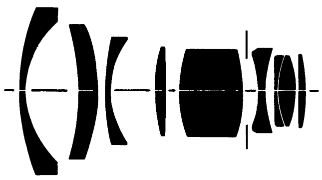
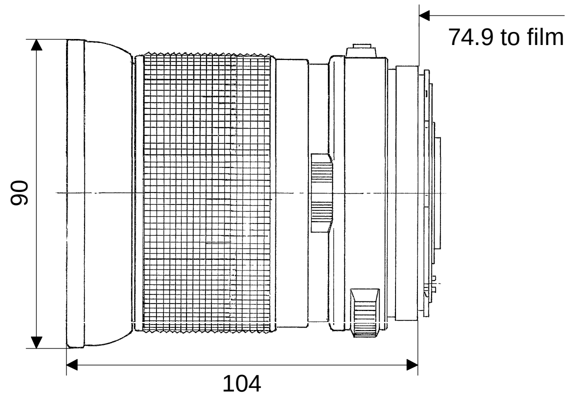
Distagon® T* 2.8/50 FE





HASSELBLAD

When Carl Zeiss created the **Distagon**® T* 2,8/50 FE lens the target was neither to keep it as compact as the **Distagon**® T* 4/50 CFi lens nor to integrate a central shutter. Freed from these constraints the result is an extraordinary wide angle lens: twice as fast as usual in medium format, superb performance with excellent color correction, even wide open and close-up due to ”floating elements” (FLE) that automatically adjust internal optical air spaces to the needs of close-up imaging.

This is the ideal wide angle lens for all photographers who need to produce professional results in cramped surroundings, under low light conditions and terrible time pressure. Optics conoisseurs also do appreciate the **Distagon**® T* 2,8/50 FE lens highly. No wonder it became a preferred lens in NASA space missions.

<u>Preferred use:</u> industrial location work, editorial, advertising, aerospace, fast action

Cat. No. of lens	**10 49 23**
Number of elements	9
Number of groups	8
Max. aperture	f/2.8
Focal length	51.7 mm
Negative size	55 x 55 mm
Angular field*	width 57°, height 57°, diagonal 2w 75°
Min. aperture	22
Camera mount	FE
Fiiter connection	M 86 x 1
Focusing range	infinity to 0.42 m
Working distance (between mechanical front end of lens and subject)	0,2 m

Close limit field size	262 mm x 262 mm
Max. scale	1:4.7
Entrance pupil*	
Position	39.2 mm behind the first lens vertex
Diameter	18.1 mm
Exit pupil*	
Position	20.3 mm in front of the last lens vertex
Diameter	32.1 mm
Position of principal planes*	
H	61.2 mm in front of the first lens vertex
H'	18.1 mm behind the last lens vertex
Back focal distance	69.9 mm
Distance between first and last lens vertex*	105.2 mm
Weight	1010 g

* for infinity

ZEISS

Performance data:

Distagon® T* 2.8/50 FE

Cat. No. 10 49 23

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.

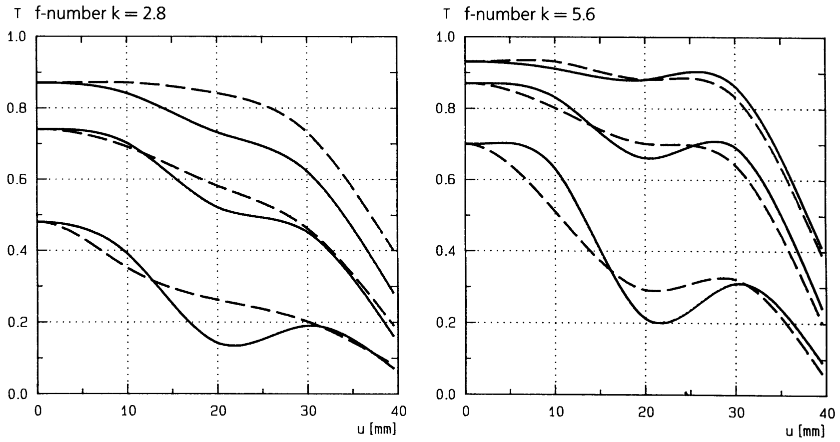
2. Relative illuminance

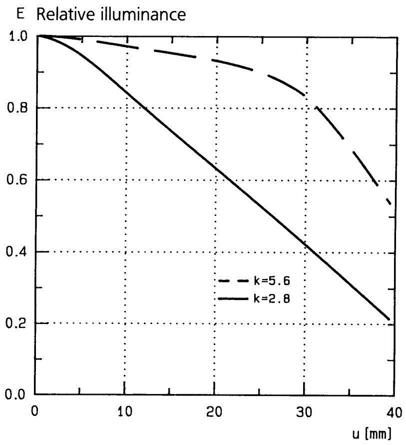
In this diagram the horizontal axis gives the image height u in mm and the vertical axis the relative illuminance E, both for full aperture and a moderately stopped-down lens. The values for E are determined taking into account vignetting and natural light decrease.

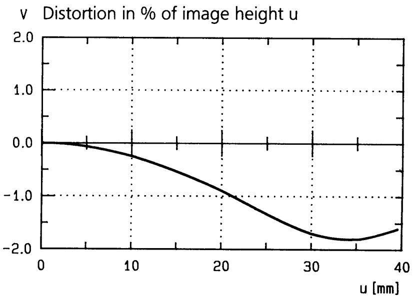
3. Distortion

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.

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







Subject to change.

Printed in Germany 25.05.2000

ZEISS

Carl Zeiss
Photoobjektive
D-73446 Oberkochen
Telephone (07364) 20-6175
Fax (07364) 20-4045
eMail: photo@zeiss.de
http://www.zeiss.de