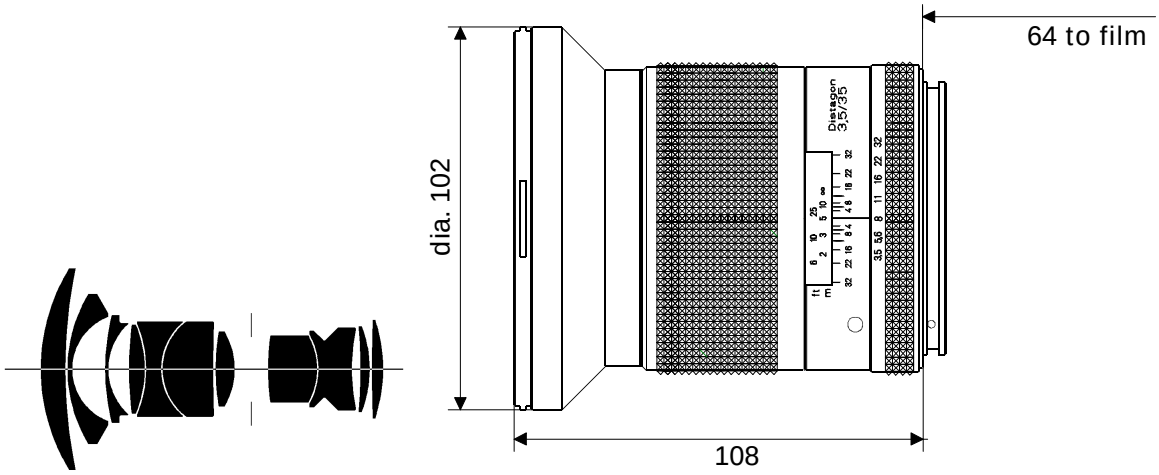
Distagon® T* 3.5/35



CONTAX® 645

The **Distagon**® T* 3.5/35 lens is the super wide angle lens in the Contax® 645 autofocus system. The focal length of 35 mm on the Contax® 645 camera produces images similiar to those from a 21 mm lens on a 35 mm Contax® SLR. It is the lens of choice for dramatic wide angle perspectives, an important tool for professional landscape, advertising and industrial photography. The **Distagon**® T* 3.5/35 lens features a very uniform corner-to-corner illumination, which is appreciated by professionals who need to achieve a pleasing rendition of blue sky areas in their landscape photos.
With its extreme angle of view it is also a very good lens for documentation photography in cramped surroundings. This situation is often encountered in industrial photography, where subjects with many intricate small and important details are to be captured.
Carl Zeiss designed the **Distagon**® T* 3.5/35 lens to provide the high optical performance needed to achieve truly professional photo results with these detailed subjects. The optical system of the **Distagon**® T* 3.5/35 lens was designed using the latest technology, incorporating internal focusing (IF) and the most recent optical glass.
The maximum aperture of f/3.5 on the **Distagon**® T* 3.5/35 lens is second to no other super wide angle lens in medium format. 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, advertising and industrial documentation.
Distortion of the **Distagon**® T* 3.5/35 lens is well controlled – a particular strength of retrofocus wide angle lenses from Carl Zeiss, that benefits the professional travel photographer.
Preferred use: dramatic wide vistas, landscapes, cities, interiors, advertising, industrial, documentation

Cat. No. of lens:	**10 49 43**
Number of elements:	11
Number of groups:	8
Max. aperture:	1:3.5
Focal length:	35.5mm
Negative size:	41.5 x 56mm
Angular field 2w:	90°
Mount:	Contax 645 Mount
Filter connection:	screw-in type, thread M95 x 1mm
Focusing range:	∞ to 0.5m
Aperture scale:	3.5 - 4 - 5.6 - 8 - 11 - 16 - 22 - 32
Weight:	approx. 877 g

Entrance pupil*:	
Position:	30.2mm behind the first lens vertex
Diameter:	9.9mm
Exit pupil*:	
Position:	37.6mm in front of the last lens vertex
Diameter:	27.7mm
Position of principal planes*:	
H:	52.8mm behind the first lens vertex
H':	24.6mm behind the last lens vertex
Back focal distance*:	60.1mm
Distance between first and last lens vertex*:	109.2mm

* at ∞

Performance data:
Distagon® T* 3.5/35
Cat. No. 10 49 43

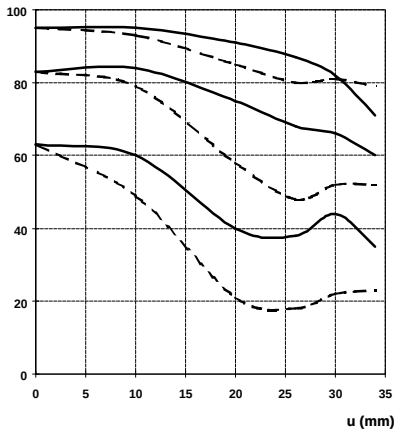
1. MTF Diagrams

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.

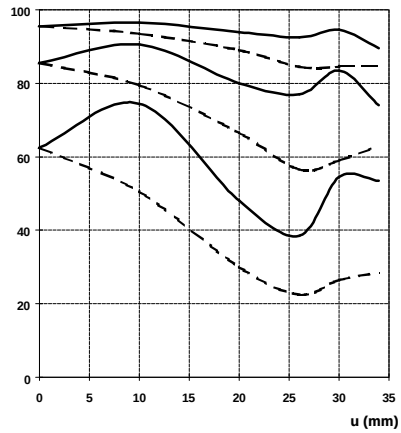
Modulation transfer T as a function of image height u.
White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

Slit orientation: sag, tan

f-number k = 3,5



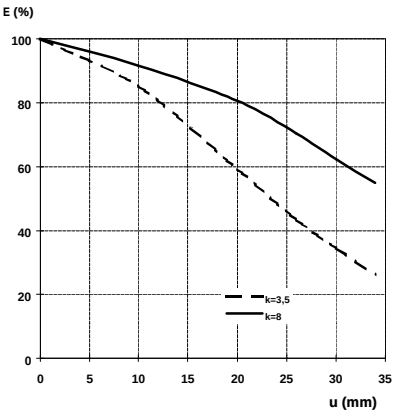
f-number k = 5,6



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.

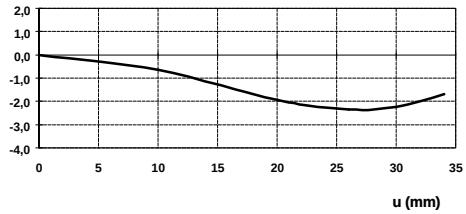
Relative illuminance



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



Subject to change.
Printed in Germany 09.03.99

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