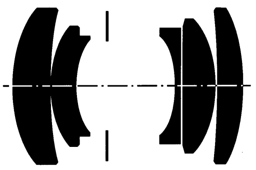
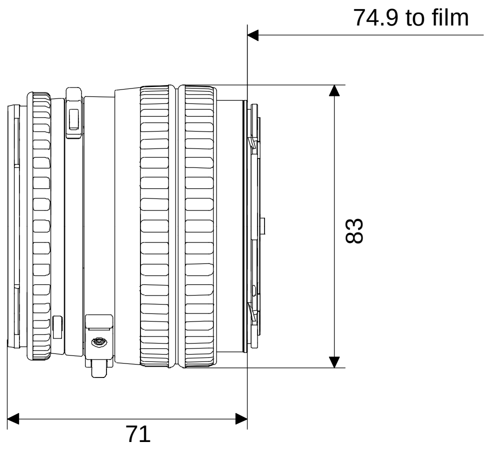
Planar® T* 3,5/100 CFi





HASSELBLAD

The **Planar**® T* 3,5/100 CFi lens is a very special lens. It is not just a standard **Planar**® lens with 25% more focal length. It is optimized to deliver virtually zero distortion and at the same time extremely well defined image details – sharpness – over the entire frame, and all this even at full aperture. A lens with this quality could only be developed with Carl Zeiss' extensive experience in microdocumentation and aerial mapping and surveying. So the **Planar**® T* 3,5/100 CFi lens is the first choice in optics for all photographers who combine a Hasselblad camera and a recent high resolution film for demanding aerial photography with its fast shutter speeds and hence wide open apertures. The **Planar**® T* 3,5/100 CFi lens is also an indispensible tool for all applications which require an exact reproduction of the geometry of the subject.
It is, therefore, recommended as a standard optical tool for photography where the demands for detail recognition from corner to corner are extremely high, such as architectural work, aerial surveying, documentation, industrial and scientific photography. For reproducing valuable paintings and similar artwork with sizes larger than one square meter, the **Planar**® T* 3,5/100 CFi lens should be the no. 1 lens choice. (For artwork sizes smaller than one square meter, the Carl Zeiss **Makro-Planar**® T* 4/120 CFi lens is the lens of choice.) Every Hasselblad photographer who is really serious about sharpness can't do without this lens!
Preferred use: architecture, documentation, and reproduction with no distortion, large products with important small details, general industrial, aerials shot wide open, digital photography

Cat. No. of lens	**10 22 17**
Number of elements	5
Number of groups	4
Max. aperture	f/3.5
Focal length	101.3 mm
Negative size	55 x 55 mm
Angular field	width 31°, height 31°, diagonal 42°
Min. aperture	22
Camera mount	CFi
Shutter	Prontor CFi 1s-1/500s, b, f
Filter connection	bayonett series 60
Focusing range	infinity to 0.9 m
Working distance (between mechanical front end of lens and subject)	0.7 m

Close limit field size	380 mm x 380 mm
Max. scale	1 : 6.9
Entrance pupil	
Position	37.7 mm behind the first lens vertex
Diameter	28.9 mm
Exit pupil	
Position	40.2 mm in front of the last lens vertex
Diameter	32.8 mm
Position of principal planes	
H	48.9 mm behind the first lens vertex
H'	27.6 mm in front of the last lens vertex
Back focal distance	73.7 mm
Distance between first and last lens vertex	58.7 mm
Weight	600 g

ZEISS

Performance data:

Planar® T* 3,5/100 CFi

Cat. No. 10 22 17

1. MTF Diagrams

The image height u - calculated from the image center - is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = M odulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the top of this page.

The lowest spatial frequency corresponds to the upper pair of curves, the highest spatial frequency to the lower pair. Above each graph, the f-number k is given for which the measurement was made. "White" light means that the measurement was made with a subject illumination having the approximate spectral distribution of daylight.

Unless otherwise indicated, the performance data refer to large object distances, for which normal photographic lenses are primarily used.

2. Relative illuminance

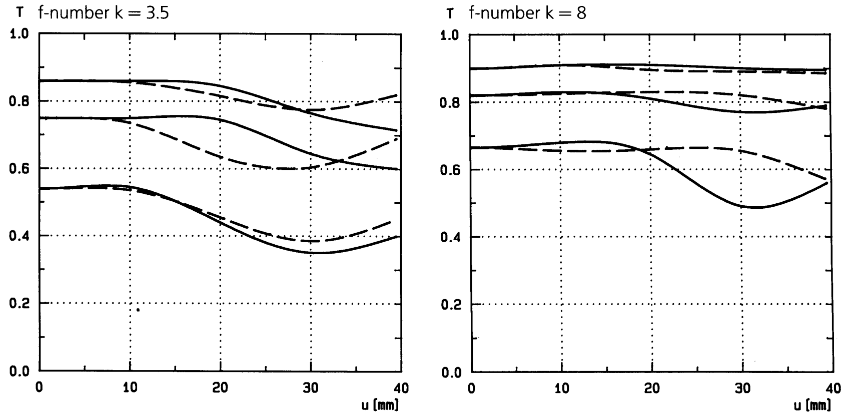
In this diagram the horizontal axis gives the image height u in mm and the vertical axis the relative illuminance E, both for full aperture and a moderately stopped-down lens. The values for E are determined taking into account vignetting and natural light decrease.

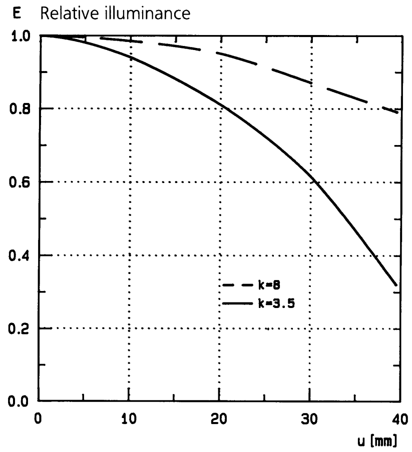
3. Distortion

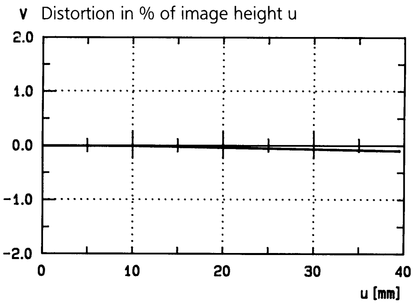
Here again the image height u is entered on the horizontal axis in mm. The vertical axis gives the distortion V in % of the relevant image height. A positive value for V means that the actual image point is further from the image center than with perfectly distortion-free imaging (pincushion distortion); a negative V indicates barrel distortion.

Modulation transfer T as a function of image height u. Slit orientation: tangential ——— sagittal ————

White light. Spatial frequencies R = 10, 20 and 40 cycles/mm







Subject to change.

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ZEISS

Carl Zeiss

Photoobjektive

D-73446 Oberkochen

Telephone (07364) 20-6175

Fax (07364) 20-4045

eMail: photo@zeiss.de

http://www.zeiss.de