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## **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

Working Party on the Construction of Vehicles (One-hundred-and-twentienth session, 7-10 March 2000, agenda item 6.11.)

PROPOSAL FOR DRAFT SUPPLEMENT 19 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-third session and is transmitted to WP.29 and to AC.1 for consideration. It is based on the text of documents TRANS/WP.29/GRE/1999/12 and TRANS/WP.29/GRE/1999/20, as amended (TRANS/WP.29/GRE/43, paras. 62 and 63).

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Documents are also available via the INTERNET:

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

## List of contents, annexes,

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

Sheet WY2.3W (only for signalling lamps)
Sheets P19W, PS19W, PY19W and PSY19W (only for signalling lamps)
Sheets P24W, PS24W, PY24W and PSY24W (only for signalling lamps)

#### Text of the Regulation,

# Paragraph 2.3.1.2., amend to read:

"2.3.1.2. the rated voltage. However, for filament lamps for which only a 12 V type is standardized and the maximum allowed bulb diameter of which does not exceed 7.5 mm, the rated voltage need not be marked;"

# Paragraph 2.3.1.3., amend to read:

"2.3.1.3. the international designation of the relevant category. The wattage character "W" of this designation need not be marked when the maximum allowed bulb diameter of the lamp type does not exceed 7.5 mm;"

## Annex 1,

Annex 1, sheet H4/2, replace in the table the IEC sheet number by "sheet 7004-39-6"

Annex 1, sheet P21W/1, replace in the table the IEC sheet number by "sheet 7004-11A-9"

Annex 1, sheet R5W/1, replace in the table the IEC sheet number by "sheet 7004-11A-9"

Annex 1, sheet R10W/1, replace in the table the IEC sheet number by "sheet 7004-11A-9"

Annex 1, sheet H27W/2, replace in the table the IEC sheet number by "sheet 7004-107-3"

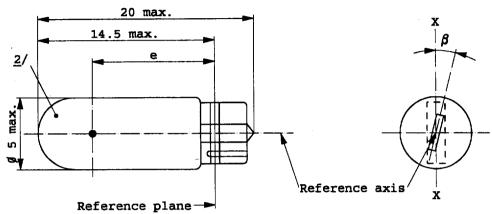
Annex 1, sheet HIR1/2, replace in the table the IEC sheet number by "sheet 7004-31-2"

Annex 1, sheet PY27/7W/1, replace in the table the IEC sheet number by . "sheet 7004-104A-1"

Annex 1, sheet HIR2/2, replace in the table the IEC sheet number by "sheet 7004-32-2"

Annex 1, sheet H10/2, replace in the table the IEC sheet number by "sheet 7004-31-2"

Add at the end new Sheet WY2.3W/1, new Sheets P19W/1 to P19W/3 and new Sheets P24W/1 to P24W/3, to read:



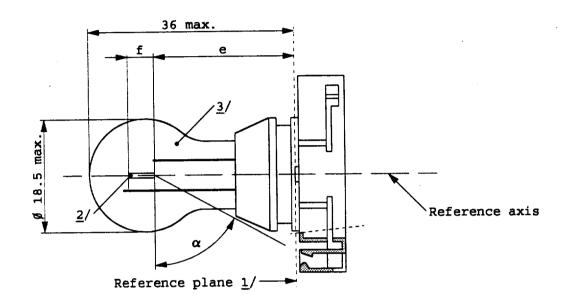
Reference pi	ane –						
DIMENSIONS in mm	I .	ament lamp al product	Standard filament lamp <u>3</u> /				
	min.	nom.	max.				
е ,	10.3	10.8	11.3	10.8 ± 0.3			
Lateral deviation $1/$			1.0	0.5 max.			
β	-15°	0°	+15°	0° ± 5°			
Cap W 2 x 4.6d in accordance with IEC Publ. 61 (sheet 7004-94-2)							
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS							

		ELECTRICAL	AND PHOTOMETRIC CHARACTER	RISTICS
Rated values		Volts	12	12
		Watts	2.3	2.3
Test voltage Volts		Volts	13.5	
W		tts	2.5 max.	2.5 max.at 13.5 V
1		minous ux lm	11.2	
	±%		20	

Reference luminous flux : Amber bulb: 11.2 lm at approx. 13.5 V Clear bulb: 18.6 lm

- Maximum lateral deviation of filament centre from two mutually perpendicular planes both containing the reference axis and one containing axis X-X.
- $\underline{2}$ / The light emitted from production lamps shall be amber. (See also note  $\underline{3}$ /).
- 3/ The light emitted from standard filament lamps shall be amber or white. For amber standard filament lamps, changes of the bulb temperature shall not affect the luminous flux which might impair photometric measurements of signalling devices. Moreover the colour shall be in the lower part of the tolerance area.

Sheet P19W/1



- $\underline{1}/$  The reference plane is defined by the meeting points of the cap-holder fit.
- $\underline{2}/$  No actual filament diameter restrictions apply but the objective is d max.= 1.1 mm.
- $\underline{3}/$  The light emitted from normal production lamps shall be white for categories P19W and PS19W and amber for categories PY19W and PSY19W. (See also note  $\underline{8}/$ ).

# CATEGORIES P19W, PY19W, PS19W AND PSY19W

DIMENSIONS in mm		4./		ment lamps	Standard filament lamp 8/			
		<u>4</u> /	min.	nom.	max.			
е	е			24.0		24.0		
f	- N. A. 18	<u>5</u> / <u>6</u> /		4.0		4.0 ± 0.2		
α		2/	61.5°			61.5° min.		
PS19W: Ca PY19W: Ca	P19W: Cap PGU20/1 PS19W: Cap PG20/1 PY19W: Cap PGU20/2 in accordance with IEC Publ. 61 (sheet 70041) PSY19W: Cap PG20/2							
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS								
Dated and		Volts	12			12		
Rated values		Watts	19			19		
Test voltage Volts			13.5			13.5		
	Watts		20 max. 20 max					
Objective	Luminous	P19W PS19W	350 ± 15 %					
vatues	flux	PY19W PSY19W	215 ± 20 %					
Reference luminous flux Clear bulb: 350 lm at approx. 13.5 V Amber bulb: 215								

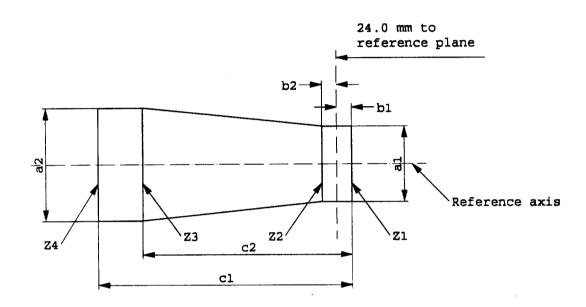
- $\underline{4}/$  For categories PS19W and PSY19W, dimensions shall be checked with O-ring removed.
- $\underline{5}/$  The filament position is checked by means of a "box-system". Sheet P19W/3.
- 6/ The ends of the filament are defined as the points where, when the viewing direction is perpendicular to the plane through the filament lead-in wires as showed in the drawing on sheet P19W/1, the projection of the outside of the end turns crosses the filament axis.
- 7/ No part of the cap beyond to the reference plane shall interfere with angle  $\alpha$ . 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 P19W and PS19W and white or amber for categories PY19W and PSY19W. For amber standard filament lamps, changes of the bulb temperature shall not affect the luminous flux which might impair photometric measurements of signalling devices. Moreover, the colour shall be in the lower part of the tolerance area.

Sheet P19W/3

# Screen projection requirements

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

Dimensions in millimetres

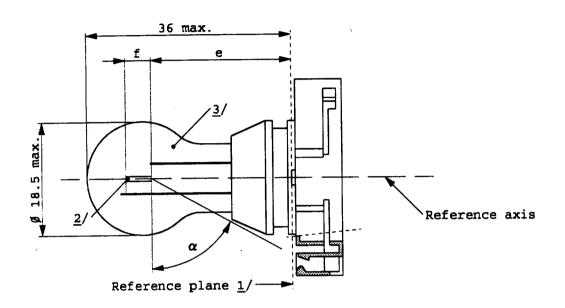


	a1	a2	b1,b2	c1	c2
Filament lamps of normal production	2.9	3.9	0.5	5.2	3.8
Standard filament lamps	1.5	1.7	0.25	4.7	3.8

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 P19W/2, note  $\frac{6}{2}$  shall lie between lines Z1 and Z2 and between lines Z3 and Z4.

The filament shall lie entirely within the limits shown



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

DIMENSIONS in mm 4		4./		ment lamp	Standard filament lamp 8/		
		<u>4</u> /	min.	nom.	max.		
e <u>5</u> / <u>6</u> /				24.0		24.0	
f		<u>5</u> / <u>6</u> /		4.0		4.0 ± 0.2	
α		<u>7</u> /	61.5°			61.5° min.	
P24W: Cap PGU20/3 PS24W: Cap PG20/3 PY24W: Cap PGU20/4 in accordance with IEC Publ. 61 (sheet 70041) PSY24W: Cap PG20/4							
	ELEC	TRICAL A	ND PHOTOME	TRIC CHARA	ACTERISTIC	S.	
Rated values		Volts		12		12	
		Watts	24			24	
Test voltage Volts 13.5				13.5			
	Watts		25 max.			25 max.	
Objective	Luminous	P24W PS24W	500 +10/-20 %				
values	flux	PY24W PSY24W	300 +15/-25 %			`	

 $\underline{4}/$  For categories PS24W and PSY24W, dimensions shall be checked with O-ring removed.

Amber bulb: 300

Reference luminous flux

- $\underline{5}/$  The filament position is checked by means of a "box-system". Sheet P24W/3.
- $\underline{6}$ / 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 showed in the drawing on sheet P24W/1, the projection of the outside of the end turns crosses the filament axis.

Clear bulb: 500 lm at approx. 13.5 V

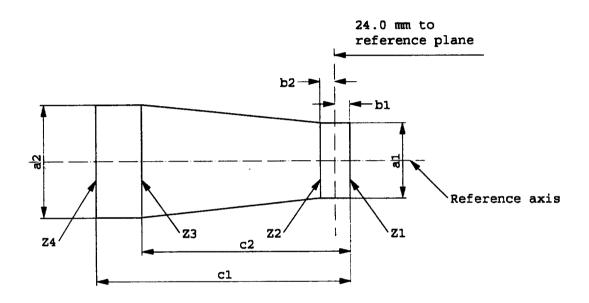
- $\underline{7}/$  No part of the cap beyond to the reference plane shall interfere with angle  $\alpha$ . The bulb shall be optically distortion free within the angle  $2\alpha + 180^{\circ}$ .
- $\underline{8}/$  The light emitted from standard filament lamps shall be white for categories P24W and PS24W and white or amber for categories PY24W and PSY24W. For amber standard filament lamps, changes of the bulb temperature shall not affect the luminous flux which might impair photometric measurements of signalling devices. Moreover, the colour shall be in the lower part of the tolerance area.

Sheet P24W/3

Screen projection requirements

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

Dimensions in millimetres



	a1	a2	b1,b2	c1	с2
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

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 6/2 shall lie between lines Z1 and Z2 and between lines Z3 and Z4.

The filament shall lie entirely within the limits shown