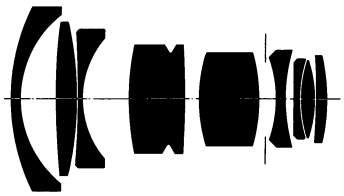
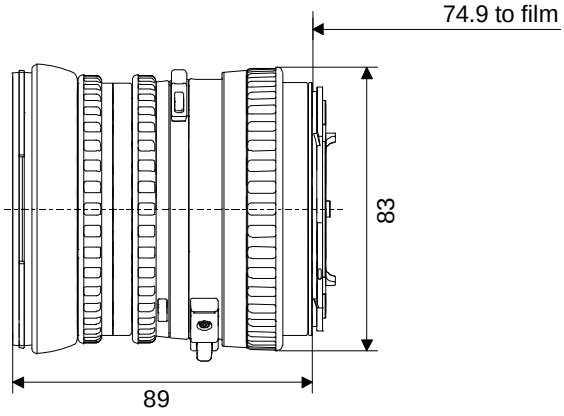
# **Distagon**® T* 4/50 CFi



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Many photographers consider the **Distagon**® T* 4/50 CFi lens the ideal all-purpose wide angle lens in medium format. The modern optical design guarantees high performance, even close-up, thanks to "floating elements". Corner-to-corner illumination is very even with all aperture settings common in advertising, nature and landscape photography, and veiling glare is extremely well controlled. So the **Distagon**® T* 4/50 CFi lens is well suited for landscape shots with large blue sky areas.

Distortion is kept remarkably low, qualifying the **Distagon**® T* 4/50 CFi lens for both professional architecture and product photography – a unique strength of retrofocus wide angle lenses from Carl Zeiss. On top of all these benefits the **Distagon**® T* 4/50 CFi lens is remarkably compact.
Preferred use: all-purpose, landscapes, calendars, travel

| | |
|---|---|
| **Cat. No. of lens** | **10 49 49** |
| Number of elements | 9 |
| Number of groups | 8 |
| Max. aperture | f/4 |
| Focal length | 51.9 mm |
| Negative size | 55 x 55 mm |
| Angular field | width 57°, height 57°, diagonal 74° |
| Min. aperture | 32 |
| Camera mount | CFi |
| Shutter | Prontor CFi 1s-1/500s, b, f |
| Filter connection | bayonett series 70 |
| Focusing range | infinity to 0.5 m |
| Near ranges, optimized | infinity to 4.0 m<br>4.0 m to 1.2 m<br>1.2 m to 0.8 m<br>0.8 m to 0.5 m |

| | |
|---|---|
| Working distance (between mechanical front end of lens and subject) | 0.3 m |
| Close limit field size | 351 mm x 351 mm |
| Max. scale | 1 : 6.3 |
| Entrance pupil | |
| Position | 31.9 mm behind the first lens vertex |
| Diameter | 13.0 mm |
| Exit pupil | |
| Position | 22.2 mm in front of the last lens vertex |
| Diameter | 22.6 mm |
| Position of principal planes | |
| H | 53.8 mm behind the first lens vertex |
| H' | 22.2 mm behind the last lens vertex |
| Back focal distance | 74.1 mm |
| Distance between first and last lens vertex | 87.1 mm |
| Weight | 800 g |

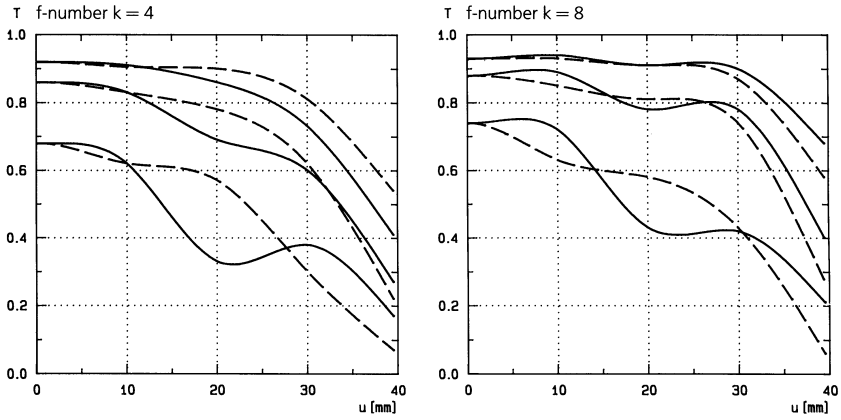
ZEISS

Performance data:
**Distagon**® T* 4/50 CFi
Cat. No. 10 49 49

### 1. MTF Diagrams

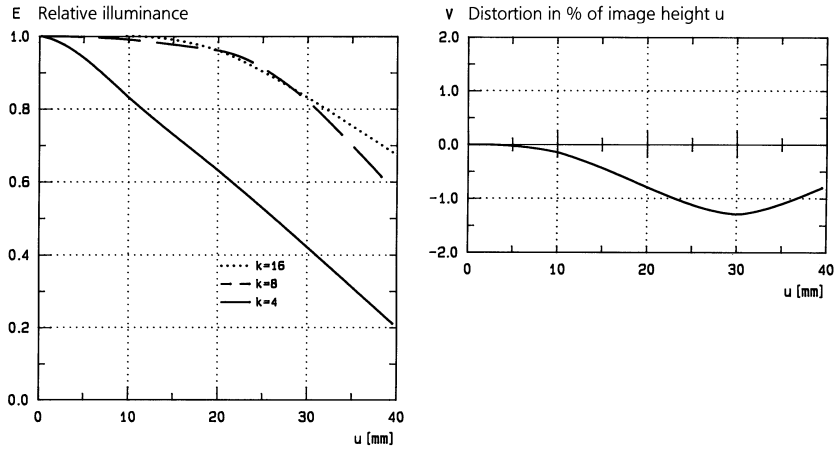
The image height u - calculated from the image center - is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = M odulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the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