

TFSR-05-05

# Substitute for Front lighting

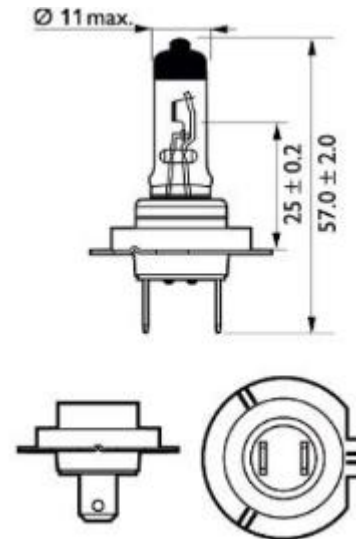
## Study for interlock options H7

Cor Versluijs  
2019-01-15

# Scope Front-lighting

- Product families in scope of study (including related holder and gauges)
 

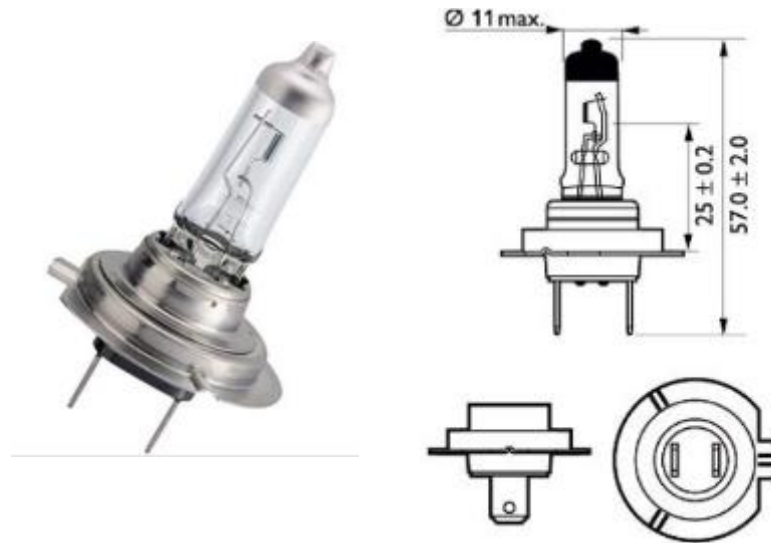
- Type Fit	<b>Cap</b> / Cap Gauge (7004-)/ (7006-)	<b>Holder</b> / Gauges (7005-)/ (7006-)
- H7 Fit PX26d (&PY26d)	<b>5-7</b> / 5-3, 5A-2, 5B-3	<b>5-4</b> / 5C-2



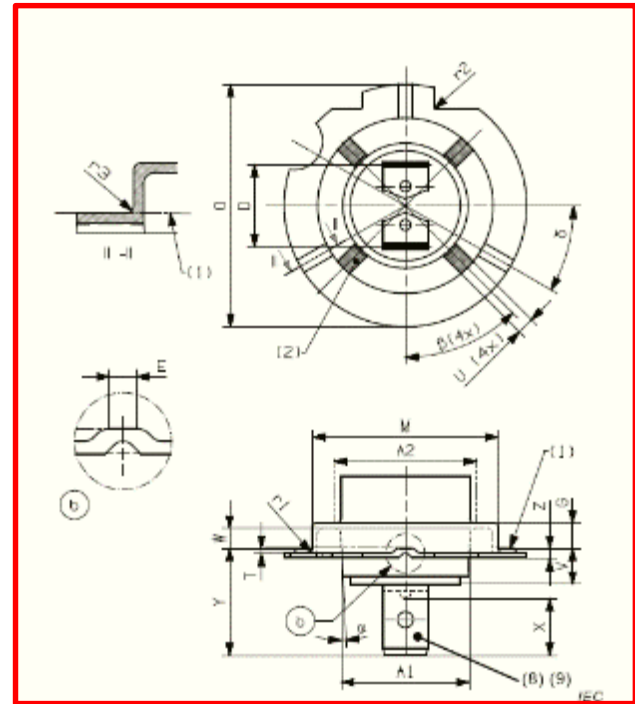
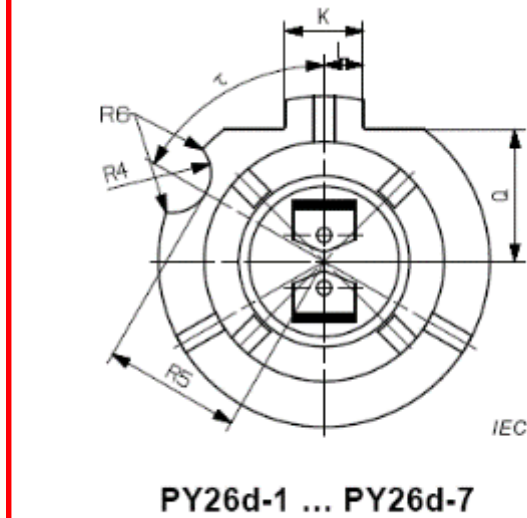
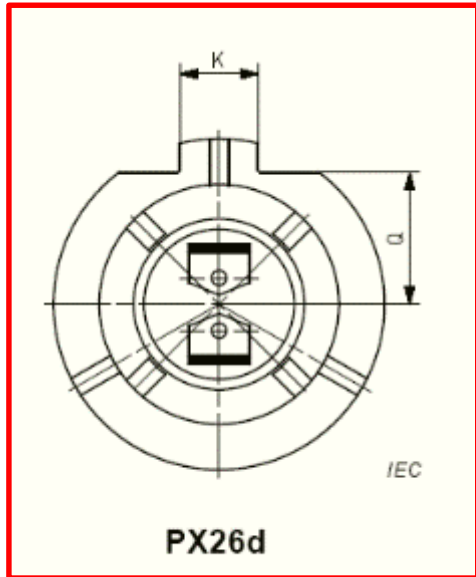
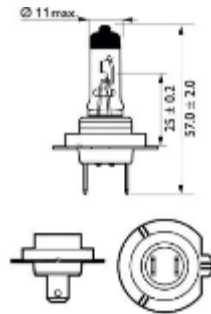
# H7 – related types on the fit family PX26d, PY26d-1 ... PY26d-7 (Sheets 700x-5)

• The following related types and key-ways to consider:

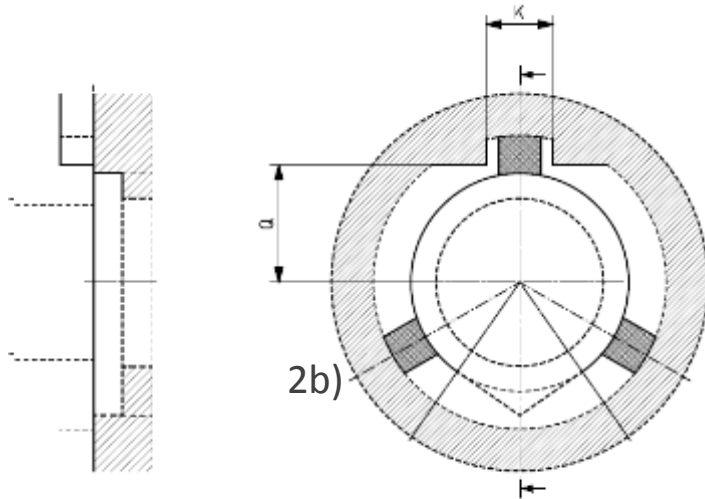
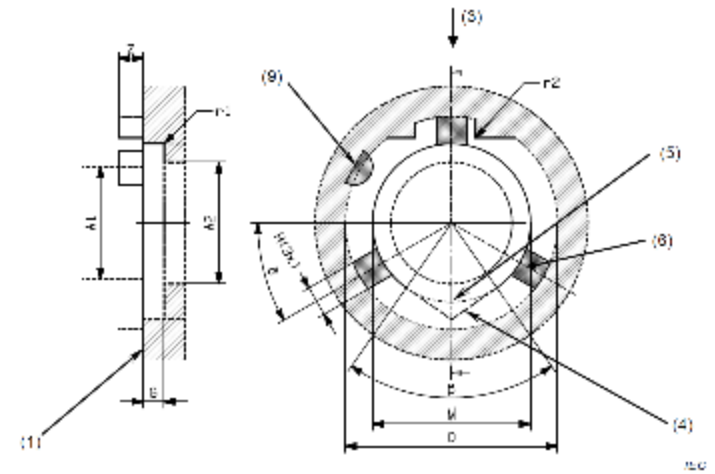
- **PX26d**      **H7**
- PY26d-1      H18
- PY26d-2      (reserved)
- PY26d-3      (reserved)
- PY26d-4      (reserved)
- PY26d-5      (reserved)
- PY26d-6      H20
- PY26d-7      (reserved )



# H7 – PX26d (TYPE / CAP) sheet 7004-5-5

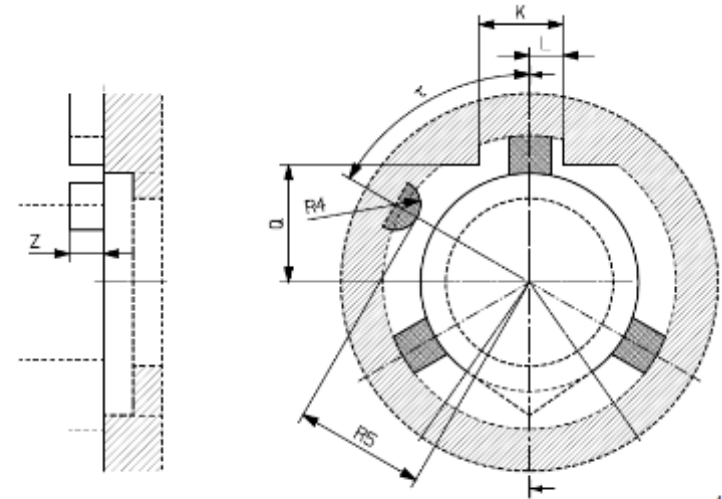


# H7 – PX26d (TYPE / Holder) Sheet 7005-5-4



**PX26d**

IEC



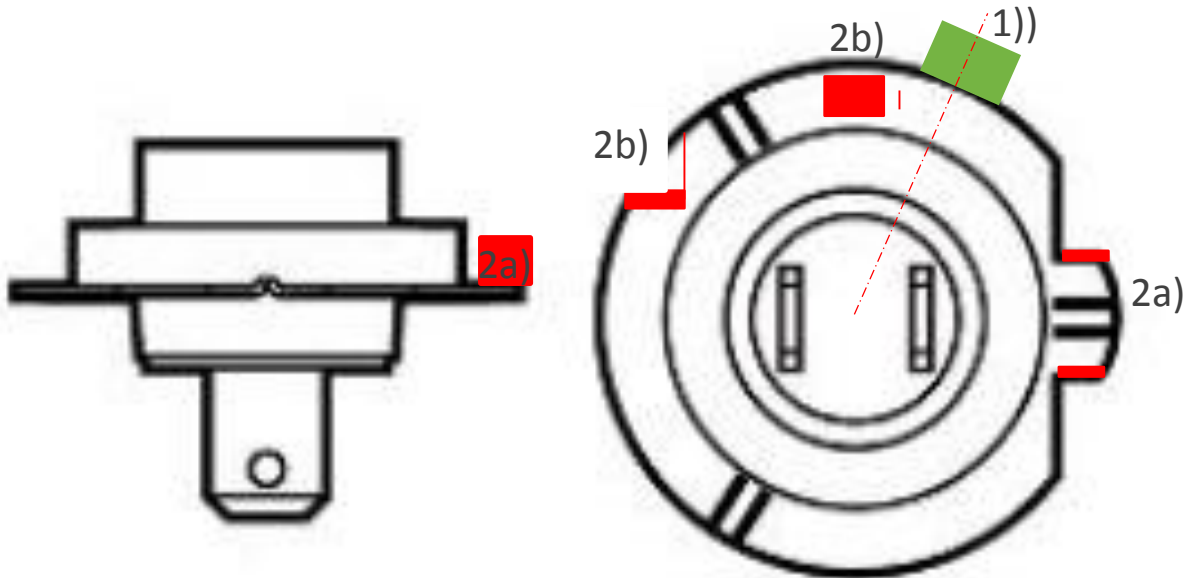
**PY26d-1 ... PY26d-7**

IEC

## H7 – PX26d (TYPE / CAP) initial options new Substitute key

Options to create a “hole” on the holder for the additional key element

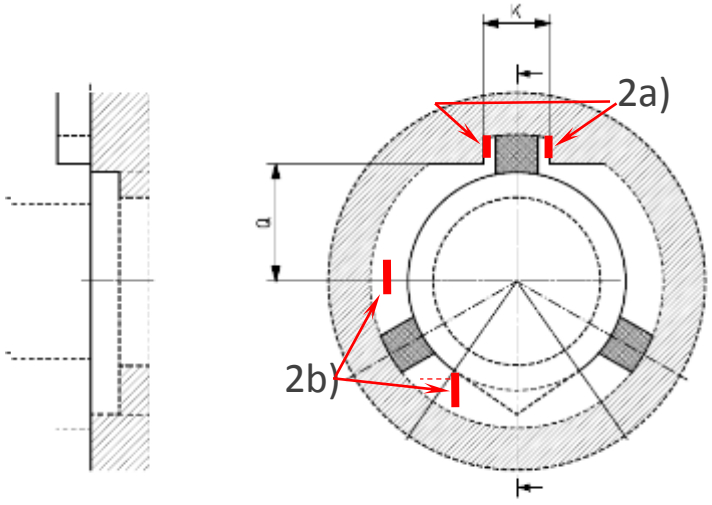
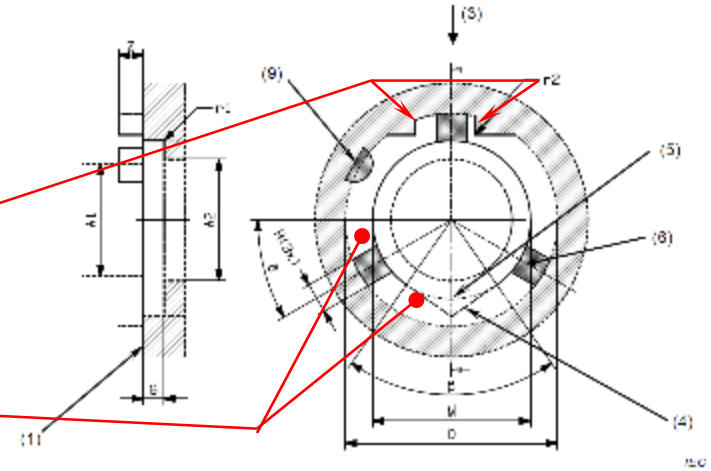
- 1) Add an extension on the circumference of the diameter “O”
- 2) Add additional lip into the “reference surface”
  - a) within the orientation key-slot-width  
(not in conflict with the restricted reference face)
  - b) at another location(s)



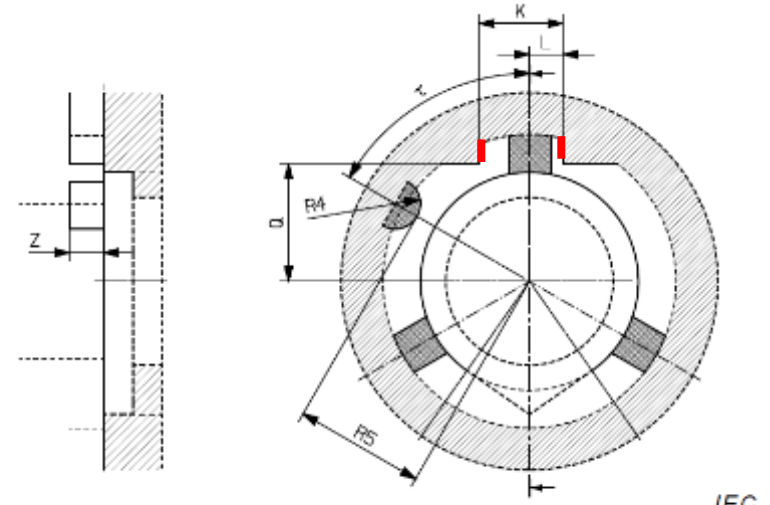
# H7 – PX26d (TYPE / Holder) Potential options new Substitute key

Options to create a “hole” on the holder for the additional key element

- 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
  - b) at another location(s)



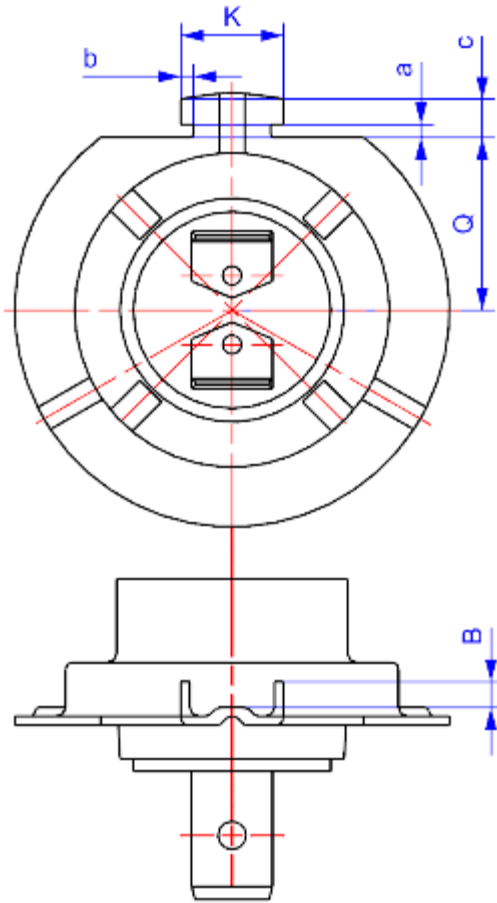
**PX26d** IEC



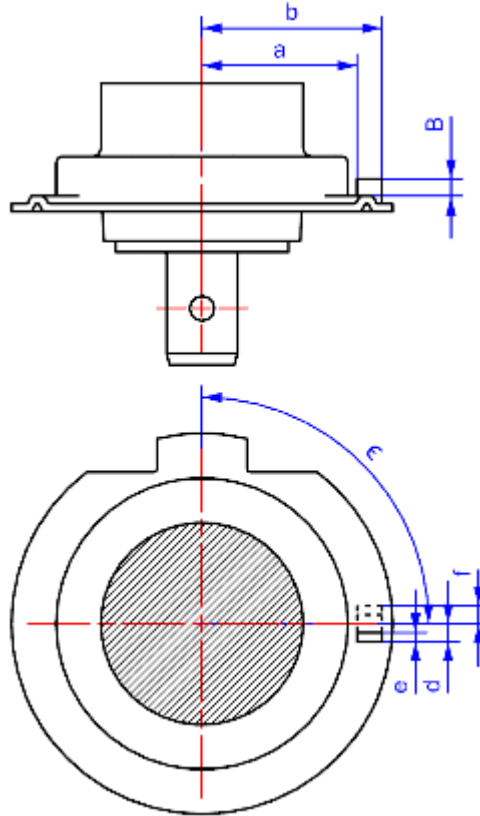
**PY26d-1 ... PY26d-7** IEC

# Options 2 worked out in detail for Caps

## Option 2a



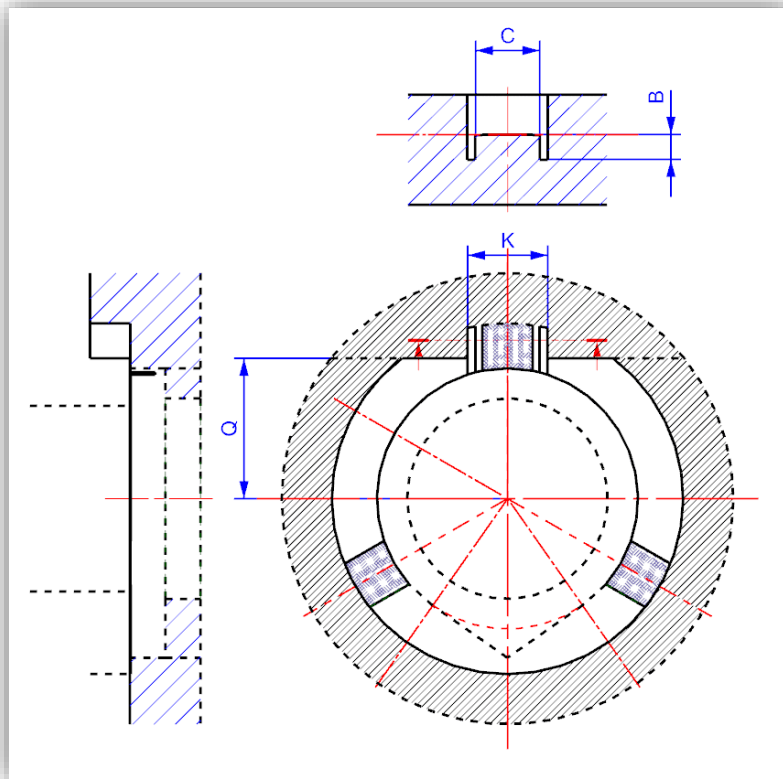
## Option 2B





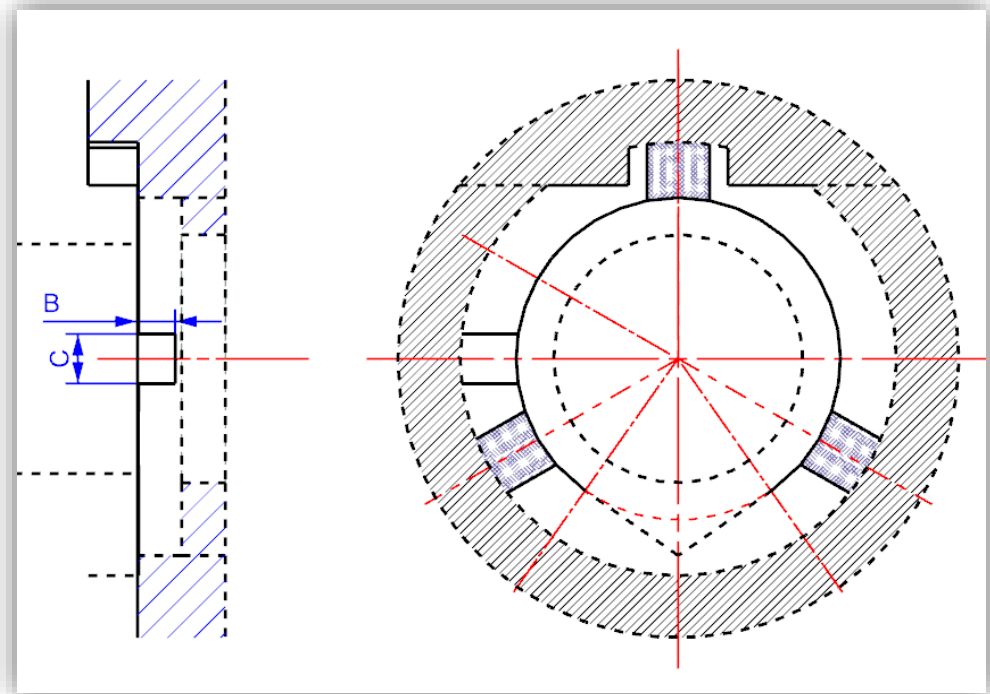
# Options 2 worked out in detail for Holders

## Option 2a



## Option 2B

(preferred in first instance for robustness)



## Examination of existing holders for mentioned options

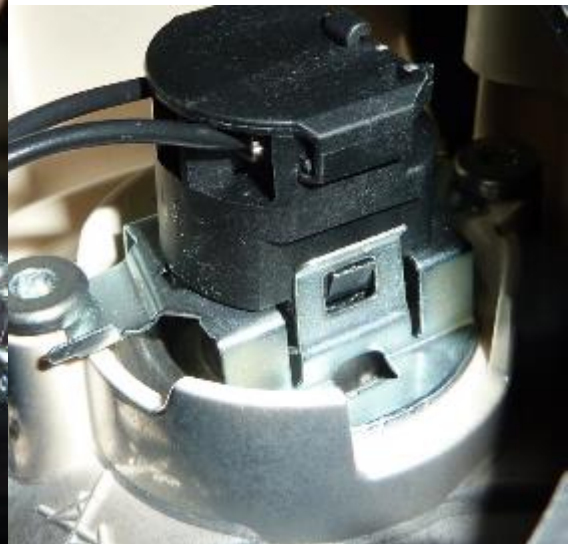
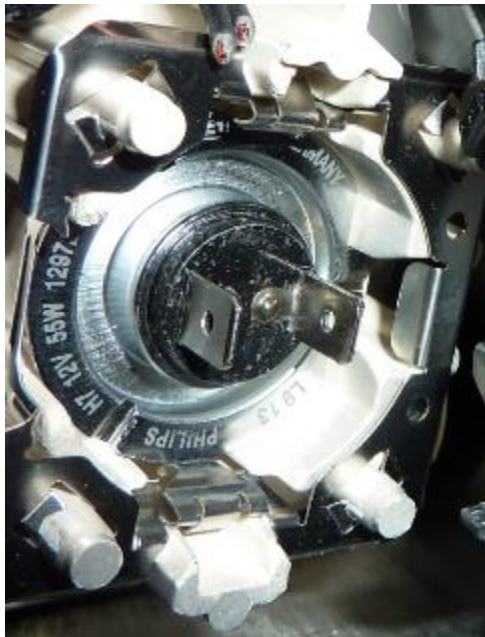
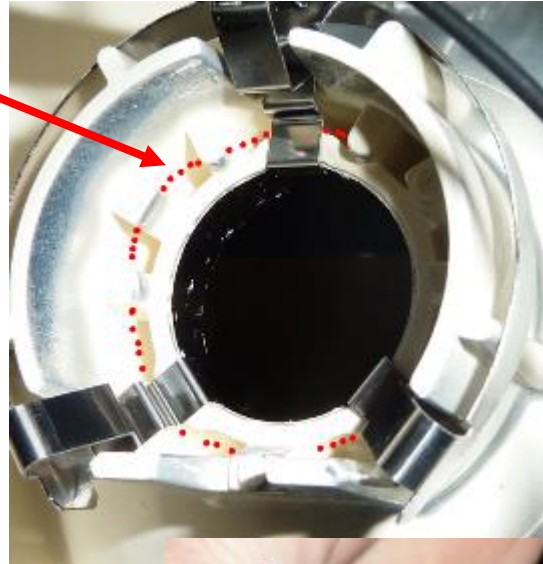
Following pages shows that the individual solutions 1 and 2 will not create a fool proof substitute key further study is required:

- 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)

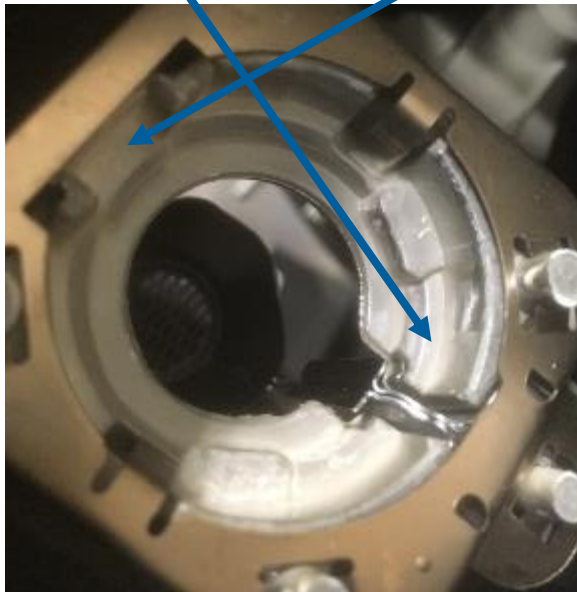
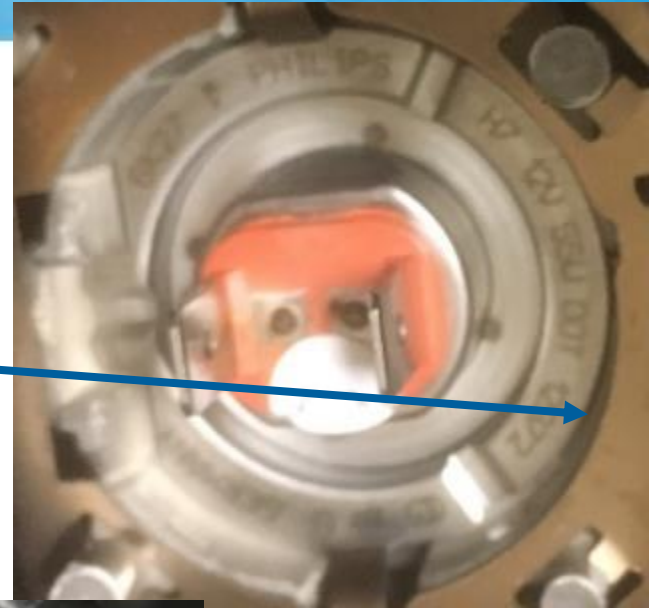
Large variety in existing holder executions

Red dots reflect the open circumference on the cap edge



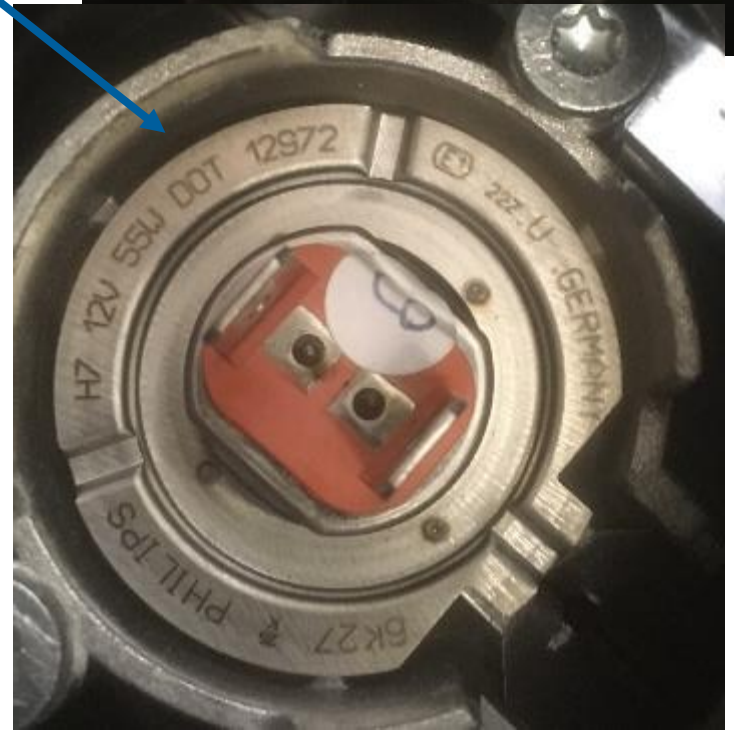
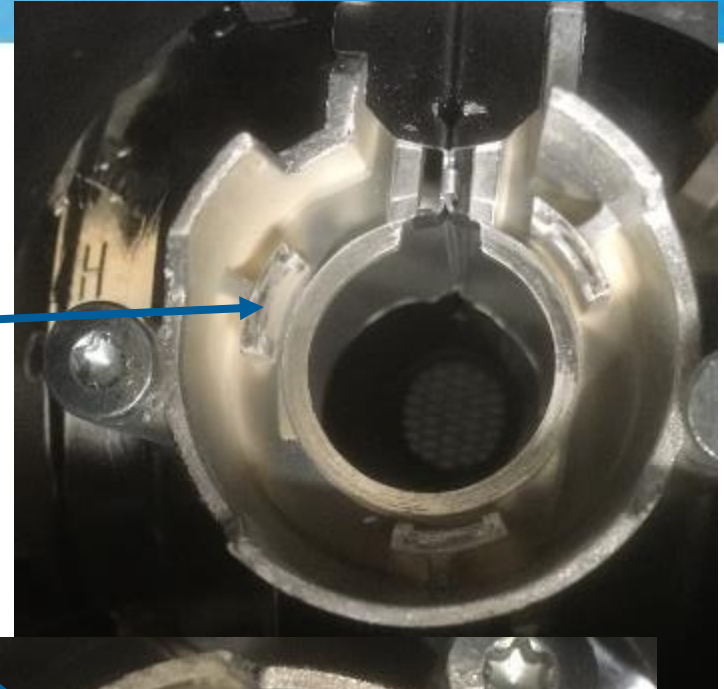
## Setmaker A – (In general)

- Circumference on the cap edge closed
- beside reference plane: 2,1 mm lowered 1<sup>st</sup> rim
- Reference / Key Closed plane (not always)



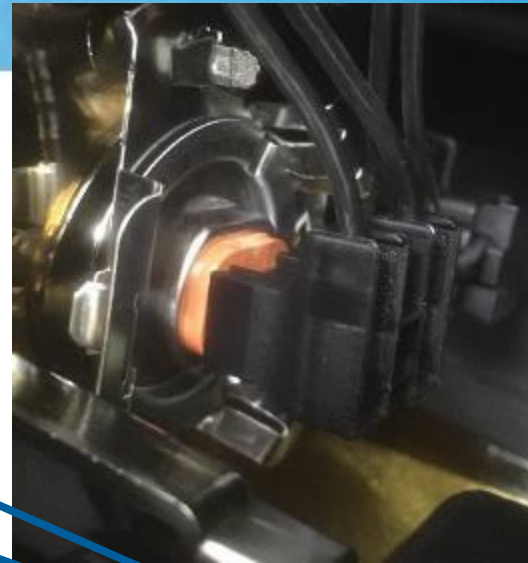
## Setmaker B

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



# Setmaker C

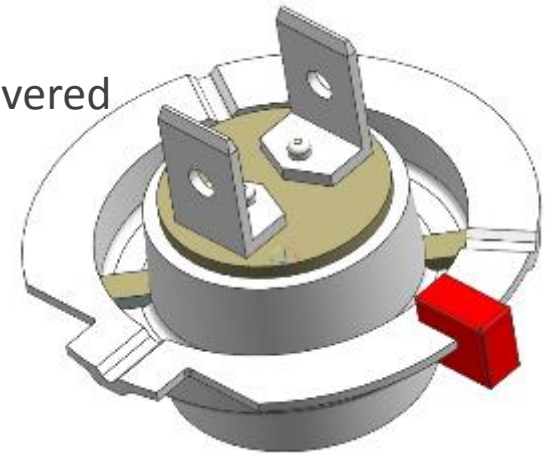
- No bounding circumference
- Reference plane continuous but with holes
- Openings at the reference Plane a orientation key



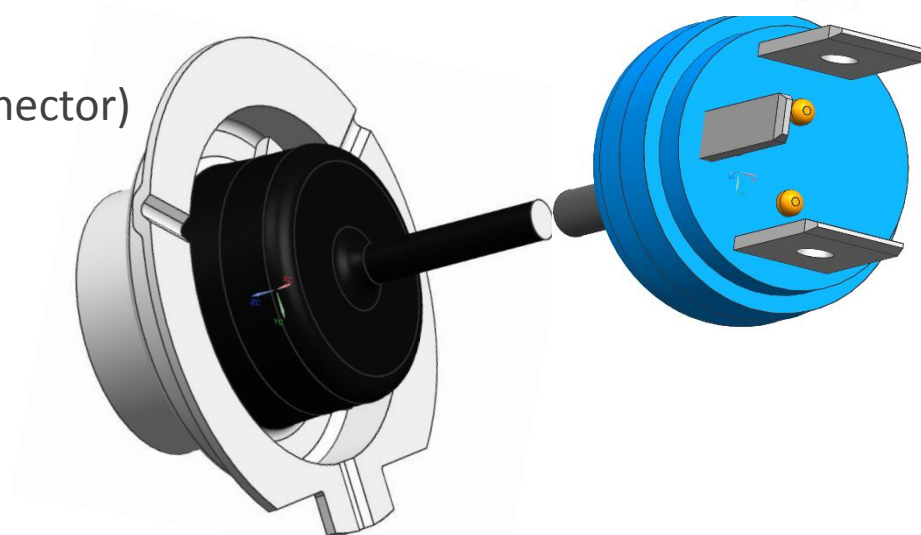
## Resulting proposal:

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

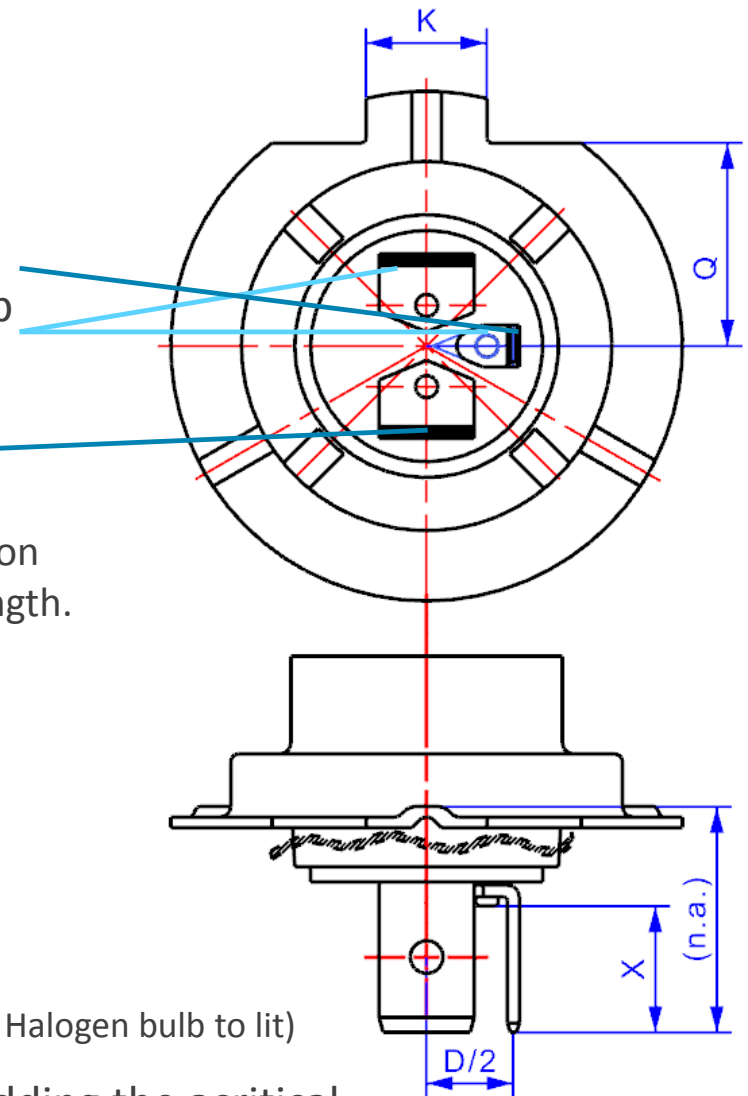
### Cap sheet

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

- 3<sup>rd</sup> 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

		Holder / Douille								
		PX26d	PX26t	PY26d-1	PY26d-2	PY26d-3	PY26d-4	PY26d-5	PY26d-7	PY26d-7
Cap / Culot	PX26d	✓	✓	✗	✗	✗	✗	✗	✗	✗
	PX26t	✗	✓	✗	✗	✗	✗	✗	✗	✗
	PY26d-1	✗	✗	✓	✗	✗	✗	✗	✗	✗
	PY26d-2	✗	✗	✗	✓	✗	✗	✗	✗	✗
	PY26d-3	✗	✗	✗	✗	✓	✗	✗	✗	✗
	PY26d-4	✗	✗	✗	✗	✗	✓	✗	✗	✗
	PY26d-5	✗	✗	✗	✗	✗	✗	✓	✗	✗
	PY26d-6	✗	✗	✗	✗	✗	✗	✗	✓	✗
	PY26d-7	✗	✗	✗	✗	✗	✗	✗	✗	✓

