Mizu-P25™ Miniature Waterproof Connectors
250 Volts Type
<table>
<thead>
<tr>
<th>REV.</th>
<th>REV. RECORD</th>
<th>DATE</th>
<th>EC NO.</th>
<th>WRTTN:</th>
<th>CHK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>PROPOSED &amp; RELEASED</td>
<td>2012/ 2/ 3</td>
<td>JTR2012-0053</td>
<td>SINAOKA</td>
<td>SANDO</td>
</tr>
<tr>
<td>A1</td>
<td>REVISED</td>
<td>2015/10/30</td>
<td>JTR2016-0041</td>
<td>YFUSHIMI</td>
<td>TAITO</td>
</tr>
<tr>
<td>B</td>
<td>REVISED</td>
<td>2016/ 5/13</td>
<td>JTR2016-0105</td>
<td>YFUSHIMI</td>
<td>TAITO</td>
</tr>
<tr>
<td>B1</td>
<td>REVISED</td>
<td>2016/ 8/ 5</td>
<td>107245</td>
<td>YFUSHIMI</td>
<td>TAITO</td>
</tr>
<tr>
<td>B2</td>
<td>REVISED</td>
<td>2019/07/23</td>
<td>620884</td>
<td>RHORI</td>
<td>HKOMATSU</td>
</tr>
</tbody>
</table>

**APPLICATION SPECIFICATION**

**FOR 2.5 MINI WATERPROOF CONN.**
SUMMARY

1.0 GENERAL PRESENTATION
1.1 PART NUMBERS
1.2 COMPONENTS

2.0 CONNECTOR ASSEMBLY PROCESS
2.1 TERMINALS CRIMPING
2.2 TERMINALS INSERTION
2.3 CAP LOCKING
2.4 MATING
2.5 UNMATING
1.0 GENERAL PRESENTATION
The plug and receptacle housings (hereinafter referred to as "housing assembly ") include a wire-end seal and are shipped in a pre-lock state, whereby the cap is not completely locked, but is held in a provisional state.

1.1 PART NUMBERS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MOLEX P/N</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug Housing Assembly 2way</td>
<td>52266-0211</td>
<td>Black</td>
</tr>
<tr>
<td>Plug Housing Assembly 3way</td>
<td>52266-0311</td>
<td>Black</td>
</tr>
<tr>
<td>Plug Housing Assembly 4way</td>
<td>52266-0411</td>
<td>Black</td>
</tr>
<tr>
<td></td>
<td>52266-0417</td>
<td>Brown</td>
</tr>
<tr>
<td>Receptacle Housing Assembly 2way</td>
<td>52213-0211</td>
<td>Black</td>
</tr>
<tr>
<td>Receptacle Housing Assembly 3way</td>
<td>52213-0311</td>
<td>Black</td>
</tr>
<tr>
<td>Receptacle Housing Assembly 4way</td>
<td>52213-0411</td>
<td>Black</td>
</tr>
<tr>
<td></td>
<td>52213-0417</td>
<td>Brown</td>
</tr>
<tr>
<td>TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crimp Pin</td>
<td>50147-8*00</td>
<td>N / A</td>
</tr>
<tr>
<td>Crimp Receptacle</td>
<td>50148-8*00</td>
<td>N / A</td>
</tr>
</tbody>
</table>
1.2 COMPONENTS

- Crimp Receptacle
- Cap
- Wire End Seal
- Receptacle Housing
- Seal Stopper
- Seal
- Plug Housing
- Wire End Seal
- Cap
- Crimp Pin

Fig 1
2.0 CONNECTOR ASSEMBLY PROCESS

2.1 TERMINALS CRIMPING
Please refer to Molex Crimp Specifications [AS-50147-001].

2.2 TERMINALS INSERTION

WARNING:
BEFORE THE TERMINAL INSERTION, PLEASE MAKE SURE THAT THE CAPS LOCK IS IN PRE-LOCKED POSITION, THEREFORE THE YELLOW END WIRE SEAL IS VISIBLE.

Fig 2

The end wire seal is visible
With the housing assembly and terminal facing each other as below (Step1), proceed to insert terminal into the housing in the wire-end seal side until it locks into the housing assembly with a “click”. (Step2) If the terminal is in the reverse position, it will not lock. In this situation, reconfirm the proper position of the terminal and reinset.

**Step 1**
Present the terminals in the correct orientation

**Step 2**
Insert the terminals until the locking and the audible click

Fig 3
Step 1

Present the terminals in the correct orientation

Step 2

Insert the terminals until the locking and the audible click

Good orientation

Fig 4
WARNING:
INSERT THE CRIMPED TERMINALS STRAIGHTLY INTO THE WIRE END SEAL OPENING. DO NOT TWIST OR SLANT THE CRIMPED TERMINALS WHEN INSERTING. WHEN THE TERMINAL SEEMS TO BE CAUGHT DURING INSERTION, DO NOT FORCE THE TERMINALS INTO THE HOUSING AND INSERT THE TERMINAL AGAIN. IF TERMINALS ARE FORCED IN, IT COULD CAUSE THE SEALING TO TEAR.

Fig 5
2.3 CAP LOCKING

After confirming the proper position of the terminal, push the cap in the direction of the arrow. Using the splash-proof connector cap tool, the cap will lock securely and easily. See Housing Assembly/Cap Fitting Tool Cross Reference Table.

![Diagram of cap locking](image)

**Housing Assembly/Cap Fitting Tool Cross Reference**

<table>
<thead>
<tr>
<th>Housing Assembly</th>
<th>Cap Fitting Tool</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>52266–02**</td>
<td>———</td>
<td>———</td>
</tr>
<tr>
<td>52266–0***</td>
<td>57147–6000</td>
<td>(Wire Type) AVSS0.3</td>
</tr>
<tr>
<td>52266–0***</td>
<td>57170–6000</td>
<td>(Wire Type) AVS0.3</td>
</tr>
<tr>
<td>52213–02**</td>
<td>———</td>
<td>———</td>
</tr>
<tr>
<td>52213–0***</td>
<td>57148–6000</td>
<td>(Wire Type) AVSS0.3</td>
</tr>
<tr>
<td>52213–0***</td>
<td>57171–6000</td>
<td>(Wire Type) AVS0.3</td>
</tr>
<tr>
<td>52116–0***</td>
<td>57130–6000</td>
<td>———</td>
</tr>
<tr>
<td>52117–0***</td>
<td>57131–6000</td>
<td>———</td>
</tr>
</tbody>
</table>

**Fig 6**

Lock portion

Lock portion
When the cap locks completely, the cap lock portion will show in the lock window (reverse side). If only one side is locked, water resistance may be compromised.
2.4 MATING
Join the lock portion of the plug and receptacle housings (Fig 7). Continue mating until a “click” is felt or heard.

Step 1
Mate the female and male connector.

Step 2
Mate until audible click

Fig 7
2.5 **UNMATING**

Use a tool like a screwdriver (end portion 2 mm) or similar tool. Insert tip into the plug housing side-lock portion (Step 1), lift (Step 2), pull out the receptacle housing circuit and unmate (Step 3).

---

**Step 1**

**Step 2**

**Step 3**

---

**Fig 8**
Care is needed not to lift the lock portion more than necessary. “Do not lift more than twice the height of the lock portion” is a convenient yardstick to use (Fig 9). If lifted any more than this, it will not be able to return to its original position, resulting in either a reduced latch effect or break.