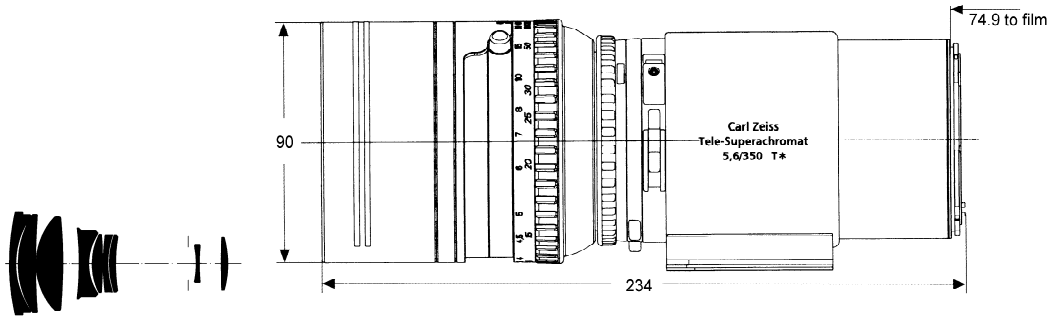
Tele-Superachromat T* 5.6/350 CFE



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The Carl Zeiss **Tele-Superachromat** T* 5.6/350 CFE lens is a high performance telephoto lens for the real demanding photographer. This exceptional lens incorporates considerable amounts of optical glass and metal parts of utmost precision. It is extremely difficult to manufacture. The Carl Zeiss **Tele-Superachromat** T* 5.6/350 CFE lens was designed to deliver its high image quality even wide open, the way fashion photographers prefer to work. It incorporates special optical materials to achieve a chromatic correction so good, that even for infrared photos no special index is needed for focusing.

The Carl Zeiss **Tele-Superachromat** T* 5.6/350 CFE lens features a very smooth internal focusing mechanism with user-adjustable limiters for both ends of the desired focusing range – which can even be narrowed down to zero, which means, the focusing ring can be locked in any position. Thus the outstanding sharpness of this lens can be placed and locked if desired with great ease and precision. Sports and wildlife photographers will benefit from this feature. The lens is equipped with the Hasselblad system tripod quick mount right under the center of gravity of camera and lens combined.
Preferred use: advertising, fashion, industrial, aerospace, architectural details, nature

Cat. No. of lens	**10 45 49**
Number of elements	9
Number of groups	8
Max. aperture	f/5.6
Focal length	343.1 mm
Negative size	55 x 55 mm
Angular field*	width 9.1°, height 9.1°, diagonal 13°
Min. aperture	45
Camera mount	CFE
Shutter	Prontor CFE
Filter connection	M 86x1
Focusing range	infinity to 3.75 m
Working distance (between mechanical front end of lens and subject)	3.4 m
Close limit field size	545 mm x 545 mm
Max. scale	1 : 9.9
Entrance pupil*	
Position	300.2 mm behind the first lens vertex
Diameter	59.5 mm
Exit pupil*	
Position	33.6 mm in front of the last lens vertex
Diameter	29.7 mm
Position of principal planes	
H	46.0 mm in front of the first lens vertex
H'	205.9 mm in front of the last lens vertex
Back focal distance	137.2 mm
Distance between first and last lens vertex	161.5 mm
Weight	1800 g

* at infinity

ZEISS

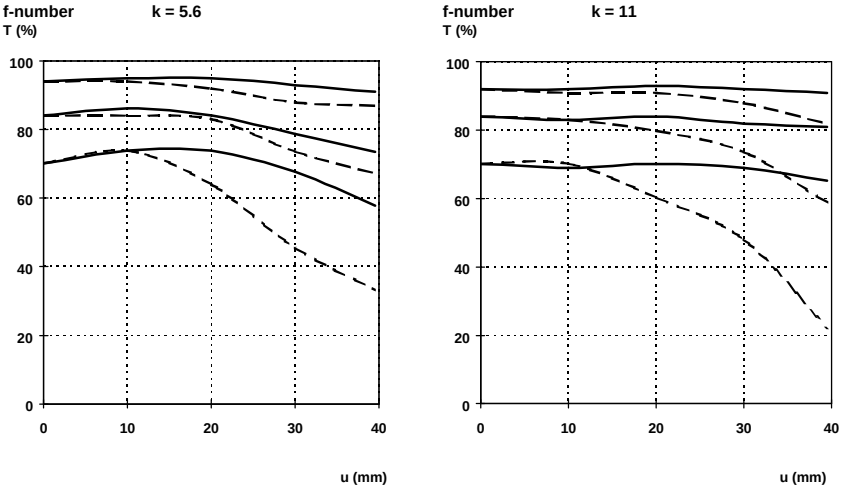
Performance data:
Tele-Superachromat T* 5.6/350 CFE
Cat. No. 10 45 49

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 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.

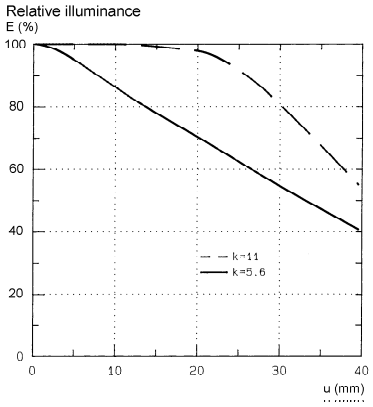
Modulation transfer T as a function of image height u.
White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

Slit orientation: sag, tan



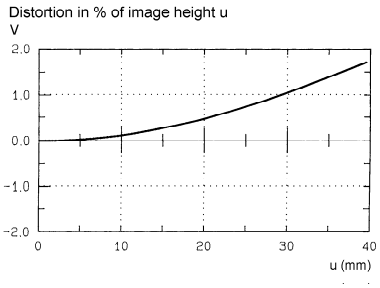
2. Relative illuminance

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.



Subject to change.
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