Distagon T*
f/4–50 mm
Cat. No. 104870

HASSELBLAD

ZEISS

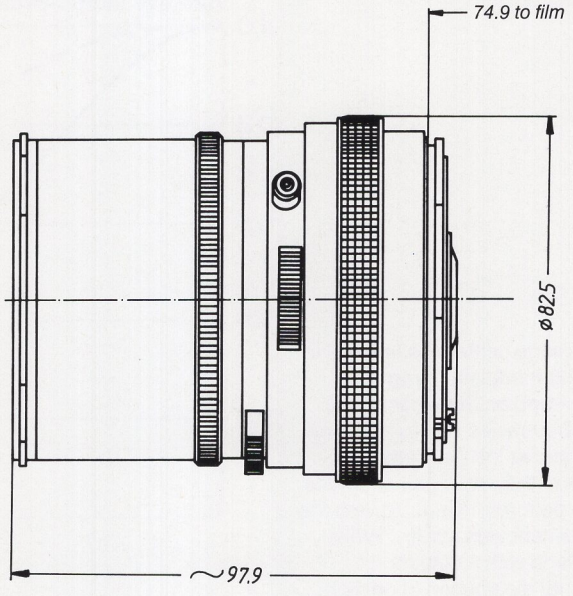
Carl Zeiss
D-7082 Oberkochen
West Germany

In all wide-angle lenses for reflex cameras the distance between the last lens surface and the image plane is larger than the focal length. This applies also to the 50 mm **Distagon** lens.

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

The **Distagon** T* f/4–50 mm lens 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.



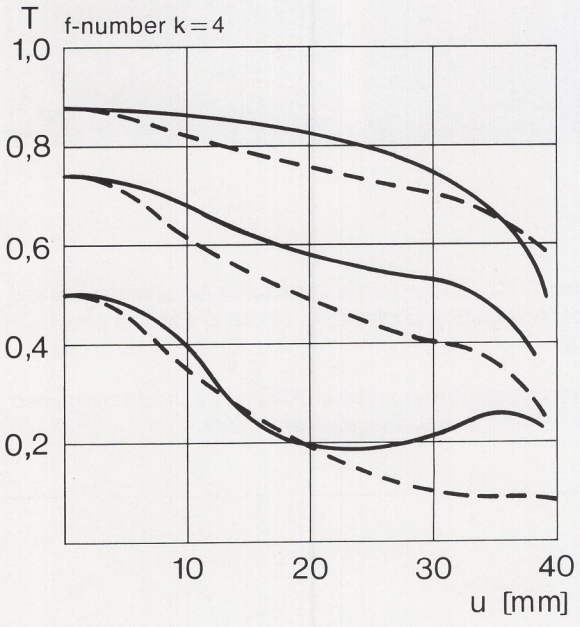
Number of lens elements:	7
Number of components:	7
f-number:	4
Focal length:	51.3 mm
Negative size:	56.5 x 56.5 mm
Angular field 2 w:	diagonal 75°, side 58°
Spectral range:	visible spectrum
f-stop scale:	4–5.6–11–16–22
Mount:	Prontor CF shutter
Filter mounting:	bayonet for Hasselblad series 60
Weight:	approx. 795 g

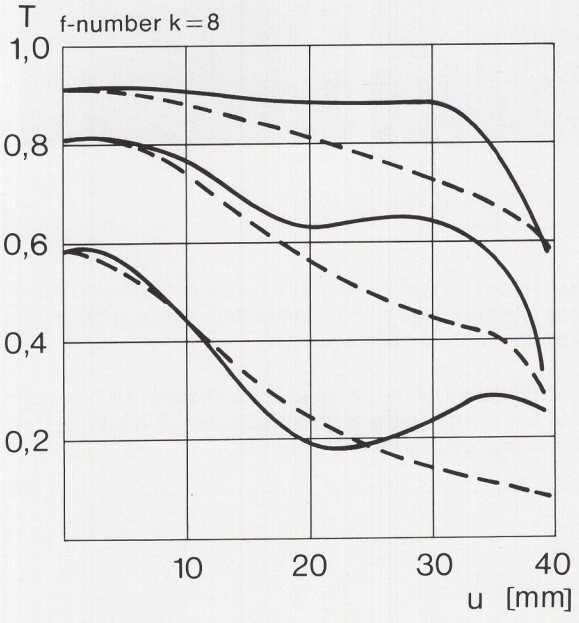
Distance range:	∞ to 0.5 m
Position of entrance pupil:	32.3 mm behind the first lens vertex
Diameter of entrance pupil:	12.8 mm
Position of exit pupil:	21.5 mm in front of the last lens vertex
Diameter of exit pupil:	23.0 mm
Position of principal plane H:	54.8 mm behind the first lens vertex
Position of principal plane H′:	18.6 mm behind the last lens vertex
Distance between first and last lens vertex:	91.7 mm

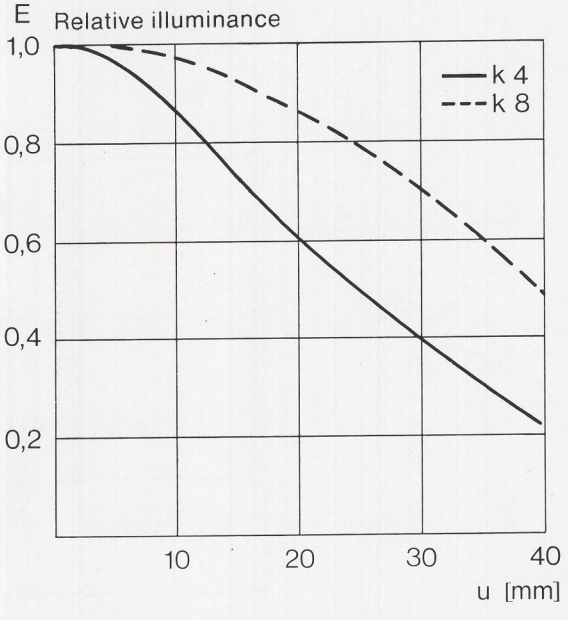
Performance data: **Distagon** T* f/4–50 mm Cat. No. 10 48 70

Modulation transfer T as a function of image height u
Slit orientation tangential — — — —
sagittal ————

White light
Spatial frequencies R = 10 cycles/mm 20 cycles/mm
40 cycles/mm





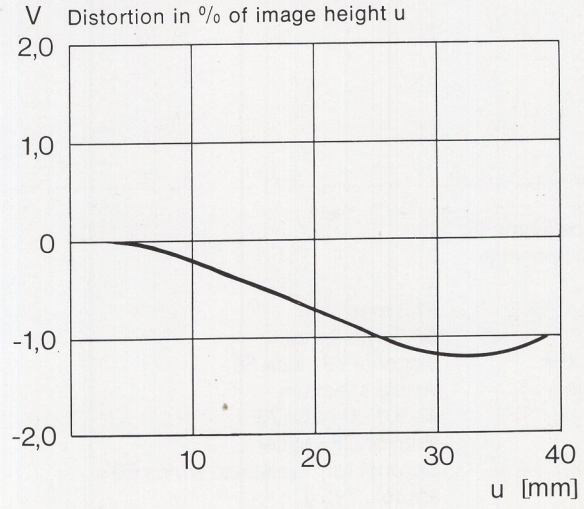


1. MTF Diagrams
The image height u – reckoned from the image center – is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = **M**odulation **T**ransfer **F**actor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs)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