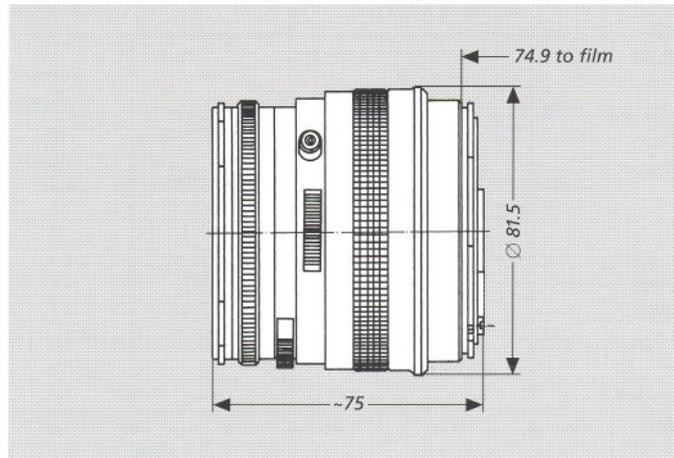
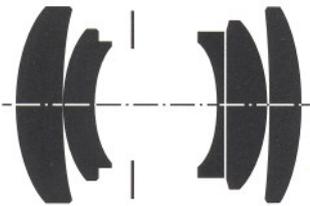


# Planar® T\* f/3.5 – 100 mm



H A S S E L B L A D



The 100 mm Planar® T\* f/3.5 lens provides outstanding image quality and freedom from distortion due to the

appropriate choice of speed and focal length. This lens with a Prontor CF shutter has been specially developed for the Hasselblad SLR camera system.

At full aperture and when stopped down moderately, the image quality of the 100 mm Planar® T\* f/3.5 lens is superior

to that of the 80 mm Planar® lens. For this reason, the lens is recommended as a standard lens for photography where the demands for detail recognition and brilliance are high.

The excellent distortion correction is also of great importance for architectural photography and for all applications which require an exact reproduction of the geometry of the object (e. g. for surveying).

<b>Cat. No. of lens:</b>	<b>10 21 66</b>	Focusing range:	$\infty$ to 0.9 m
Number of elements:	5	Reproduction ratio:	0 to 1:6.9
Number of groups:	4	Close-limit field size:	392 x 392 mm
Max. aperture:	f/3.5	Entrance pupil:	
Focal length:	100.3 mm	Position:	32.9 mm behind the first lens vertex
Negative size:	56.5 x 56.5 mm	Diameter:	28.7 mm
Angular field 2w:	diagonal 43°, side °	Exit pupil:	
Spectral range:	visible spectrum	Position:	42.7 mm in front of the last lens vertex
Aperture scale:	3.5 – 4 – 5.6 – 8 – 11 – 16 – 22	Diameter:	33.4 mm
Mount:	focusing mount with bayonet; coupling systems for automatic diaphragm function	Position of principal planes:	
Shutter:	Prontor CF	H:	42.2 mm behind the first lens vertex
Filter connection:	bayonet for Hasselblad series 60	H':	27.1 mm in front of the last lens vertex
Weight:	approx. 605 g	Back focal distance:	73.2 mm
		Distance between first and last lens vertex:	57.2 mm

**Planar**  
100 Years



# Performance data: Planar® T\* f/3.5 – 100 mm No. 102166

## 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/mm (line pairs) per mm given at the top of this page.

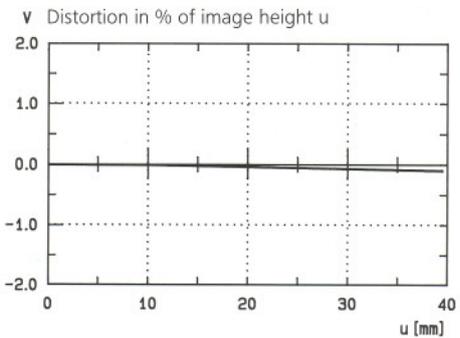
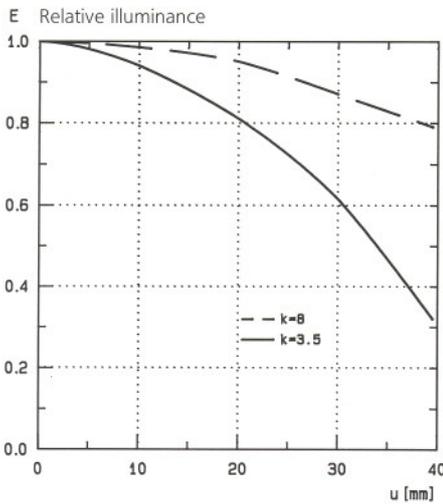
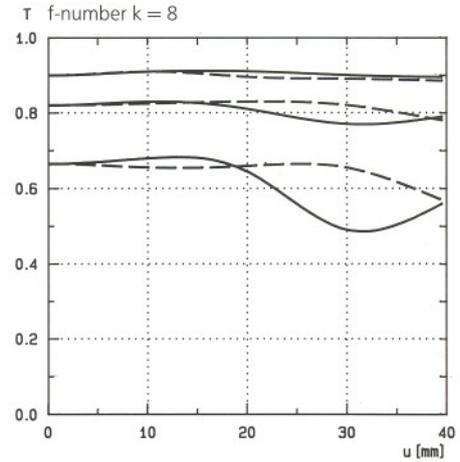
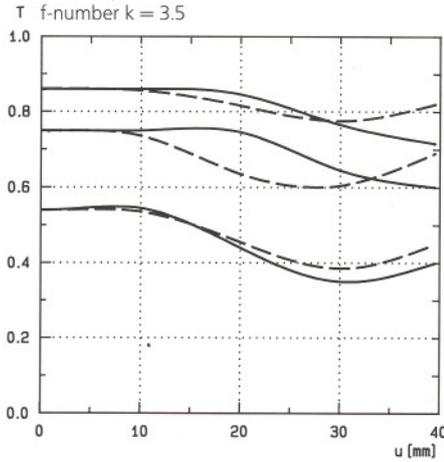
The lowest spatial frequency corresponds to the upper pair of curves, the highest spatial frequency to the lower pair. Above each graph, the  $f$ -number  $k$  is given for which the measurement was made. "White" light means that the measurement was made with a subject illumination having the approximate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

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



## 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.



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