

# HB IP67 Hood and Housing Series (screw type)

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### 1. INTRODUCTION

This specification contains the regulations for assembly of various HB series IP67 Hood and Housing (screw type).

The following components are available in this system:

Hood and housing (screw type): H10B/H16B

# 2. SUPPORTING DOCUMENTS

### 2.1. Customer drawings

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

### 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. 108-137015.

# 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



### 3. DESCRPTION

# 3.1. Assembly product

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





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 screw types

3.2.1. Hood



HXXB-TSH-S (Side entry) HXXB-TSH-EMCS-N/ EMCS (Side entry)

H—High construction EMCS-N—Conductive surface EMCS—EMC



HXXB-TGH-S (Top entry) HXXB-TGH-EMCS-N/ EMCS (Top entry)

H—High construction EMCS-N—Conductive surface EMCS—EMC

#### Note:

Above are the hoods for the typical applications.

For the special applications, also can be provided. The below are the examples for reference.

- Hoods without cable entry or more cable entries.
- Hoods color for Grey, Black and Silver white.
- Hoods without painting are available per the request.
- Different hoods size has different optional entry threads. Refer to drawings for the detailed information.



### 3.2.2. Housing



HXXB-AG-S HXXB-AG-EMCS-N HXXB-AG-EMCS

EMCS-N—Conductive surface EMCS—EMC

#### Note:

Above are the housings for the typical applications.

- For the special applications, also can be provided. The below are the examples for reference.
  - Housings color for Grey, Black and Silver white.
  - Housings without painting are available per the request.
  - Different housing size refer to drawings for the detailed information.



# 4. REQUIREMENTS

# 4.1. Panel cut-out

For bulkhead mounted housing or surface mounted housings, for example as shown in Figure 2. More detailed information also can be found from related customer drawings.





| Size      | Turno    | Dimension(mm) |    |    |    |              |
|-----------|----------|---------------|----|----|----|--------------|
| Size Type | А        | В             | С  | E  | D  |              |
| H10B      | bulkhead | 83            | 32 | 60 | 35 | For M4 screw |
| H16B      | bulkhead | 103           | 32 | 82 | 35 | For M4 screw |

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:

| Recon   | Recommended tightening torque for housings, bulkhead mounting |                |                                      |  |  |  |  |  |
|---------|---|----------------|--------------------------------------|--|--|--|--|--|
| Series  | Numbers of screws   | Size of screws | Recommended<br>Tightening torque(Nm) |  |  |  |  |  |
| 10B/16B | 4   | M4             | 0.8-1.0                              |  |  |  |  |  |



# 5. ASSEMBLY

### Assembly housing

For bulkhead mounting housing

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



Figure: 3



#### > Assembly female insert into housing

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





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 male 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 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: 9



#### 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 the locking.



#### Figure: 10

#### Note:

Whatever the type of hood & 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 cable gland (plastic or metal).

As shown in Figure 12.



# 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.



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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