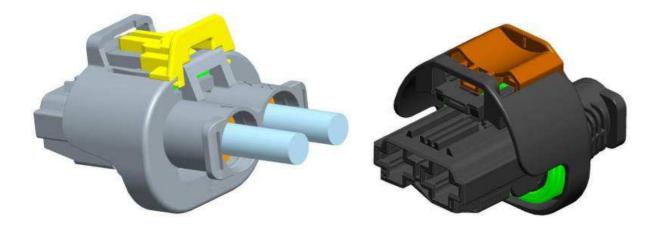


Recommandations Générales d'utilisation PC 2 VOIES 8mm NG1/NG1+ General instruction use for NG1/NG1+ 2w 8mm Connector

# Quality specification for 8mm receptacle housing with hinge



# NG1 / NG1+ 8mm 2 WAYS CONNECTOR

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# DOCUMENT REVISIONS

DATE DATE	INDICE REVISION	NATURE DE LA MODIFICATION DESCRIPTION
25 Mai 2011	A	Création / First Issue
07 Jan 2013	В	Mise à Jour / Spécification update



# 1 Objective

To define the function and the acceptance criteria of the breaking hinges on 2w receptacle housings NG1 / NG1+

# 2 Applicability

All, 8mm 2w receptacle housing NG1/ NG1+

- NG1 PN : 1544567-x; 1544317-x; 1544678-x; 1544679-x; 1544661-x; 1544662-x; 1544650-x; 1544653-x
- NG1+ PN : 1544978-x

## **3** Definitions

- SL : Secondary lock.
- PN : Part number

## 4 General rules and instructions description

#### **Functional point**

The hinge has been designed to link the main housing and the secondary lock in a unique part. Its first function is to joint the parts together. This function is necessary to permit the management of only one PN for the two parts and to avoid to lose the SL during handling and locking operation.

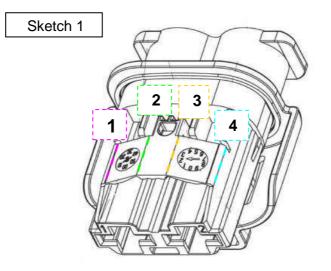
The hinge must be flexible to allow the locking and unlocking of the SL. The SL is closed to check if the terminals are in the right position in the housing cavities. After terminal insertion, the SL properly closed guarantees that all terminals are in the correct position. The SL is opened only if a terminal must be removed from the connector.

On the SL there is a hock that is ensuring the retention force and keeps the SL in the closed position. The hinge doesn't contribute to the SL retention. The secondary lock improves the retention of the terminal into the cavity.



#### **Position of breaking**

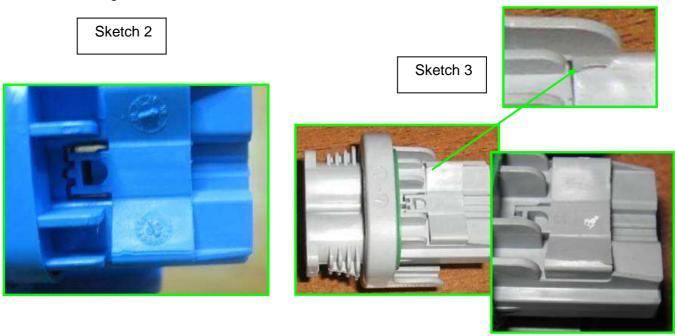
The cracks are identified on 4 positions. The sketch n<sup>a</sup> shown the position on the part.



#### Acceptance criteria

 When a white mark or superficial crack in positions 1 and 4 (sketch n<sup>2</sup>), or a not complete cutting hinge (sketch n<sup>3</sup>) along the thick ness appear, the functional is acceptable.

The hinge could be closed and opened 3 times without being separated from the main housing.

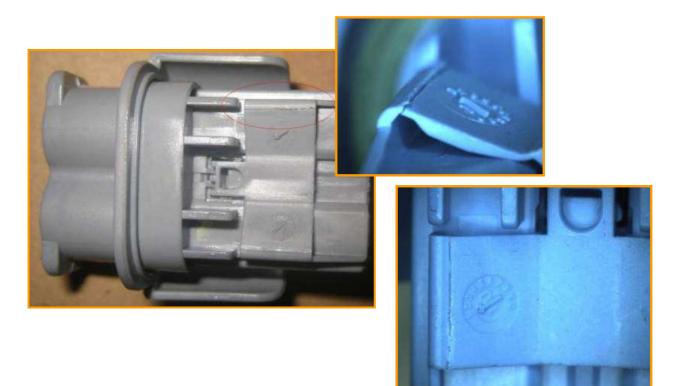




#### **Breaking evaluation**

Acceptable (hinge position 1 & 4)

We consider the hinge damaged as shown on the view below. The crack is along the hinge when the SL is closed.



The tests were realised with these configuration. The hinge opening is possible if we need to remove the terminals to replace another on the connector. The closing is possible too.

Even if the hinge is broken, the SL keep his position during the harness shipment. It needs an opening force according the product specification to be able to open the Secondary lock.

Functional test :

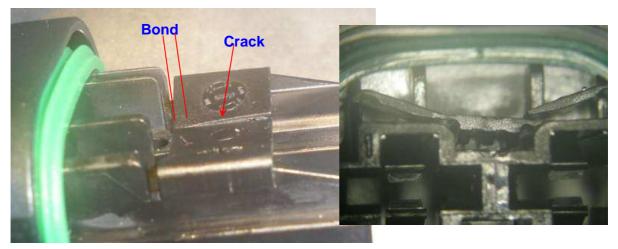
The hinge could be closed and opened 3 times without being separated from the main housing.



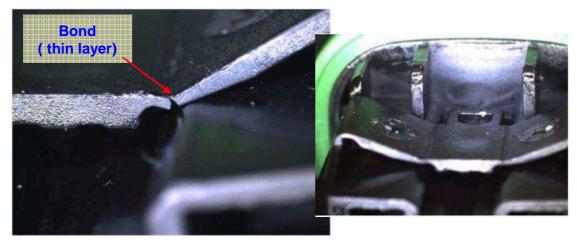
#### Acceptable (Hinge position 2 or 3)

We consider the hinge damaged as shown on the view below. The crack is along the hinge when the SL is closed. If there is a bond (even very small) between the Secondary lock and the hinge, the parts are acceptable.

Case 1 :



Case 2 :



The tests were realised with these configuration. The hinge opening is possible if we need to remove the terminals to replace another on the connector. The closing is possible too.

The SL keeps its position during the harness shipment. It needs an opening force according the product specification to be able to open the secondary lock.

Functional test :

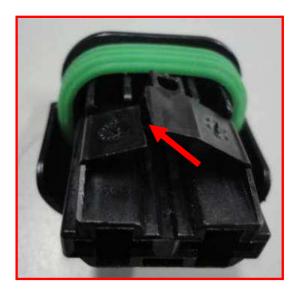
The hinge could be closed and opened 3 times without being separated from the main housing.



#### Not acceptable

We consider hinge damaged as shown on the view below.

Hinge position 2 or 3.



#### Assurance of functionality

This is not an acceptance condition for parts out of the production process. It is an assurance that the parts found on line, with these defaults, can be used without compromising. The final secondary lock application, detected the right terminals position, is secure at the first SL insertion.

#### **5** Document modifications

Product Engineer is owner of this document update.

#### **6** Further applicable documents

Product specification 108-15346 / 108-15333 Instruction sheet 411-15697