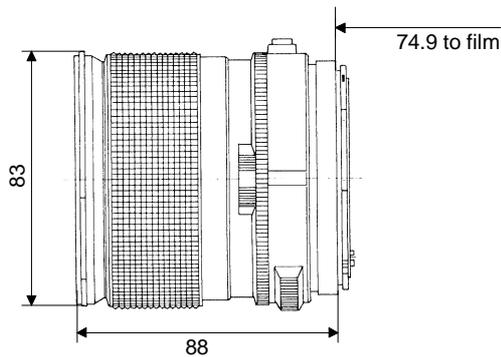
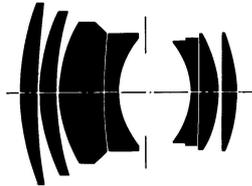


Planar® T* 2/110 FE



H A S S E L B L A D

The **Planar® T* 2/110** lens is the fastest Carl Zeiss lens in 6x6 medium format. Focusing with this fast lens and the Hasselblad Acute Matte focusing screen is stunningly fast and precise. With the **Planar® T* 2/110** lens the full aperture of 2 can, however, not only be used for focusing. The lens is so well corrected that the full aperture can be used for picture taking. This is a result of Carl Zeiss' experience as main supplier for super speed lenses to the motion picture industry. In still photography this high speed **Planar®** lens is an excellent tool for portrait photography. Combined with a modern 200 series Hasselblad camera featuring Hasselblad's quick return mirror, the photographer has unparalleled control of his portrait taking situation.

This is especially useful with executive portraits: They mostly ought to show some of the executive's environment with unwanted detail blurred out by a large aperture, need to have high technical quality to enable poster size enlargements, and have to be done under considerable time constraints, often in available light – the perfect task for the **Planar® T* 2/110** lens. Similar situations face the candid wedding photographer and the theatrical and stage performance photo specialist.

On top of that the **Planar® T* 2/100** lens is an impressive piece of "glass"!

Preferred use: Executive portraits under time pressure and available light conditions, editorial, people, travel, candid portraits on location, weddings, theatrical and stage photography

Cat. No. of lens	10 21 88		
Number of elements	7	Close limit field size	289 mm x 289 mm
Number of groups	5	Max. scale	1:5.2
Max. aperture	f/2	Entrance pupil	
Focal length	110.8 mm	Position	55.2 mm behind the first lens vertex
Negative size	55 x 55 mm	Diameter	53.8 mm
Angular field	width 28°, height 28°, diagonal 2w 39°	Exit pupil	
Min. aperture	16	Position	39.0 mm in front of the last lens vertex
Camera mount	FE	Diameter	58.3 mm
Filter connection	B 77	Position of principal planes	
Focusing range	infinity to 0.8 m	H	60.6 mm behind the first lens vertex
Working distance (between mechanical front end of lens and subject)	0,6 m	H'	33.4 mm in front of the last lens vertex
		Back focal distance	77.5 mm
		Distance between first and last lens vertex	74.3 mm
		Weight	750 g



Performance data:

Planar[®] T* 2/110 FE

Cat. No. 10 21 88

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

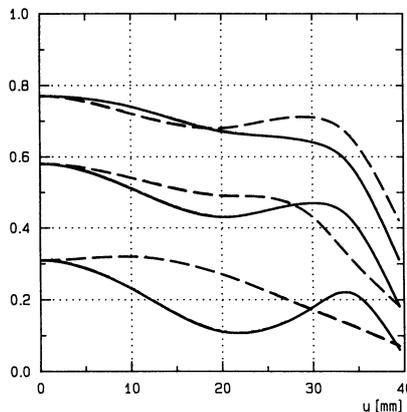
In this diagram the horizontal axis gives the image height u in mm and the vertical axis the relative illuminance E , both for full aperture and a moderately stopped-down lens. The values for E are determined taking into account vignetting and natural light decrease.

3. Distortion

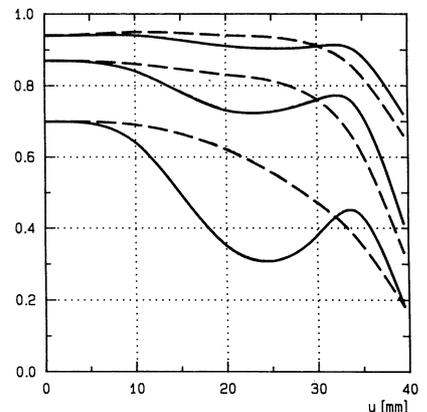
Here again the image height u is entered on the horizontal axis in mm. The vertical axis gives the distortion V in % of the relevant image height. A positive value for V means that the actual image point is further from the image center than with perfectly distortion-free imaging (pincushion distortion);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

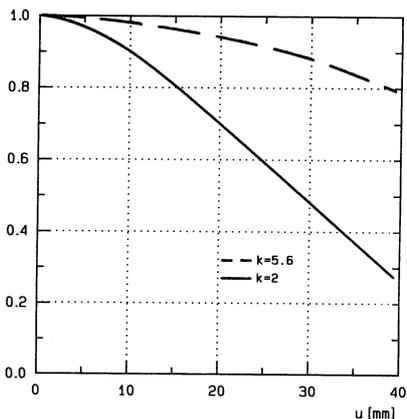
T f-number $k = 2$



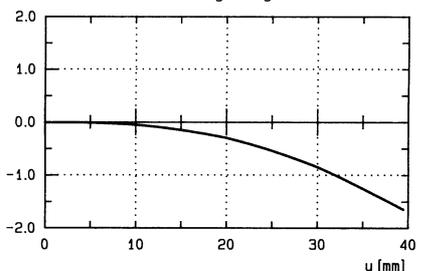
T f-number $k = 5.6$



E Relative illuminance



v Distortion in % of image height u



Subject to change.

Printed in Germany 25.05.2000



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