

# **IP68 Hood and Housing Series**

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# 1. INTRODUCTION

This specification contains the regulations for assembly of various H3APR 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.

### 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. 108-137011.

### 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.



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. Central locking

### 3.2.1.1. Normal type

Hood:

► H3APR-TGC-PG/M/-EMC

Housing:

➢ H3APR-SGRHC-PG/M

PG/M Thread-1



- Hood & housing available for size: H3APR
- PG/M Thread-1 on hood optional: M16, M20
- PG/M Thread-2 on housing: M20



### 3.2.1.2. Normal type

Hood:

➢ H3APR-TGC-PG/M/-EMC

Housing:

➢ H3APR-AGC-EMC



Figure: 3

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



### 3.2.2. Opposite angle locking

### 3.2.2.1. Normal type

Hood:

➢ H3APR-MTGSW-PG/M

Housing:

➢ H3APR-MAGSW





Figure:4

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



### 3.2.2.2. Normal type

Hood:

► H3APR-MTGSW-PG/M

Housing:

➢ H3APR-MAGS





Figure:5

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



# 4. **REQUIREMENTS**

### 4.1. Panel cut-out

> For housing type: H3APR-SGRHC-PG/M



Figure: 6

➢ For housing type: H3APR-AGC-EMC





➢ For housing type: H3APR-MAGSW





➢ For housing type: H3APR-MAGS



Figure: 9



# 5. ASSEMBLY

### Assembly housing

For central locking: H3APR-SGRHC-PG/M

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



Figure: 10

### For central locking: H3APR-AGC-EMC

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





#### > For opposite angle locking: H3APR-MAGSW

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





#### > For opposite angle locking: H3APR-MAGS

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





#### > Assembly female insert into housing

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



Figure: 14

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.





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: 17

#### 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



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.



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

------ End------