

Transmitted by the expert from GTB

Informal document No. GRE-60-06
(60th GRE, 1 - 3 October 2008,
agenda item 3(a))

21 August 2008

REGULATION No. 37 (Filament lamps)

Proposal for Supplement 33 to the 03 series of amendments

BACKGROUND

At its fifty-ninth session GRE considered two proposals from India regarding new filament light sources (GRE-59-38 and GRE-59-42) and agreed to resume consideration of these proposals at its sixtieth session, pending technical review by the experts from GTB and IEC (ECE/TRANS/WP.29/GRE/2008/59, par. 6).

The proposals from India have since been distributed with official symbols (ECE/TRANS/WP.29/GRE/2008/27 and ECE/TRANS/WP.29/GRE/2008/28).

GTB POSITION

1) GENERAL COMMENTS

As a consequence of the decision taken by GRE, GTB initiated a round of comments to the Indian proposals among its experts on Light Sources. After their evaluation GTB has concluded that a preliminary point of view can be presented at this time, but that more time is needed to prepare a consolidated position.

The major comments so far concern the use of existing caps for new light source categories. This may be acceptable if those light sources are only used in motorcycle applications and/or for wedge base light sources.

However, the caps of the proposed light source categories P18/5W and PR18/5W are already specified for light source categories P21/5W and PR21/5W used in automotive signal lamps in general. Therefore, the development of additional keys for existing caps is considered necessary. The proposed caps for WY10W and WY16W do not exist and need to be standardised by IEC.

In the conventional process of introduction of new light sources, a proposal is developed in GTB, and the original author submits proposals for standardisation of new caps and its holders via the respective national committee of IEC. The process in IEC is subject to strict rules as to procedure and timing and can hardly be changed; it takes nearly 24 months. Usually, GTB arranges the timing of proposals for new light sources to GRE in such a way that they are synchronised with the corresponding proposals to IEC. In this way, entry into force of the amendments to Regulation No. 37 and publication of the related IEC positively voted documents occur around the same moment in time. In this case, it looks like the proposals from India to GRE are ahead of the IEC process.

W10W and WY10W are proposed as wedge base alternative. "Wedge base" is indeed the only discriminating factor since the objective luminous flux is equal to that of H6W respectively HY6W and R10W respectively RY10W, wattage is not lower and dimensions are larger.

2) PRELIMINARY CONCLUSIONS

- GTB would like to understand from the Indian delegation why existing categories with nearly the same specifications do not fulfil the requirements of the Indian industry.
- GTB need more time to conclude on the WY16W proposal (including cap).
- GTB suggests in general that one cap key is not used for more than one category in order to avoid mis-insertion of light sources into lamps. For wedge base lamps however, this may not be possible. Therefore, in case of introduction of P18/5W and PR18/5W, new keys are recommended.
- GTB recommends that light source proposals to GRE that require a new IEC cap should be aligned with the IEC timetable. Type approval of new categories should not be granted before the IEC process has come to a stage where the design of the cap is final (RVC or later stages like FDIS or publication of the amendment of the standard).

3) DETAILED COMMENTS

- A. Comparison of major characteristics
- B. Comparison per colour
- C. List of categories
- D. List of sheets

A. COMPARISON OF MAJOR CHARACTERISTICS

	Category	Objective Luminous flux (lm)	+/-	Max Objective Wattage (W)	IEC Cap	Max length to reference plane	Total length (Specified by R37)	Max diameter (mm)	Comments
New proposals India	W10W	125	20%	11	W2.1x9.5d	32	38,1	15,7	cap also W2.2W, W2.5W, W3W, W5W, WR5W, WY5W, W16W
	WY10W	75	20%	11	W3x9.5d	32	38,1	15,7	cap non-existing; also proposed for WY16W
	WY16W	189	20%	21,35	W3x9.5d	32	38,1	15,7	cap non-existing; also proposed for WY10W
	P18/5W (major)	325	15%	23,5	BAY15d	45		26,5	cap also; P21/5W
	P18/5W (minor)	35	20%	6,6					
	PR18/5W (major)	76	20%	23,5	BAW15d	45		26,5	cap also; PR21/5W
	PR18/5W (minor)	8	25%	6,6					
New proposals GTB	H10W	200	12%	12	BAU9s	28		9,25	cap in IEC process (CD)

	HY10W	120	17%	12	BAUZ9s	28		9,25	cap in IEC process (CD)
Existing	H6W	125	12%	7,35	BAX9s	28		9,25	
	HY6W	75	17%	7,35	BAZ9s	28		9,25	
	R10W	125	20%	11	BA15s	30		19	
	RY10W	75	20%	11	BAU15s	30		19	
	W16W	310	20%	21,35	W2.1x9.5d	32	38,1	15,7	
	H21W	600	12%	26,25	BAY9s	33		9,25	
	HY21W	300	17%	26,25	BAW9s	33		9,25	
	P21/5W (major)	440	15%	26,5	BAY15d	45		26,5	
	P21/5W (minor)	35	20%	6,6	BAY15d	45		26,5	
	PR21/5W (major)	105	20%	26,5	BAW15d	45		26,5	
	PR21/5W (minor)	8	25%	6,6	BAW15d	45		26,5	

12V versions

(Decimal comma used, as specified by ISO.)

B. COMPARISON PER COLOUR

Colour	Category	Objective Luminous flux (lm)	+/-	Max Objective Wattage (W)	IEC Cap	Max length to reference plane	Total length (Specified by R37)	Max diameter (mm)
1. White	H21W	600	12%	26,25	BAY9s	33		9,25
1. White	P21/5W (major)	440	15%	26,5	BAY15d	45		26,5
1. White	P18/5W (major)	325	15%	23,5	BAY15d	45		26,5
1. White	W16W	310	20%	21,35	W2.1x9.5d	32	38,1	15,7
1. White	H10W	200	12%	12	BAU9s	28		9,25
1. White	H6W	125	12%	7,35	BAX9s	28		9,25
1. White	R10W	125	20%	11	BA15s	30		19
1. White	W10W	125	20%	11	W2.1x9.5d	32	38,1	15,7
1. White	P21/5W (minor)	35	20%	6,6	BAY15d	45		26,5
1. White	P18/5W (minor)	35	20%	6,6	BAY15d	45		26,5
2. Amber	HY21W	300	17%	26,25	BAW9s	33		9,25
2. Amber	WY16W	189	20%	21,35	W3x9.5d	32	38,1	15,7

2. Amber	HY10W	120	17%	12	BAUZ9s	28		9,25
2. Amber	HY6W	75	17%	7,35	BAZ9s	28		9,25
2. Amber	RY10W	75	20%	11	BAU15s	30		19
2. Amber	WY10W	75	20%	11	W3x9.5d	32	38,1	15,7
3. Red	PR21/5W (major)	105	20%	26,5	BAW15d	45		26,5
3. Red	PR18/5W (major)	76	20%	23,5	BAW15d	45		26,5
3. Red	PR21/5W (minor)	8	25%	6,6	BAW15d	45		26,5
3. Red	PR18/5W (minor)	8	25%	6,6	BAW15d	45		26,5

12V versions

(Decimal comma used, as specified by ISO.)

C. LIST OF CATEGORIES

The proposal from India for insertion of new categories into the list of categories should be corrected and read as follows:

Category	Sheet number(s)
C5W	C5W/1
H6W	H6W/1
HY6W	H6W/1
HY21W	H21W/1 to 2
P13W	P13W/1 to 3
P18/5W	P18/5W/1 to 3
P19W	P19W/1 to 3
P21W	P21W/1 to 2
P21/4W	P21/4W/1 (P21/5W/2 to 3)
P21/5W	P21/5W/1 to 3
P24W	P24W/1 to 3
P27W	P27W/1 to 2
P27/7W	P27/7W/1 to 3
PC16W	PC16W/1 to 3
PCR16W	PC16W/1 to 3
PCY16W	PC16W/1 to 3
PR18/5W	PR18/5W/1
PR19W	P19W/1 to 3
PR21W	PR21W/1 (P21W/2)
PR21/4W	PR21/4W/1 (P21/5W/2 to 3)
PR21/5W	PR21/5W/1 (P21/5W/2 to 3)
PR24W	P24W/1 to 3
PR27/7W	PR27/7W/1 (P27/7W/2 to 3)
PS19W	P19W/1 to 3

PS24W	P24W/1 to 3	
PSR19W	P19W/1 to 3	
PSR24W	P24W/1 to 3	
PSY19W	P19W/1 to 3	
PSY24W	P24W/1 to 3	
PY19W	P19W/1 to 3	
PY21W	PY21W/1	(P21W/2)
PY24W	P24W/1 to 3	
PY27/7W	PY27/7W/1	(P27/7W/2 to 3)
R5W	R5W/1	
R10W	R10W/1	
RR5W	R5W/1	
RR10W	R10W/1	
RY10W	R10W/1	
T1.4W	T1.4W/1	
T4W	T4W/1	
W2.3W	W2.3W/1	
W3W	W3W/1	
W5W	W5W/1	
W10W	W10W/1	
W15/5W	W15/5W/1 to 3	
W16W	W16W/1	
W21W	W21W/1 to 2	
W21/5W	W21/5W/1 to 3	
WP21W	WP21W/1 to 2	
WPY21W	WP21W/1 to 2	
WR5W	W5W/1	
WR21/5W	WR21/5W/1	(W21/5W/2 to 3)
WY2.3W	WY2.3W/1	
WY5W	W5W/1	
WY10W	WY10W/1	
WY16W	WY16W/1	
WY21W	WY21W/1 to 2	

D. LIST OF SHEETS

The proposal from India for insertion of new sheets into the list of sheets should be corrected and read as follows:

Sheet number(s)

C5W/1
C21W/1 to 2
H1/1 to 3
H3/1 to 4
H4/1 to 5
H7/1 to 4

Sheet number(s)

H8/1 to 4

H9/1 to 4

H10/1 to 3

H11/1 to 4

H12/1 to 3

H13/1 to 4

H14/1 to 4

H15/1 to 5

H6W/1

H21W/1 to 2

H27W/1 to 3

HB3/1 to 4

HB4/1 to 4

HIR1/1 to 3

HIR2/1 to 3

HS1/1 to 5

HS2/1 to 3

HS5/1 to 4

HS6/1 to 4

P13W/1 to 3

P18/5W/1 to 3

P19W/1 to 3

P21W/1 to 2

P21/4W/1

P21/5W/1 to 3

P24W/1 to 3

P27W/1 to 2

P27/7W/1 to 3

PC16W/1 to 3

PR18/5W/1

PR21W/1

PR21/4W/1

PR21/5W/1

PR27/7W/1

PY21W/1

PY27/7W/1

R2/1 to 3

R5W/1

R10W/1

S1/S2/1 to 2

S3/1

T1.4W/1

T4W/1

W2.3W/1

W3W/1

W5W/1

W10W/1

W15/5W/1 to 3

Sheet number(s)

W16W/1

W21W/1 to 2

W21/5W/1 to 3

WP21W/1 to 2

WR21/5W/1

WY2.3W/1

WY10W/1

WY16W/1

WY21W/1 to 2
