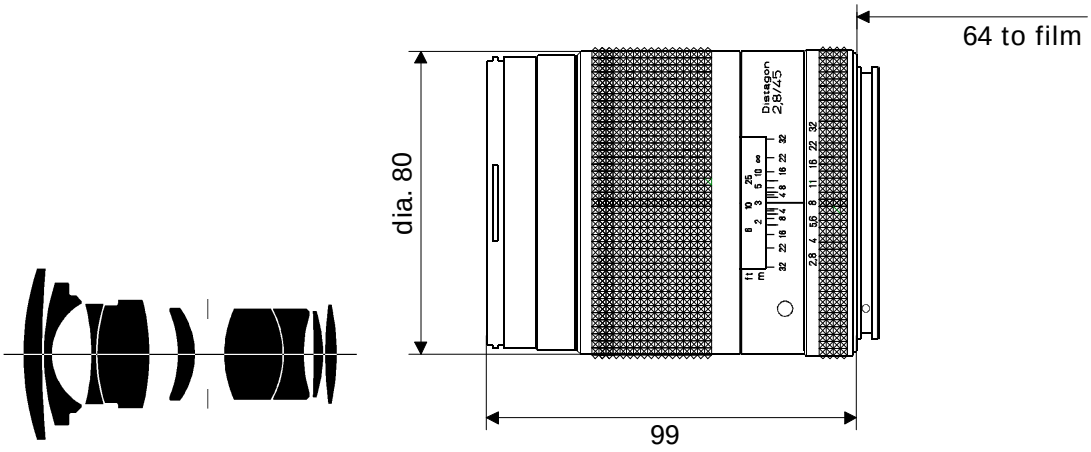
# Distagon® T* 2.8/45




CONTAX® 645

The **Distagon**® T* 2.8/45 lens is the all-purpose wide angle lens in the Contax® 645 autofocus system. The focal length of 45 mm on a Contax® 645 medium format camera produces images similiar to the 28 mm lens on a Contax® 35 mm SLR. The optical system of the lens was designed using the latest technology, incorporating internal focusing (IF). Thus it is the the right optic for most scenic landscapes and cities. To handle these subjects with perfection the **Distagon**® T* 2.8/45 lens features a very uniform corner-to-corner illumination, which is highly appreciated by professionals who need to achieve a pleasing rendition of blue sky areas in their landscape photos.

With a maximum aperture of f/2.8 the **Distagon**® T* 2.8/45 lens is fast enough for indoor wedding coverage and similar tasks that ask for medium format image quality.

On assignments like a wedding, which are fast paced and cannot be repeated, the combination of medium format and autofocus on Contax® level excels. At the other end of the aperture scale the **Distagon**® lens can be stopped down to f/32, thus enabling stunning depth of field effects in outdoor nature photography.

Distortion of the **Distagon**® T* 2.8/45 lens is kept remarkably low – a particular strength of retrofocus wide angle lenses from Carl Zeiss, that benefits the professional travel photographer.

Preferred use: all-purpose, landscapes, cities, calendars, travel, editorial, weddings

| | |
|---|---|
| **Cat. No. of lens:** | **10 49 44** |
| Number of elements: | 9 |
| Number of groups: | 7 |
| Max. aperture: | 1:2.8 |
| Focal length: | 45.5mm |
| Negative size: | 41.5 x 56mm |
| Angular field 2w: | 76° |
| Mount: | Contax 645 Mount |
| Filter connection: | screw-in type, thread M72 x 0.75 |
| Focusing range: | ∞ to 0.5m |
| Aperture scale: | 2.8 - 4 - 5.6 - 8 - 11 - 16 - 22 - 32 |
| Weight: | approx. 821 g |

| | |
|---|---|
| Entrance pupil* | |
| Position: | 29.4mm behind the first lens vertex |
| Diameter: | 16.0mm |
| Exit pupil* | |
| Position: | 33.0mm in front of the last lens vertex |
| Diameter: | 33.1mm |
| Position of principal planes*: | |
| H: | 52.8mm behind the first lens vertex |
| H': | 14,7mm behind the last lens vertex |
| Back focal distance*: | 60.2mm |
| Distance between first and last lens vertex*: | 100.0mm |

* at ∞

# Performance data:
# Distagon® T* 2.8/45
# Cat. No. 10 49 44

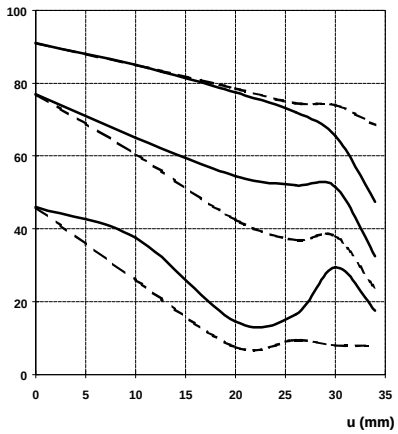
## 1. MTF Diagrams

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 = 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 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.

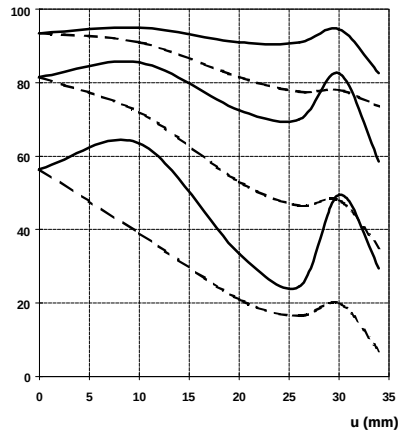
**Modulation transfer T as a function of image height u.**
**White light. Spatial frequencies R = 10, 20 and 40 cycles/mm**

**Slit orientation:** —— sag  – – tan

**f-number k = 2,8**



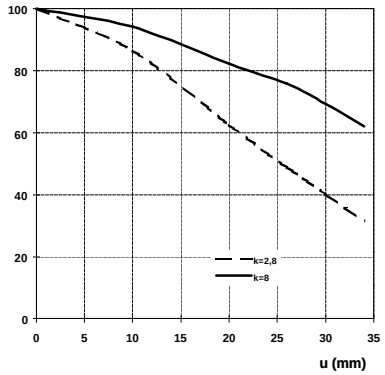

**f-number k = 5,6**




## 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.

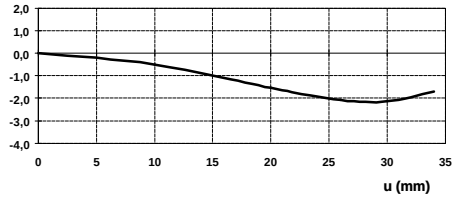
**Relative illuminance**
**E (%)**




## 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.

**Distortion in % of image height u**
**V**




Subject to change.
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