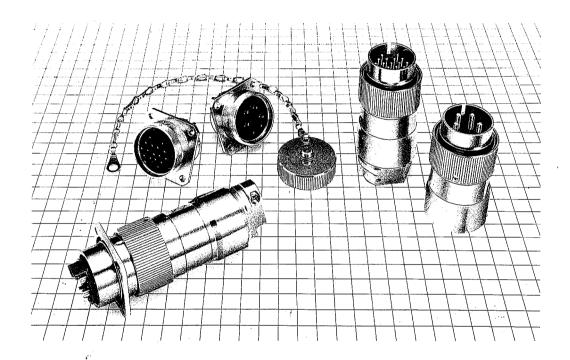
# HRS HR21 SERIES

# 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
- 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.

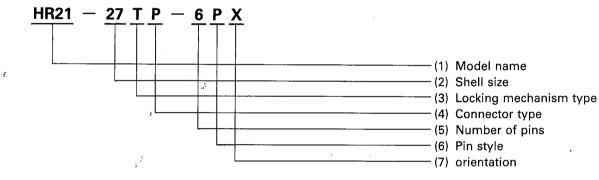
#### ■ Material & Finish

Parts Materials		Finish
Outer sheath	Brass	Chrome plating
Insulating material	Synthetic resin & PPS resin (*)	(Black)
Pin	Copper alloy	Nickel plating

\*UL94V-0

## ■ Ordering Information

- Plug
- Receptacle



#### Clamp

(1) Model name : HR21 Series

(2) Shell size : This number indicates the outer dia. of the shell of the plug mating part.

Size 27 only for this series.

(3) Locking mechanism type : The symbol is the initial letter of the locking mechanism.

T indicates thread coupling.

(4) Connector type : Indicates any of the following connector types:

P : Plug P-CP : Clamp for plug

R : Receptacle R-C : Cap for receptacle

(5) Number of pins : Indicates the number of pins.

(6) Pin style : Indicates the style of pins as follows:

P: Male pin S: Female pin

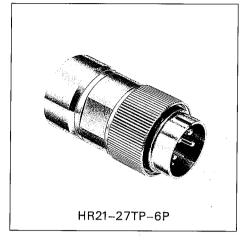
(7) Insertion position variation: Indicates the orientation variations as follows:

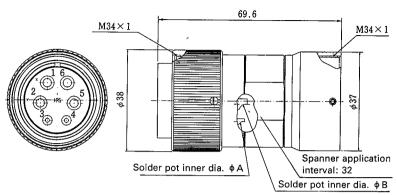
No symbol: Standard type X: Variable by 45°

Y: Variable by 90°

(8) Cable dia. : Indicates the dia. of the applicable cable.

## ■ Plug



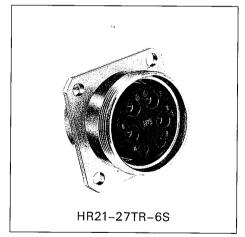


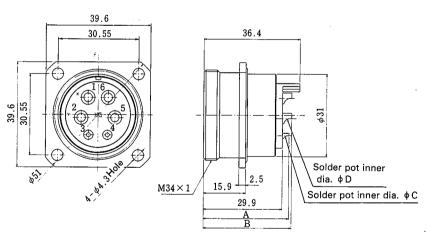
#### (An example in shape)

HRS No.	Part No.	No. of pins	φΑ	φВ
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

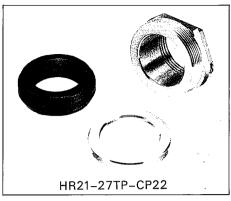


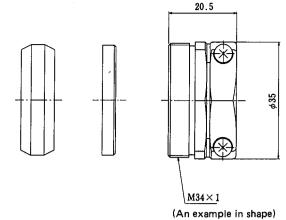


#### (An example in shape)

HRS No.	Part No.	No. of pins	А	В	φС	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

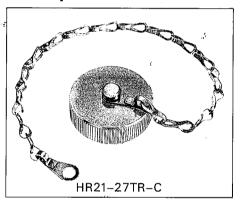


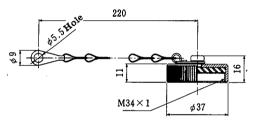


HRS No.	Product No.	Cable diameter
121-0009-4	HR21-27TP-CP21	ф 21
121-0010-3	HR21-27TP-CP22	ф 22

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

### **I** Cap

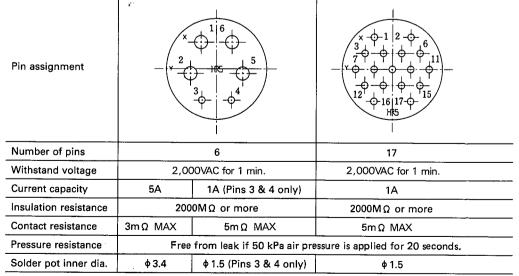




(An	example	in	shape)
		_	

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

## Pin Assignment and Major Performances



- The above figures indicate the conditions viewed from the pin engaging side.
  - Withstand voltage shows the testing voltage.
     Insulation resistance is as measured at 500V ADC.

  - 4. Contact resistance is as measured at 1 ADC.