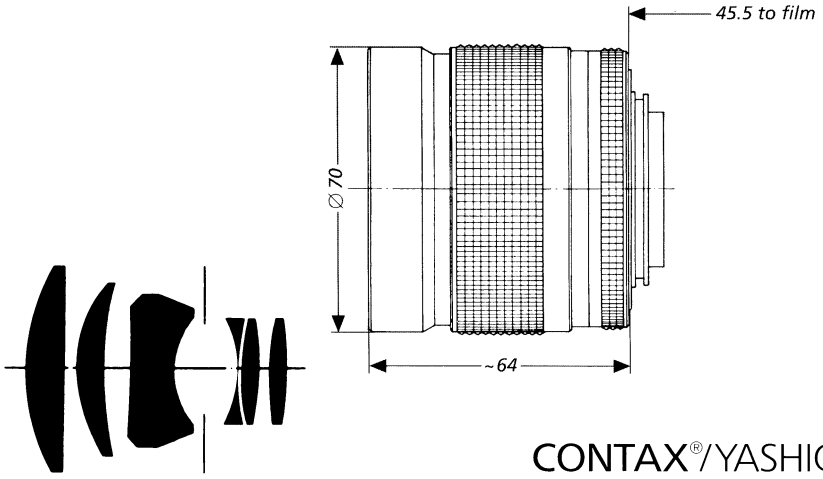
Planar® T* f/1.4 - 85 mm



CONTAX®/YASHICA® mount

The 85 mm **Planar**® T* f/1.4 lens ranks amongst the best high-speed lenses presently available for 35 mm reflex cameras. An outstanding feature is the excellent image quality even at full aperture. This feature results in special applications of the 85 mm **Planar**® T* f/1.4 lens for discerning amateur and professional photographers. Owing to the fully utilizable speed, this lens is especially suitable for stage photography. Sporting events, outdoors and indoors, in twilight and floodlights are tasks for which the press reporter requires or desires a focal length which is slightly longer than that of standard lenses due to the object distance or for reasons of perspective. As regards portraits, another advantage is that the depth of field is low with photographs taken with the diaphragm fully open. Thus an unsteady and disturbing background is avoided and the portrait stands out clearly against the surroundings.

Cat. No. of lens:	**10 21 45**
Number of elements:	6
Number of groups:	5
Max. aperture:	f/1.4
Focal length:	84.8 mm
Negative size:	24 x 36 mm
Angular field 2w:	28º 30' diagonal
Mount:	focusing mount with bayonet; TTL metering either at full aperture or in stopped-down position. Aperture priority/Shutter priority/ Automatic programs (Multi-Mode Operation)
Aperture scale:	1.4 - 2 - 2.8 - 4 - 5.6 - 8 - 11 - 16
Filter connection:	clip-on-filter, diameter 70 mm screw-in type, thread M 67 x 0.75

Weight:	approx. 595 g
Focusing range:	∞ to 1 m
Entrance pupil:	
Position:	68.7 mm behind the first lens vertex
Diameter:	58.4 mm
Exit pupil:	
Position:	23.1 mm in front of the last lens vertex
Diameter:	46.1 mm
Position of principal planes:	
H:	39.1 mm behind the first lens vertex
H':	45.0 mm in front of the last lens vertex
Back focal distance:	39.3 mm
Distance between first and last lens vertex:	65.8 mm

Performance data:

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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.

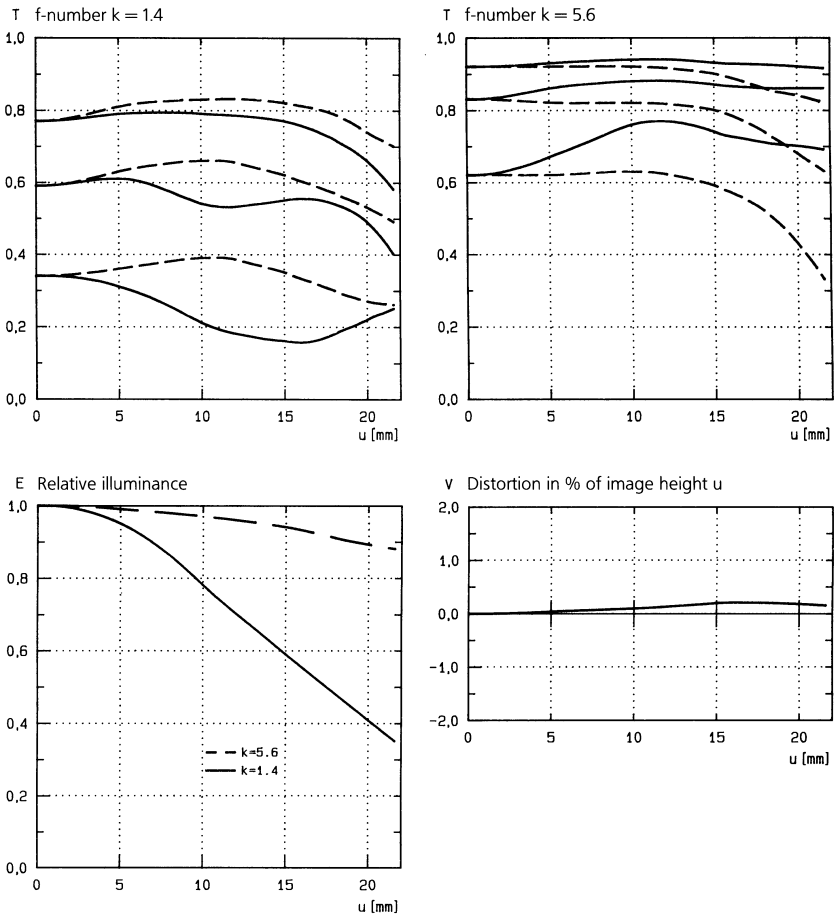
2. Relative illuminance

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



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