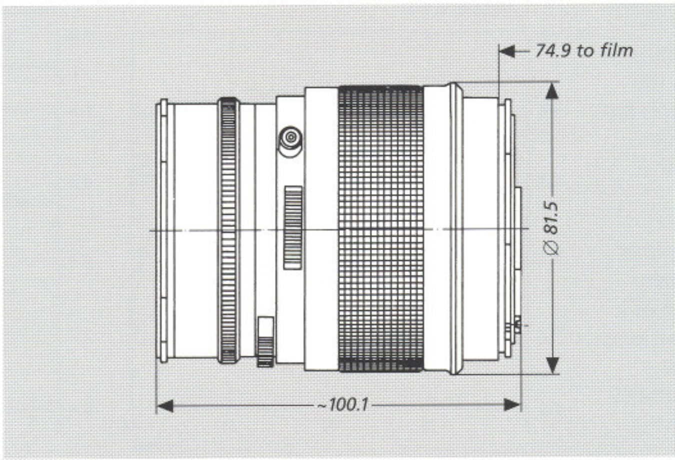
Sonnar® T* f/4 – 150 mm



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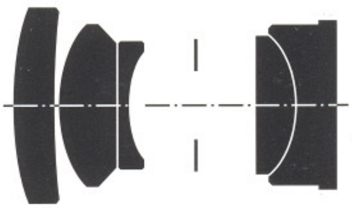

Many photographers consider the 150 mm **Sonnar**® T* f/4 lens the most important supplementary lens for the Hasselblad SLR camera system. Even at full aperture the lens covers the entire 6x6 cm format and produces pictures of excellent sharpness and brilliance. The compact design which is characteristic of all **Sonnar**® lenses offers excellent corner-to-corner illumination of the image field.
The 150 mm **Sonnar**® T* f/4 lens is above all suited for portraiture, press, sports, and stage photography. The high speed of this lens allows short exposure times and thus hand-held exposure also in unfavorable light conditions, e.g. on the stage or for documentary series in bad weather.

Cat. No. of lens:	**10 11 14**
Number of elements:	5
Number of groups:	3
Max. aperture:	f/4
Focal length:	151.2 mm
Negative size:	56.5 x 56.5 mm
Angular field 2w:	diagonal 29°, side 21°
Spectral range:	visible spectrum
Aperture scale:	4 – 5.6 – 8 – 11 – 16 – 22 – 32
Mount:	Prontor CF
Filter connection:	bayonet for Hasselblad series 60
Weight:	approx. 785 g
Focusing range:	∞ to 1.4 m
Reproduction ratio:	0 to 1:7.1
Close-limit field size:	400 x 400 mm
Entrance pupil:	
Position:	63.8 mm behind the first lens vertex
Diameter:	37.4 mm
Exit pupil:	
Position:	32.1 mm in front of the last lens vertex
Diameter:	28.0 mm
Position of principal planes:	
H:	11.6 mm behind the first lens vertex
H':	70.8 mm in front of the last lens vertex
Back focal distance:	80.4 mm
Distance between first and last lens vertex:	81.8 mm

Planar
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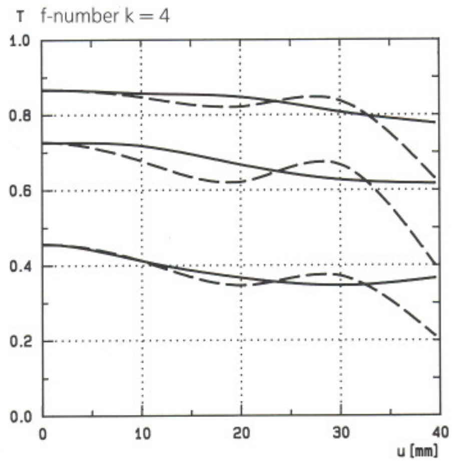
Performance data:
Sonnar® T* f/4 f = 150 mm
No. 101114

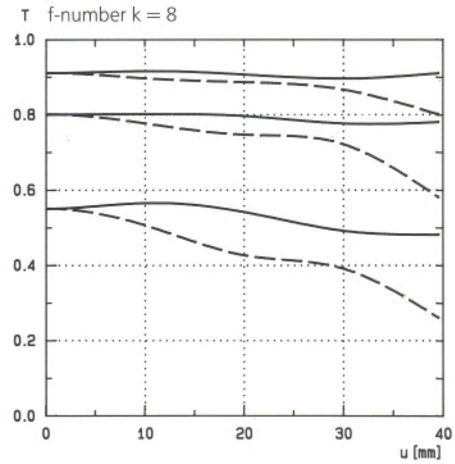
1. MTF Diagrams

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.

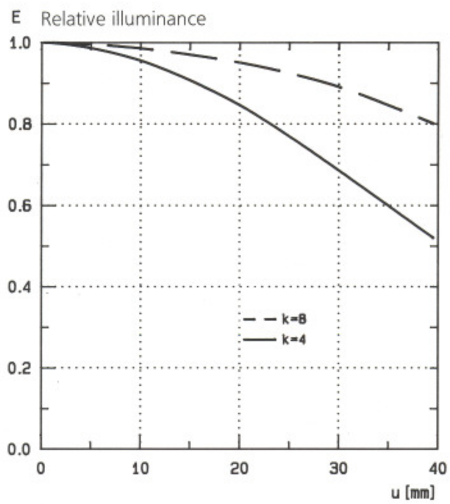
Modulation transfer T as a function of image height u. Slit orientation: tangential – – – sagittal ——
White light. Spatial frequencies R = 10, 20 and 40 cycles/mm





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.

Carl Zeiss
Photoobjektive
D-73446 Oberkochen
Tel.: (0 73 64) 20-61 75
Fax: (0 73 64) 20 40 45

For advice, please contact

Subject to change.

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