Easy Wash Type

HACCP supporting product

Disassemble and wash type Quick Connect Couplings
Smart Connect and Disconnect
Easy disassembly and cleanability help in hygienic management of HACCP.

**HACCP:** Hazard Analysis and Critical Control Point

HACCP is the management system in which food safety is addressed to the process from production, procurement and handling of raw materials to distribution and consumption of finished products through the analysis and control of biological, chemical and physical hazards.
Quick
Just connect the plug to the socket and twist the “Safety Lock” for connection. Connection by one person is possible.

Cleaning
No tools are required. All parts can be disassembled quickly. Small number of parts makes cleaning easy.

Corrosion resistant
Stainless steel (JIS SUS316L equivalent) for the liquid contact parts, buffing (#400) to prevent propagation of various bacteria (electro-plating available on request). Less deterioration due to excellent corrosion-proof material.

Versatile
There are two types of end configurations. Ferrule shape (ISO 2852 standard) and welding shape (JIS G 3447 standard).

Effortless operation unique to Cuplas
Clean manufacturing environment and efficient production
"Hygienic CUPLA" was born to solve the various troubles of ferrule joints at food manufacturing factories. [It takes time to disassemble and clean] [It takes time and effort to assemble piping] [Clamps work loose and leak] [Packing can easily dislodge and become contaminated] [Overtightening the clamp cuts the packing]. Nitto Kohki’s "Quick Connect Couplings", which is active in a wide variety of industries, will further expand its field of activity.

**Safety standards**

The seal material conforms to article No. 3-D-3-(1) Rubber utensils (except nursing utensils) or Containers / Packages. It has passed both material and elution tests specified in the Food sanitation Act and the standards for Food and Food additives (Notice No.370 of 1959 issued by the Ministry of Health and Welfare of Japan). Also conforms to standard No. 21 CFR 177.2600 of the US Food and Drug Administration (FDA).

**Construction**

No tools are required. Since the O-ring is attached beforehand, it will not drop off during connection like conventional fittings.

**Safety** - Safety Lock function -

By rotating the cam handle, the "Safety Lock" is activated, and the O-ring sticks tightly to prevent fluid leakage. Reliable design with no protruding of O-ring into piping.

**Accessories** - Dust Cap -

Dust cap for both plug and socket (made of polyethylene). Prevents contamination of foreign matter into piping during separation.
**Workability**
Effortless operability and safety

**Easy connection**
You can connect by just inserting the plug to the socket and twisting the "Safety Lock". Efficient piping is realized with ease and without any special skill.

**Safety Lock function**
As a safety measure, the "Safety Lock" feature ensures that there can be no unintentional disconnection of the Cupla. By turning the cam handle, you can maintain the connected state of the socket and plug.

**Speedy disconnection**
Disconnection of plug and socket can be done with ease. Can be disconnected by unlocking the "Safety Lock" and turning the cam handle. No special skills required.

**Easy to wash**
Easy disassembly and easy cleaning

**Maintenance**
No tools are required to disassemble/assemble Hygienic CUPLA. Small number of parts that are easy to handle, aiding efficient maintenance.

**Easy washing of the whole unit**
After disassembly, small number of components requires minimum effort when cleaning. No small parts to lose.

**Stringent safety standards are met**
The seal material conforms to article No. 3-D-3-(1) Rubber utensils (except nursing utensils) or Containers/Packages. It has passed both material and elution tests specified in the Food sanitation Act and the standards for Food and Food additives (Notice No.370 of 1959 issued by the Ministry of Health and Welfare of Japan). Also conforms to standard No. 21 CFR 177.2600 of the US Food and Drug Administration (FDA). The Dust Cap conforms to No. 3-D-2-(1) and 3-D-2-(2)-4 Apparatus and Containers/Packages. It has passed both material and elution tests specified in the standards for Food and Food additives. (Notice No.201 of revised March 31, 2006 by the Ministry of Health and Welfare of Japan).
**Specifications**

| Body material | Stainless steel [SCS16 (JIS SUS316L equivalent)] |
| Surface finish of the liquid-contact part | Buff finish #400 |
| Size of end configurations | Welding type -2 | Ferrule type -3 |
| | 1.5 S / 2.0 S |
| Max. working pressure -4 | 1.0 MPa, 10 kgf/cm², 10 bar, 145 PSI |
| Proof pressure -5 | 1.5 MPa, 15 kgf/cm², 15 bar, 218 PSI |

### Seal material -6

<table>
<thead>
<tr>
<th>Material</th>
<th>Working temperature range -7</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone rubber</td>
<td>0°C to +110°C</td>
<td>Standard material</td>
</tr>
<tr>
<td>Fluoro rubber</td>
<td>0°C to +180°C</td>
<td>Available on request</td>
</tr>
<tr>
<td>Ethylene propylene rubber</td>
<td>0°C to +150°C</td>
<td>Available on request</td>
</tr>
</tbody>
</table>

### O-ring size

1.5 S: P38, 2.0 S: P50 (Dimensions, tolerance: refer to JIS B 2401, Hardness: A70±5)

### Working temperature range

- **Plug** SEW-1.5P Type / SEW-2.0P Type
- **Socket** SEW-1.5S Type / SEW-2.0S Type

**Models and Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>Application</th>
<th>Mass (g)</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEW-1.5P-BW</td>
<td>Welding type</td>
<td>179</td>
<td>L1 52 L2 – øD 35.7</td>
</tr>
<tr>
<td>SEW-1.5P-FR</td>
<td>Ferrule type</td>
<td>224</td>
<td>– (73.5) øD 50.5 øB 35.7</td>
</tr>
<tr>
<td>SEW-2.0P-BW</td>
<td>Welding type</td>
<td>231</td>
<td>L1 52 L2 – øD 47.8</td>
</tr>
<tr>
<td>SEW-2.0P-FR</td>
<td>Ferrule type</td>
<td>301</td>
<td>– (73.5) øD 84 øB 47.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Application</th>
<th>Mass (g)</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEW-1.5S-BW</td>
<td>Welding type</td>
<td>364</td>
<td>L1 58 L2 – øD 84 H 35.7</td>
</tr>
<tr>
<td>SEW-1.5S-FR</td>
<td>Ferrule type</td>
<td>407</td>
<td>– (79.5) øD 50.5 øB 35.7</td>
</tr>
<tr>
<td>SEW-2.0S-BW</td>
<td>Welding type</td>
<td>455</td>
<td>L1 58 L2 – øD 94 øB 47.8</td>
</tr>
<tr>
<td>SEW-2.0S-FR</td>
<td>Ferrule type</td>
<td>526</td>
<td>– (79.5) øD 64 øB 47.8</td>
</tr>
</tbody>
</table>

### Precautions to be taken when using Cuplas

- **Any residual fluid remaining in the passage will spill out on disconnection.** Do not remove any residual fluid before disconnection to avoid burns or injury to the skin when dangerous fluid such as chemical agent or high temperature fluid is used. There is a dead space inside the Cupla. Be careful that this may lead to the spread of bacteria.
- **The Cupla can be easily disassembled for cleaning.** The Cupla should be evaluated before use to determine the suitability with regard to sanitation and safety. Especially when using O-rings of other brands than Nitto Kohki, be sure to evaluate the O-ring at your end.
- **Do not use the Cupla continuously under any pressure exceeding the rated working pressure.** This may cause leakage or damage. Do not use the Cupla continuously under any pressure exceeding the rated working pressure. This may cause leakage or damage. Do not use the Cupla continuously under any pressure exceeding the rated working pressure. This may cause leakage or damage. Do not use the Cupla continuously under any pressure exceeding the rated working pressure. This may cause leakage or damage. Do not use the Cupla continuously under any pressure exceeding the rated working pressure. This may cause leakage or damage. Do not use the Cupla continuously under any pressure exceeding the rated working pressure. This may cause leakage or damage.
- **The durability of the Cupla differs depending on the operating environment and conditions (pressure and temperature etc.).** If necessary, conduct performance evaluation tests under your actual operating environment and conditions.
- **Do not use continuously at the lowest or highest working temperature.** Use only within range of its rated temperature. May cause damage or deterioration to the sealing and leak if used otherwise.
- **When the Lock plate ASSY is deformed, replace it with a new one regardless of connection/disconnection times.** Malfunction caused by welding (directly or otherwise) is not included in the warranty.
- **Any residual fluid remaining in the passage will spill out on disconnection.** Drain any residual fluid before disconnection to a void.
- **Use only within range of its rated temperature.** May cause damage or deterioration to the sealing and leak if used otherwise.
- **Do not use the Cupla continuously under any pressure exceeding the rated working pressure.** This may cause leakage or damage.
- **The outer diameter and thickness of the pipe to be welded to the Cupla must conform to JIS G 3447.**
- **When the Cupla remains connected for long periods of time, it may become difficult to disassemble.** In this case, do not forcefully turn the socket and plug to disconnect as this may damage the seal material and cause leakage.
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- **When the Cupla remains connected for long periods of time, it may become difficult to disassemble.** In this case, do not forcefully turn the socket and plug to disconnect as this may damage the seal material and cause leakage.
- **The O-ring and Lock plate ASSY are consumable items.** When the Lock plate ASSY is deformed, replace it with a new one regardless of connection/disconnection times.
- **The durability of the Cupla differs depending on the operating environment and conditions (pressure and temperature etc.).**
- **Do not use continuously at the lowest or highest working temperature.** Use only within range of its rated temperature. May cause damage or deterioration to the sealing and leak if used otherwise.
- **When the Cupla remains connected for long periods of time, it may become difficult to disassemble.** In this case, do not forcefully turn the socket and plug to disconnect as this may damage the seal material and cause leakage.
- **When the Lock plate ASSY is deformed, replace it with a new one regardless of connection/disconnection times.** Malfunction caused by welding (directly or otherwise) is not included in the warranty.

### Replacement guide

**Lock plate ASSY**

- **1000 times**

- **When the Lock plate ASSY is deformed, replace it with a new one regardless of connection/disconnection times.**
- **The O-ring and Lock plate ASSY are consumable items.**
- **The durability of the Cupla differs depending on the operating environment and conditions (pressure and temperature etc.).**
- **Do not use continuously at the lowest or highest working temperature.**

**Note 1:** All metal parts are equivalent to SUS304 except those exposed to liquid contact. / **Note 2:** The dimensions of the weld zone conform to JIS G 3447 stainless steel sanitary pipe. / **Note 3:** Please use ferrule couplings conforming to IDF / ISO 2892. / **Note 4:** The normal allowable fluid pressure under continuous use. May cause leakage or damage if repeatedly used exceeding this pressure. / **Note 5:** The maximum pressure, up to which the performance of the cupla will not be affected - even if the max working pressure is temporarily exceeded. / **Note 6:** The seal material conforms to article No.2.3.3 (1) (Rubber units except rubber pump units) or Container / Packages. It has passed both material and solution tests specified in the Food sanitation Act and the standards for Food and Food additives (Notice No.370 of 1959 issued by the Ministry of Health and Welfare of Japan). Conforms to standard No.21CFR 177.2600 of the US Food and Drug Administration (FDA). / **Note 7:** Working temperature range that the Cupla can be used differs depending on the operating conditions. / **Note 8:** Vacuum performance may vary depending upon working environment and usage conditions.
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