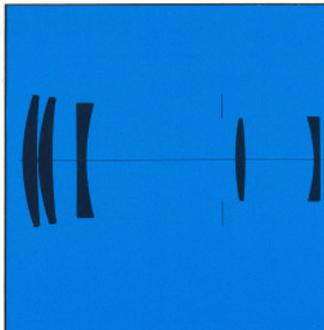


**Tele-Tessar T\***  
 f/4–250 mm  
 Cat. No. 104529

H A S S E L B L A D

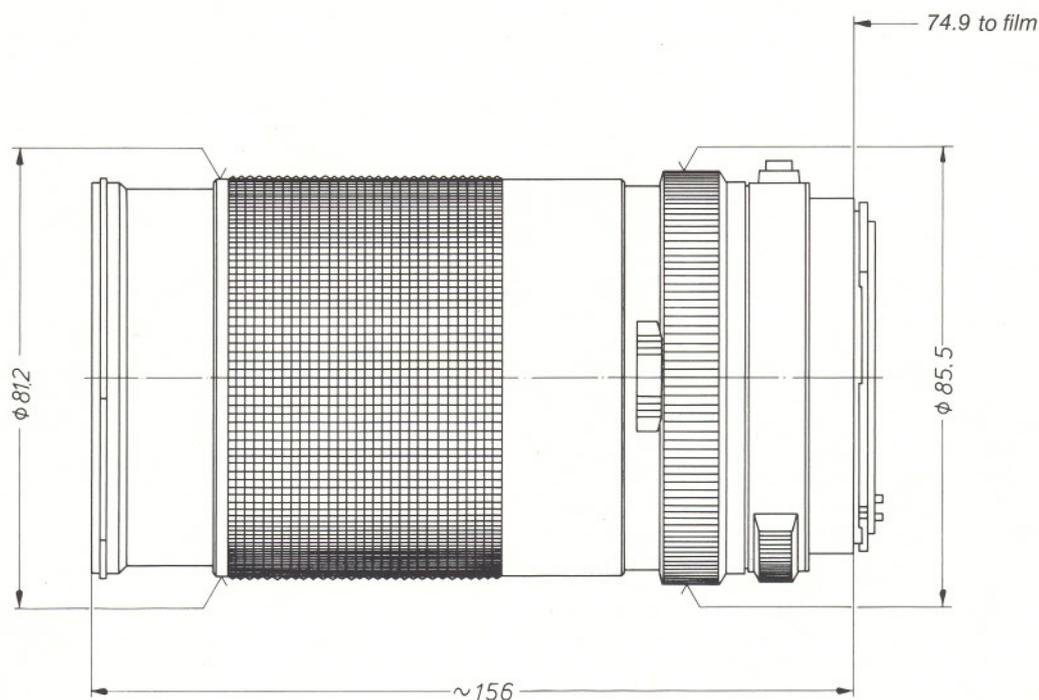


**ZEISS**

Carl Zeiss  
 D-7082 Oberkochen  
 West Germany

Even at full aperture the **Tele-Tessar T\*** f/4–250 mm lens for the 2000 FC Hasselblad camera provides an excellent image quality. This lens is a true tele lens and hence very compact and relatively light.

Applications of the **Tele-Tessar T\*** f/4–250 mm lens are many. It is suitable not only for long-range photography and portraiture but also, owing to its relatively high initial aperture, for press, sports and stage photography.

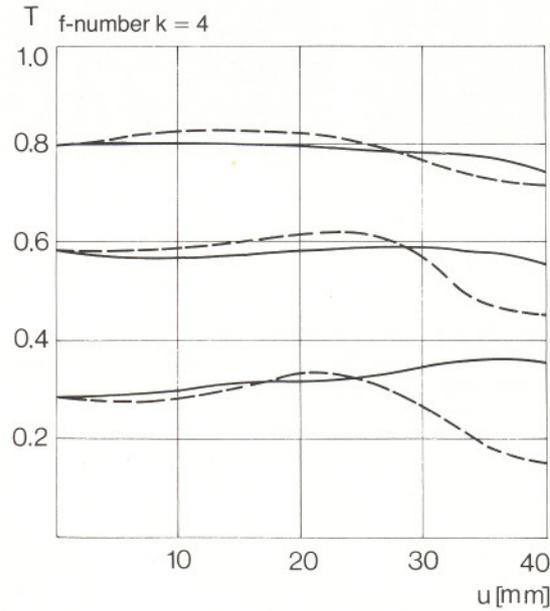


Number of lens elements: 5  
 Number of components: 5  
 f-number: 4  
 Focal length: 246.3 mm  
 Negative size: 56.5 x 56.5 mm  
 Angular field 2 w: diagonal 18°, side 13°  
 Spectral range: visible spectrum  
 f-stop scale: 4–5.6–8–11–16–22–32  
 Mount: focusing mount with bayonet; coupling system for automatic diaphragm function  
 Filter mount: bayonet, size B 77  
 Weight: approx. 920 g

Distance range: ∞ to 2.5 m (8.5')  
 Smallest object field: 433x433 mm (17" x 17")  
 Position of entrance pupil: 12.5 mm behind the first lens vertex  
 Diameter of entrance pupil: 61.5 mm  
 Position of exit pupil: 32.9 mm in front of the last lens vertex  
 Diameter of exit pupil: 29.4 mm  
 Position of principal plane H: 115.6 mm in front of the first lens vertex  
 Position of principal plane H': 17.6 mm in front of the first lens vertex  
 Distance between first and last lens vertex: 144.6 mm

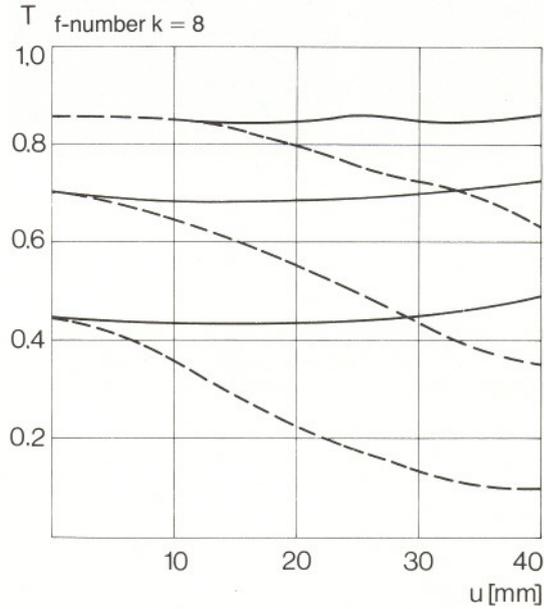
Modulation transfer T as a function of image height u

Slit orientation tangential ———  
sagittal ———



White light

Spatial frequencies R = 10, 20 and 40 cycles/mm



**1. MTF Diagrams**

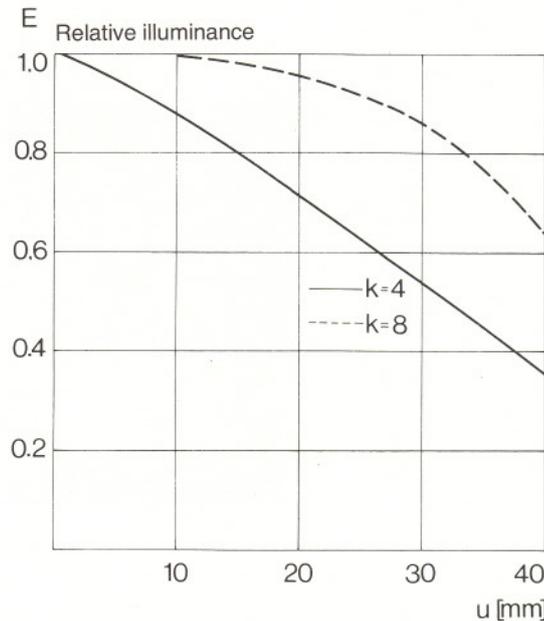
The image height u – reckoned from the image center – is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = Modulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the top 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.

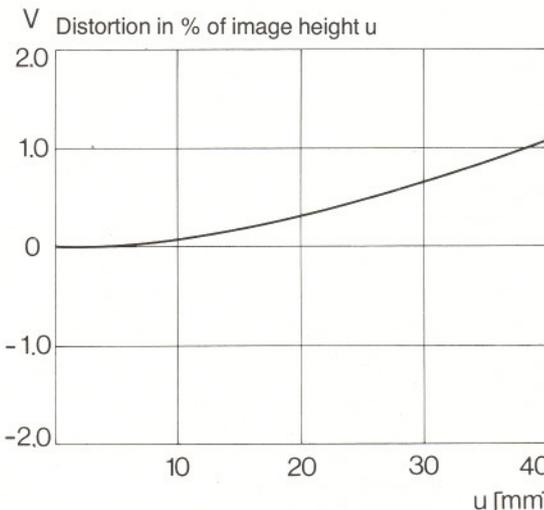
**2. Relative illuminance**

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.



Subject to technical amendment