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PROPOSAL FOR DRAFT SUPPLEMENT 20 TO THE 03 SERIES  
OF AMENDMENTS TO REGULATION No. 37

(Filament lamps)

Transmitted by the Working Party on Lighting and Light-Signalling (GRE)

Note: The text reproduced below was adopted by GRE at its forty-fourth session, and is transmitted for consideration to WP.29 and to AC.1. It is based on document TRANS/WP.29/GRE/2000/8, as amended (TRANS/WP.29/GRE/44, para. 30).

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List of contents, annexes,

Annex 1, add at the end of the list new sheets, to read:

".....  
Sheets H13"

Text of the Regulation,

Paragraph 3.8., amend to read:

"3.8. Check on optical quality

(Applies solely to filament lamps of categories R2, H4 and HS1)"

Annex 1,

Add at the end new data sheets H13/1 to H13/4, to read:

CATEGORIES H13 AND H13A

Sheet H13/1

The drawings are only to illustrate the essential dimensions  
of the filament lamp

Dimensions in mm

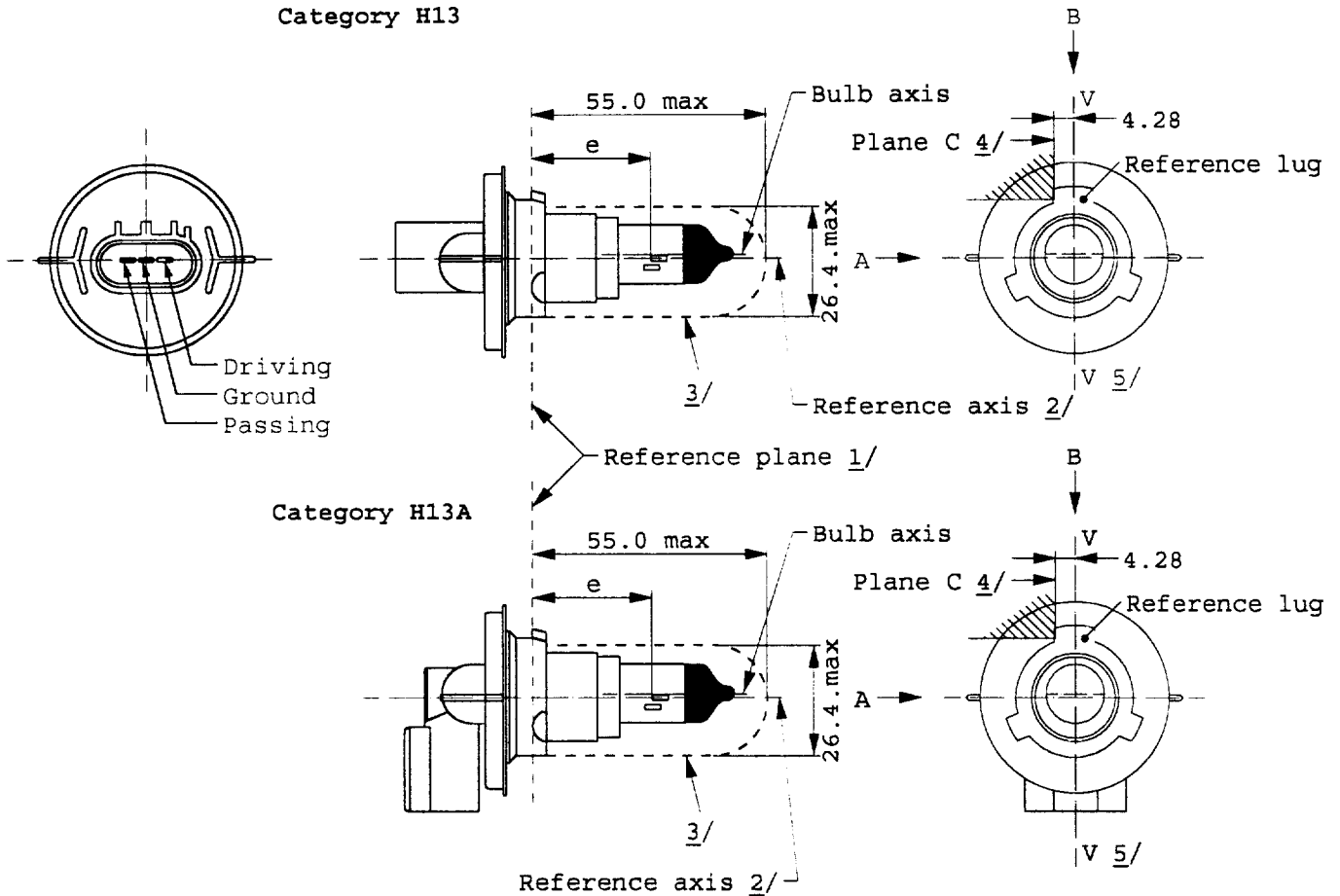


Figure 1 Main drawing

- 1/ The reference plane is the plane formed by the underside of the three radiused tabs of the cap.
- 2/ The reference axis is perpendicular to the reference plane and crosses the intersection of the two perpendiculars as indicated in Figure 2 on sheet H13/2.
- 3/ Glass bulb and supports shall not exceed the envelope as indicated. The envelope is concentric to the reference axis.
- 4/ The filament lamp shall be rotated in the measuring holder until the reference lug contacts plane C of the holder.
- 5/ Plane V-V is the plane perpendicular to the reference plane passing through the reference axis and parallel to plane C.

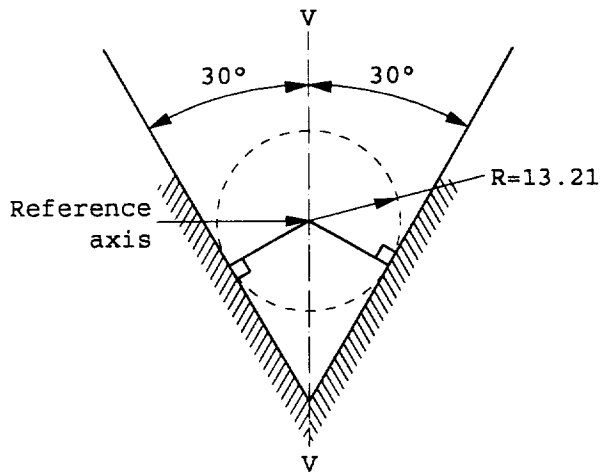
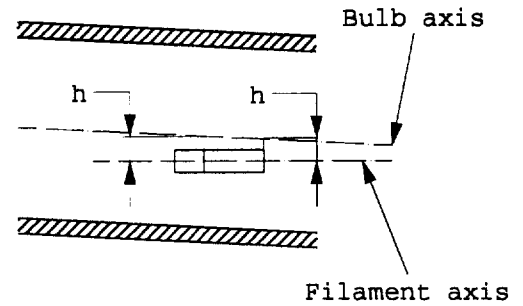


Figure 2

Definition of reference axis 2/



View from B

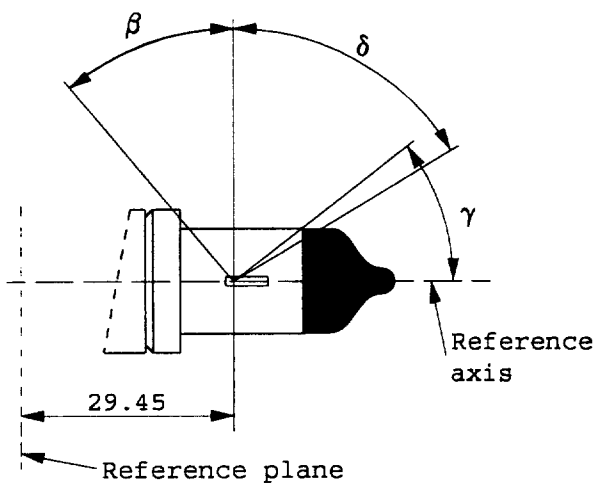
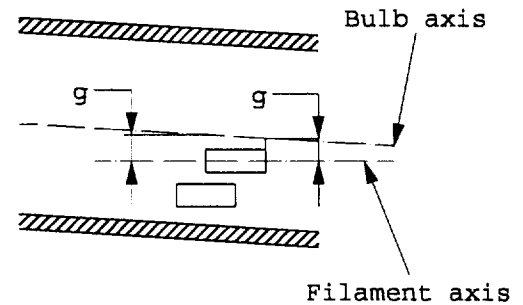


Figure 3

Distortion free area 6/  
and black top 7/

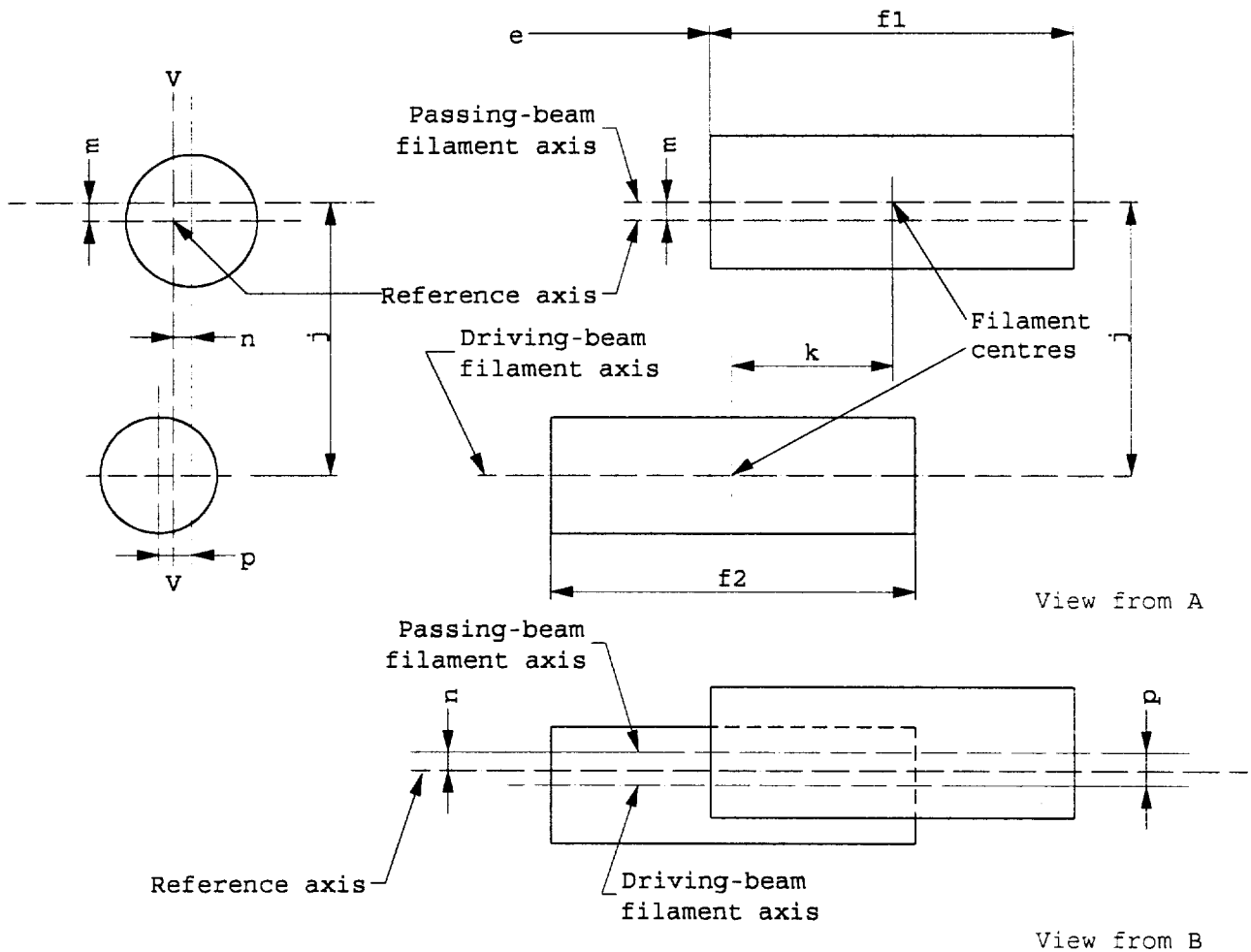


View from A

Figure 4

Bulb offset 8/

- 6/ Glass bulb shall be optically distortion-free axially within the angles  $\beta$  and  $\delta$ . This requirement applies to the whole bulb circumference within the angles  $\beta$  and  $\delta$ .
- 7/ The obscuration shall extend to at least angle  $\gamma$  and shall extend at least to the cylindrical part of the bulb on the whole bulb top circumference.
- 8/ Offset of passing-beam filament in relation to the bulb axis is measured in two planes parallel to the reference plane where the projection of the outside end turns nearest to and farthest from the reference plane crosses the passing-beam filament axis.



**Figure 5**  
**Position and dimensions of filaments 9/ 10/ 11/ 12/**

- 9/ Dimensions  $j$ ,  $k$  and  $p$  are measured from the centre of the passing-beam filament to the centre of the driving-beam filament.
- 10/ Dimensions  $m$  and  $n$  are measured from the reference axis to the centre of the passing-beam filament.
- 11/ Both filaments axis are to be held within a  $2^\circ$  tilt with respect to the reference axis about the centre of the respective filament.
- 12/ Notes concerning the filament diameters.
  - No actual diameter restrictions apply but the objective for future development is to have  $d_1 \text{ max.} = 1.7 \text{ mm.}$  (Passing-beam filament only).
  - For the same manufacturer, the design filament diameter of standard (étalon) filament lamp and filament lamp of normal production shall be the same.

CATEGORIES H13 AND H13A

Sheet H13/4

| Dimensions in mm   |                  | Tolerances                          |         |                        |         |
|--|------------------|-------------------------------------|---------|------------------------|---------|
|  |                  | Filament lamps of normal production |         | Standard filament lamp |         |
| e  | <u>13/</u>       | 29.45                               | ± 0.20  |                        | ± 0.10  |
| f1   | <u>13/</u>       | 4.6                                 | ± 0.50  |                        | ± 0.25  |
| f2   | <u>13/</u>       | 4.6                                 | ± 0.50  |                        | ± 0.25  |
| g  | <u>8/ 14/</u>    | d1 /2                               | ± 0.40  |                        | ± 0.20  |
| h  | <u>8/</u>        | 0                                   | ± 0.30  |                        | ± 0.15  |
| j  | <u>9/</u>        | 2.5                                 | ± 0.20  |                        | ± 0.10  |
| k  | <u>9/</u>        | 2.0                                 | ± 0.20  |                        | ± 0.10  |
| m  | <u>10/</u>       | 0                                   | ± 0.20  |                        | ± 0.13  |
| n  | <u>10/</u>       | 0                                   | ± 0.20  |                        | ± 0.13  |
| p  | <u>9/</u>        | 0                                   | ± 0.08  |                        | ± 0.08  |
| β  |                  | 42° min.                            | —       |                        | —       |
| δ  |                  | 52° min.                            | -       |                        | -       |
| γ  |                  | 43°                                 | +0/-5°  |                        | +0/- 5° |
| Cap P26.4t in accordance with IEC 61 (sheet 7004-...-1) <u>15/</u>           |                  |                                     |         |                        |         |
| ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS <u>16/</u>                        |                  |                                     |         |                        |         |
| Rated values   | Volts            | 12                                  |         | 12                     |         |
|  | Watts            | 55                                  | 60      | 55                     | 60      |
| Test voltage   | Volts            | 13.2                                |         | 13.2                   |         |
| Objective values   | Watts            | 68 max.                             | 75 max. | 68 max.                | 75 max. |
|  | Luminous flux lm | 1100                                | 1700    |                        |         |
|  | ± %              | 15                                  | 15      |                        |         |
| Reference luminous flux for headlamp testing:<br>800/1200 lm at approx. 12V. |                  |                                     |         |                        |         |

- 13/ The ends of the filament are defined as the points where, when the viewing direction A as shown on sheet H13/1, the projection of the outside of the end turns crosses the filament axis.
- 14/ d1 is the actual diameter of the passing-beam filament.
- 15/ Filament lamp H13 shall be equipped with the straight cap and filament lamp H13A with the right-angle cap.
- 16/ The values indicated in the left-hand columns relate to the passing-beam and those indicated in the right-hand columns to the driving-beam.