



## H3APR IP68 EMC Hood and Housing Series

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## 1. INTRODUCTION

This specification contains the regulations for assembly of various H3APR IP68 EMC anti corrosion Hood and Housing.

## 2. SUPPORTING DOCUMENTS

### 2.1. Customer drawings

For dimensions and materials of the individual parts, please refer to the relative customer drawings of H3APR IP68 EMC anti corrosion hood and housing.

### 2.2. Product specification

The product specifications of the used articles are to be taken into account. The product specification describes the technical data as regulations, temperature range and degree of protection. For further reference, please refer to product spec. 108-137187.

### 2.3. Application Specification

Connectors shall be assembled as below mentioned application specifications to ensure correct connector assembly.

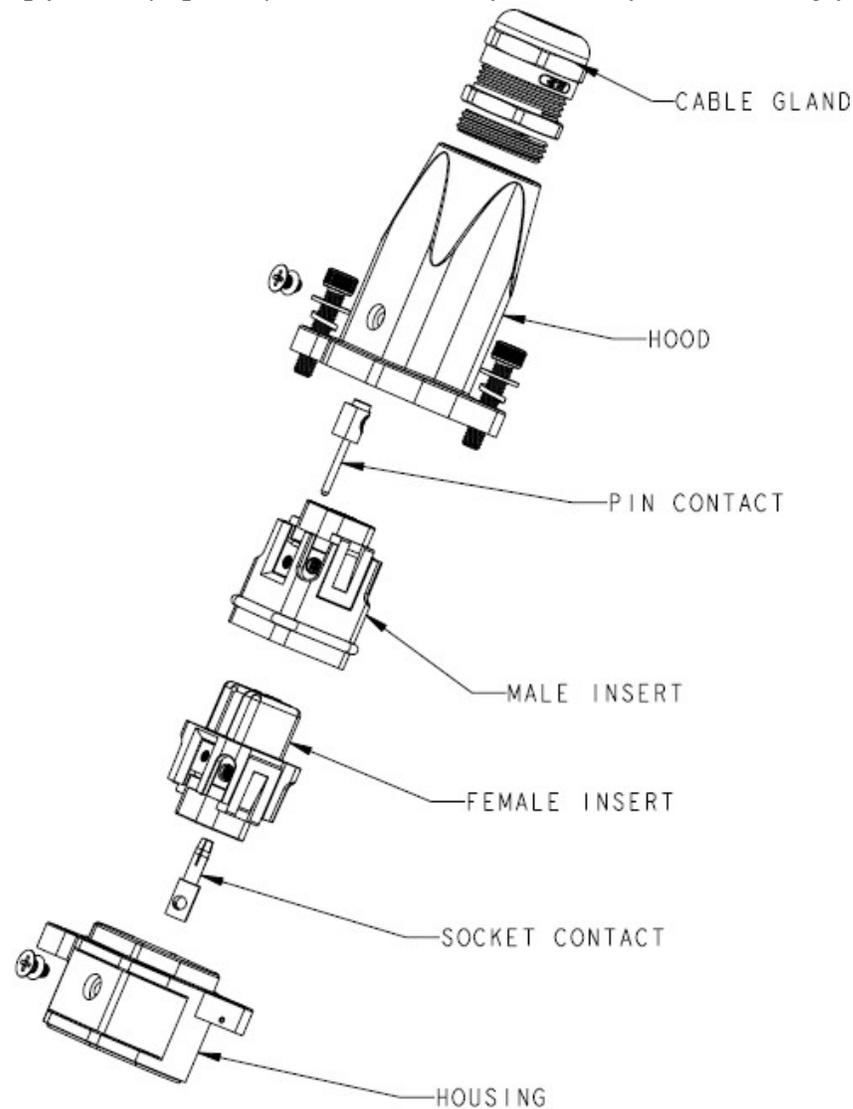
### 2.4. Standards

- EN 61984: Connectors - Safety requirements and tests
- IEC 60664-1: Insulation coordination for equipment within low-voltage systems (Part 1)
- EN 60529: Degrees of Protection Provided by Enclosures (IP Code)
- EN 60068: Environmental testing
- EN 62153-4-7: Electromagnetic compatibility (EMC) - Test method for measuring the transfer impedance and the screening - or the coupling attenuation - Tube in tube method
- ISO 6988: Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture

## 3. DESCRIPTION

### 3.1. Assembly product

The following picture (Figure 1) shows an example of complete assembly product.



**Figure: 1**

The complete product consists of the following components (see figure 1):

- Cable gland
- Hood
- Pin contact
- Male insert
- Female insert
- Socket contact
- Housing

## 3.2. Hood and housing types

### 3.2.1. Opposite angle locking

#### 3.2.1.1. Normal type

Hood:

- H3APR-MTGSW-PG/M-EMC-C

Housing:

- H3APR-MAGSW-EMC-C



**Figure:2**

- Hood & housing available for size: H3APR
- PG/M Thread-1 on hood optional: PG13.5, M20

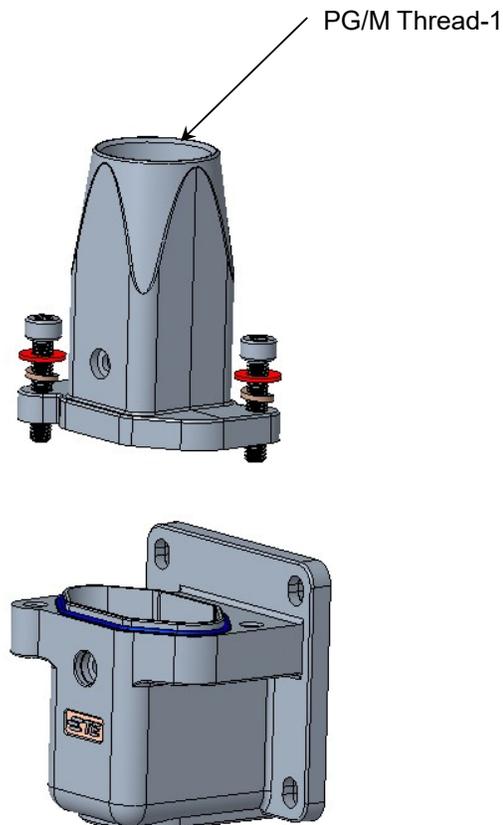
## 3.2.1.2. Right angled type

Hood:

- H3APR-MTGSW-PG/M-EMC-C

Housing:

- H3APR-MAGS-EMC-C



**Figure:3**

- Hood & housing available for size: H3APR
- PG/M Thread-1 on hood optional: PG13.5, M20

## 3.2.2. Central locking

### 3.2.2.1. Normal type

Hood:

- H3APR-TGC-PG/M-EMC-C

Housing:

- H3APR-AGC-EMC-C



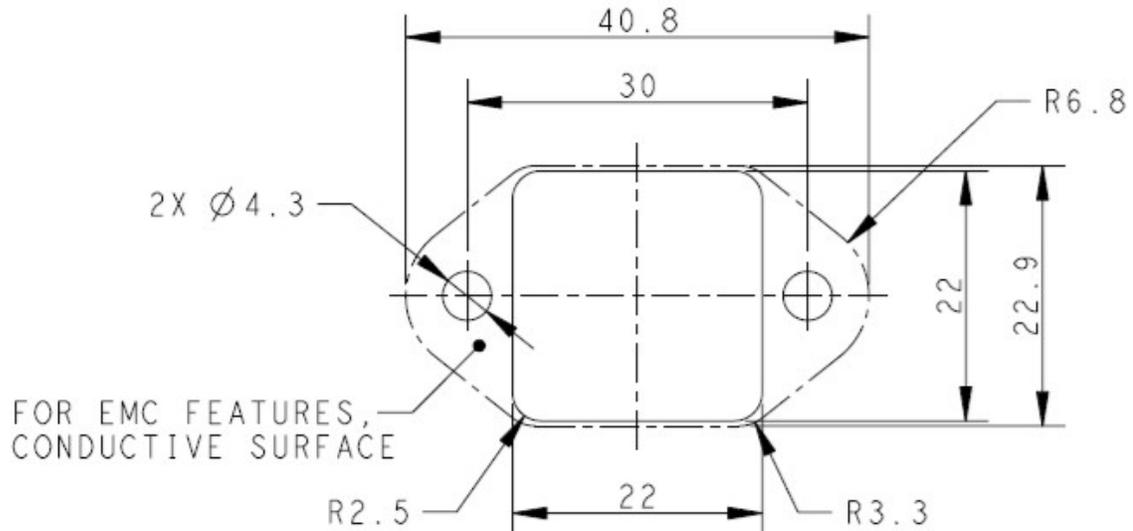
**Figure: 4**

- Hood & housing available for size: H3APR
- PG/M Thread-1 on hood optional: M16, M20

## 4. REQUIREMENTS

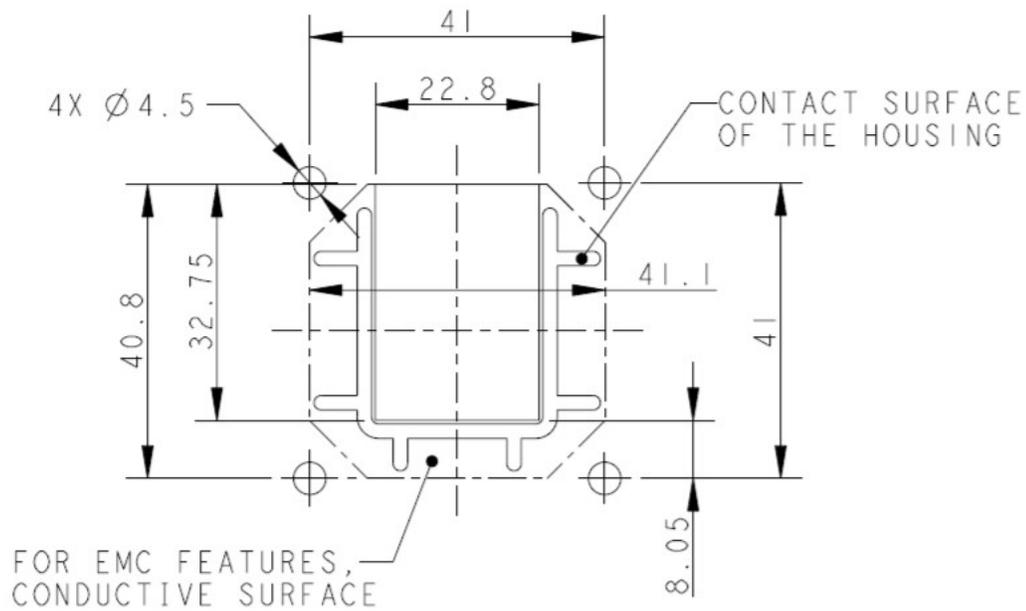
### 4.1. Panel cut-out

- For housing type: H3APR-MAGSW-EMC-C



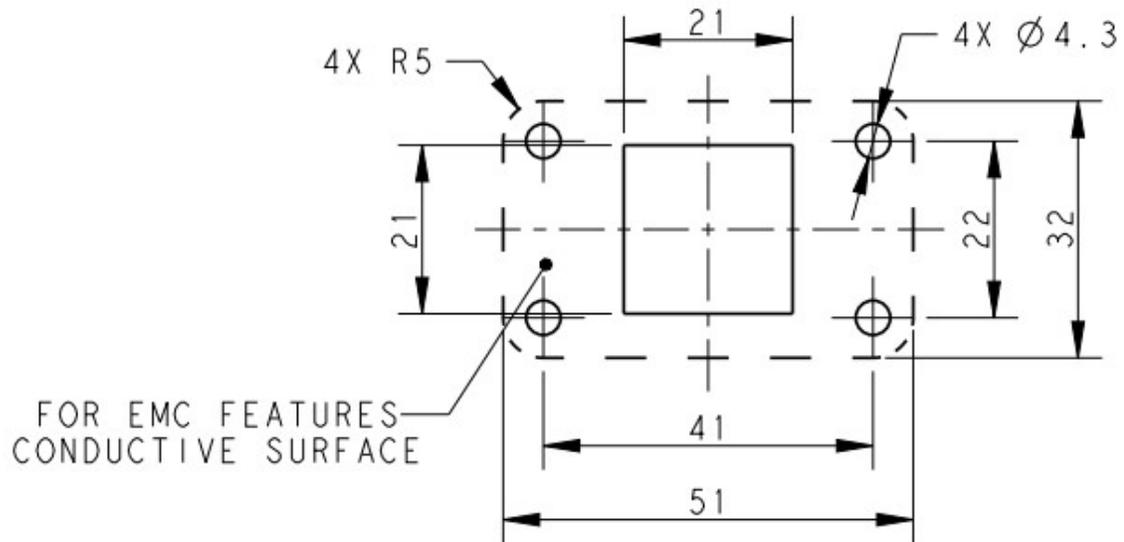
**Figure: 5**

- For housing type: H3APR-MAGS-EMC-C



**Figure: 6**

- For housing type: H3APR-AGC-EMC-C

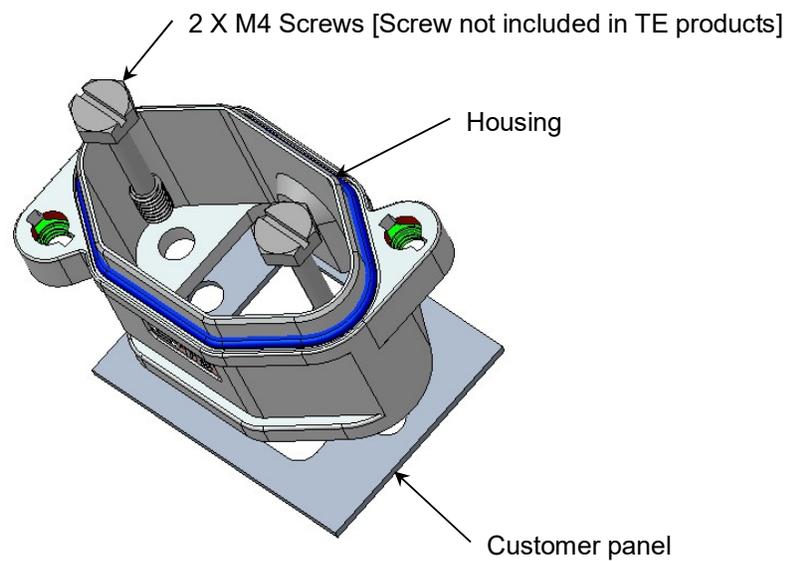


**Figure: 7**

## 5. ASSEMBLY

- **Assembly housing**
- **For opposite angle locking: H3APR-MAGSW-EMC-C**

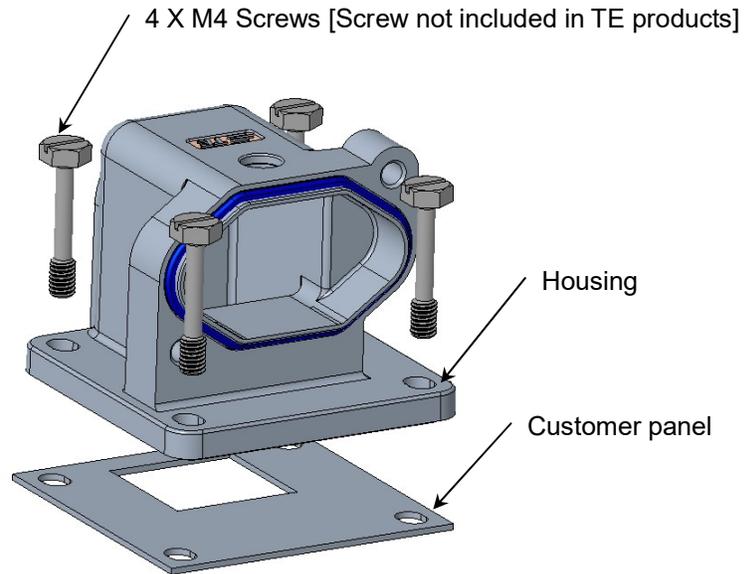
Fix housing with 2 x M4 screws. Tightening torque refer to spec of screws, but no less than 2Nm.



**Figure: 8**

➤ **For opposite angle locking: H3APR-MAGS-EMC-C**

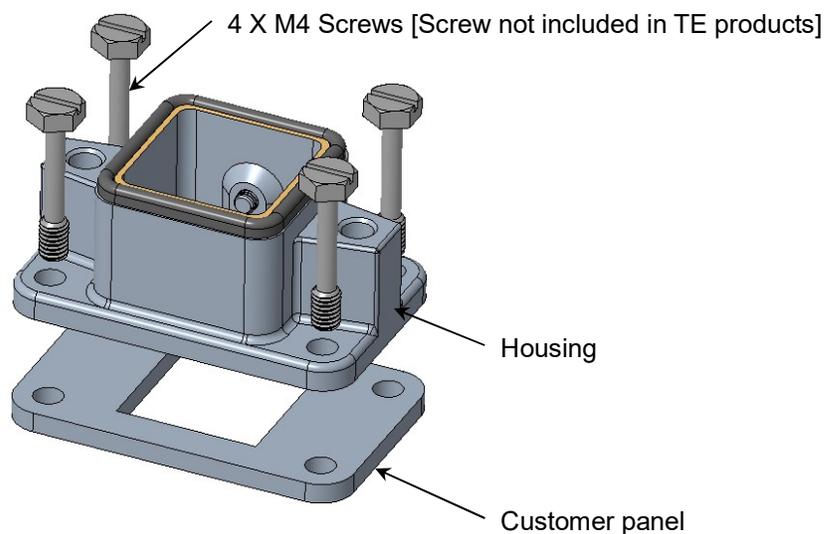
Fix housing with 4 x M4 screws. Tightening torque refer to spec of screws, but no less than 2Nm.



**Figure: 9**

➤ **For central locking: H3APR- AGC-EMC-C**

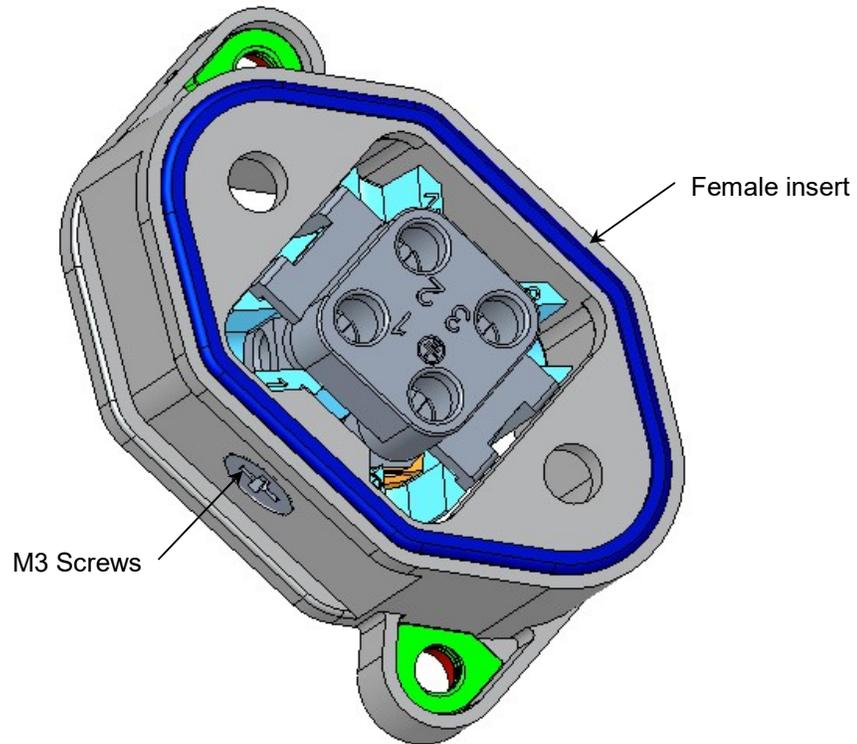
Fix housing with 4 x M4 screws. Tightening torque refer to spec of screws, but no less than 2Nm.



**Figure: 10**

➤ **Assembly female insert into housing**

Fix female insert with M3 screw. Tightening torque refer to spec of female insert.



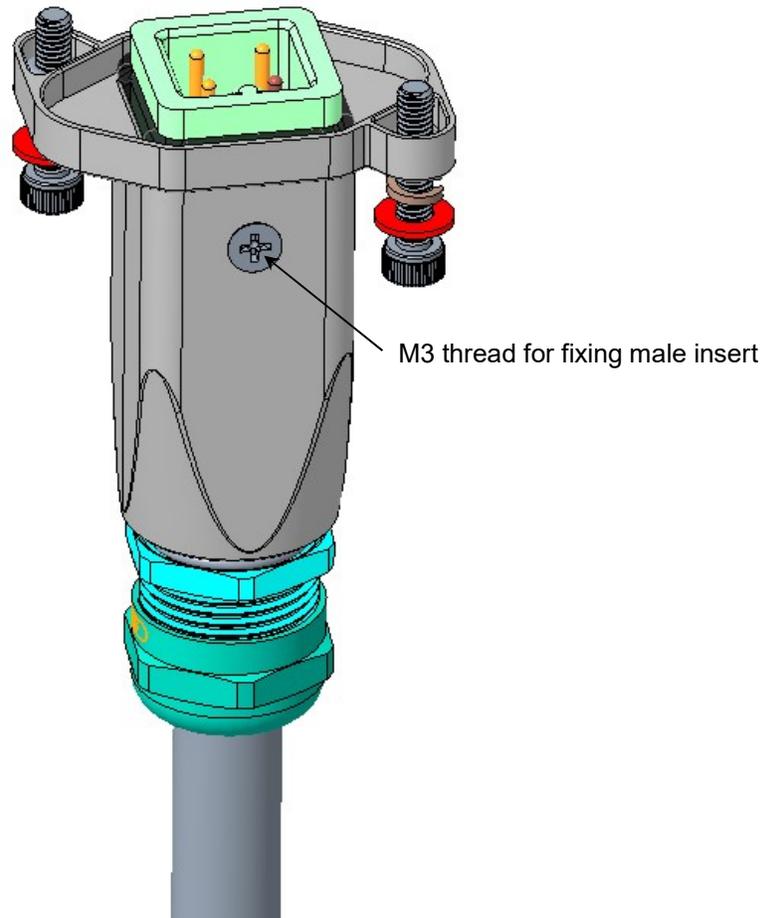
**Figure: 11**

Note:

- Refer application spec of female insert separately and before fixing to housing, it should be well prepared.
- Whatever the type of housing or the type of female insert, they have same assembly process here.

➤ **Assembly male insert into hood**

Fix female insert with M3 screw. Tightening torque refer to spec of male insert.



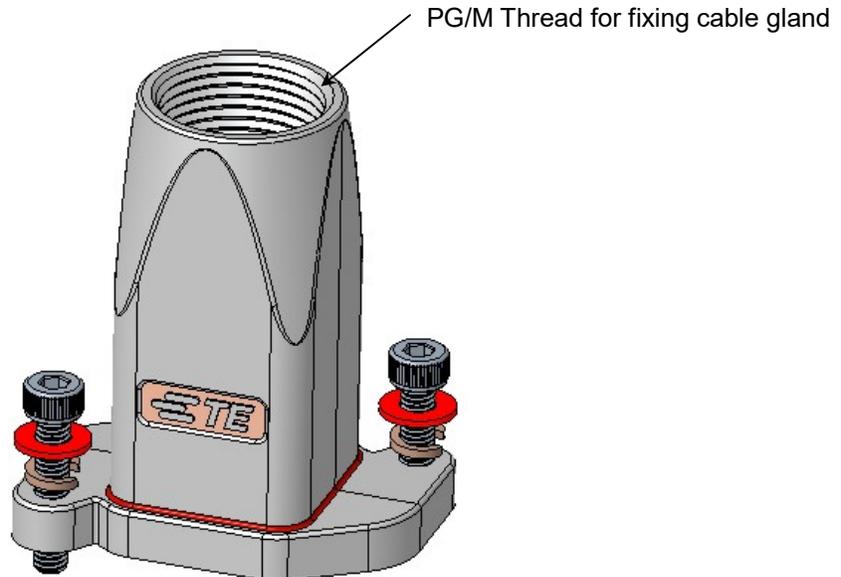
**Figure: 12**

Note:

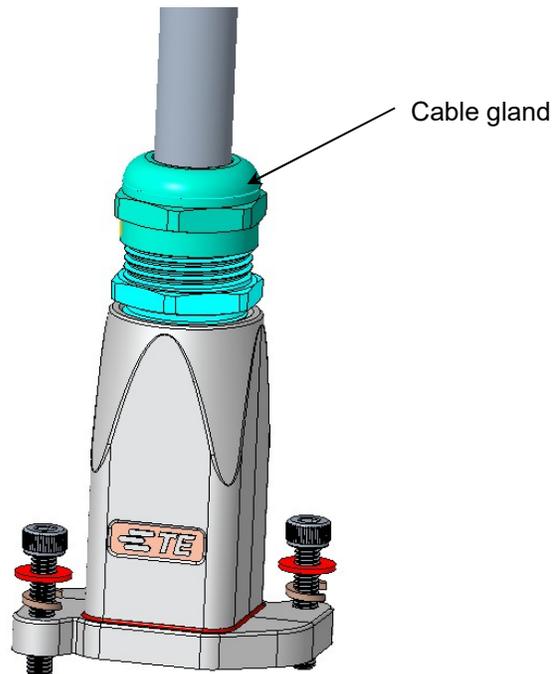
- Refer application spec of male insert separately and before fixing to hood, male insert should be well prepared.
- Whatever the type of hood or the type of male insert, they have same assembly process here.

➤ **Assembly cable gland with hood**

Fix cable gland to hood. Tightening torque refer to spec of cable gland.



**Figure: 13**



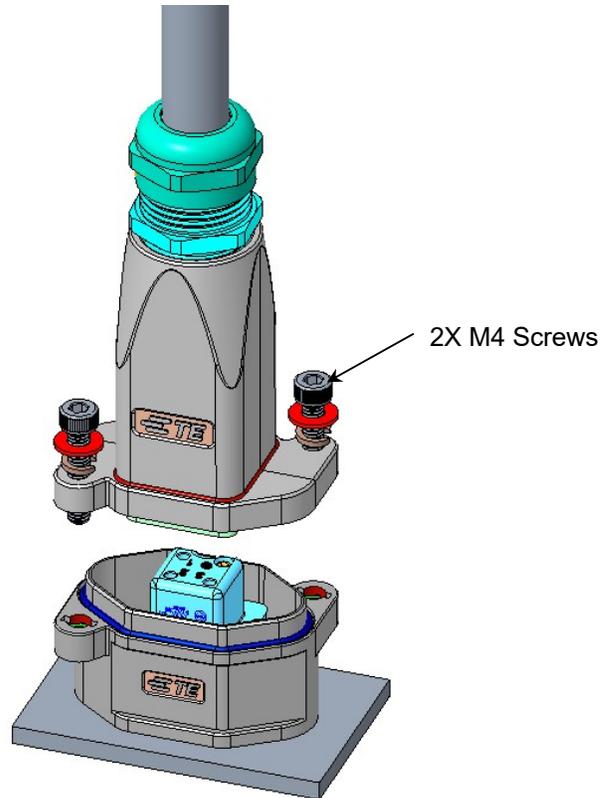
**Figure: 14**

Note:

- Refer application spec of cable gland separately.
- Whatever the type of hood or the type & size of thread hole, they have same assembly process here.

➤ **Assembly hood with housing**

Fix hood to housing with 2 x M4 screws. Tightening torque 2Nm



**Figure: 15**

Note:

- Whatever the type of hood & housing, they have same assembly process here.

## 6. STORAGE

The connectors should be stored in the air ventilation, no corrosive gas, no rain and no snow in the warehouse. Relative humidity: less than 85% RH.

**NOTE**



Any conflict is found between this file and customer drawings, customer drawings are preferential. And please contact TE Connectivity related engineer if necessary.

----- End -----