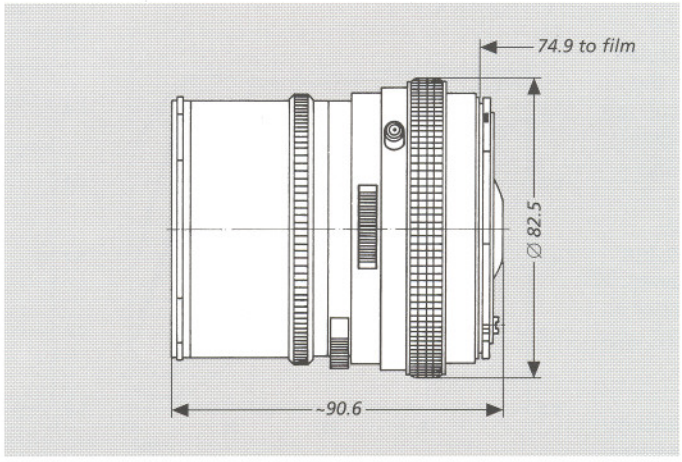
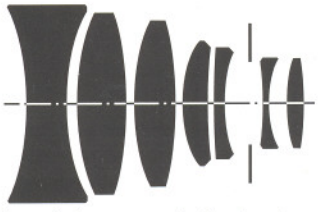
UV-Sonnar® f/4.3 – 105 mm



HASSELBLAD



The 105 mm UV-**Sonnar**® f/4.3 lens is a special design consisting of fluorite and quartz elements with excellent light transmission in the ultraviolet region of the spectrum. The lens also features extensive chromatic correction both for the ultraviolet and the visible ranges and is therefore suitable for use in both these ranges.

The UV-**Sonnar**® lens features high image quality and superb distortion correction throughout the wide range from UV to VIS. In UV photography, focusing can be performed using visible light without the need for further adjustment. Fields of application include technical and scientific photography, such as studies of textiles, printing forgeries and all types of material examination. A field of special interest is extraterrestrial UV photography.

Cat. No. of lens:	**10 42 09**	Close-limit field size:	815 x 815 mm
Number of elements:	7	Entrance pupil:	
Number of groups:	7	Position:	39.8 mm behind the first lens vertex
Max. aperture:	f/4.3	Diameter:	24.6 mm
Focal length:	107.5 mm	Exit pupil:	
Negative size:	56.5 x 56.5 mm	Position:	10.8 mm in front of the last lens vertex
Angular field 2w:	diagonal 40°, side 29°	Diameter:	21.1 mm
Spectral range:	215 – 700 nm	Position of principal planes:	
Aperture scale:	4.3 – 5.6 – 8 – 11 – 16 – 22 – 32	H:	20.8 mm behind the first lens vertex
Mount:	Prontor CF shutter	H':	26.8 mm in front of the last lens vertex
Filter connection:	bayonet for Hasselblad series 60	Back focal distance:	80.7 mm
Weight:	approx. 820 g	Distance between first and	
Focusing range:	∞ to 1.8 m	last lens vertex:	65.2 mm

ZEISS

Performance data:
UV-Sonnar® f/4.3 – 105 mm
No. 104209

1. MTF Diagrams

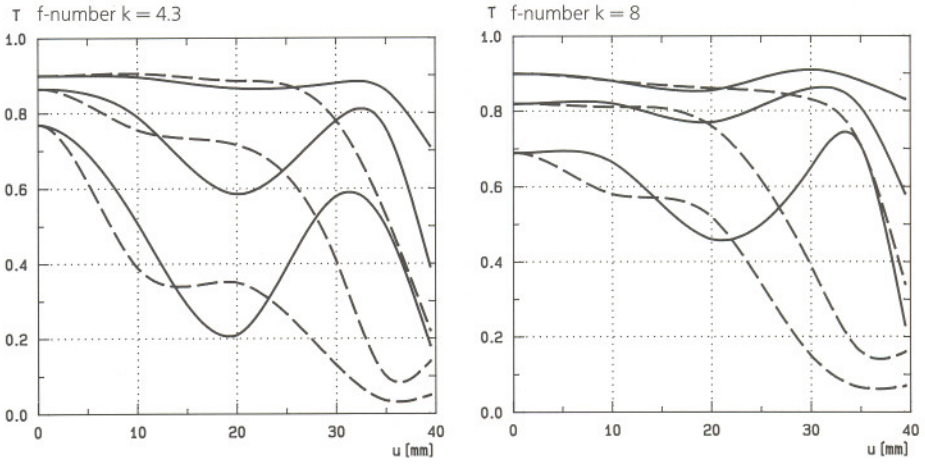
The image height u – calculated from the image center – is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = **M**odulation **T**ransfer **F**actor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given 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.

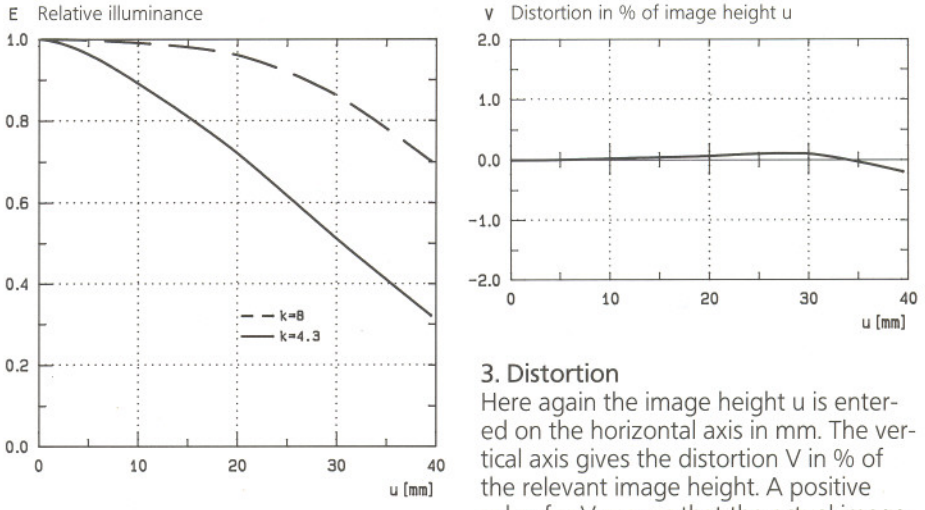
Unless otherwise indicated, the performance data refer to large object distances, for which normal photographic lenses are primarily used.

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 ———
λ = 436 nm. 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.

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.

H 10-42-09 e Printed in Germany AW-TS-VIII/94 Lo Printed on environment-friendly paper, bleached without the use of chlorine