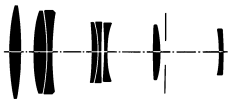
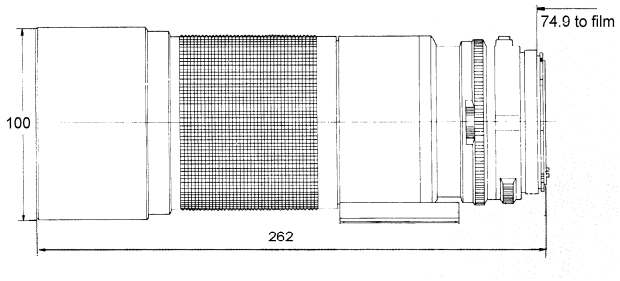
Tele-Tessar® T* 4/350 FE





HASSELBLAD

The **Tele-Tessar**® T* 4/350 FE lens is probably the most underrated lens in the Hasselblad program. Admittedly, it is big and goes heavy on the shoulder and on the budget. However, it was never cheap or easy for a lens manufacturer to correct aberrations in long focal length lenses considerably faster than f/8 really well. A lot of glass with very special properties and high price is involved. In this lens the correction is on a very high level, so stunning reproduction of fine detail can be achieved – with the maximun resolution at wide open aperture. At f/4 the viewfinder image is bright and detailed, enabling unusually quick and positive focusing is possible, aided by a very smooth internal focusing mechanism of extreme precision. Combined with this **Tele-Tessar**®'s ability to focus down to 1.9 meters (!), framing an object the size of a face, the photographer has unbelievable creative opportunities.

Using the shallow depth of field this lens can provide, it is surprisingly easy to take visually clear and professionally clean photos even in very distracting surroundings: The tremendous background blur will instantly and easily clean up almost any location.
This effect is extremely helpful and time-saving in industrial photography in factories, people shots and portraits on location – even in rather unfavourable surroundings. The narrow angle of view frames only a small background area, and even if this area is rather cluttered, the **Tele-Tessar**® T* 4/350 FE lens will clean it up photographically, saving time and labour, thus paying itself off pretty well.
Preferred use: glamour, close-up portraits, demanding location work (fashion, editorial), sports

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Cat. No. of lens	**10 45 41**
Number of elements	8
Number of groups	6
Max. aperture	f/4
Focal length	349.9 mm
Negative size	55 x 55 mm
Angular field*	width 9.0°, height 9.0°, diagonal 13°
Min. aperture	32
Camera mount	FE
Filter connection	M 96x1 clip-on, diameter 100 mm
Focusing range	infinity to 1.9 m
Working distance (between mechanical front end of lens and subject)	1.6 m
Close limit field size	420 mm x 420 mm
Max. scale	1 : 4
Entrance pupil*	
Position	303.5 mm behind the first lens vertex
Diameter	86.4 mm
Exit pupil*	
Position	49.4 mm in front of the last lens vertex
Diameter	41.8 mm
Position of principal planes	
H	75.7 mm in front of the first lens vertex
H'	231.5 mm in front of the last lens vertex
Back focal distance	118.4 mm
Distance between first and last lens vertex	212.7 mm
Weight	2000 g

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*for infinity

ZEISS

Performance data:

Tele-Tessar® T* 4/350 FE

Cat. No. 10 45 41

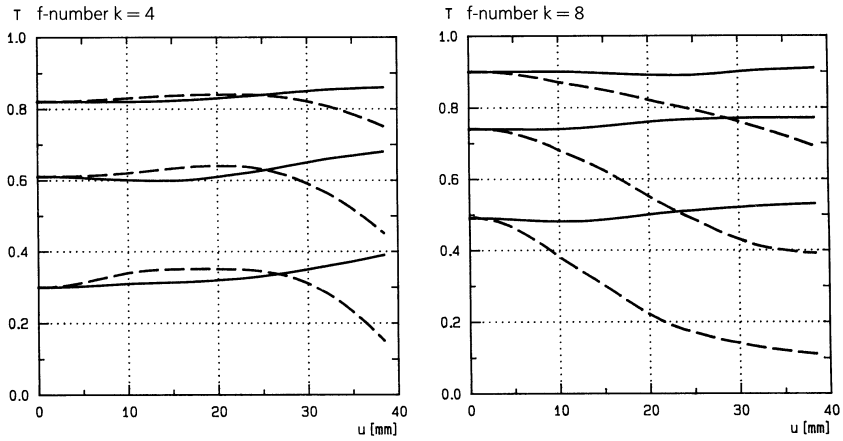
1. MTF Diagrams

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.

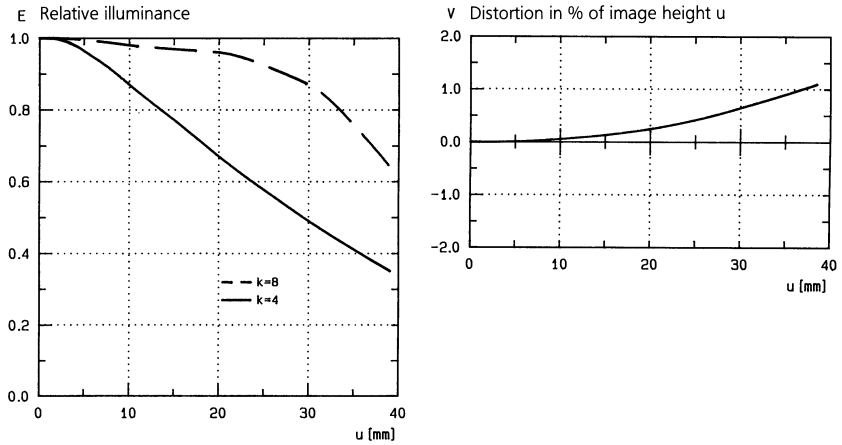
Unless otherwise indicated, the performance data refer to large object distances, for which normal photographic lenses are primarily used.

Modulation transfer T as a function of image height u. 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.

Subject to change.
Printed in Germany 06.06.2000

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