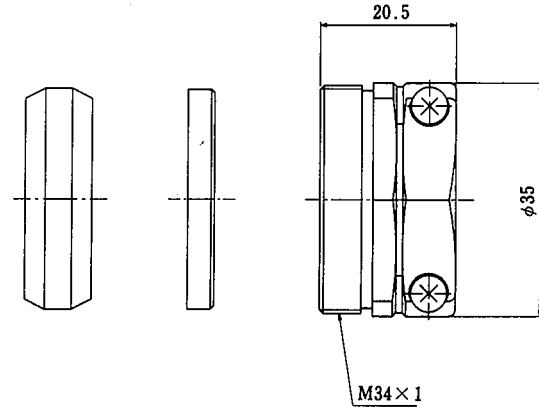
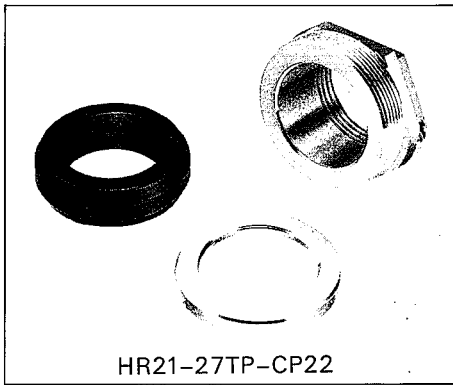
HR21-27TR-6S



(An example in shape)

| HRS No.    | Part No.      | No. of pins | A    | B    | φC  | φD  |
|------------|---------------|-------------|------|------|-----|-----|
| 121-0005-3 | HR21-27TR-6S  | 6           | 32.4 | 33.4 | 1.5 | 3.4 |
| 121-0006-6 | HR21-27TR-6P  | 6           | 32.4 | 33.4 | 1.5 | 3.4 |
| 121-0013-1 | HR21-27TR-17S | 17          | 32.4 | —    | 1.5 | —   |
| 121-0014-4 | HR21-27TR-17P | 17          | 32.4 | —    | 1.5 | —   |

## ■ Clamp

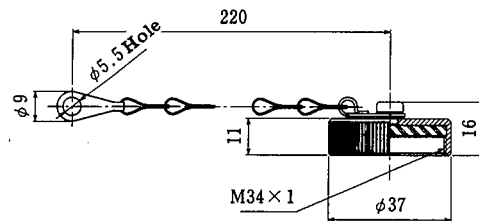
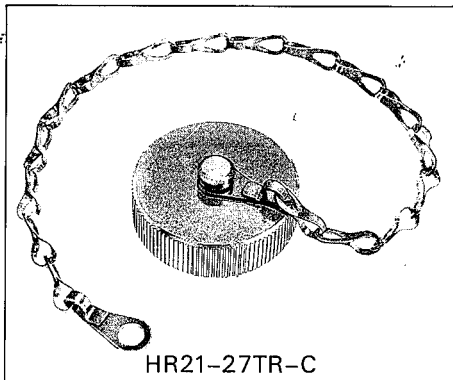


(An example in shape)

| HRS No.    | Product No.    | Cable diameter |
|------------|----------------|----------------|
| 121-0009-4 | HR21-27TP-CP21 | φ 21           |
| 121-0010-3 | HR21-27TP-CP22 | φ 22           |

Remark: Check to use the suitable cable diameter, it is depend the clamping force or water proof on the cable differences.

## ■ Cap



(An example in shape)

| HRS No.    | Product No. |
|------------|-------------|
| 121-5007-6 | HR21-27TR-C |

## ◆ Pin Assignment and Major Performances

| Pin assignment        |  |                         |
|-----------------------|--|-------------------------|
|                       | Number of pins   | 6                       |
| Withstand voltage     | 2,000VAC for 1 min.  |                         |
| Current capacity      | 5A   | 1A (Pins 3 & 4 only)    |
| Insulation resistance | 2000MΩ or more   |                         |
| Contact resistance    | 3mΩ MAX  | 5mΩ MAX                 |
| Pressure resistance   | Free from leak if 50 kPa air pressure is applied for 20 seconds. |                         |
| Solder pot inner dia. | φ 3.4  | φ 1.5 (Pins 3 & 4 only) |

- Notes: 1. The above figures indicate the conditions viewed from the pin engaging side.  
 2. Withstand voltage shows the testing voltage.  
 3. Insulation resistance is as measured at 500V ADC.  
 4. Contact resistance is as measured at 1 ADC.