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agenda item 4.2.6.)

PROPOSAL FOR SUPPLEMENT 27 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 fifty-fifth session, and is transmitted for consideration to WP.29 and to AC.1 (TRANS/WP.29/GRE/55, paras. 44, 45 and 55). It is based on documents TRANS/WP.29/GRE/2005/34 as amended by para. 44, and TRANS/WP.29/GRE/2005/38 and TRANS/WP.29/GRE/2005/39, both not amended.

Annex 1.

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Documents are also available via the INTERNET:

<http://www.unece.org/trans/main/welcwp29.htm>

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

"	Category	Sheet number(s)
....	H9	<u>***</u> / H9/1 to 4
....	H9B	<u>***</u> / H9/1 to 4
....	H14	H14/1 to 4
....	H21W	<u>**</u> / H21W/1 to 2
....	H27W/1	<u>****</u> / H27W/1 to 3
....	HIR1	<u>***</u> / HIR1/1 to 3
....	HS5	HS5/1 to 4
....	PSX24W	<u>**</u> / P24W/1 to 3
....	PX24W	<u>****</u> / P24W/1 to 3
....	R2	<u>**</u> / R2/1 to 3
....		

only for signalling lamps:

....	H6W	H6W/1
....	P13W	P13W/1 to 3
....		
....	W5W	W5W/1
....	W15/5W	W15/5W/1 to 3
....	W16W	W16W/1
....	"	

Insert new footnotes **/, ***/ and ****/, to read:

- **/ Not for use in passing beam headlamps.
***/ Not for use in front fog lamps marked "B" as defined in Regulation No. 19.
****/ See transitional provisions in Regulation No. 19."

List of sheets for filament lamps, amend to read:

"
Sheet number(s)

....
W5W/1
W15/5W/1 to 3
W16W/1
.... "

Sheet H21W/1, the table, amend to read (adding a value for the flux at approximately 12V):

"

Reference luminous flux at approximately	12V	415 lm
	13.5 V	600 lm

.... "

Sheet H27W/2, the table amend to read (adding a value for the flux at approximately 12V):

"

Reference luminous flux at approximately	12 V	350 lm
	13.5 V	477 lm

.... "

Sheet HB3/1, footnote 4/, amend to read:

"4/ The keyway is mandatory for category HB3A and optional for category HB3."

Sheet HB4/1, footnote 4/, amend to read:

"4/ The keyway is mandatory for category HB4A and optional for category HB4."

Sheet P19W/2, the table, amend to read:

"

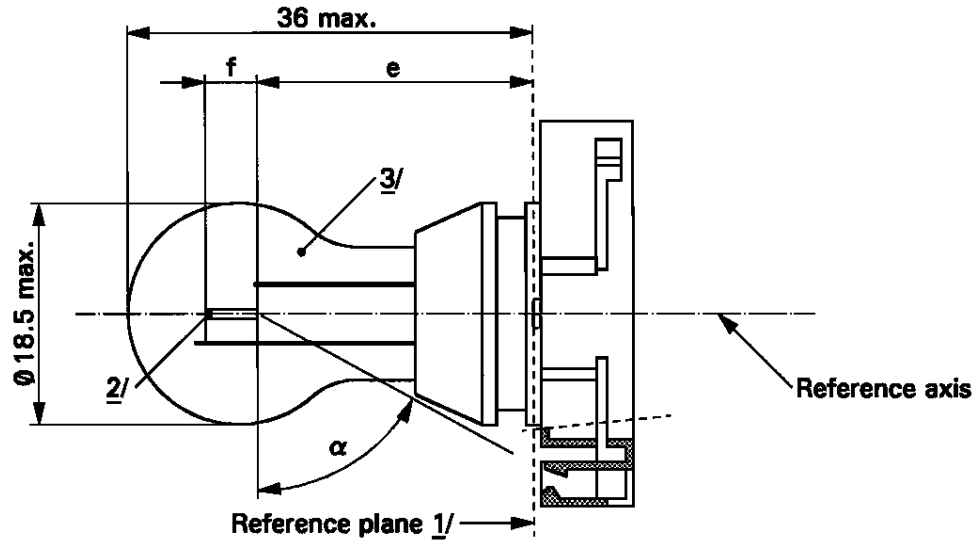
α	<u>7/</u>	58°			58° min.
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.... "

Sheets from P24W/1 to P24W/3, amend to read: (see next pages)

"CATEGORIES P24W, PX24W, PY24W, PR24W, PS24W, PSX24W, PSY24W and PSR24W

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



- 1/ The reference plane is defined by the meeting points of the cap-holder fit.
- 2/ No actual filament diameter restrictions apply but the objective is d max. = 1.1 mm.
- 3/ The light emitted from normal production lamps shall be white for categories P24W, PX24W, PS24W and PSX24W; amber for categories PY24W and PSY24W; red for the categories PR24W and PSR24W. (See also note 8/)

CATEGORIES P24W, PX24W, PY24W, PR24W, PS24W, PSX24W, PSY24W and PSR24W

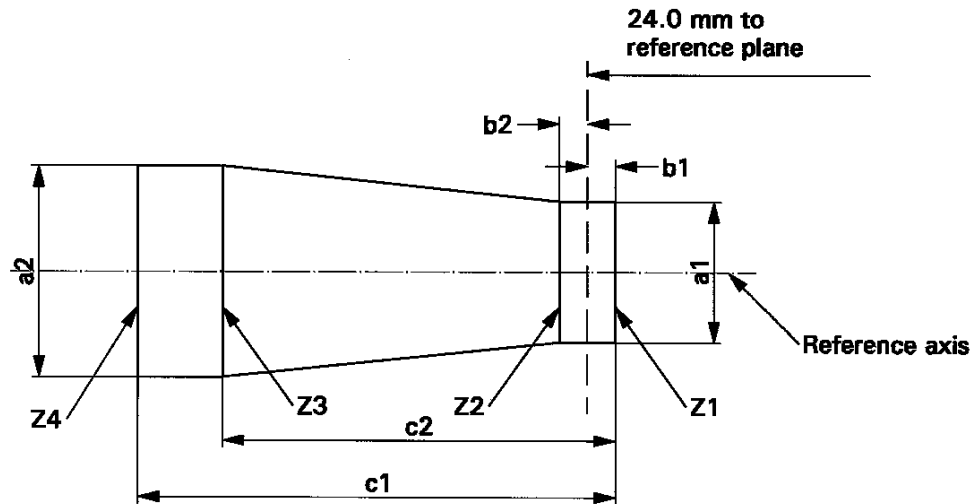
Dimensions in mm		Filament lamps of normal production			Standard filament lamp	
		min.	nom.	max.	8/	
e		5/ 6/	24.0		24.0	
f	5/ 6/	P24W, PY24W, PR24W, PS24W, PSY24W, PSR24W	4.0		4.0	
		PX24W, PSX24W	4.2		4.2	
α		7/	58.0°		58.0° min.	
P24W	Cap PGU20-3	in accordance with IEC Publication 60061 (sheet 7004-127-2)				
PX24W	Cap PGU20-7					
PY24W	Cap PGU20-4					
PR24W	Cap PGU20-6					
PS24W	Cap PG20-3					
PSX24W	Cap PG20-7					
PSY24W	Cap PG20-4					
PSR24W	Cap PG20-6					
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS						
Rated values		Volts	12		12	
		Watts	24		24	
Test voltage		Volts	13.5		13.5	
Objective values		Watts		25 max.		
		Luminous flux	P24W PS24W	500 +10/-20 %		
			PX24W PSX24W	500 +10/-15 %		
			PY24W PSY24W	300 +15/-25 %		
			PR24W PSR24W	115 +15/-25 %		
Reference luminous flux at approximately			12 V	White: 345 lm		
			13.5 V	White: 500 lm Amber: 300 lm Red: 115 lm		

- 4/ For categories PS24W, PSX24W, PSY24W and PSR24W, dimensions shall be checked with O-ring removed.
- 5/ The filament position is checked by means of a "box-system"; sheet P24W/3.
- 6/ The ends of the filament are defined as the points where, when the viewing direction is perpendicular to the plane through the filament lead-in wires as shown in the drawing on sheet P24W/1, the projection of the outside of the end turns crosses the filament axis.
- 7/ No part of the cap beyond the reference plane shall interfere with angle α . The bulb shall be optically distortion free within the angle $2\alpha + 180^\circ$.
- 8/ The light emitted from standard filament lamps shall be white for categories P24W, PX24W, PS24W and PSX24W; white or amber for categories PY24W and PSY24W; white or red for categories PR24W and PSR24W.

CATEGORIES P24W, PX24W, PY24W, PR24W, PS24W, PSX24W, PSY24W and PSR24W

Screen projection requirements

This test is used to determine, by checking whether the filament is correctly positioned relative to the reference axis and reference plane, whether a filament lamp complies with the requirements.



P24W, PY24W, PR24W, PS24W, PSY24W, PSR24W	a1	a2	b1, b2	c1	c2
Filament lamps of normal production	2.9	3.9	0.5	5.2	3.8
Standard filament lamps	1.5	1.7	0.25	4.7	3.8

PX24W, PSX24W	a1	a2	b1, b2	c1	c2
Filament lamps of normal production	1.9	1.9	0.35	5.0	4.0
Standard filament lamps	1.5	1.5	0.25	4.7	4.0

The filament position is checked in two mutually perpendicular planes, one of them being the plane through the lead-in wires.

The ends of the filament as defined on sheet P24W/2, note 6/, shall lie between Z1 and Z2 and between the lines Z3 and Z4.

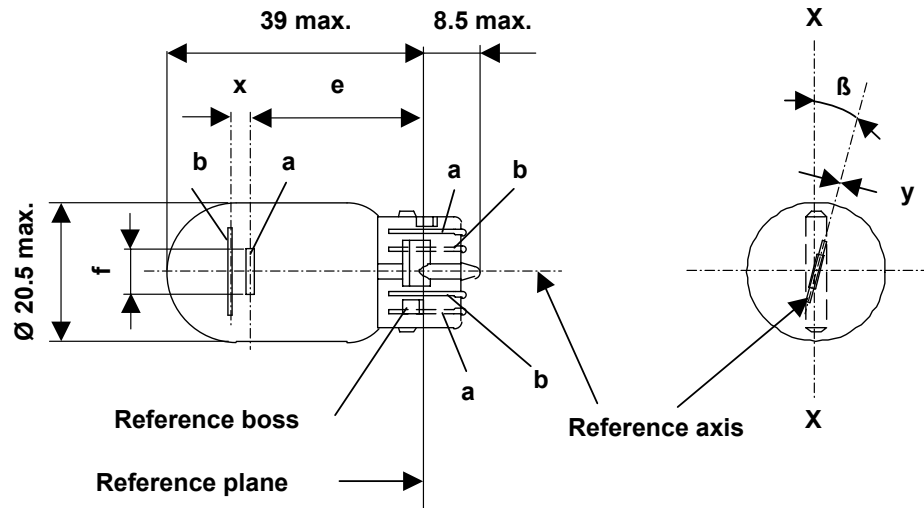
The filament shall lie entirely within the limits shown."

Insert new sheets W15/5W/1 to 3, between sheet W5W/1 and sheet W16W/1, to read: (see next pages).

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

FILAMENT LAMP FOR MOTORCYCLES

a= major (high wattage) filament
b= minor (low wattage) filament



Dimensions in mm	Filament lamps of normal production			Standard filament lamp	
	min.	nom.	max.		
e		25.0 <u>1/</u>		25.0 ± 0.3	
f			7.5	7.5 + 0/ - 2	
Lateral deviation <u>2/</u>			<u>1/</u>	0.3 max.	
x <u>3/</u>		2.8 <u>1/</u>		2.8 ± 0.3	
y <u>3/</u>		0.0 <u>1/</u>		0.0 ± 0.3	
β	-15° <u>1/</u>	0°	+15° <u>1/</u>	0° ± 5°	
Cap WZ3x16q in accordance with IEC Publication 60061 (sheet 7004-[...]-1)					
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS					
Rated values	Volts	12			12
	Watts	15	5	15	5
Test voltage	Volts	13.5			13.5
Objective values	Watts	19.1 max.	6.6 max.	19.1 max.	6.6 max.
	Luminous flux	280 ± 15 %	35 ± 20 %		
Reference luminous flux: 280 lm and 35 lm at approximately 13.5 V					

1/ To be checked by means of a "Box-System"; sheets W15/5W/2 and 3.

2/ Maximum lateral deviation of filament centre from two mutually perpendicular planes both containing the reference axis and one containing axis X-X.

3/ "x" and "y" denote the offset of the axis of the minor filament with respect to the axis of the major filament.

Screen projection requirements

This test is used to determine, by checking whether:

- (a) the major filament is correctly positioned relative to the reference axis and reference plane and has an axis perpendicular, within $\pm 15^\circ$, to the plane through the axis X-X and the reference axis; and whether:
- (b) the minor filament is correctly positioned relative to the major filament, whether a filament lamp complies with the requirements.

Test procedure and requirements.

1. The filament lamp is placed in a holder capable of being rotated about its axis and having either a calibrated scale or fixed stops corresponding to the angular displacement tolerance limits. The holder is then so rotated that an end view of the major filament is seen on the screen on which the image of the filament is projected. The end view of that filament shall be obtained within the angular displacement tolerance limits. ($\pm 15^\circ$).

2. Side elevation

The filament lamp placed with the cap down, the reference axis vertical and the major filament seen end-on:

- 2.1. the projection of the major filament shall lie entirely within a rectangle of height "a" and width "b", having its centre at the theoretical position of the centre of the filament;
- 2.2. the projection of the minor filament shall lie entirely within a rectangle of width "c" and height "d" having its centre at a distance "u" above the theoretical position of the centre of the major filament.

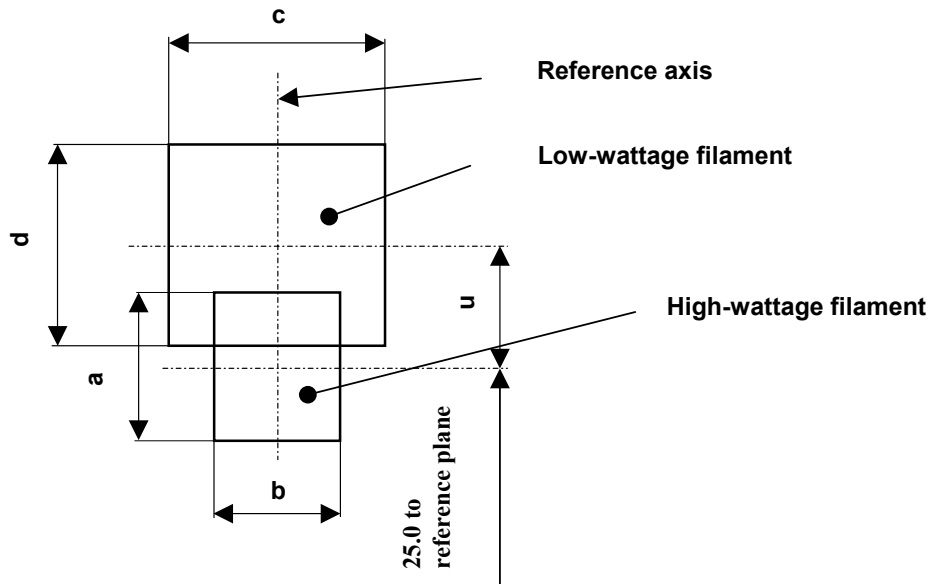
3. Front elevation

The filament lamp being placed with the cap down and the reference axis vertical, the filament lamp being viewed in a direction at right angles to axis of the major filament:

- 3.1. the projection of the major filament shall lie entirely within a rectangle of height "a" and width "h", centred on the theoretical position of the centre of the filament;
- 3.2. the centre of the major filament shall not be offset by more than distance "k" from the reference axis.
- 3.3. the centre of the minor filament axis shall not be offset from the reference axis by more than ± 2 mm (± 0.4 mm for standard filament lamps).

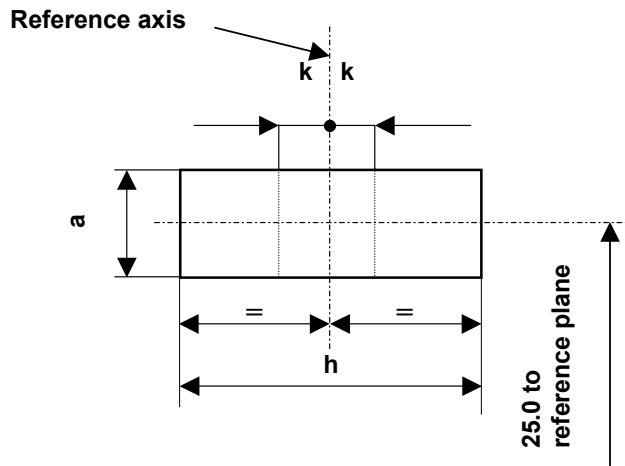
Side elevation

Dimensions in millimetres



Reference	a	b	c	d	u
Dimensions	3.3	2.8	4.8		2.8

Front elevation



Reference	a	h	k
Dimensions	3.3	9.5	1.0

"
