Sonnar T*
f/5.6–250 mm
Cat. No. 101026

H A S S E L B L A D

ZEISS

Carl Zeiss
D-7082 Oberkochen
West Germany

Even at full aperture the image quality of this lens is excellent and cannot be improved any further by stopping down.

Despite its long focal length and the remarkable tele effect the lens is compact and handy and allows hand-held exposure.

Applications: portraiture, long-range, press, sports, and stage photography. For outdoor portraiture the narrow depth-of-focus range of the lens can be applied to separate the model from an unsteady background.

74,9 to film

ø 79

∿ 156
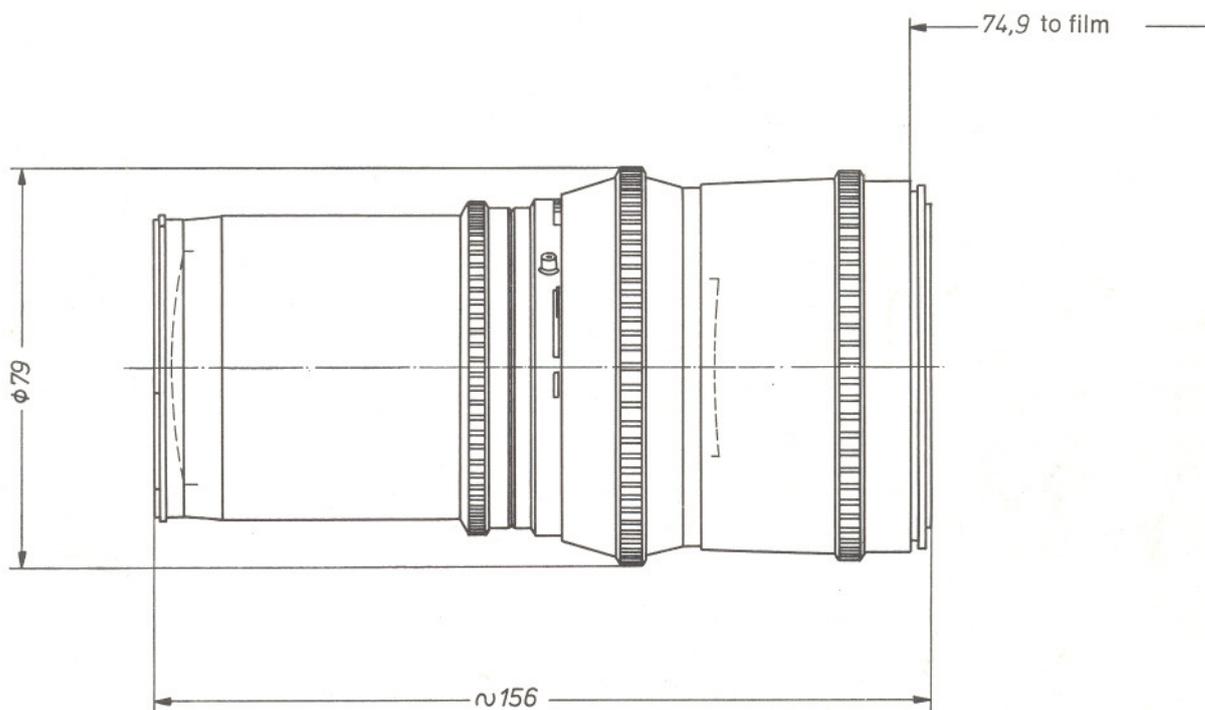
Number of lens elements:	4	
Number of components:	3	
f-number:	5.6	
Focal length:	248.4 mm	
Negative size:	56.5 x 56.5 mm	
Angular field 2w:	diagonal 18°, side 13°	
Spectral range:	visible spectrum	
f-stop scale:	5.6 - 8 - 11 - 16 - 22 - 32 - 45	
Mount:	Compur interchangeable reflex shutter size 0 with automatic iris diaphragm	
Filter mounting:	bayonet for Hasselblad series 50	
Weight:	approx. 930 g	

Distance range:	∞ to 2.5 m
Automatic depth-of-field indication for z = 0.06 mm *)	
Position of entrance pupil:	125.5 mm behind the first lens vertex
Diameter of entrance pupil:	44.8 mm
Position of exit pupil:	21.3 mm in front of the last lens vertex
Diameter of exit pupil:	25.6 mm
Position of principal plane H:	62.8 mm in front of the first lens vertex
Position of principal plane H′:	23.0 mm in front of the first lens vertex
Distance between first and last lens vertex:	105.5 mm

*) z = circle-of-confusion diameter

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 = 5.6
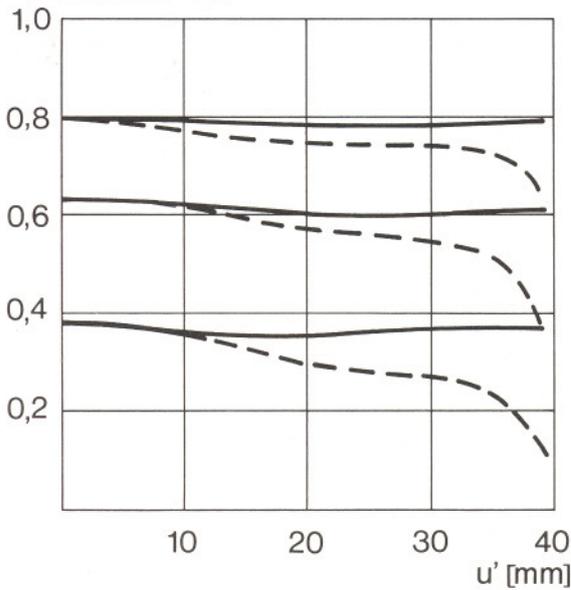
T   f-number k = 8

E   Relative illuminance

— k = 5,6
--- k = 8
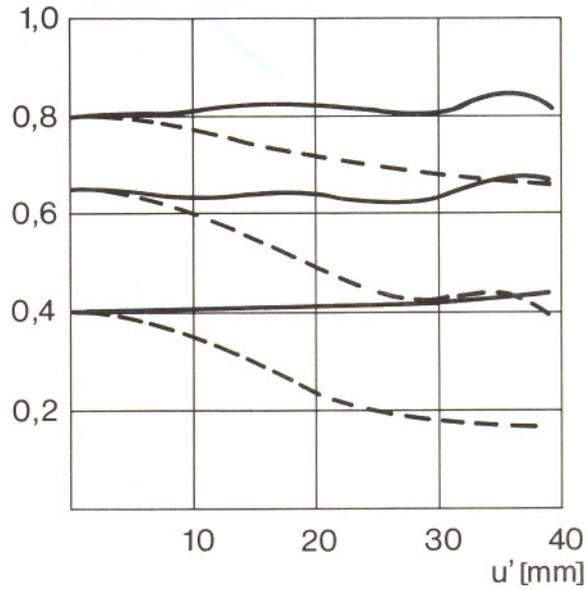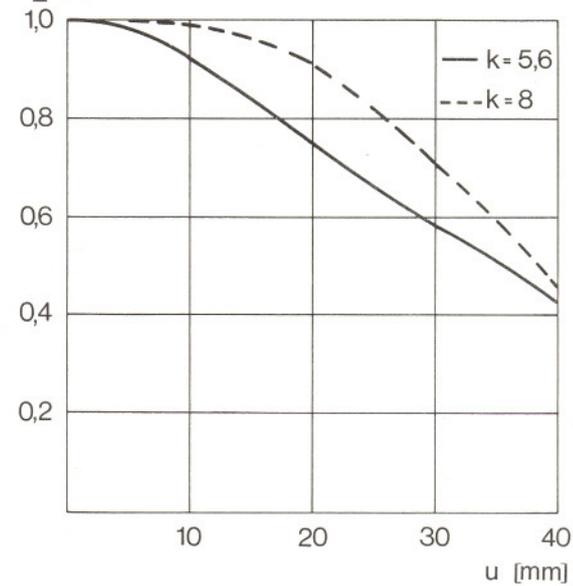
1. MTF Diagrams

The image height u – reckoned 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 right hand above the diagrams.

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.

V   Distortion in % of image height u
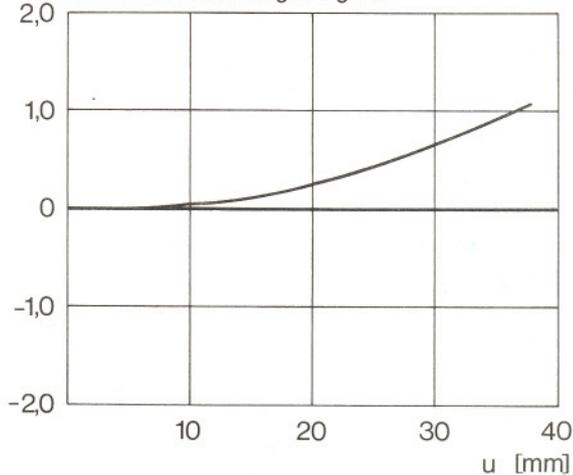
Subject to technical amendment