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## HB IP65 EMC Hood and Housing Series

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## 1. INTRODUCTION

This specification contains the regulations for assembly of various HB series IP65 EMC Hood and Housing.

The following components are available in this system:

EMC Hood and housing: H6B/H10B/H16B/H24B

## 2. SUPPORTING DOCUMENTS

### 2.1. Customer drawings

For dimensions and materials of the individual parts, please refer to the relative customer drawings of H6B/H10B/H16B/H24B.

### 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. 108-137016.

### 2.3. Application Specification

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

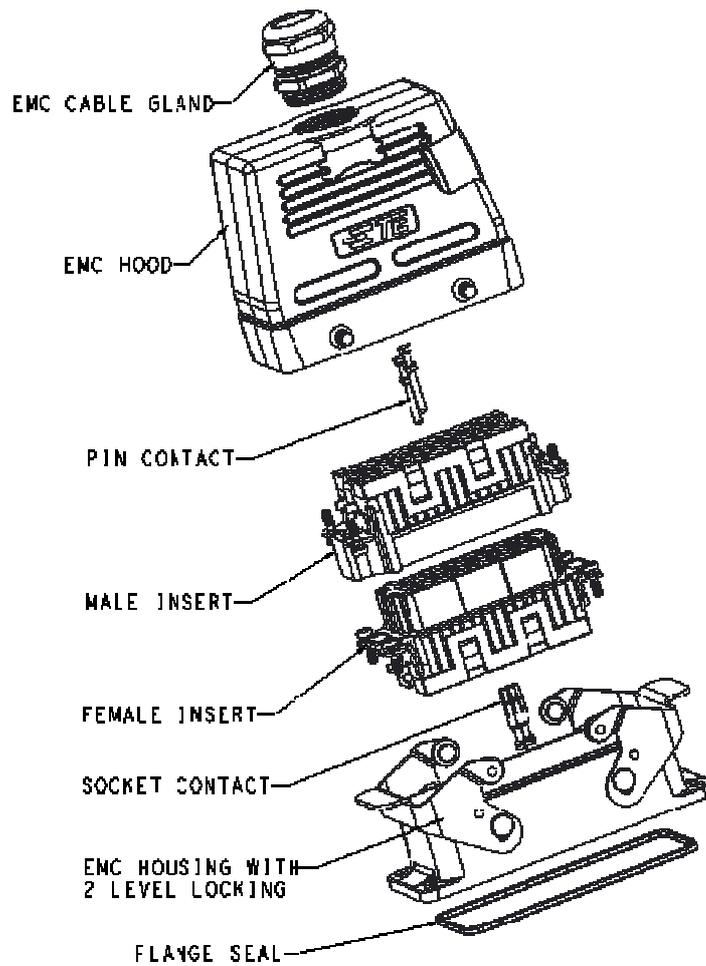
### 2.4. Standards

- 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
- EN62153-4-7: Electromagnetic compatibility (EMC) - Test method for measuring the transfer impedance and the screening - or the coupling attenuation - Tube in tube method

## 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):

- EMC Cable gland
- EMC Hood
- Pin contact
- Male insert
- Female insert
- Socket contact
- EMC Housing
- Flange seal

## 3.2. Hood and housing types

### 3.2.1. Hood



HXXB-TSH/TS-EMC (Side entry, with 4 bolt)  
H—High construction



HXXB-TGH/TG-EMC (Top entry, with 4 bolt)  
H—High construction



HXXB-TSBHS/TSBS-EMC  
(Side entry, with 2 level stainless steel locking)  
H—High construction



HXXB-TGBHS/TGBS-EMC  
(Top entry, with 2 level stainless steel locking)  
H—High construction



HXXB-TSH/TS-RO-EMC  
(Side entry, with 2 bolt)  
H—High construction



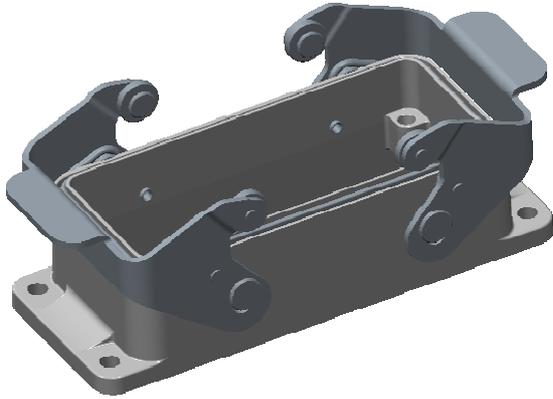
HXXB-TGH/TG-RO-EMC  
(Top entry, with 2 bolt)  
H—High construction

**Note:**

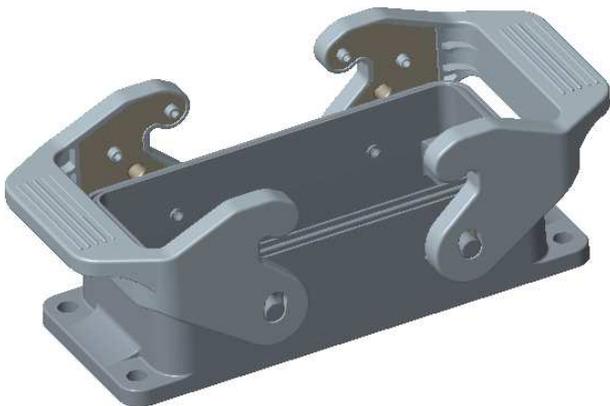
- Above are the EMC hoods for the typical applications.  
For the special applications, also can be provided. The below are the examples for reference.
- EMC Hoods without cable entry or more cable entries.
  - Different hoods size has different optional entry threads. Refer to drawings for the detailed information.

## 3.2.2. Housing

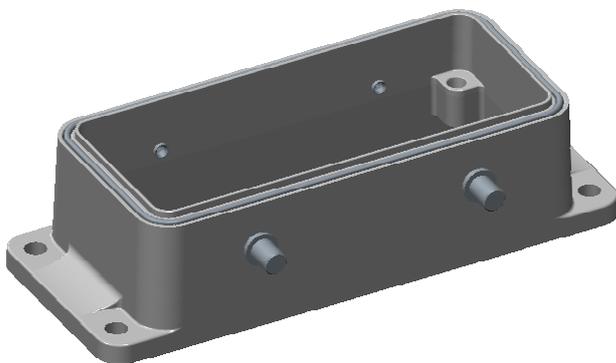
### 3.2.2.1. Bulkhead mounted housing



HXXB-AGS-EMC, with 2 level stainless steel locking  
(H10B/H16B/H24B available)



HXXB-AG-SL-EMC  
with 2 level stainless steel locking  
(H10B/H16B/H24B available)



HXXB-AG-BO-EMC, with 4 blot  
(H10B/H16B/H24B available)



HXXB-AGS-LB, with 1 level stainless steel locking  
(H6B/H10B/H16B/H24B available)

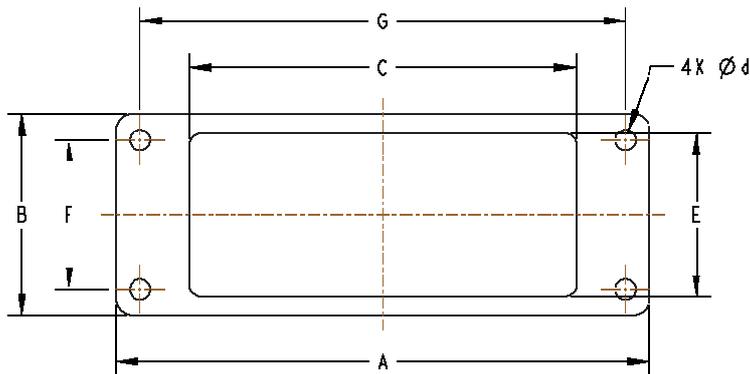
**Note:**

Above are the EMC housings for the typical applications.  
For the special applications, also can be provided. The below are the examples for reference.  
- Different housing size refer to drawings for the detailed information.

## 4. REQUIREMENTS

### 4.1.1. Panel cut-out

Information concerning the panel cut-out for the use of bulkhead mounted housing can be taken from the customer drawings. Panel cut-out looks as shown in Figure 2.



**Figure: 2**

Housing Size	Mounted type.	Dimension (mm)						
		A	B	C	E	F	G	Ød
H6B	Bulkhead	82	43	48	35	32	70	4.4
H10B	Bulkhead	93	43	60	35	32	83	4.4
H16B	Bulkhead	113	43	82	35	32	103	4.4
H24B	Bulkhead	140	43	108	35	32	130	4.4

Note: Fixing screws for the assembly housings are not part of the scope of delivery.

Initial and test-torque values can be chosen from the following table:

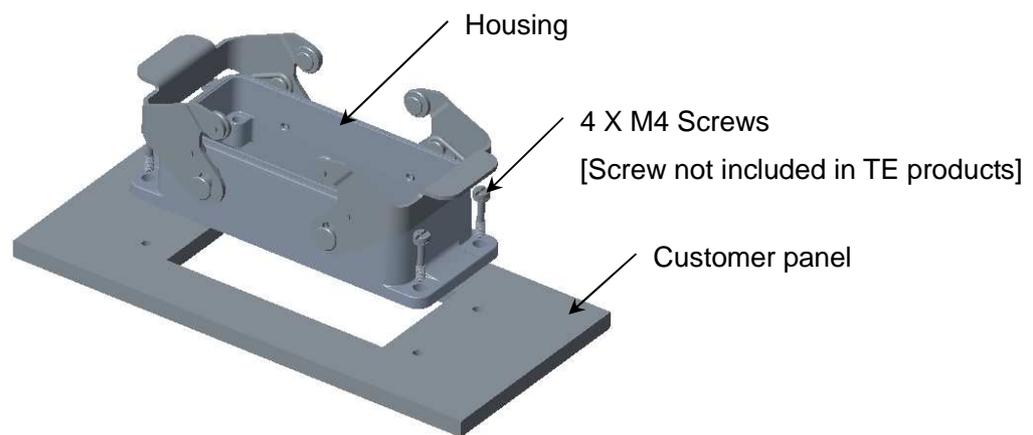
Recommended tightening torque for EMC housings, bulkhead mounting			
Series	Numbers of screws	Size of screws	Recommended Tightening torque(Nm)
H6B/10B/16B/24B	4	M4	0.8-1.0

## 5. ASSEMBLY

### ➤ Assembly EMC housing

For bulkhead mounting EMC housing

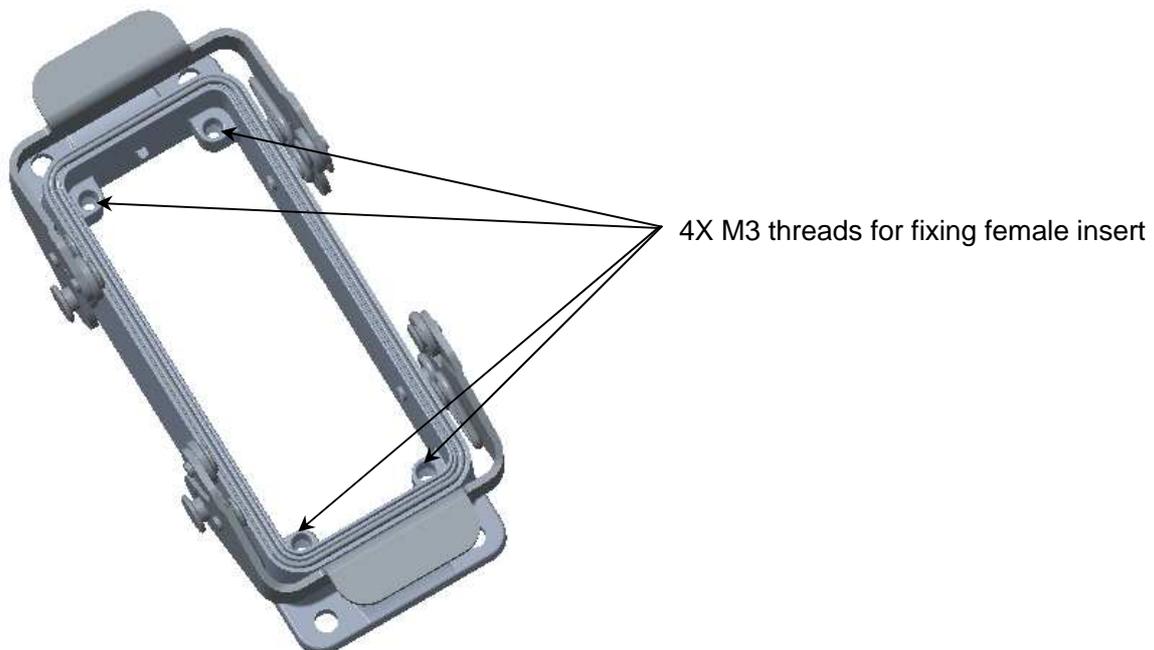
Fix EMC housing with 4 x M4 screws. Tightening torque refer to spec of screws.



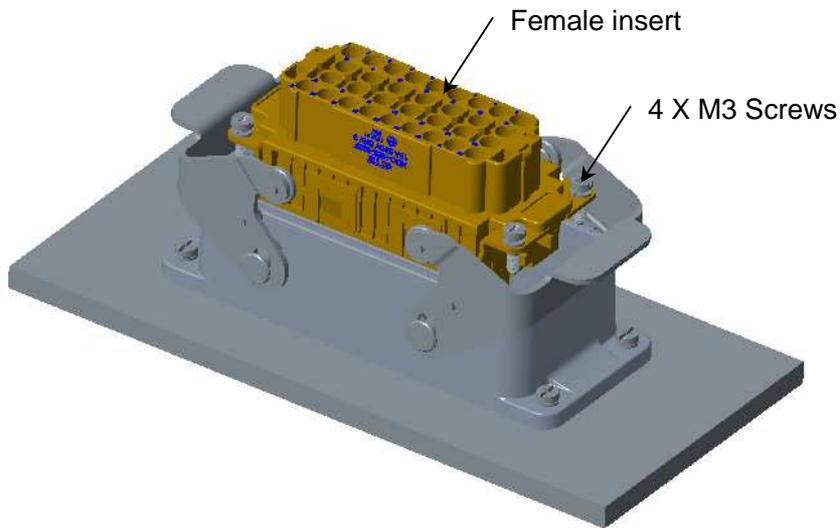
**Figure: 3**

### ➤ Assembly female insert into EMC housing

Fix female insert with 4 x M3 screws. Tightening torque refer to spec of female insert.



**Figure: 4**



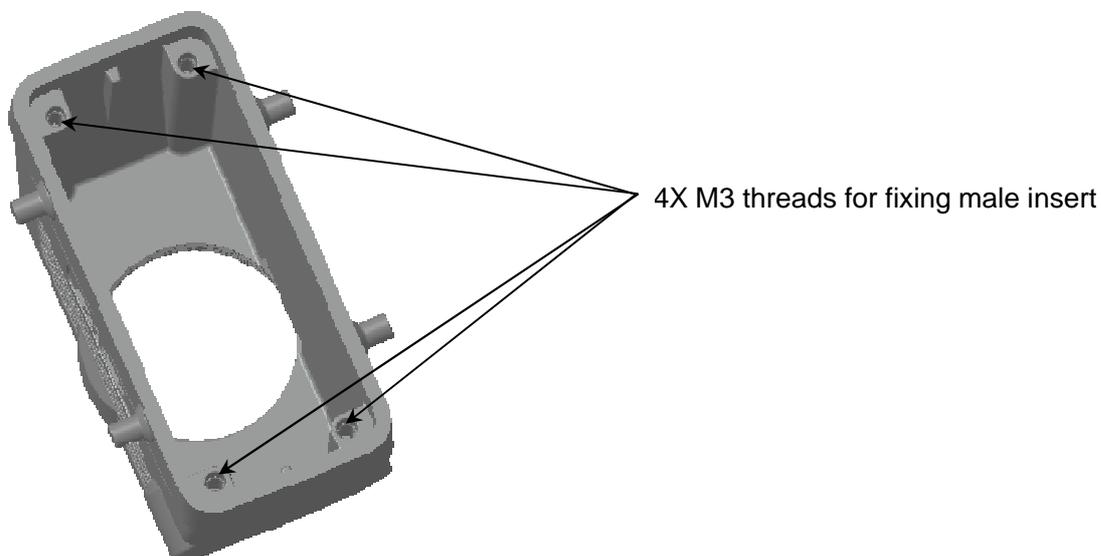
**Figure: 5**

Note:

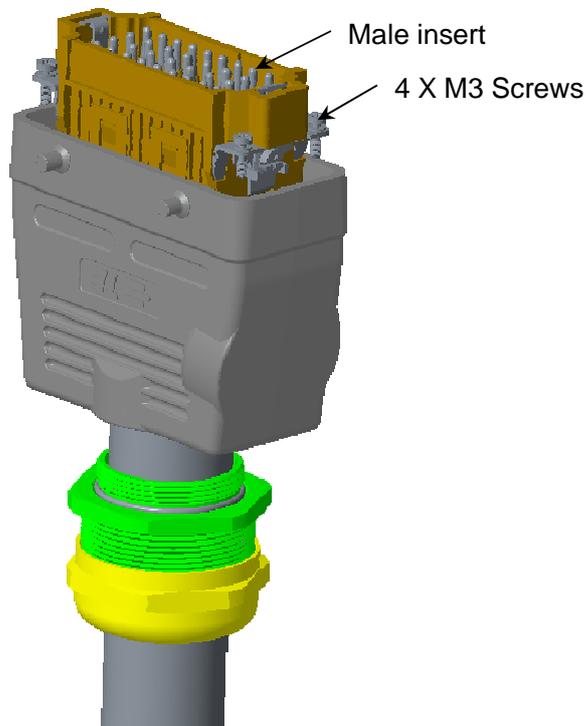
- Refer application spec of female insert separately and before fixing to housing, it should be well prepared.
- Whatever the type of EMC housing or the type of female insert, they have same assembly process here.

➤ **Assembly male insert into EMC hood**

Fix female insert with 4 x M3 screws. Tightening torque refer to spec of male insert.



**Figure: 6**



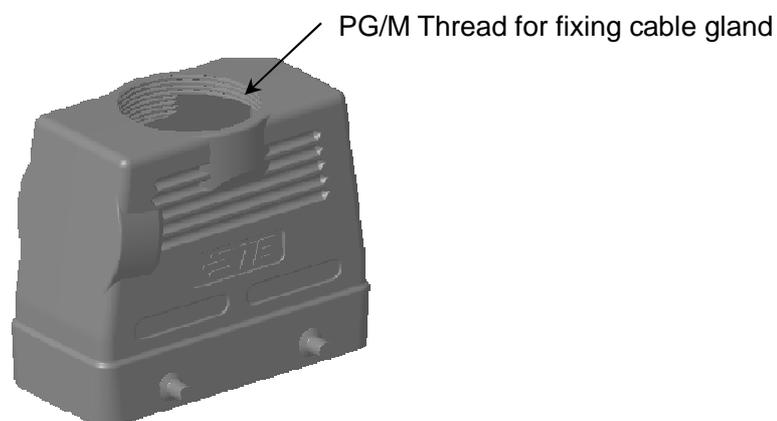
**Figure: 7**

Note:

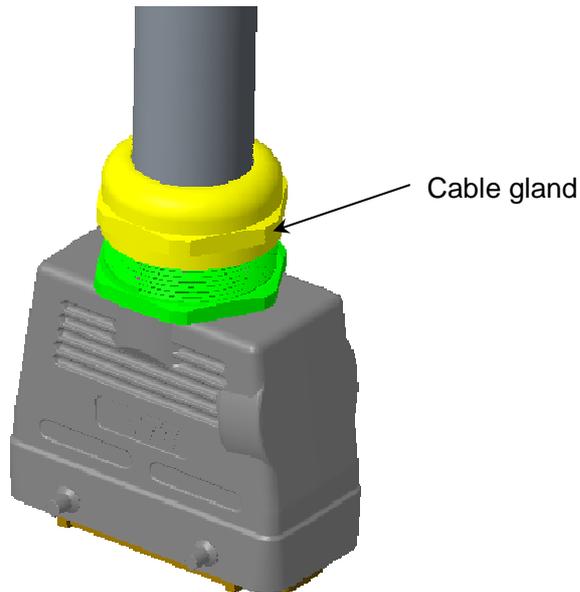
- Refer application spec of male insert separately and before fixing to hood, male insert should be well prepared.
- Whatever the type of EMC hood or the type of male insert, they have same assembly process here.

➤ **Assembly cable gland with EMC hood**

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



**Figure: 8**



**Figure: 9**

Note:

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

➤ **Assembly hood with housing**

Fix EMC hood to EMC housing with the locking.



**Figure: 10**

Note:

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

## 6. ACCESSORIES

For the selection of cable glands, please refer to our catalogue.

The possible arrangement of fitting depends on the hood selection. All hood versions have M-threads and PG-threads.

For example, the hood and housing can be assembled with the adaptors and EMC cable gland.

As shown in Figure 11.



**Figure: 11**

## 7. 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.

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