

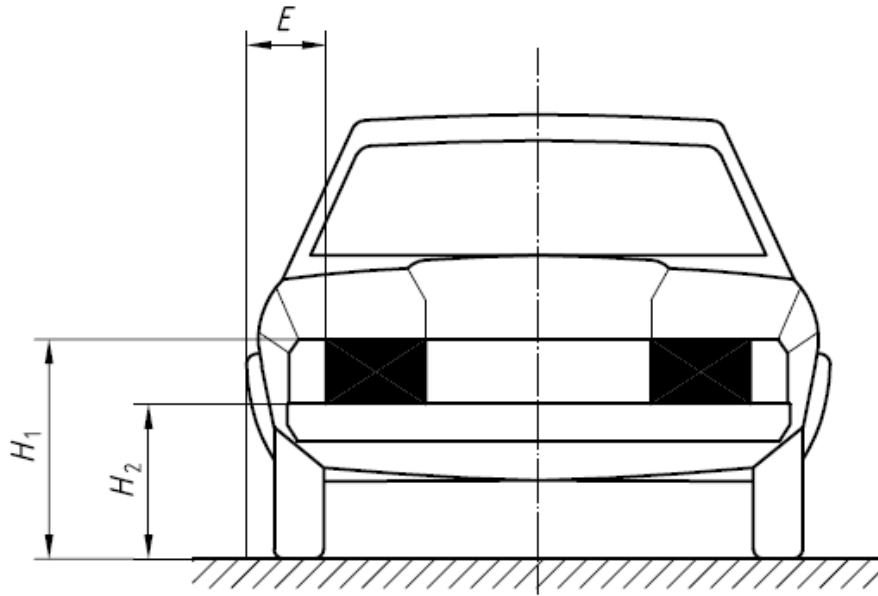
Development of Customized Local Road Vehicle (CLR V) Standards

Comparison of CLR V (Jeepney, LUV, Filcab) Specifications with PNS ISO 303

ISO 303

Road vehicles — Installation of lighting and light signalling devices for motor vehicles and their trailers

Dipped Beam Headlamp



E.2.2 Application

For motor vehicles only.

E.2.3 Number

Two.

E.2.4 Dimensions (in millimetres)

$$H_1 \leq 1\,200$$

$$H_2 \geq 500$$

$$E \leq 400$$

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = white	1	42	2%	98%			
$H_1 \leq 1,200$ mm	0	43	0%	100%	956.2	400.0	1,200.0
$H_2 \geq 500$ mm	3	41	7%	93%	827.6	320.0	1,100.0
$E \leq 400$ mm	12	23	34%	66%	304.4	50.0	460.00

Front Fog Lamp

E.4.2 Application

For motor vehicles only.

E.4.3 Number

Two.

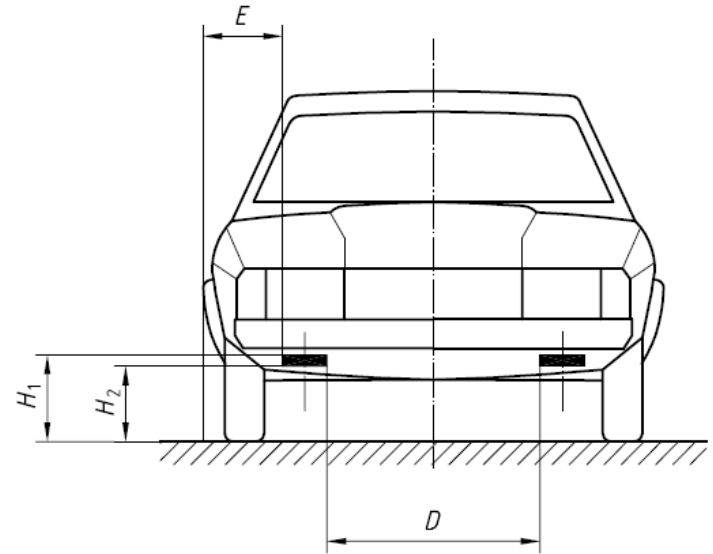
E.4.4 Dimensions (in millimetres)

$H_1 \leq 800$ (the front fog lamp shall not be higher than the dipped

$H_2 \geq 250$

D : unspecified

$E \leq 400$



	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = white	3	9	25%	75%			
$H_1 \leq 1,200$ mm	9	4	69%	31%	1,047.7	570.0	2,220.0
$H_2 \geq 500$ mm	1	12	8%	92%	927.7	500.0	2,100.0
$E \leq 400$ mm	10	3	77%	23%	200.0	50.0	680.0

Front Position Lamp

E.5.2 Application

For motor vehicles and trailers.

E.5.3 Number

Two or four (except for single lamp).

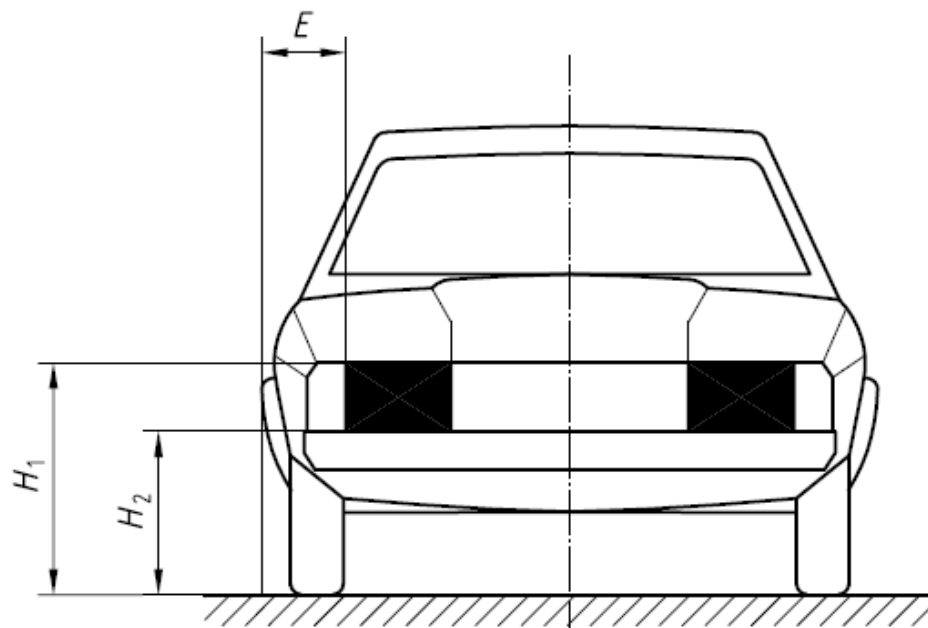
E.5.4 Dimensions (in millimetres)

$H_1 \leq 1\,500$ (or $2\,100$ if the shape of

$H_2 \geq 350$

$E \leq 400$ for motor vehicles

$E \leq 150$ for trailers



Upper Front Position Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = white	3	14	18%	82%			
H1 ≤ 1,200 mm	0	19	0%	100%	813.8	260.0	1,120.0
H2 ≥ 500 mm	3	16	16%	84%	704.2	230.0	960.00
E ≤ 400 mm	9	6	60%	40%	528.3	30.0	850.00

Front Position Lamp

E.5.2 Application

For motor vehicles and trailers.

E.5.3 Number

Two or four (except for single lamp).

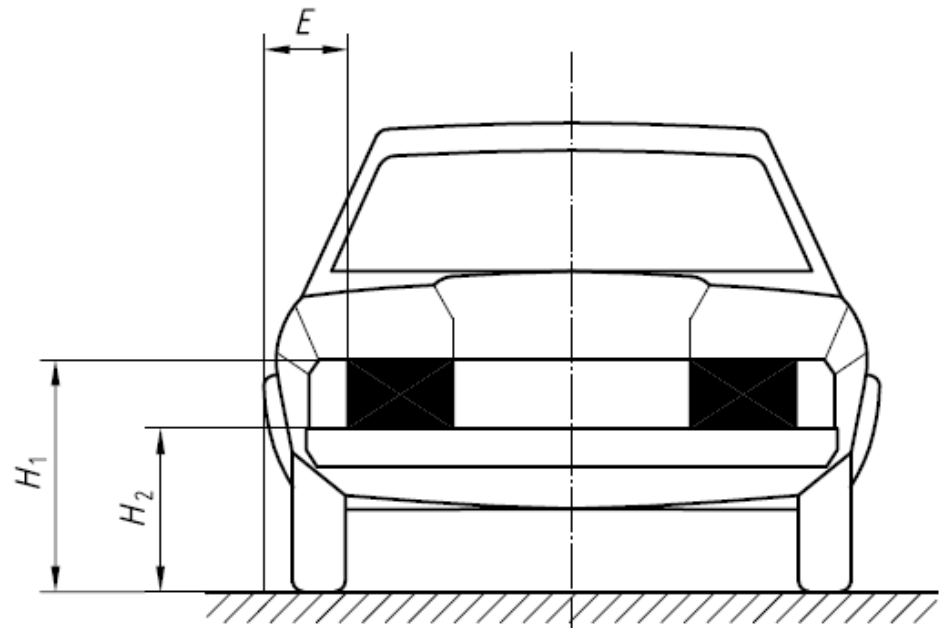
E.5.4 Dimensions (in millimetres)

$H_1 \leq 1\,500$ (or $2\,100$ if the shape of

$H_2 \geq 350$

$E \leq 400$ for motor vehicles

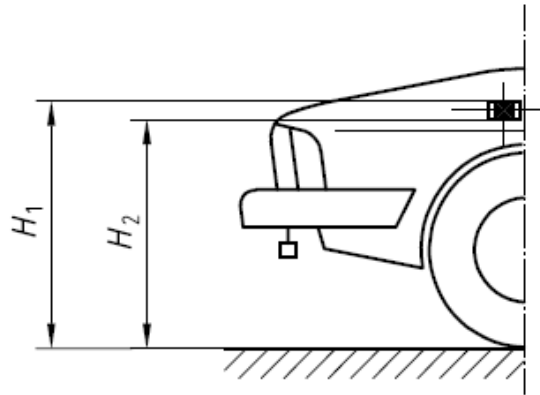
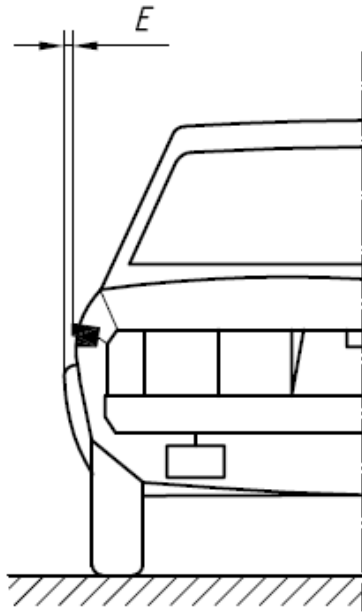
$E \leq 150$ for trailers



Lower Front Position Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = white	2	5	29%	71%			
$H_1 \leq 1,500\text{mm}$ or 2100	0	10	0%	100%	760.6	400.0	1,140.0
$H_2 \geq 350$ mm	1	9	10%	90%	654.5	280.0	950.00
$E \leq 400$ mm	5	4	56%	44%	727.8	130.0	1,550.00

Parking Lamp



E.6.2 Application

For motor vehicles only.

E.6.3 Number

Two.

E.6.4 Dimensions (in millimetres)

H_1 : unspecified

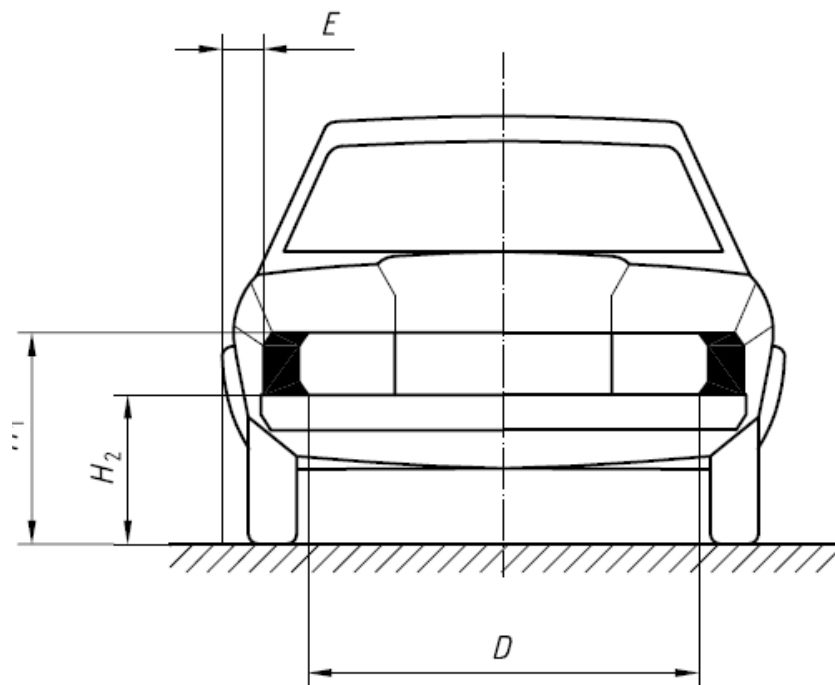
H_2 : unspecified

D : unspecified

$E \leq 400$

- parking lamp is used interchangeably with front position lamp

Front Direction Indicator Lamp



E.7.2 Application

For motor vehicles only.

E.7.3 Number

Two.

E.7.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure)}$$

$$H_2 \geq 350$$

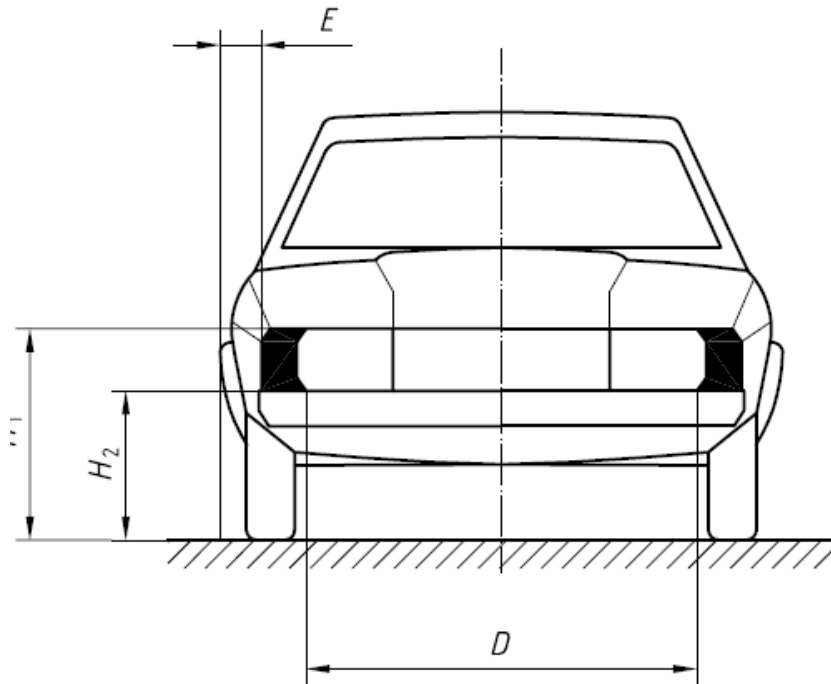
$$D \geq 600$$

$$E \leq 400$$

Upper Front Direction Indicator Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = amber	3	19	14%	86%			
$H_1 \leq 1,500\text{mm or } 2,100$	0	24	0%	100%	922.3	535.0	1,250.0
$H_2 \geq 350 \text{ mm}$	0	24	0%	100%	828.1	455.0	1,130.00
$E \leq 400 \text{ mm}$	13	8	62%	38%	620.7	-	1,120.00

Front Direction Indicator Lamp



E.7.2 Application

For motor vehicles only.

E.7.3 Number

Two.

E.7.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure)}$$

$$H_2 \geq 350$$

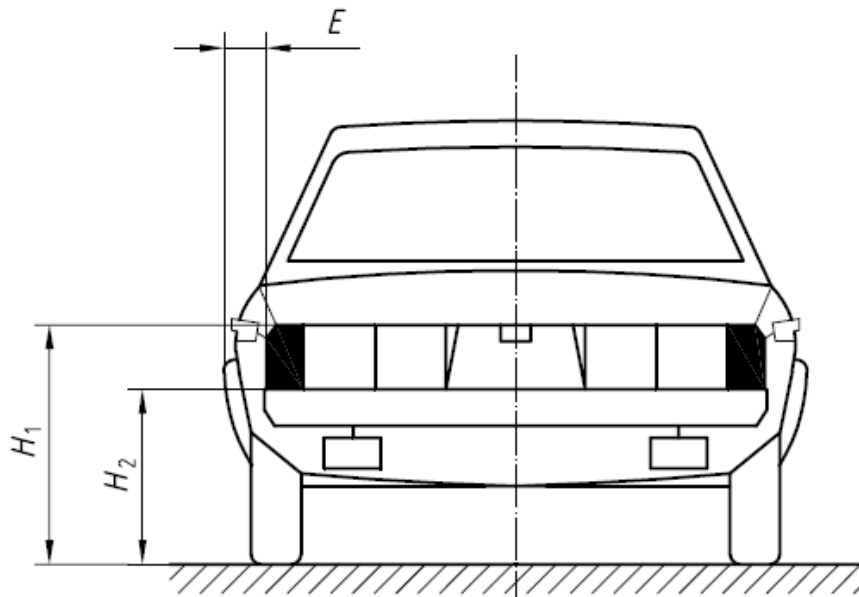
$$D \geq 600$$

$$E \leq 400$$

Lower Front Direction Indicator Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = amber	3	20	13%	87%			
$H_1 \leq 1,500\text{mm or } 2,100$	0	25	0%	100%	617.8	350.0	1,090.0
$H_2 \geq 350 \text{ mm}$	1	24	4%	96%	531.0	300.0	1,050.0
$E \leq 400 \text{ mm}$	4	21	16%	84%	395.9	50.0	1,700.0

Rear Direction Indicator Lamp



E.9.2 Application

For motor vehicles and trailers.

E.9.3 Number

Two or four (except for single lamp).

E.9.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure)}$$

$$H_2 \geq 350$$

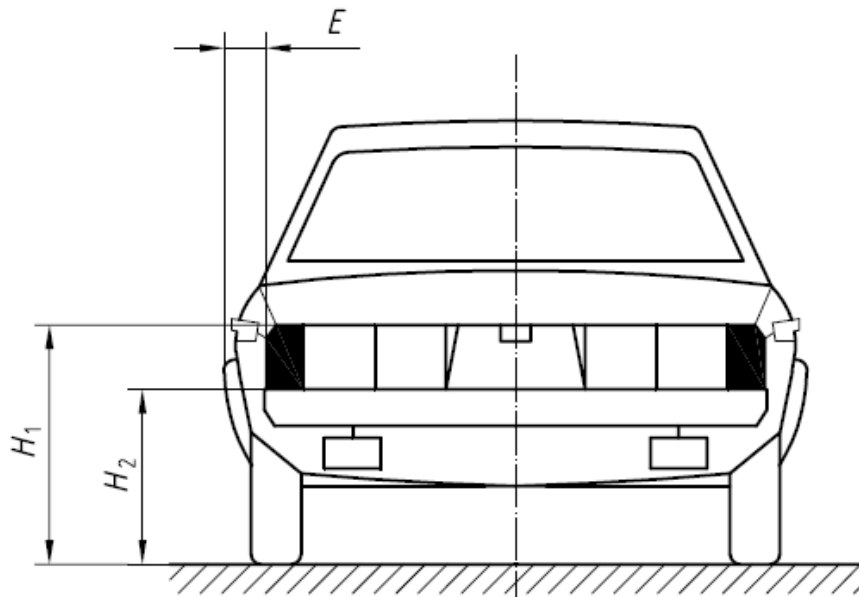
$$D \geq 600$$

$$E \leq 400$$

Upper Rear Direction Indicator Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = amber	6	16	27%	73%			
$H_1 \leq 1,500\text{mm or } 2,100$	1	25	4%	96%	1,018.3	250.0	1,520.0
$H_2 \geq 350 \text{ mm}$	1	25	4%	96%	883.9	210.0	1,310.0
$D \geq 600 \text{ mm}$	1	25	4%	96%	1,162.7	400.0	1,660.0
$E \leq 400 \text{ mm}$	1	18	5%	95%	289.2	40.0	1,460.0

Rear Direction Indicator Lamp



E.9.2 Application

For motor vehicles and trailers.

E.9.3 Number

Two or four (except for single lamp).

E.9.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure)}$$

$$H_2 \geq 350$$

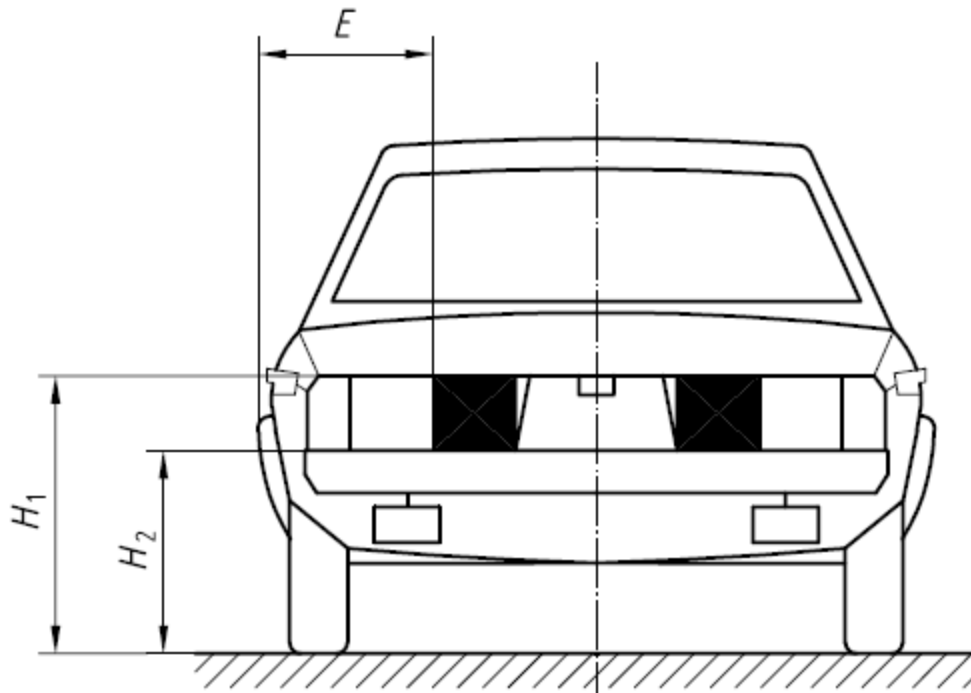
$$D \geq 600$$

$$E \leq 400$$

Lower Rear Direction Indicator Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = amber	3	8	27%	73%			
H1 ≤ 1,500mm or 2,100	0	12	0%	100%	661.7	530.0	980.0
H2 ≥ 350 mm	0	12	0%	100%	584.2	420.0	840.0
D ≥ 600 mm	0	12	0%	100%	1,267.9	870.0	1,500.0
E ≤ 400 mm	0	3	0%	100%	419.4	125.0	1,730.0

Stop Lamp



E.10.2 Application

For motor vehicles and trailers.

E.10.3 Number

Two or four (except for single lamp).

E.10.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure is...)}$$

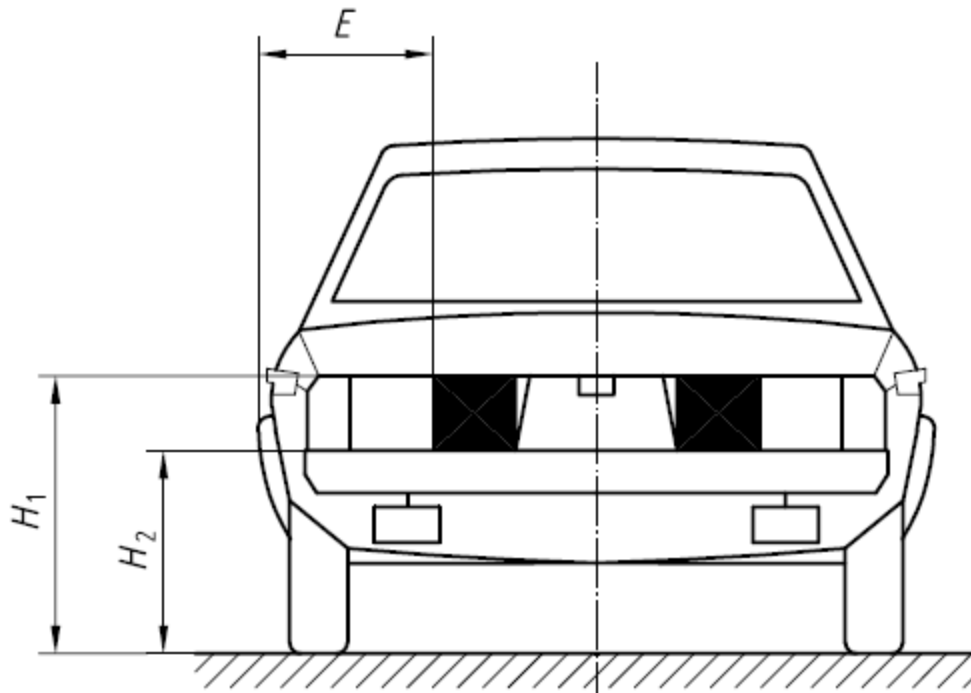
$$H_2 \geq 350$$

$$E \leq 400$$

Upper Stop Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = red	1	28	3%	97%			
$H_1 \leq 1,500\text{mm or } 2,100$	0	30	0%	100%	1,043.2	300.0	1,480.0
$H_2 \geq 350 \text{ mm}$	3	28	10%	90%	922.1	250.0	1,310.0
$E \leq 400 \text{ mm}$	0	27	0%	100%	178.0	30.0	370.0

Stop Lamp



E.10.2 Application

For motor vehicles and trailers.

E.10.3 Number

Two or four (except for single lamp).

E.10.4 Dimensions (in millimetres)

$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure is...)}$$

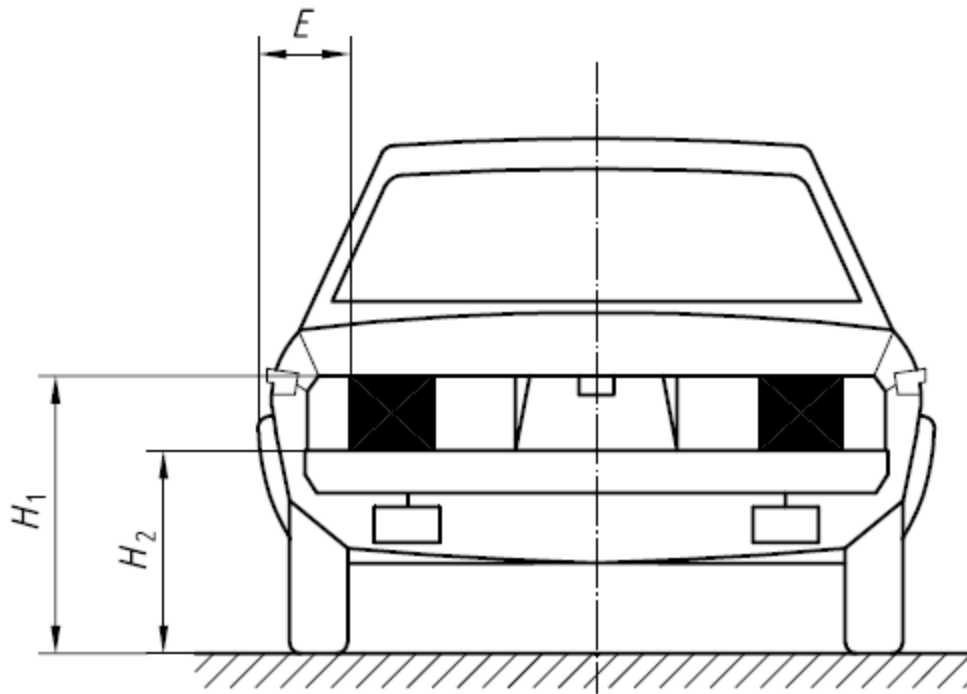
$$H_2 \geq 350$$

$$E \leq 400$$

Lower Stop Lamp

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = red	1	10	9%	91%			
H1 ≤ 1,500mm or 2,100	0	14	0%	100%	717.1	495.0	980.0
H2 ≥ 350 mm	0	13	0%	100%	598.8	420.0	840.0
E ≤ 400 mm	1	9	10%	90%	276.5	70.0	500.0

Rear Position Lamp



E.12.2 Application

For motor vehicles and trailers.

E.12.3 Number

Two or four (except for single lamp).

E.12.4 Dimensions (in millimetres)

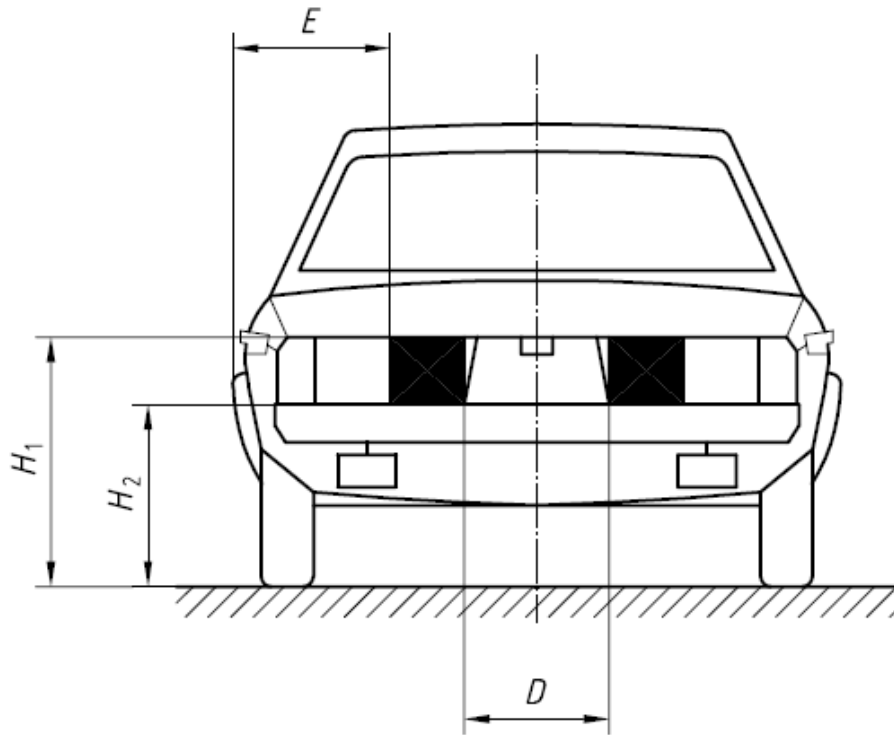
$$H_1 \leq 1\,500 \text{ (or } 2\,100 \text{ if the structure p)}$$

$$H_2 \geq 350$$

$$E \leq 400$$

- Rear position lamp is used interchangeably with stop lamp

Reversing Lamp



E.14.2 Application

For motor vehicles and trailers.

E.14.3 Number

One or two.

E.14.4 Dimensions (in millimetres)

$$H_1 \leq 1\,200$$

$$H_2 \geq 250$$

D : unspecified

E : unspecified

	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Color = white	9	20	31%	69%			
$H_1 \leq 1,200$ mm	9	18	33%	67%	937.4	490.0	1,520.0
$H_2 \geq 250$ mm	0	27	0%	100%	819.1	355.0	1,310.0

Rear Registration Plate Lamp

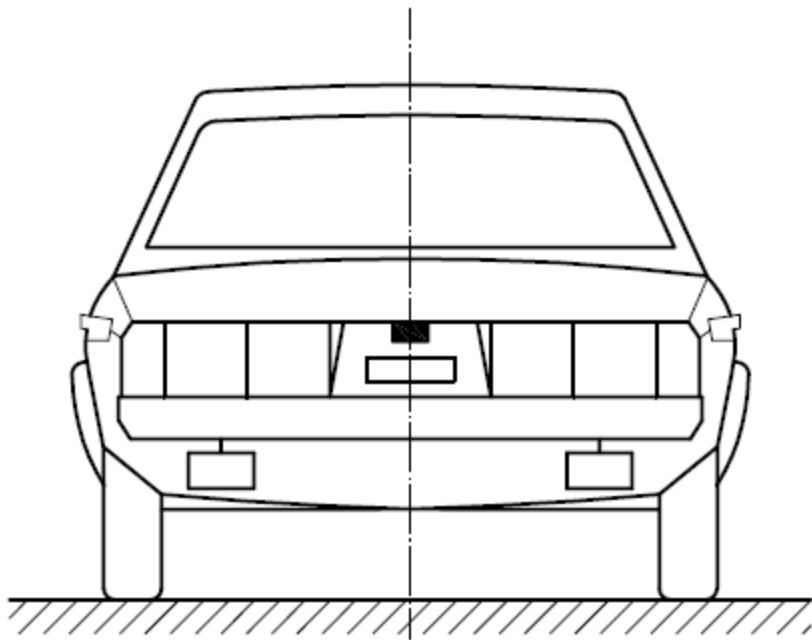


Figure E.15 — Rear registration plate lamp

E.15.2 Application

For motor vehicles and trailers.

E.15.3 Number

One.

E.15.4 Dimensions

Width, height and length shall be such that the device illuminates the area of the registration plate.

E.15.5 Position

The manufacturer of the device shall specify the position in which the device is to be fitted, in relation to the space for the registration plate. The device shall be so designed that no light is emitted directly towards the rear, with the exception of red light if the device is combined or grouped with a rear lamp.

	Fail	Pass	Fail (%)	Pass (%)
Color = white	1	18	5%	95%
Number = one	8	13	38%	62%
Existent?	17	27	39%	61%

Rear Retro-reflector (non-triangular)

E.16.2 Application

For motor vehicles only.

E.16.3 Number

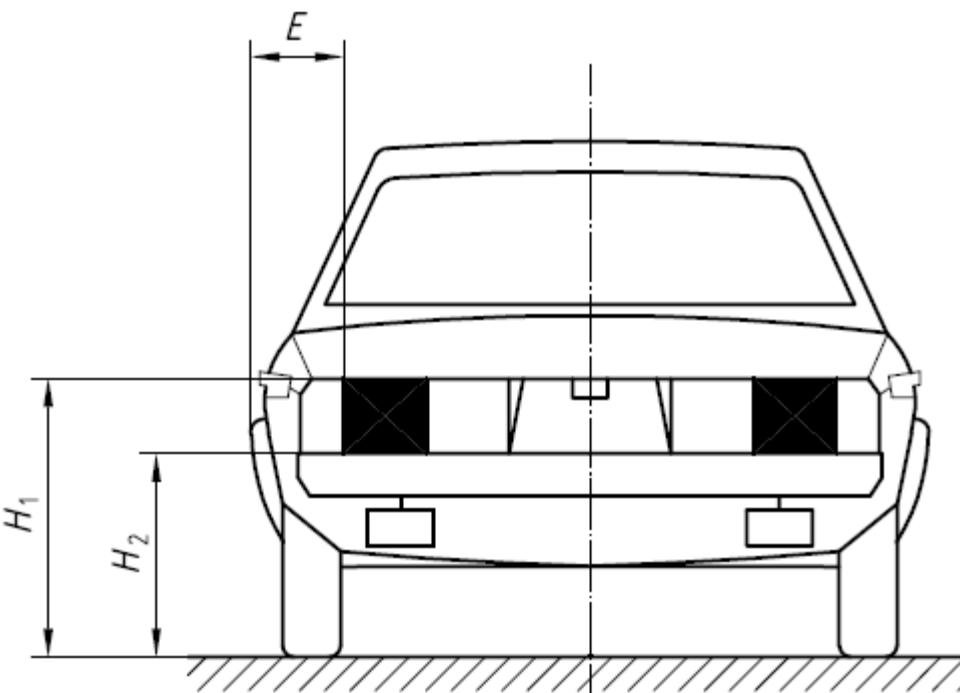
Two — however, additional retro-reflecting devices and materials are permitted, provided they do not impair the effectiveness of other lighting and light signalling devices.

E.16.4 Dimensions (in millimetres)

$$H_1 \leq 900 \text{ (or 1 500 if the shape of the l)}$$

$$H_2 \geq 250$$

$$E \leq 400^2)$$



	Fail	Pass	Fail (%)	Pass (%)	Mean (mm)	Minimum (mm)	Maximum (mm)
Existing?	7	7	50%	50%			
$H_1 \leq 900$ mm	0	7	0%	100%	723.6	550.0	840.0
$H_2 \geq 250$ mm	0	7	0%	100%	665.4	422.5	800.0
$E \leq 400$ mm	0	7	0%	100%	334.3	230.0	400.0

End-outline marker lamp (front and rear)

E.21.2 Application

For motor vehicles, excluding passenger cars, and for trailers and semi-trailers.

E.21.3 Number

Two front, two rear.

E.21.4 Dimensions

E.21.4.1 Height

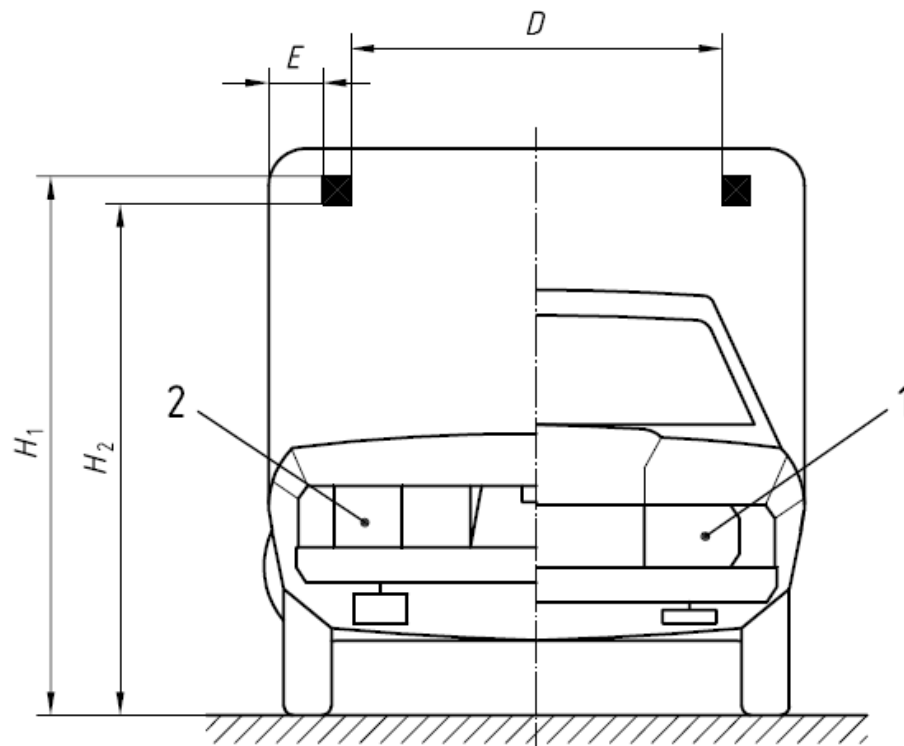
E.21.4.1.1 Front

E.21.4.1.1.1 Motor vehicles

The horizontal plane tangential to the upper edge of the apparent surface in the direction of the reference axis of the device shall not be lower than the horizontal plane tangential to the upper edge of the transparent zone of the wind-screen.

E.21.4.1.2 Rear

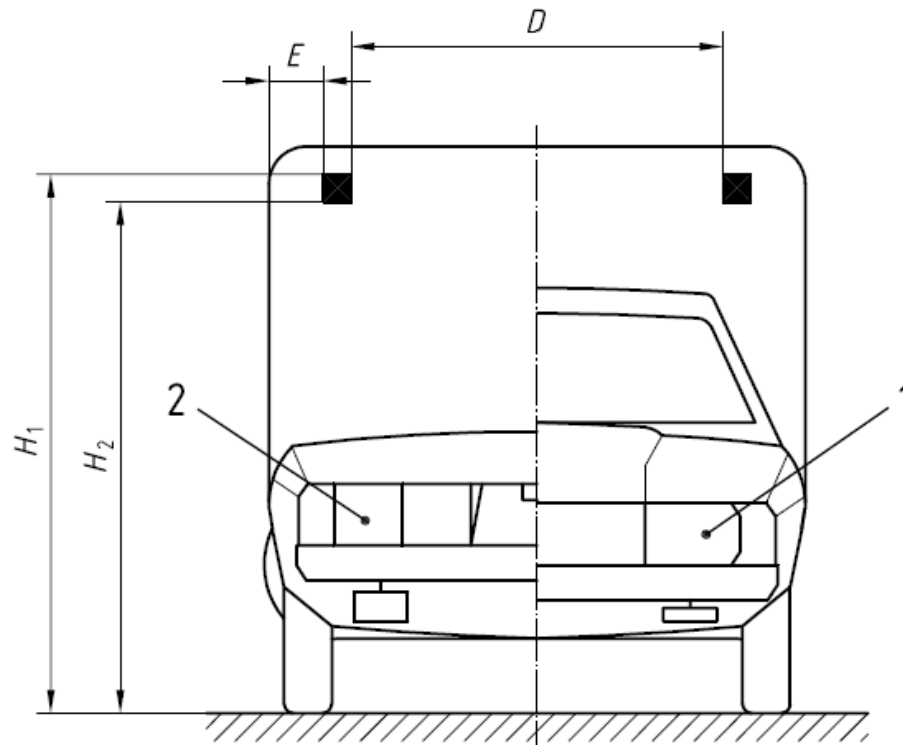
The maximum height shall be compatible with the requirements relating to the width, design and operational requirements of the vehicle and to the symmetry of the lamps.



Key

- 1 Front
- 2 Rear

End-outline marker lamp (front and rear)

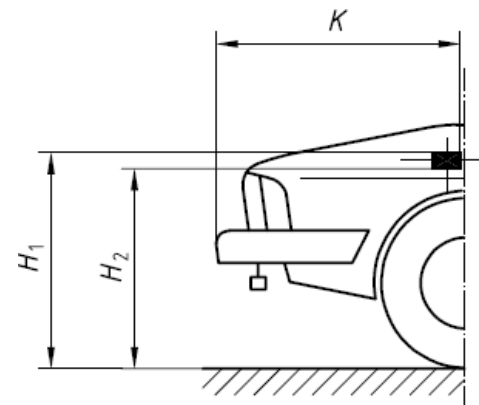


- checked only front colored riding lights/marker lamps

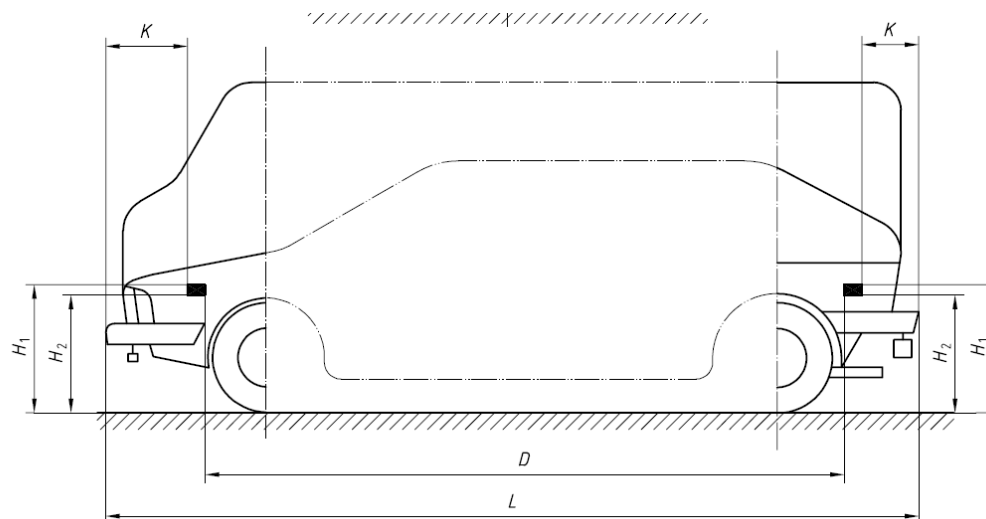
	Fail	Pass	Fail (%)	Pass (%)
Existing?	31	3	91%	9%
$E \leq 400$ mm	0	3	0%	100%

OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Side Direction Indicator Lamp

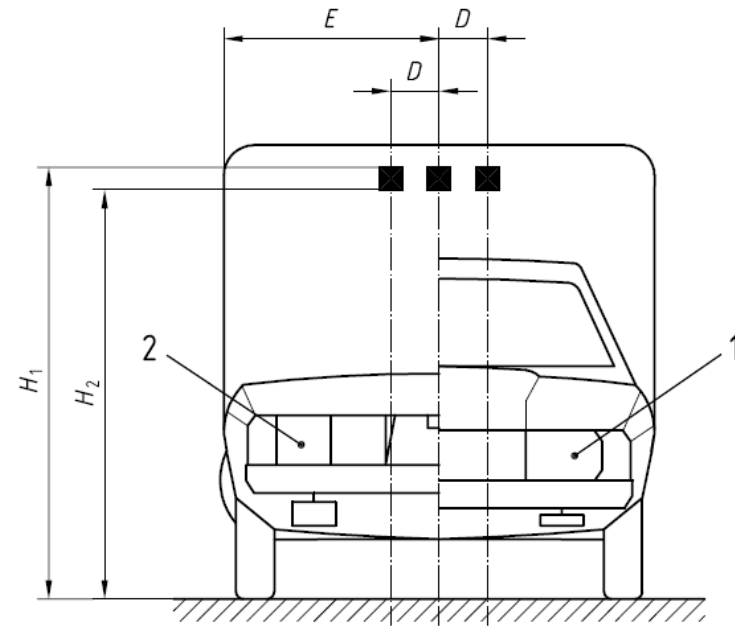


Side Retro-reflector

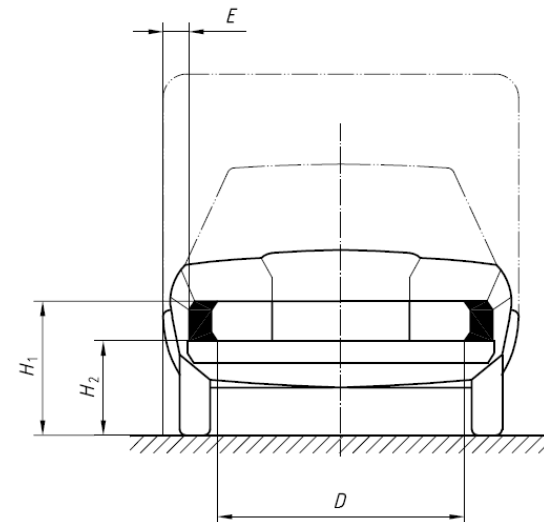


OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Identification lamp (front and rear)

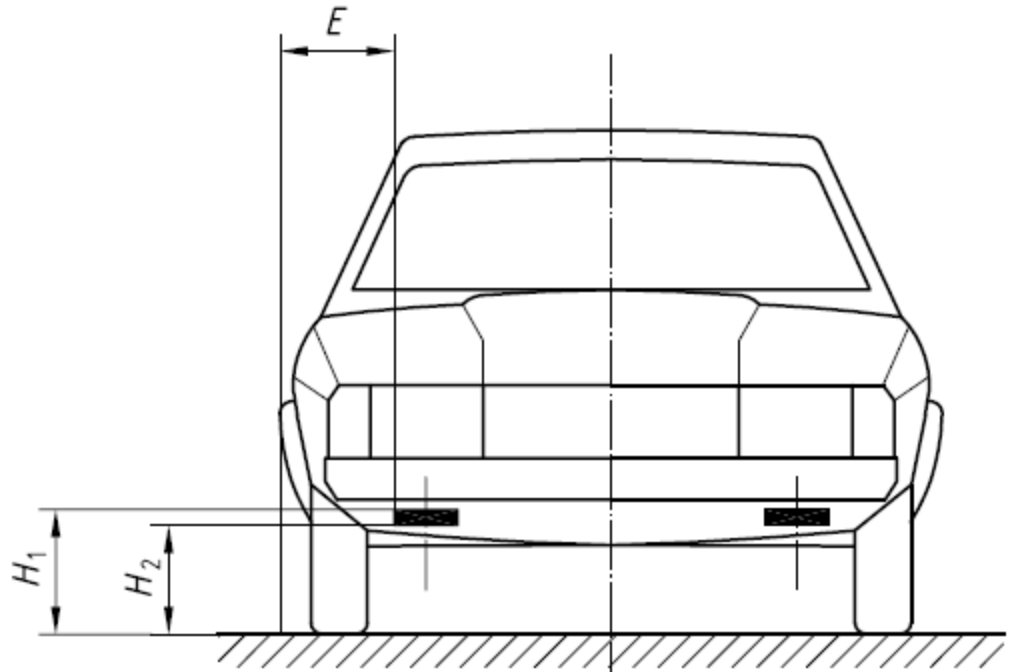


Front retro-reflector (non-triangular)



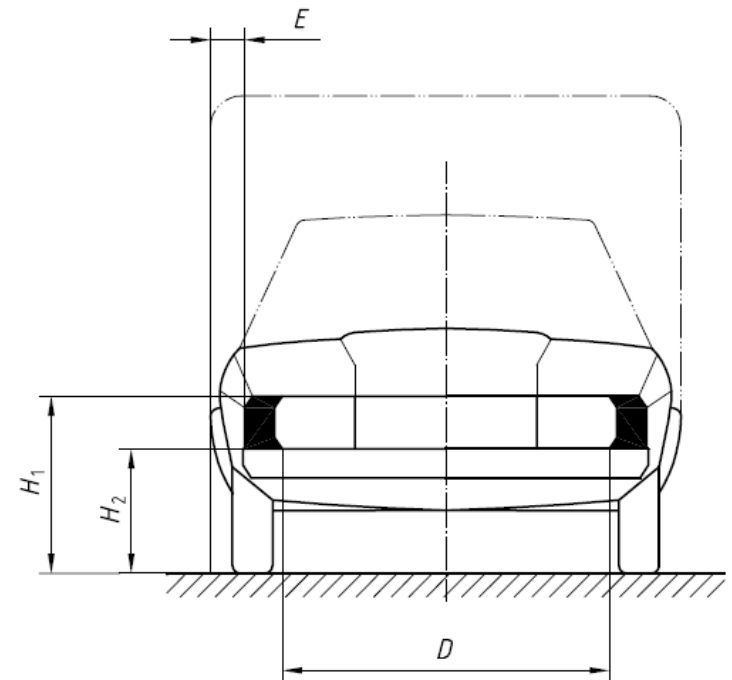
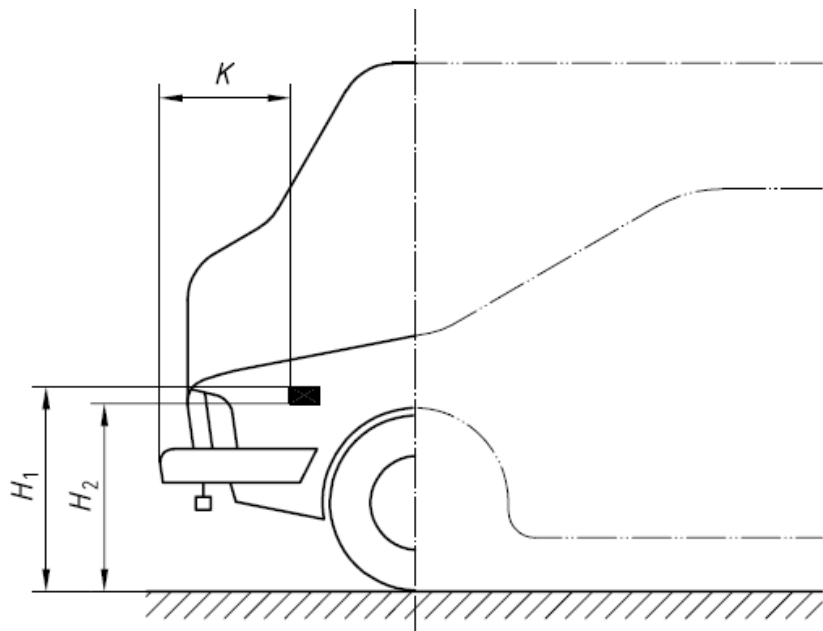
OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Daytime Running Lamp



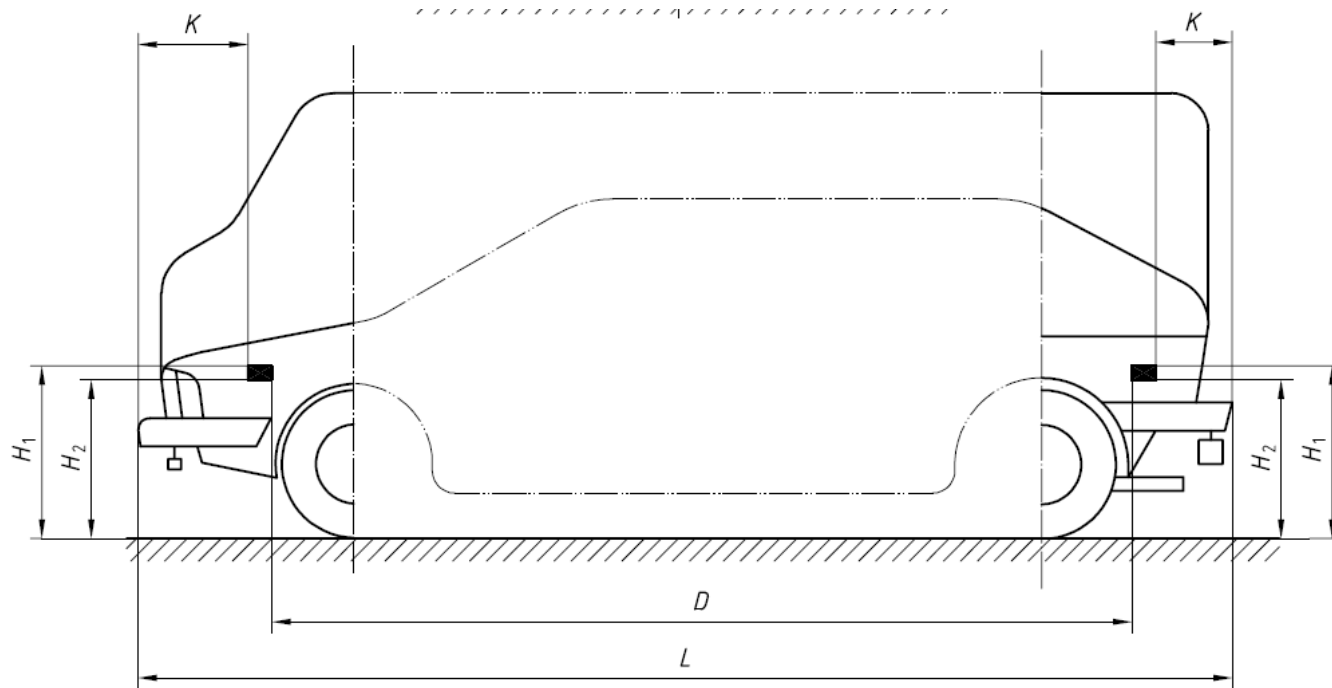
OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Cornering Lamp



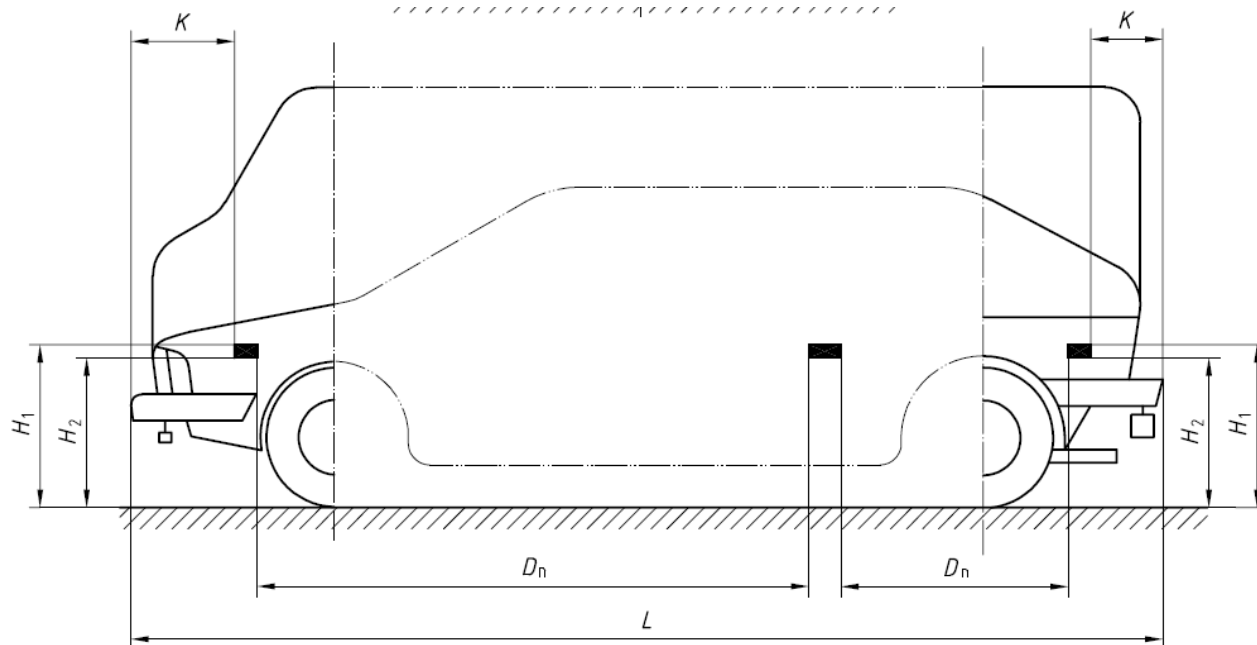
OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Side Marker Lamp (Front and Rear)



OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Side Retro-reflector (intermediate)



OTHER LIGHTS AND LIGHT SIGNALLING DEVICES (as per ISO 303)

Side Marker Lamp (intermediate)

