

MHF[®] 4 RECEPTACLE HIGH CYCLE N45 C ADAPTER

Part No. 90576-0001, 20449-001E-**, 90577-0***

Instruction Manual

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1. Purpose

This manual outlines how to correctly inspect MHF 4 receptacle using MHF 4 RECEPTACLE HIGH CYCLE N45 C ADAPTER (as High Cycle) as well as precautions for proper handling of the product.

◆ Inspection high cycle adapter

Product name: MHF 4 RECEPTACLE HIGH CYCLE N45 C ADAPTER

Part number: 90576-0001

◆ Receptacle

Product name: MHF4 Receptacle

Part number: 20449-001E-**

◆ Adapter cable

Product name: MHF Series N45 C TO SMA ADAPTER CABLE

Part number: 90577-0***

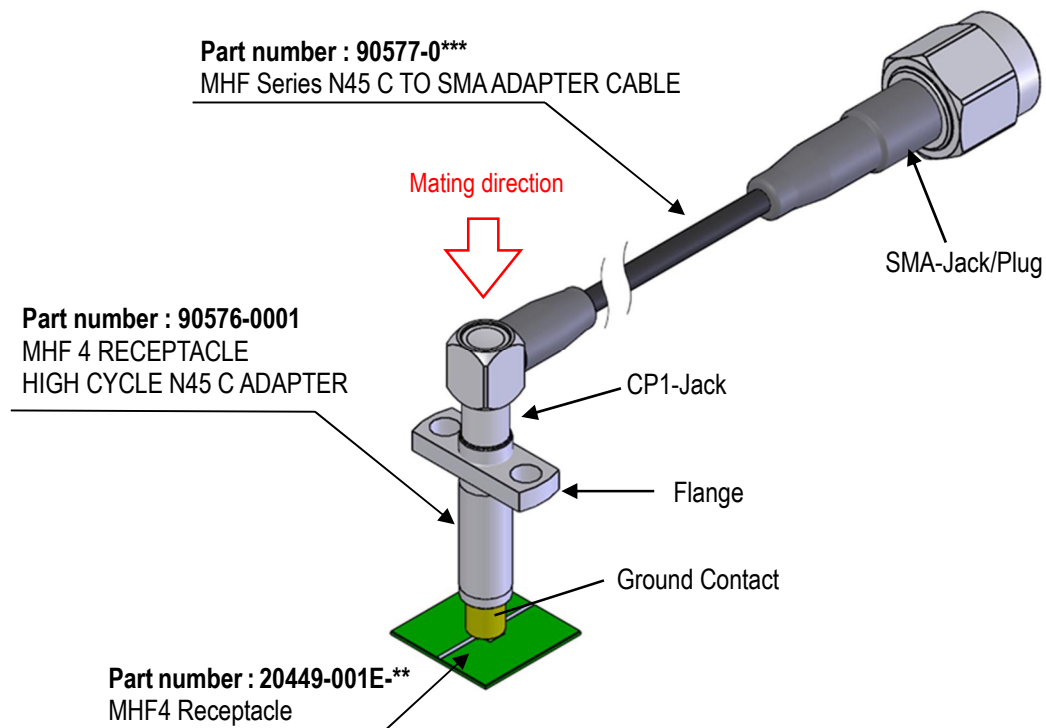


Figure 1 Parts names

2. Flange Dimensions and Layouts of Peripheral components

When placing devices around MHF 4 receptacle, avoid interference with the high cycle adapter in its mating operation.

【Flange dimensions】

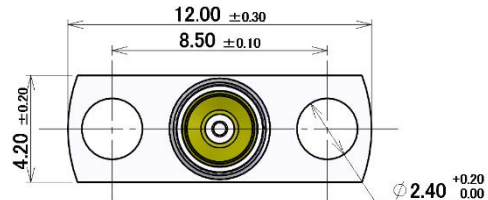
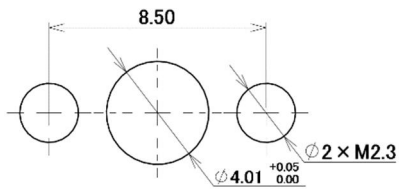


Figure 2 Flange dimensions

【Recommended panel cutout】



【Adapter dimensions】

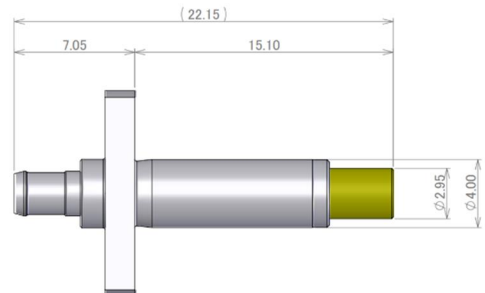


Figure 3 Panel cutout and adapter dimensions

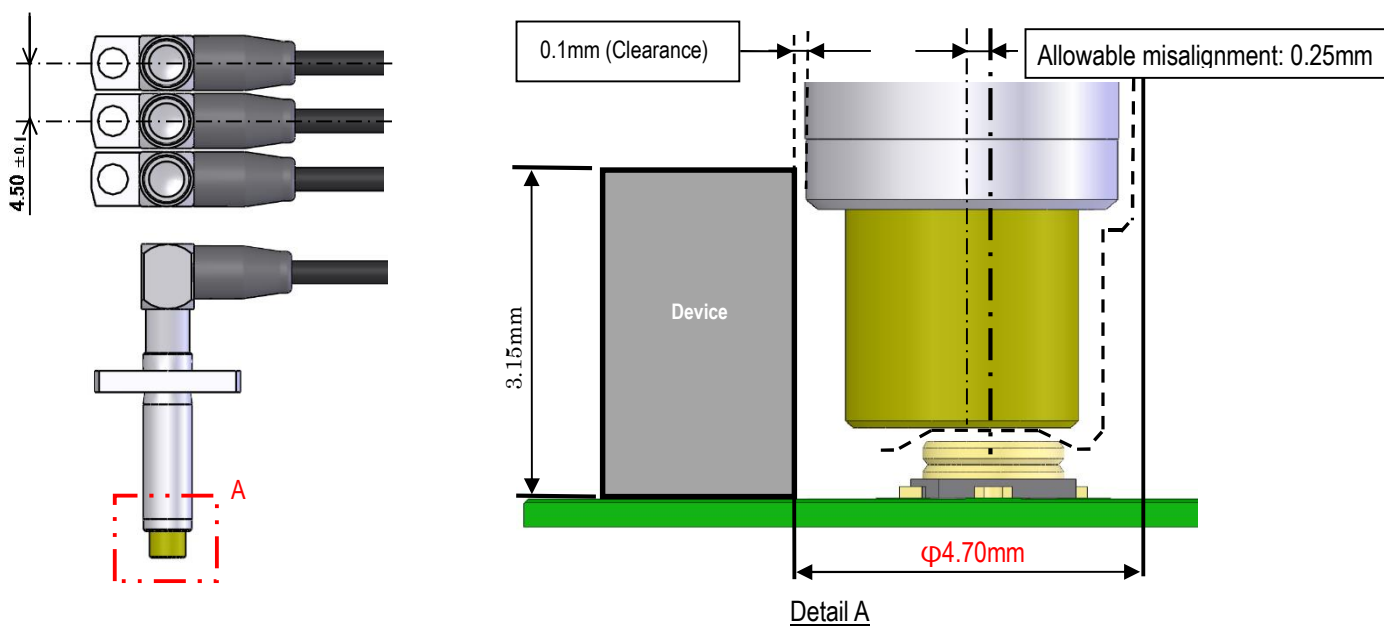


Figure 4 Device placement prohibited area

【CAUTION】

To avoid interference, do not place devices of 3.15 mm height or over within $\phi 4.70$ mm of MHF 4 receptacle, as it will damage the receptacle or high cycle adapter and cause inspection failure.

3. Cable Socket insertion

Insert the high cycle adapter to CP1 of MHF Series N45 C TO SMA ADAPTER CABLE as shown in Figure 5.

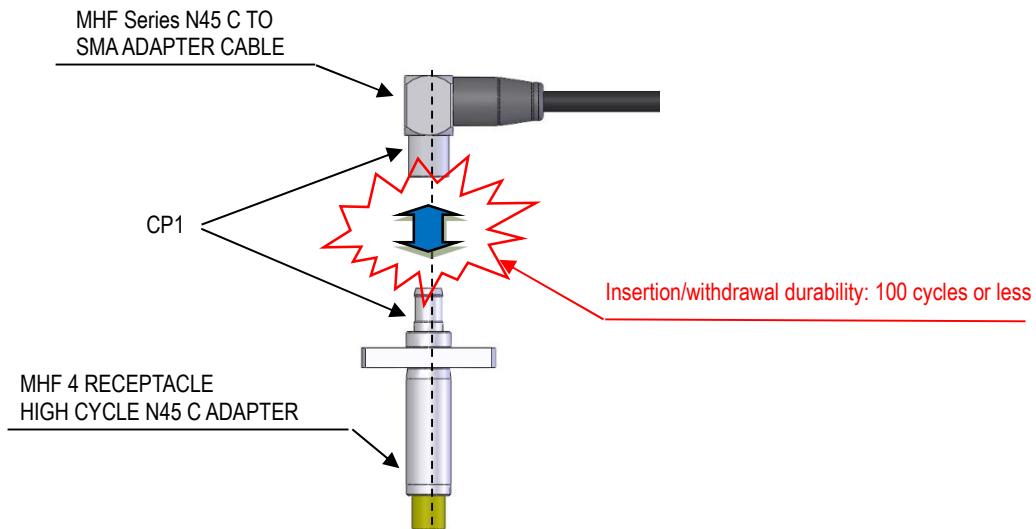


Figure 5 Insertion method and durability

【CAUTION】

Do not repeat insertion and withdrawal between high cycle adapter CP 1 and MHF Series N45 C TO SMA ADAPTER CABLE CP 1 over 100 cycles. Excessive insertion and withdrawal will damage the connector and prevent the operator from inspecting precise characteristics.

4. Inspection adapter attachment

After assembled the high cycle adapter and MHF Series N45 C TO SMA ADAPTER CABLE as shown in figure 6, screw the SMA-P (J) to the measurement instrument with 0.57Nm torque wrench.

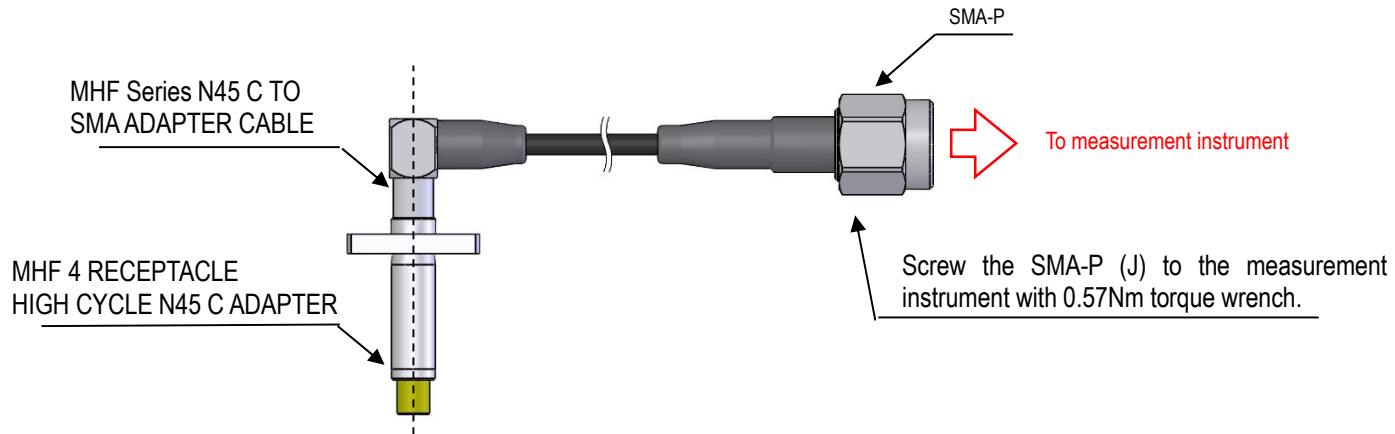


Figure 6 Connection method

【CAUTION】

Be sure to always screw only SMA-P (J) side with 0.57Nm torque wrench. Excessive torque may damage the connector.

5. Inspection with High Cycle Adapter

When placing the inspection adapters as shown in figure 7, follow the layout dimensions in figure 7. Stroke width (from bottom of the flange to tip of outer contact-A) shall be managed within 14.45 ± 0.2 mm.

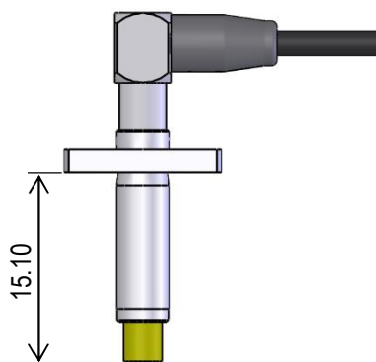
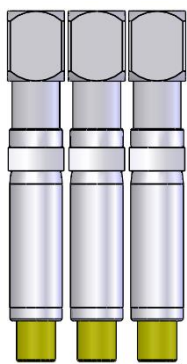
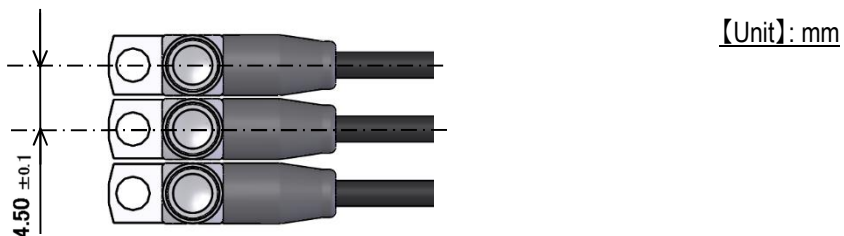


Figure 7 Before stroke

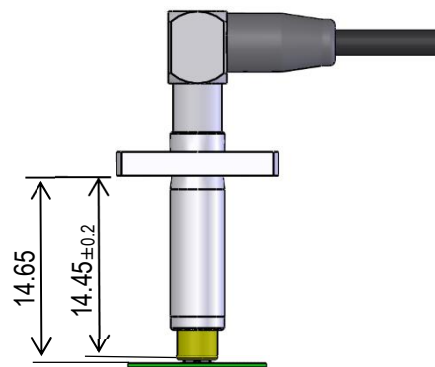


Figure8 After stroke

Figure 9 outlines the fixing JIG for high cycle adapter. This high cycle adapter does not have the floating structure. Use the fixing JIG which has the floating structure of 0.25 mm or greater. See figure 2 for recommended panel cutout for fixing the inspection adapter.

【For 3 subjects of inspection】

【Unit】: mm

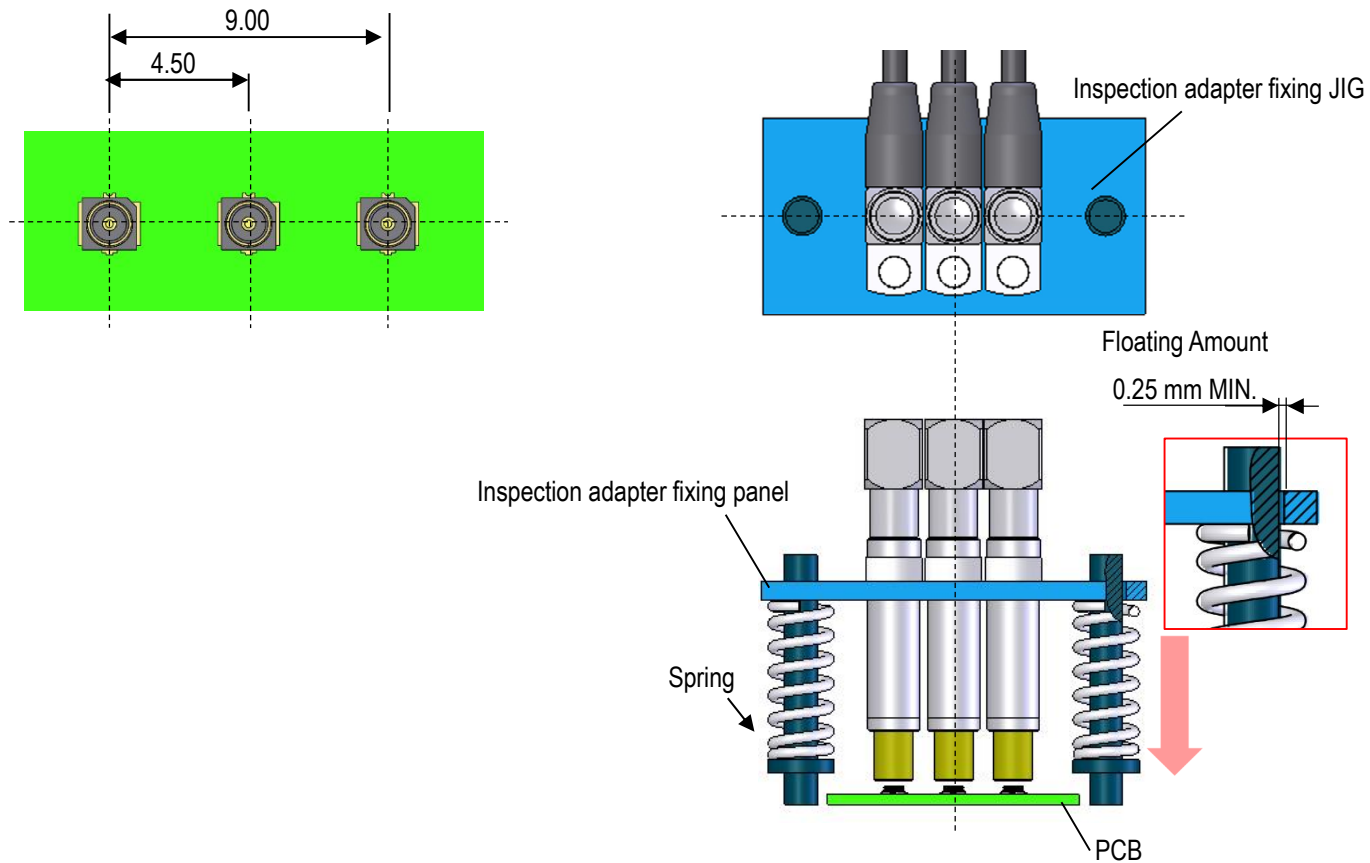


Figure.9 Inspection adapter use case

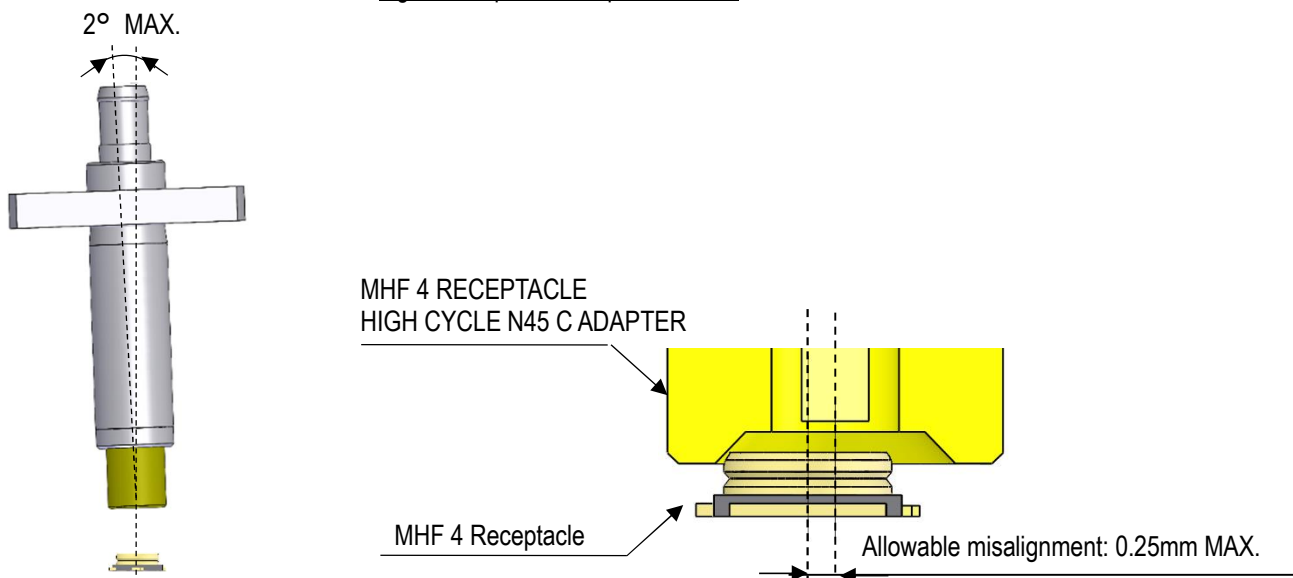


Figure.10 Allowable angle/Allowable misalignment

【CAUTION】

1. When designing the JIG set, please refer to figure 9.
2. Be sure that the fixing JIG for this inspection adapter shall have the floating structure of 0.25 mm or greater.
3. Slant mating of 2° or greater may fail the precise measurement and damage the inspection adapter or MHF 4 receptacle.
4. The inspection may fail when the misalignment between the inspection adapter and MHF 4 receptacle is over the allowable amount. Furthermore, excessive misalignment may apply the unexpected force to the inspection JIG and MHF 4 receptacle and damage them.