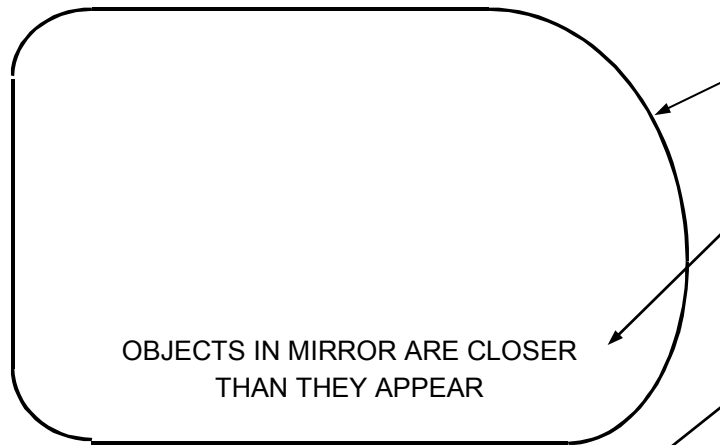


Production Tolerances for Car Mirrors

Spheric type:



Profile acc. to max. gauge
all around $+0 / -0,4$ mm
(smaller Tolerances on request !)

Letters in Laser inscription
on coated side
line thickness $0,4 \pm 0,1$ mm
or acc. to drawing

spheric radius :
see Index BLOG\VERZ0013-1 !

measuring method:
acc. to EG-Standard 2003/97/EG
or US-Standard FMVSS 571.111

spheric version



flat version

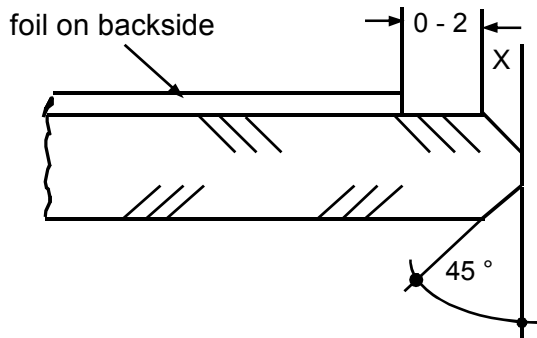


Glass thickness: $2,0 (+0 / -0,2)$ mm

$3,0 (+0 / -0,2)$ mm

US - Glass thickness 2,2 up to 2,4 mm

3,1 up to 3,3 mm



foil on backside
distance foil edge - edge seaming: 0 up to 2 mm

All measurements in mm

Edge treatments:

- cut edge
- chamfered edge - seamed with $0,6 \pm 0,4$ mm. No "knife edge" allowed with both side chamfered - min. thickness of 0,4 mm required.
- ground edge, flat edge with both sides chamfered with $X \pm 0,3 \times 0,45^\circ$ within the individual mirror : $X \pm 0,2$ mm

aspheric curve:

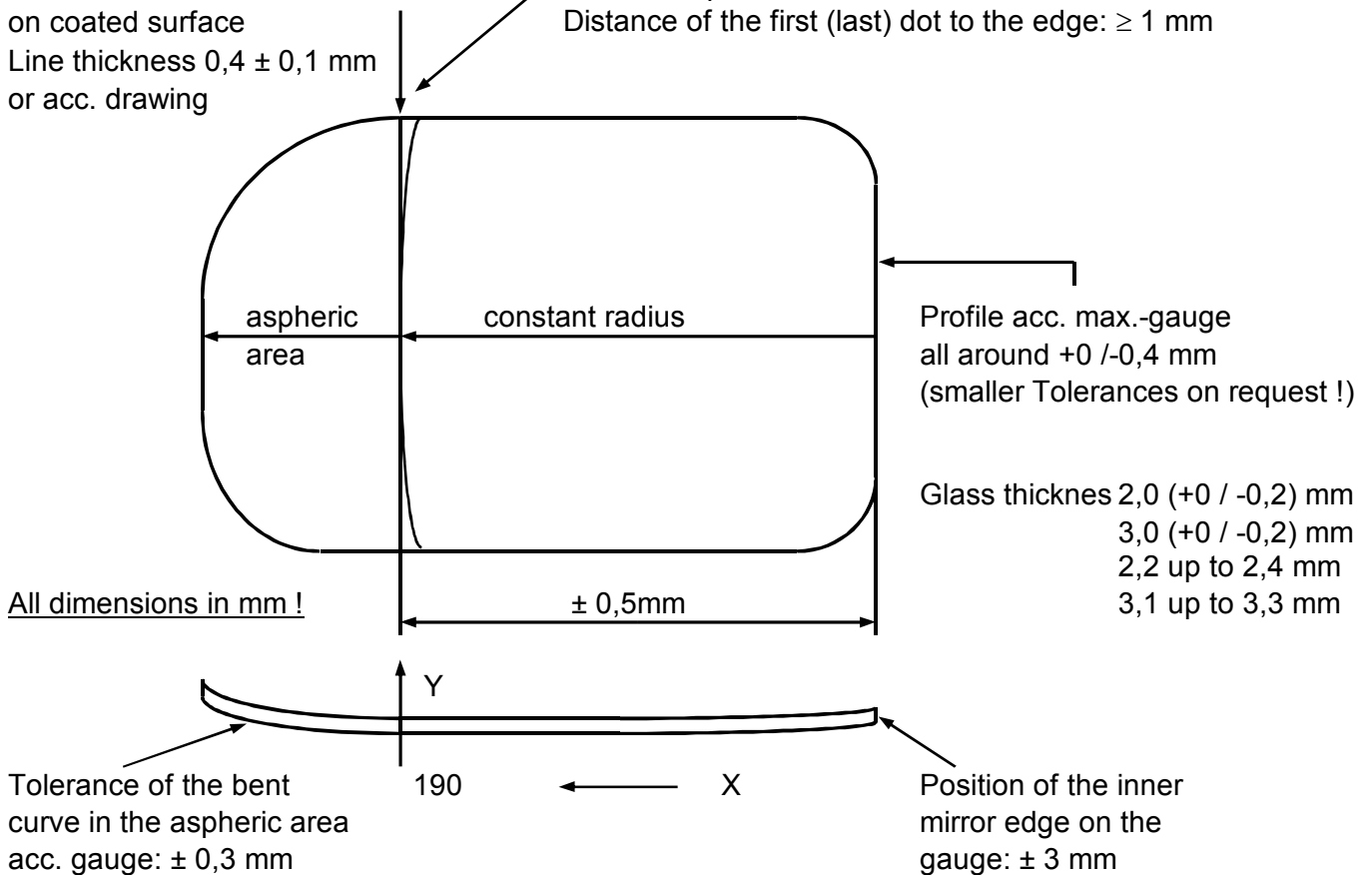
- ground edge, flat edge with both sides chamfered - seam with $X \pm 0,4 \times 0,45^\circ$
- Edge sealed (only on chamfered or ground edges)

Production Tolerances for Car Mirrors

Aspheric type:

Partition line, laser marked,
on coated surface
Line thickness $0,4 \pm 0,1$ mm
or acc. drawing

For dotted partition line:
Distance of the first (last) dot to the edge: ≥ 1 mm



Calculation of the aspheric curve:

Fixed: $R_c = 2000; 1400; 1250 \dots^*$
 $a = 190$
 $K = 2,2 \times 10^{-5}$

$$y = R_c - \sqrt{R_c^2 - x^2} + K(x-a)^3$$

Reflectivity: Silvered mirror, $R_A : > 90\%$
Cr-front surface, $R_A : > 60\%$
Cr-rear surface, $R_A : > 50\%$

TEFEF-blue, rear surface, $R_A : 45 - 54\%$
Blue mirror, front surface, $R_A : 43 - 52\%$
Titanium-chrome, $R_A : 42 - 48\%$

'a' and 'b' - limits (colour) for TEREf-blue:

$a =$ from $-11,0$ up to $-3,9$
 $b =$ from $-25,5$ up to $-15,0$

'a' and 'b' - limits (colour) for Blue mirror:

$a =$ from $-4,0$ up to $-10,0$
 $b =$ from $-4,0$ up to $-18,0$

Paint thickness for Silvered and TEREf-Blue mirrors :

Base paint : $35 \pm 10\mu\text{m}$
Top paint : $35 \pm 10\mu\text{m}$

* see Index BLOG\VERZ0013-1 !