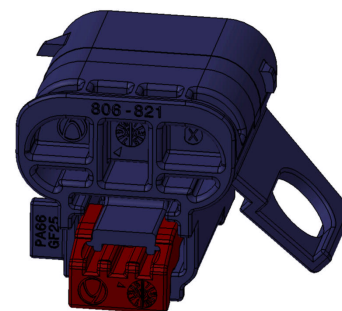
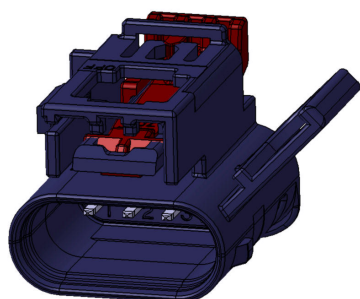
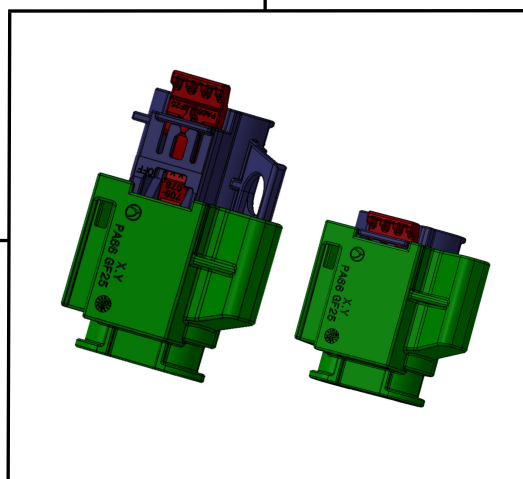
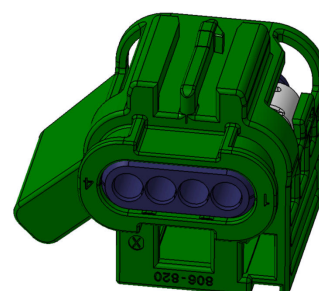
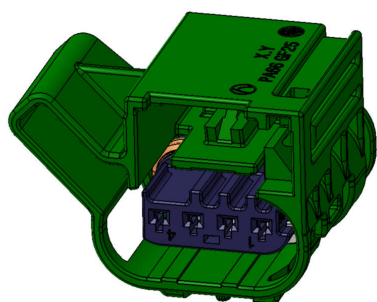




HIRSCHMANN  
AUTOMOTIVE

# Product Specification

## HV-Device



EPS-100054-00  
Edition November 2016



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## **2. General Information**

### **2.1. Introduction**

This product specification is valid for all at point 2.2 headed parts of the HV-Device and includes the product components, the delivery status, technical features as well as the quality tests.

In case of inappropriate, deviating processing and subsequent quality problems the right of recourse will be rejected.

### **2.2. Applying relevant Information/Documentation**

- |    |  |   |
|----|--|---|
| a) | Processing Specification                       | EVS-100054-00   |
| b) | Product Specification Kostal<br>DOC00076784    | Mini lamina contacts MLK 1.2                                  |
| c) | Processing Specification Kostal<br>DOC00061540 | Mini lamina contacts MLK 1.2                                  |
| d) | “Deutsche Norm”<br>DIN EN 60352-2              | Solder free electrical connection<br>Part 2: crimp connection |



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### **3. Technical Characteristics**

#### **3.1. Operating Temperature**

Built-in space : Engine category

Allowed temperature range for the plastic material.

Operating temperature: -40°C up to +150°C  
Can withstand exposure up to 180°C at intermittent.  
Periods and up to a total of max. 300 hours.  
See plastic material data sheet.

Functionality of the HV-Device see DVP.

#### **3.2. Tightness of Socket- and Plug housing**

When using 1.2 Contacts with seal: **IP6K9K**

The single wire seal must not be exposed unprotected to the steam jet.

#### **3.3. Retention Force of Contacts to the Socket housing**

The contact tear forces from the Socket housing are

$F_{\text{Primary}} \geq 55\text{N}$  and  $F_{\text{Secondary}} \geq 55\text{ N}$

#### **3.4. Retention Force of the Jumper to the Plug housing**

The retention force of each jumper is min. 50N

#### **3.5. Mounting and Demounting Forces**

Max. force for the first assembling of the Socket housing to the Plug housing to preposition max. 90N. After the first assembling, it is not possible to remove the parts from each other without damaging.

#### **3.6. Mounting and Demounting Forces**

Close the HV-Device from pre- in end position	max. 75N
Open the HV-Device from end- in preposition	max. 75N

#### **3.7. Characteristic of Contact System**

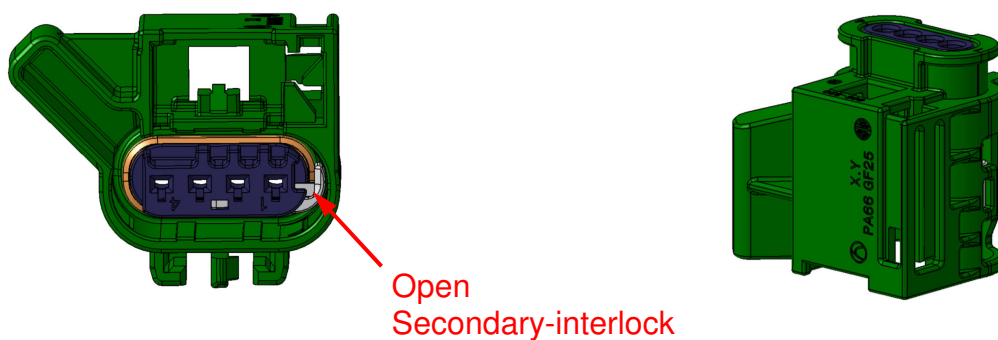
Max. permitted conductor cross section: 1 mm<sup>2</sup> with seal



## 4. Delivery Condition / Product Components of the Socket housing

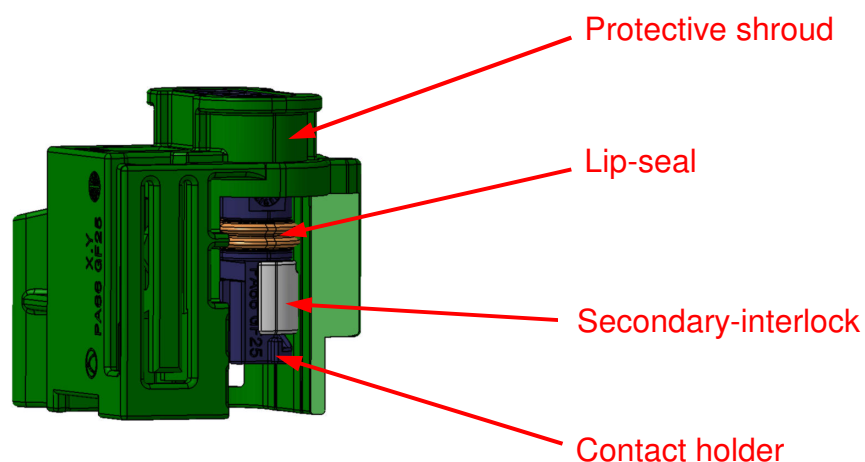
### 4.1. Delivery Condition

The Socket housing from the HV-Device will be delivered with an open secondary interlock.



### 4.2. Product Components

The Socket housing from the HV-Device consists of the contact holder, lip-seal, secondary-interlock and protective shroud.





## 5. Delivery Condition / Product Components of the Plug housing

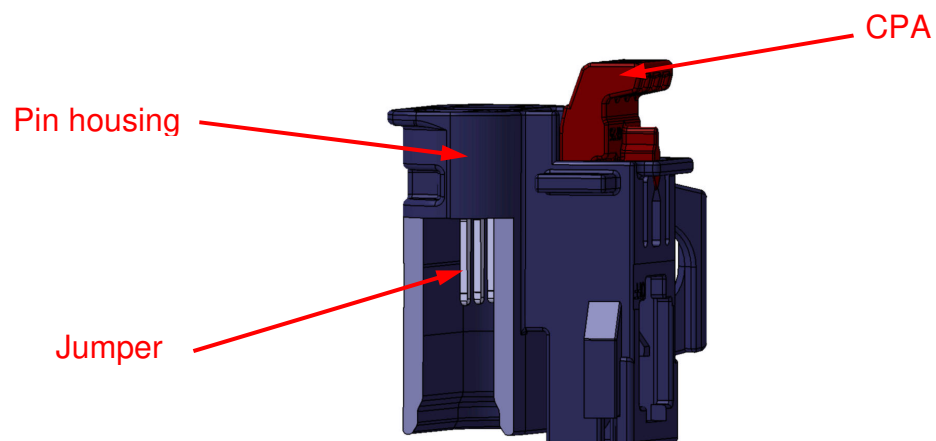
### 5.1. Delivery Condition

The Plug housing from the HV-Device will be delivered with CPA in preposition.



### 5.2. Product Components

The Plug housing from the HV-Device consists of the pin housing, 2 jumpers and the CPA.





## 6. Executed Tests

<b>Tests according to LV 214 2010-03 Working Committee Test Guideline! Tests according the MLK contact are mentioned in the Kostal-product specification.</b>	
<b>PG 0</b>	<b>Receiving inspection and testing</b>
<b>PG 1</b>	<b>Dimensions</b>
<b>PG 2</b>	<b>Material and surface analysis, contacts</b>
<b>PG 3</b>	<b>Material and surface analysis, housings</b>
<b>PG 4</b>	<b>Contact overlap</b>
	<b>Cut off safety by the handling of a 4mm padlock</b>
<b>PG 6</b>	<b>Interaction between contact and housing</b>
<b>PG 7</b>	<b>Handling and functional reliability of the housings</b>
	<b>Holding force of the contact housing to the protective shroud</b>
<b>PG 8</b>	<b>Insertion and retention forces of the contacts</b>
<b>PG 9</b>	<b>Skewed insertion angle</b>
<b>PG 13</b>	<b>Effect of the housing on derating</b>
<b>PG 17</b>	<b>Dynamic stress</b>
<b>PG 20</b>	<b>Subjection of the housings to climatic load</b>
	<b>Holding force of the jumper</b>
<b>PG 21</b>	<b>Long-term temperature storage</b>
<b>PG 22</b>	<b>Resistance to chemicals</b>
<b>PG 23</b>	<b>Water tightness</b>
<b>PG 29</b>	<b>Holding force of the blind seal</b>
	<b>Holding force female housing to pin housing</b>

Product specific deviations are shown in the DVP-overview.



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## 7. Index change table

<b>Edition</b>	<b>Index</b>	<b>Editing</b>
00	First edition November 2016	Kiechle