Substitute for Front lighting

Study for interlock options H7

Cor Versluijs
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Scope Front-lighting

- Product families in scope of study (including related holder and gauges)
  - Type Fit          Cap / Cap Gauge     Holder / Gauges  
                       (7004-) / (7006-) 
                       (7005-) / (7006-)
  - H7    Fit PX26d (&PY26d)  5-7     /  5-3, 5A-2, 5B-3     5-4     /  5C-2

<table>
<thead>
<tr>
<th>Type</th>
<th>Fits</th>
<th>Cap/Plastic Gauge</th>
<th>Holder/Gauges</th>
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<tbody>
<tr>
<td>H7</td>
<td>5-7</td>
<td>5-3, 5A-2, 5B-3</td>
<td>5-4, 5C-2</td>
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</tbody>
</table>

![Light bulb diagram]

![Holder diagram]
H7 – related types on the fit family PX26d, PY26d-1 ... PY26d-7
(Sheets 700x-5)

• The following related types and key-ways to consider:
  ➢ PX26d      H7                
  ➢ PY26d-1    H18              
  ➢ PY26d-2    (reserved)       
  ➢ PY26d-3    (reserved)       
  ➢ PY26d-4    (reserved)       
  ➢ PY26d-5    (reserved)       
  ➢ PY26d-6    H20              
  ➢ PY26d-7    (reserved)       

H7 – PX26d (TYPE / CAP) sheet 7004-5-5
H7 – PX26d (TYPE / Holder) Sheet 7005-5-4
H7 – PX26d (TYPE / CAP) initial options new Substitute key

Options to create a “hole” on the holder for the additional key element
1) Add an extension on the circumference of the diameter “O”
2) Add additional lip into the “reference surface”
   a) within the orientation key-slot-width
      (not in conflict with the restricted reference face
   b) at another location(s)
H7 – PX26d (TYPE / Holder) Potential options new Substitute key

Options to create a “hole” on the holder for the additional key element
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2) Add additional lip into the “reference surface”
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2a) 2b)
Options 2 worked out in detail for Caps

Option 2a

Option 2B
Options 2 worked out in detail for Holders
Option 2a

Option 2B
(preferred in first instance for robustness)
Examination of existing holders for mentioned options

Following pages shows that the individual solutions 1 and 2 will not create a fool proof substitute key further study is required:

• The circumference is on the cap dimension “O” is not in all holders restricted
• The reference plane is not in all holders continuous at proposed positions
• Some holders apply a twist-lock for the insertion
• Some holders have a small reference planes and reduced area next to these reference planes.
H7 – PX26d (TYPE / Holder)
Large variety in existing holder executions

Red dots reflect the open circumference on the cap edge
Setmaker A – (In general)

- Circumference on the cap edge closed
- Beside reference plane: 2,1 mm lowered 1st rim
- Reference / Key Closed plane (not always)
Setmaker B

- Small reference ring-plane sections
- Circumference on the cap edge free Large gap
- Turn-lock holder
Setmaker C

• No bounding circumference
• Reference plane continuous but with holes
• Openings at the reference Plane a orientation key
Resulting proposal:

New options (not worked out in detail yet)

• A combination of options 1+2b might solve the issues discovered

• An Electrical interface key (connector)
  see next page for the details
New PX26t

Cap sheet
(new sheet 7004-5A, or addition to existing sheet 7004-5:

• 3\textsuperscript{rd} connector pin according TAB ISO 8092-3 2,8x0,8

• Electrical connection (Cap) PX27t only one large tab and the small tab (to lit the LED source)
  The second tab disconnected (used for the mechanical stability of the connection)

• Optional: define the maximum size for the Thermal solution and for the driver box, and cable minimum/maximum length.

• All other dimensions equal to the PX26t

• Additional interchangeability table (similar as for the substitutes for signalling)

Holder sheet

• Electrical connector holder shortcut to the second large tab and the small tab (to enable a Halogen bulb to lit)

• Addition for PX26t to the current sheet PX26d by adding the acritical interconnection table
Holder interchangeability table:

- Functional fit (PX26d/t) only electrical key, others mechanical key

<table>
<thead>
<tr>
<th>Cap / Culot</th>
<th>Holder / Douille</th>
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<tbody>
<tr>
<td></td>
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