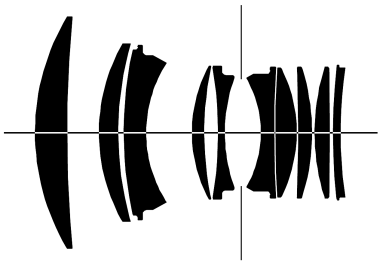
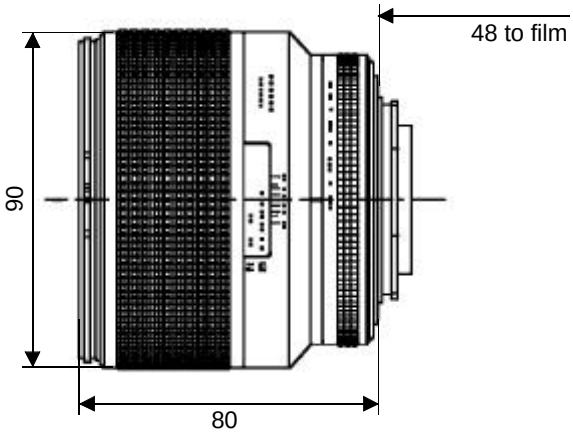
Planar® T* 1.4/85





CONTAX® N

High speed lenses with a somewhat longer focal length are among the most popular in top class 35 mm SLR camera systems.
For the Contax N system, Carl Zeiss has designed an all new Planar® 1,4/85 lens . This lens excels with very high image quality over the entire frame, clearly visible in the SLR viewfinder. The full speed of f/1.4 can be utilized not only for composing and focussing, but for actual picture taking, too. At f/1.4, the wide open aperture enables image compositions with selective focus, that is very pleasing for portraiture. As a novelty in such a fast lens, the high performance is maintained over the entire focusing range from infinity down to minimum object distance.

Carl Zeiss achieves this with a new internal focussing design IFD, which moves 6 of the 10 elements for focussing. This lens, with its large amount of optical glass, and attendant mass provides high stabilization during the exposure. Thus, significantly longer exposure times can be obtained handheld with good results. These exposure times, combined with a fully open aperture of f/1.4 and high speed films enable unusual images.

Preferred use: photojournalism, portraits under available light, kids, sports, theatrical and stage photography under available light, interiors without flash, dynamic subjects requiring fast shutter speeds.

Cat. No. of lens	**10 22 33**
Number of elements	10
Number of groups	9
Max. aperture	f/1.4
Focal length	83,0 mm
Negative size	24 x 36 mm
Angular field 2w*	width 25°; height 17°; diagonal 29°
Min. aperture	16
Camera mount	Contax N
Filter connection	M 82 x 0.75
Focussing range	infinity to 0.83 m
Working distance (between mechanical front end of lens and subject)	0.70 m

Close limit field size	221 mm x 335 mm
Max. scale	1 : 8.9
Entrance pupil*	
Position	99.7 mm behind the first lens vertex
Diameter	57.5 mm
Exit pupil*	
Position	28.3 mm in front of the last lens vertex
Diameter	50.9 mm
Position of principal planes*	
H	82.7 mm behind the first lens vertex
H'	43.7 mm in front of the last lens vertex
Back focal distance	40.6 mm
Distance between first and last lens vertex	85.1 mm
Weight	800 g

* at infinity

ZEISS

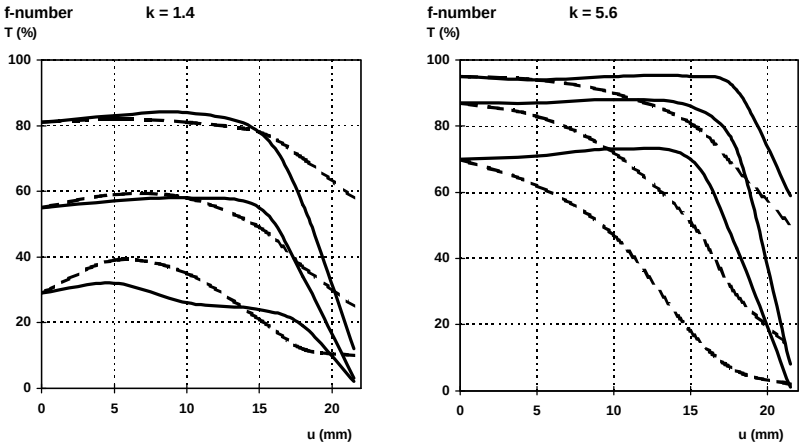
Performance data:
Planar® T* 1.4/85
Cat. No. 10 22 33

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 = Modulation 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.

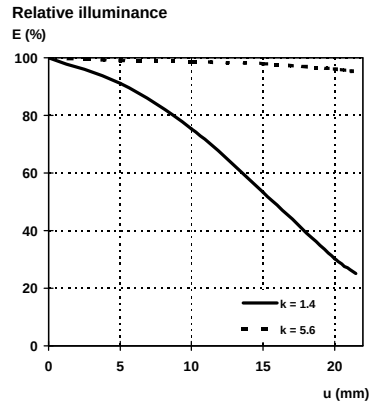
Modulation transfer T as a function of image height u.
White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

Slit orientation: — sag – – tan



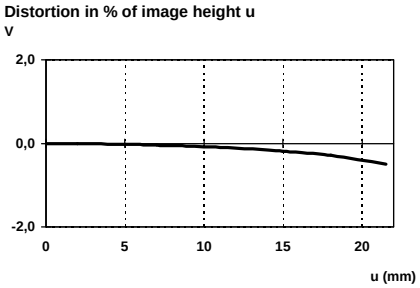
2. Relative illuminance

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.



Subject to change.
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