

Distagon T\*  
f/4–50 mm  
Cat. No. 104148

H A S S E L B L A D



**ZEISS**

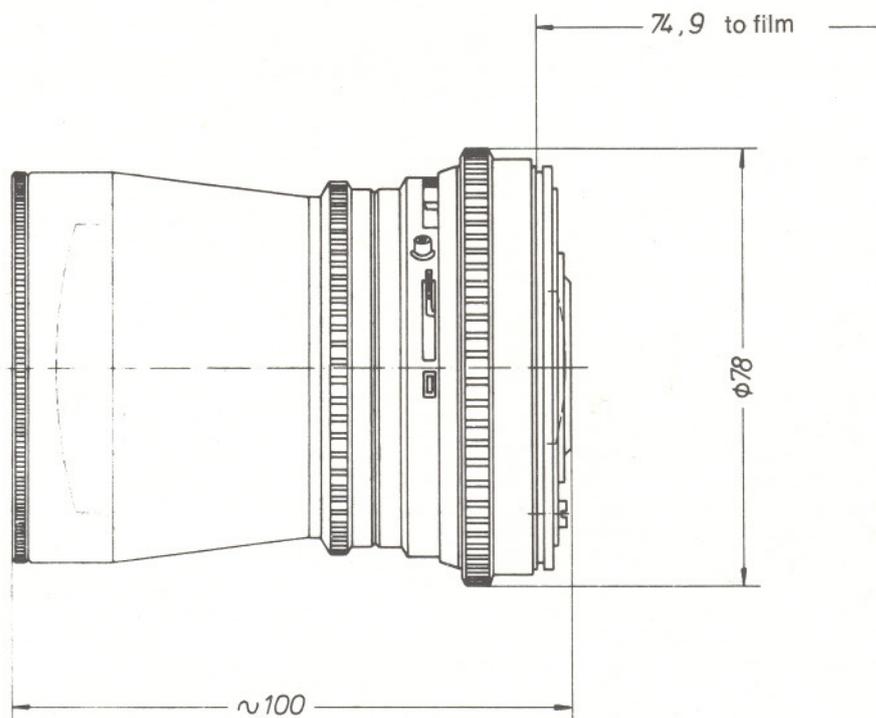
Carl Zeiss  
D-7082 Oberkochen  
West Germany

As with all lenses of the Distagon type, the distance between the last lens surface and the image plane is larger than the focal length.

In spite of its extraordinary technical features the Distagon T\* f/4–50 mm has a remarkably good correction of all image aberrations and is of unusually compact design.

The Distagon T\* f/4–50 mm is used above all for landscape and architectural photography, photography of interiors and for press photography.

As the lens is corrected for large object distances, it should be stopped down further when it is used for close-range work.



Number of lens elements: 7  
 Number of components: 7  
 f-number: 4  
 Focal length: 51.3 mm  
 Negative size: 56.5 x 56.5 mm  
 Angular field 2w: diagonal 75°, side 58°  
 Spectral range: visible spectrum  
 f-stop scale: 4 - 5.6 - 8 - 11 - 16 - 22  
 Mount: Compur interchangeable reflex shutter size 0 with automatic iris diaphragm adapter ring for Hasselblad series 63 885 g  
 Filter mounting:  
 Weight:

Distance range: ∞ to 0.5 m  
 Automatic depth-of-field indication for  $z = 0.06 \text{ mm}^*$ )  
 Position of entrance pupil: 32.3 mm behind the first lens vertex  
 Diameter of entrance pupil: 12.8 mm  
 Position of exit pupil: 21.5 mm in front of the last lens vertex  
 Diameter of exit pupil: 23.0 mm  
 Position of principal plane H: 54.8 mm behind the first lens vertex  
 Position of principal plane H': 18.6 mm behind the last lens vertex  
 Distance between first and last lens vertex: 91.7 mm

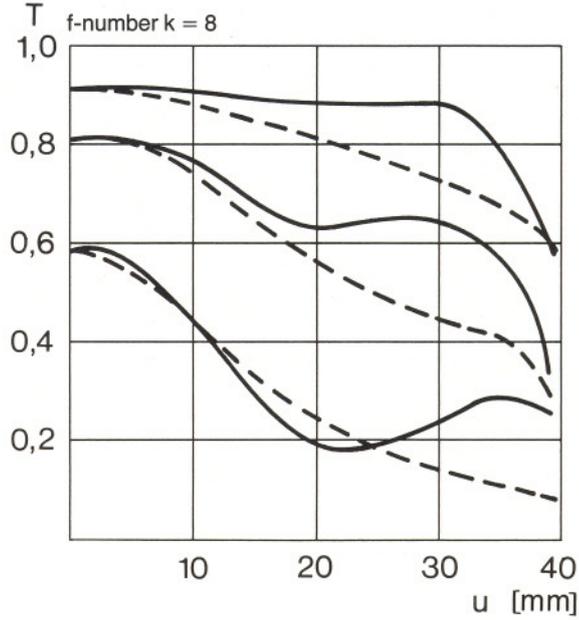
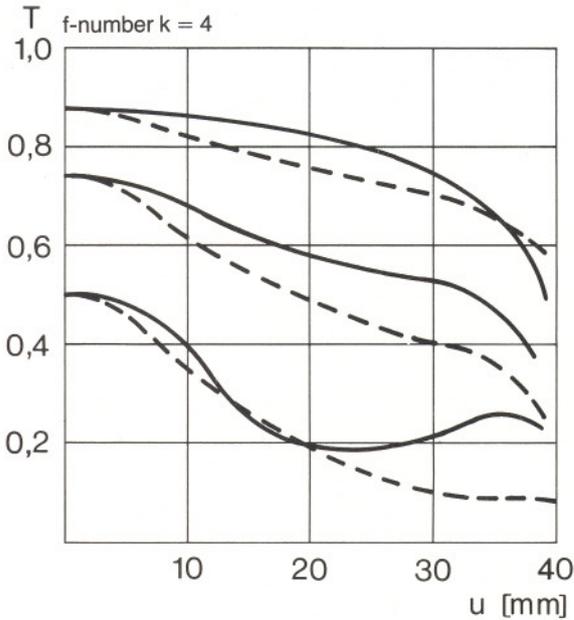
\*)  $z$  = circle-of-confusion diameter

Modulation transfer T as a function of image height u

Slit orientation tangential — — — —  
 sagittal —————

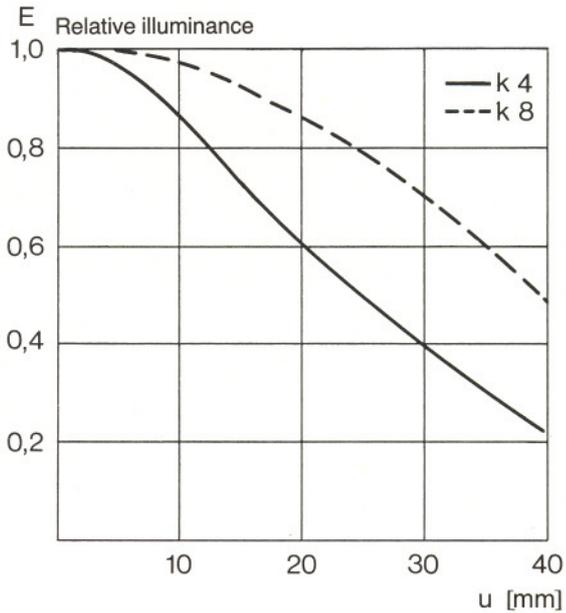
White light

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



**1. MTF Diagrams**

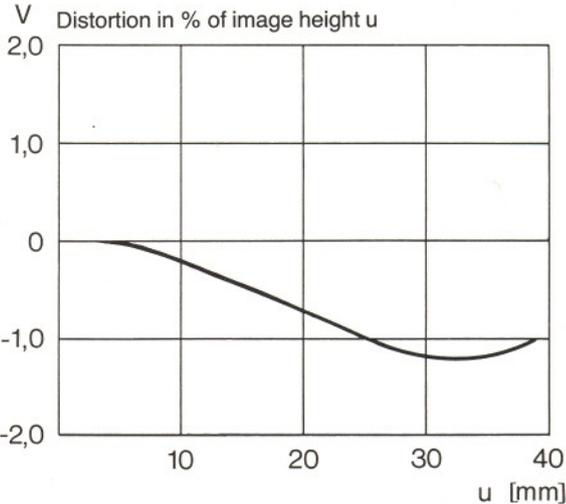
The image height u – reckoned from the image center – is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = **M**odulation **T**ransfer **F**actor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given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

Subject to technical amendment