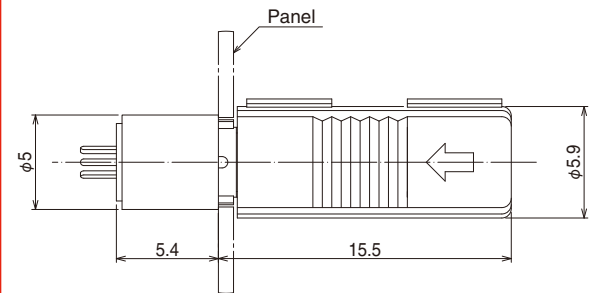


High Performance, Microminiature Circular Connectors

SR38 Series



Mating Condition



■Features

1. High density, microminiature design

- With a nominal outside diameter of 5.3 mm, the SR38 is designed to save space and fits well in tight spaces.
- The simple lock is designed to resist external forces, such as vibration. Shielding function is also provided.

2. Simple wire installation

- The plug is easy to assemble and no special tools are required.
- The receptacle is a PCB dip type.

■Product Specifications

Ratings	Rated Current	0.5A	Operating Temperature Range	-15 ~ 60°C
	Rated Voltage	AC30V, DC42V	Storage Temperature Range	-10 ~ 60°C

Items	Specifications	Conditions
1. Contact Resistance	Maximum of 30 mΩ	Measured with DC 100 mA
2. Insulation Resistance	Minimum of 100 MΩ	Measured with DC 100 V
3. Withstanding Voltage	No flashover or breakdown	AC 100 V for 1 minute
4. Vibration Resistance	No electrical discontinuity of 10μs or greater	Tested 3 directions with 10 to 55 Hz/cycle, vibration width 0.75 mm, 2 hours each.
5. Shock	No electrical discontinuity of 10μs or greater	Tested 3 directions with acceleration 490 m/s and duration 11 ms, 3 times each.
6. Durability	Contact Resistance: Maximum of 50 mΩ	100 mating cycles
7. Temperature Cycles	Insulation Resistance: Minimum of 100 MΩ	-25°C: 30 minutes ⇒ Ordinary temperature: 10~15 minutes ⇒ 70°C: Left for 30 minutes ⇒ Ordinary temperature: 10~15 minutes, Total 5 cycles.
8. Humidity Resistance	Insulation resistance: Minimum of 1 MΩ (in high humidity) Minimum of 10 MΩ (after drying)	Left at temperature 40°C and humidity 90 to 95% for 96 hours.

■Main Materials

Items	Materials	Finish	Remarks
Plug	Outer Case	Brass	Tin plated
		Polypropylene resin (Black)	-
	Insulator	PBT resin (Black)	-
	Male Contact	Phosphorous bronze	Silver plating
Receptacle	Outer Shell	Brass	Nickel plating
		Phosphorous bronze	Tin plated
	Insulator	PBT resin (Black)	-
	Female Contact	Phosphorous bronze	Silver plating

Product Number Structure

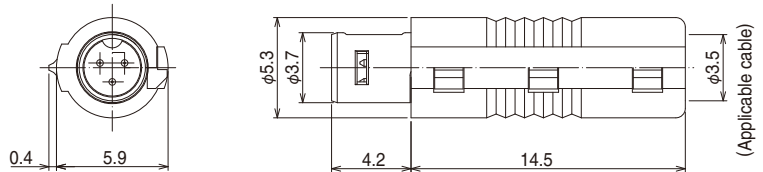
Please use when determining product specifications from a model number. Refer to the charts below for determining specific part number characteristics. Please select connectors listed in this catalog when placing orders and be sure to check the latest delivery specifications at the time of ordering the product.

SR38 - 4 P - 3 P (**)

① ② ③ ④ ⑤ ⑥

① Model Name: SR38 Series
② Shell size: This describes the outer diameter of the case on the mating plug
③ Shell Type P: Plug R: Receptacle
④ No. of Contacts:
⑤ Contact Gender P: Male Contact S: Female contact
⑥ Other Specifications: A two digit number will denote specific product changes

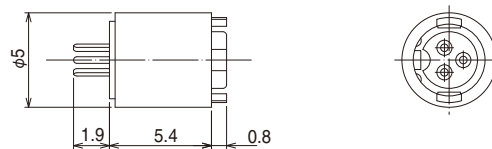
Plug



Part No.	HRS No.
SR38-4P-3P (71)	103-0372-2-71

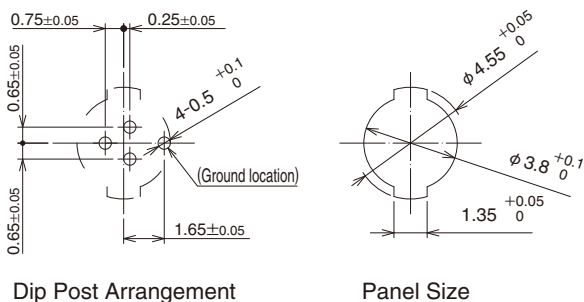
When this connector is assembled with the applicable cable, the clamp will perform well between 10 to 20 N. If you plan on using cable other than the type we recommended, please check with your cable manufacturer to make sure it meets our requirements. This is especially important when the cable is being flexed as it may affect the performance of the connector.

Receptacle



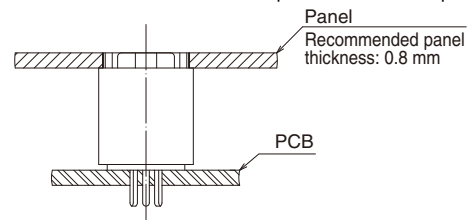
Part No.	HRS No.
SR38-4R-3S (71)	103-0373-5-71

Dip Post Arrangement and Panel Installation Dimensions

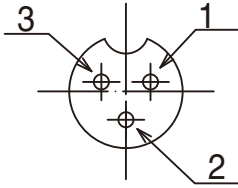


Installation of the Receptacle

As shown in the figure below, pinch the panel and PCB for fixation. Position the PCB, receptacle and panel together, as shown in the figure below. Also, make sure no loads are applied to the contact dip. Make sure that no direct force is placed onto the receptacle.

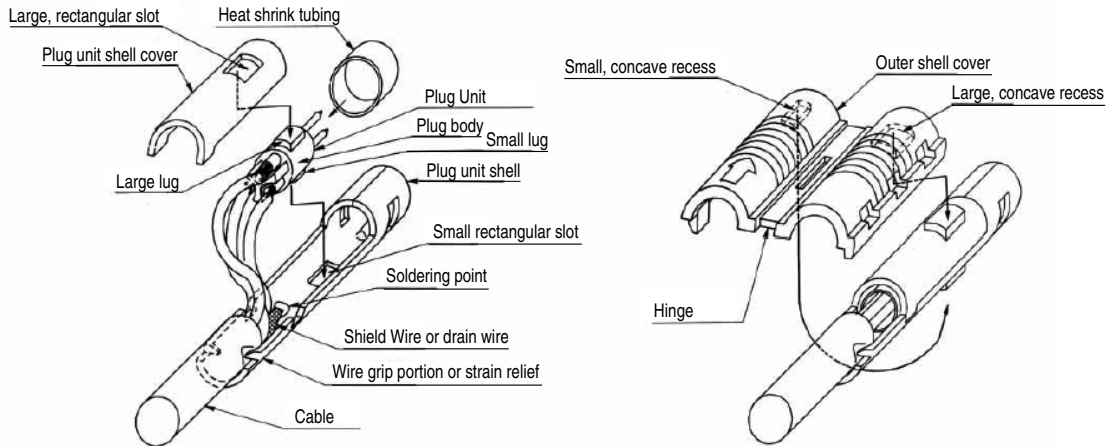


■ Contact Arrangement



- Reference 1. This diagram displays a view of the receptacle from the mating side (plug termination side)
 2. The inner diameter of the solder pot is 0.5 mm.

◆ Termination Procedure (Plug side)



1. Solder the prepared wires of the cable to the plug unit.
 (When using a soldering iron, apply heat of no more than 280° C for a maximum of 3 seconds.)
2. Place the heat shrink tubing over the soldered termination area and apply heat. Make sure that the heat shrink tubing does not contact the plug body. Doing so will affect the diameter of the plug body causing it to not fit properly in the plug unit shell
3. Solder the shield or drain wire to the bottom of the connector shell as shown in the diagram.
4. Install the cable into the wire grip portion of the plug unit shell.
5. Install the large and small lugs of the of the plug unit into the matching rectangular slots in the shell. Then install the plug unit shell cover.
6. Match the corresponding large and small recesses on the outer shell cover with the large and small lug parts on the plug body. Then close the outer shell cover and snap shut.

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