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Geneva, 26-30 March 2007

Item 3.2. of the provisional agenda

REGULATION No. 37
(Filament lamps)

Provisions for new filament lamp categories

Proposal for draft Supplement 29 to the 03 series of amendments to Regulation No. 37

Submitted by the expert from the Working Party "Brussels 1952"

The text reproduced below was prepared by the expert from the Working Party "Brussels 1952" (GTB) in order to insert into the Regulation provisions for a new filament light source of category HS6 to be used on motorcycles. The modifications to the existing text of the Regulation (up to Supplement 28 to the 03 series of amendments) are marked in **bold** characters.

Note: This document is distributed to the Experts of the Working Party on Lighting and Light-Signalling (GRE) only.

A. PROPOSAL

Annex 1,

The list of categories of filament lamps and their sheets, amend to read (including deletion of the reference to footnote ****/ for categories H21W, PSX24W and PX24W and footnote ****/ as well as insertion of a reference to a new footnote *****/ for category HS6 and footnote *****/):

<u>"Category</u>		<u>Sheet number(s)</u>
....		
H14		H14/1 to 4
H21W	<u>****/</u>	<i>H21W/1 to 2</i>
H27W/1		H27W/1
....		
HS5		HS5/1 to 4
HS6	<u>*****/</u>	HS6/1 to 4
PSX24W	<u>****/</u>	<i>P24W/1 to 3</i>
PX24W	<u>****/</u>	<i>P24W/1 to 3</i>
R2	<u>*****/</u>	R2/1 to 3
....		

....
*****/ **Not for use in Regulation No. 112 headlamps."**

Note by the secretariat: *The reference to footnotes will be renumbered accordingly.*

The list of sheets for filament lamps and their sequence, amend to read:

"Sheet number(s)

....

HS5/1 to 4

HS6/1 to 4

P13W/1 to 3

.... "

Insert new sheets HS6/1 to 4, between sheet HS5/4 and sheet P13W/1, to read (see next pages):

CATEGORY HS6

Sheet HS6/1

The drawings are intended only to illustrate the essential dimensions (in mm) of the filament lamp

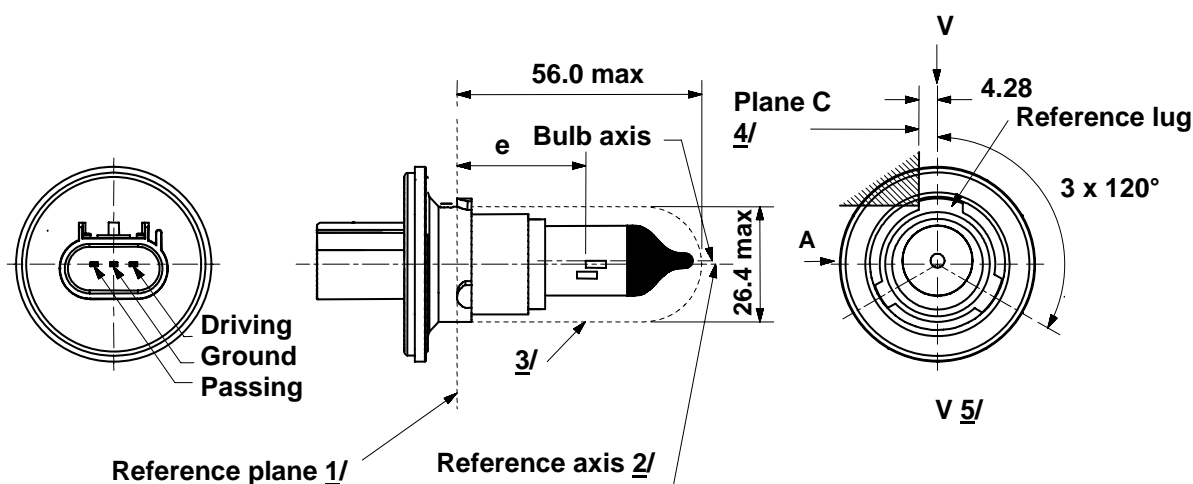


Figure 1 - Main drawings

- 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 HS6/2.
- 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.

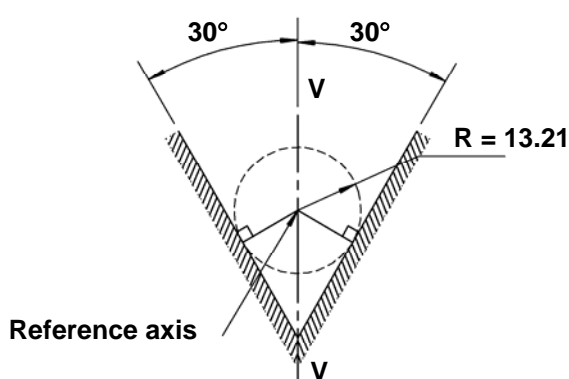


Figure 2
Definition of reference axis 2/

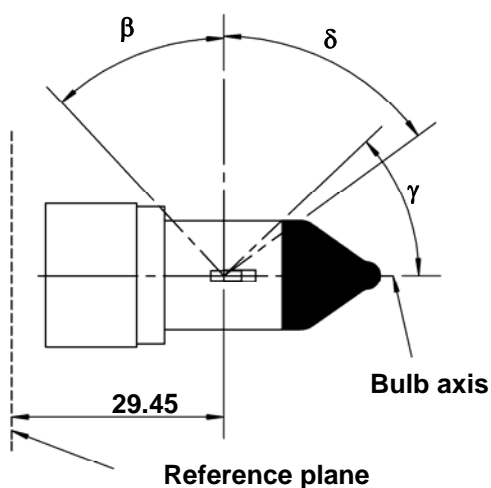
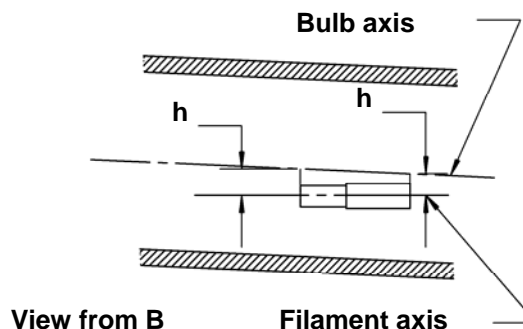
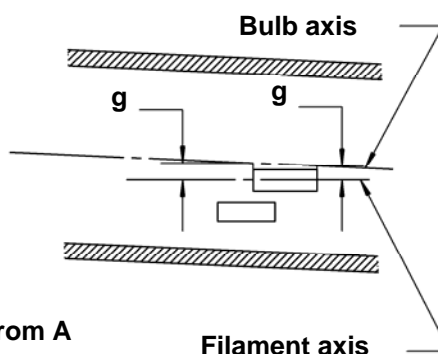


Figure 3
Undistorted area 6/
and opaque coating 7/



View from B



View from A

Figure 4
Bulb offset 8/

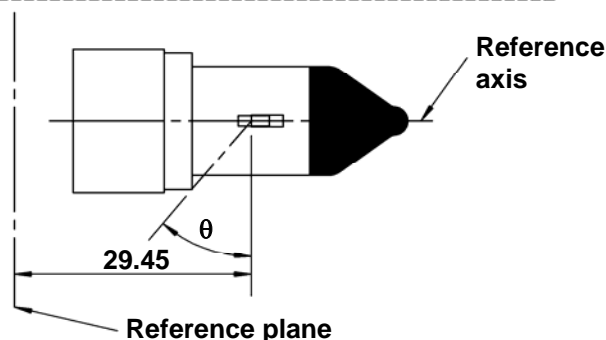


Figure 5
Light blocking toward cap 9/

- 6/ Glass bulb shall be optically distortion-free axially and cylindrically within the angles β and δ . This requirement applies to the whole bulb circumference within the angles β and δ and does not need to be verified in the area covered by the opaque coating.
- 7/ The opaque coating shall extend at least to the cylindrical part of the bulb on the whole bulb top circumference. It shall moreover extend at least to a plane parallel to the reference plane where γ crosses the outer bulb surface as shown in Figure 3 (view in direction B as indicated on sheet HS6/1).
- 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.
- 9/ Light shall be blocked over the cap end of the bulb extending to angle θ . This requirement applies in all directions around the reference axis.

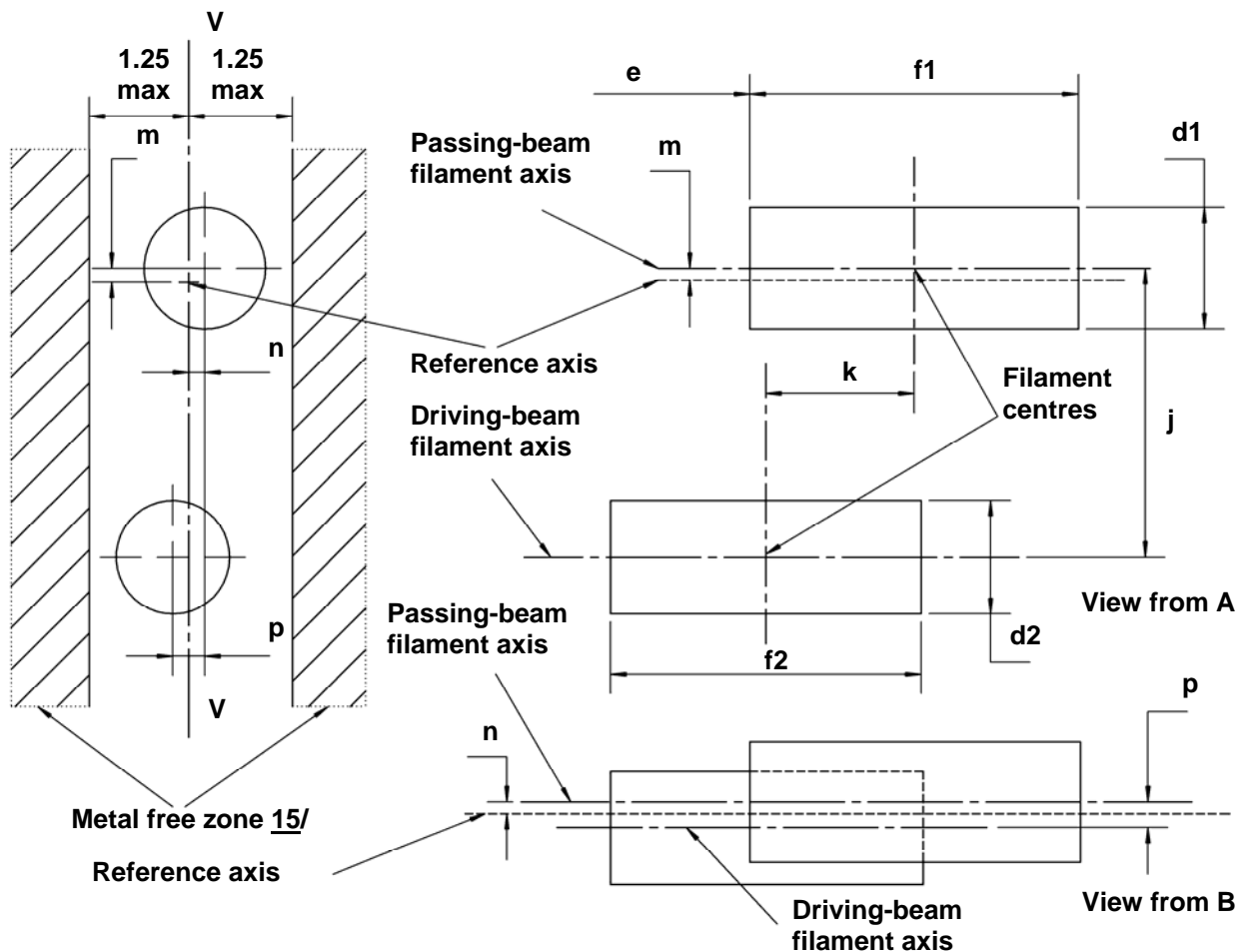


Figure 6
Position and dimensions of filaments 10/ 11/ 12/ 13/ 14/

- 10/ Dimensions j , k and p are measured from the centre of the passing-beam filament to the centre of the driving-beam filament.
- 11/ Dimensions m and n are measured from the reference axis to the centre of the passing-beam filament.
- 12/ Both filaments axis are to be held within a 2° tilt with respect to the reference axis about the centre of the respective filament.
- 13/ Note concerning the filament diameters: for the same manufacturer, the design filament diameter of standard (étalon) filament lamp and filament lamp of normal production shall be the same.
- 14/ For both the driving-beam and the passing-beam filament distortion shall not exceed ± 5 per cent of filament diameter from a cylinder.
- 15/ The metal free zone limits the location of lead wires within the optical path. No metal parts shall be located in the shaded area as seen in Figure 6.

CATEGORY HS6

Sheet HS6/4

Dimensions in mm			Tolerance			
			Filaments lamps of normal production		Standard filament lamp	
d1	<u>13/ 17/</u>	1.4 max.	-		-	
d2	<u>13/ 17/</u>	1.4 max.	-		-	
e	<u>16/</u>	29.45	± 0.20		± 0.10	
f1	<u>16/</u>	4.4	± 0.50		± 0.25	
f2	<u>16/</u>	4.4	± 0.50		± 0.25	
g	<u>8/ 17/</u>	0.5 d1	± 0.50		± 0.30	
h	<u>8/</u>	0	± 0.40		± 0.20	
j	<u>10/</u>	2.5	± 0.30		± 0.20	
k	<u>10/</u>	2.0	± 0.20		± 0.10	
m	<u>11/</u>	0	± 0.24		± 0.20	
n	<u>11/</u>	0	± 0.24		± 0.20	
p	<u>10/</u>	0	± 0.30		± 0.20	
β		42° min.	-		-	
δ		52° min.	-		-	
γ		43°	+0° / -5°		+0° / -5°	
θ	<u>9/</u>	41°	± 4°		± 4°	
Cap: PX26.4t in accordance with IEC Publication 60061 (sheet 7004-[xxx-x])						
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS <u>18/</u>						
Rated values	Volts	12			12	
	Watts	40	35		40	35
Test voltage	Volts	13.2			13.2	
Objective values	Watts	45 max.	40 max.		45 max.	40 max.
	Luminous flux	900 ± 15 %	600 ± 15 %			
Reference luminous flux at approximately		12 V			630/420	
		13.2 V			900/600	

16/ The ends of the filament are defined as the points where, when the viewing direction is direction A as shown on sheet HS6/1, the projection of the outside of the end turns crosses the filament axis.

17/ d1 is the actual diameter of the passing-beam filament.

d2 is the actual diameter of the driving-beam filament.

18/ The values indicated in the left-hand columns relate to the driving-beam filament and those indicated in the right-hand columns to the passing-beam filament."

B. JUSTIFICATION

GTB is of the opinion that there is a need for the introduction of improved technology light sources to be used on motorcycles. In this respect, GTB proposes to introduce a new filament lamp of category HS6, which is technically an H13 version for motorcycles in the same way as HS1 was of H4, introduced years ago.

*Note by the secretariat: Apart from the introduction of a new filament light source of category HS6, this proposal also reflects (see the proposed modifications in "Italics" on page 2 of this proposal) deletion of the reference to footnote ****/ and footnote ****/ for categories H21W, PSX24W and PX24W as suggested in ECE/TRANS/WP.29/GRE/2007/6 submitted by the expert from Italy.*

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