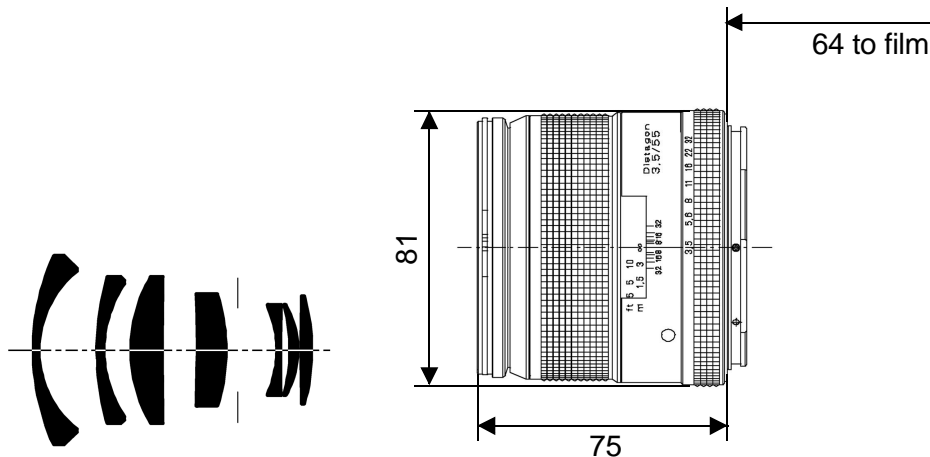


# Distagon® T\* 3.5/55



**CONTAX® 645**

The Distagon® T\*3.5/55 lens is the compact and light-weight all-purpose wide-angle lens in the Contax 645 autofocus system. The focal length of 55 mm on a Contax 645 camera produces images similar to those from 35 mm lenses on 35mm SLRs.

The Distagon® T\*3.5/55 lens consists of 7 lens elements. It is of rather compact, light-weight design and features smooth corner-to-corner illumination. Image quality is excellent over the entire frame from full opening to small apertures.

The Distagon® T\* 3.5/55 lens can be stopped down to f/32, thus enabling stunning depth of field effects. Distortion of the Distagon® T\* 3.5/55 lens is kept remarkably low - a particular strength of retrofocus wide angle lenses from Carl Zeiss.

With these features the Distagon® 3.5/55 lens is the ideal lens for photojournalistic "street photography" with the Contax 645 AF camera. Another standard task in professional medium format photography is taking pictures of large groups of up to 100 people. In this case a moderate wide angle with high image quality in the entire frame and low distortion is required and the Distagon® T\* 3.5/55 lens is the lens of choice for the Contax 645 AF.

**Preferred use:** photojournalistic work, "street photography", people, groups, weddings, indoor photography

<b>Cat. No. of lens</b>	<b>10 49 59</b>		
Number of elements	7	Close limit field size	230 mm x 330 mm
Number of groups	7	Max. scale	1 : 5.5
Max. aperture	f/3.5	Entrance pupil*	
Focal length	55.0 mm	Position	28.7 mm behind the first lens vertex
Negative size	41.5 x 56 mm	Diameter	15.5 mm
Angular field 2w*	width 54°; height 41°; diagonal 65°	Exit pupil*	
Min. aperture	32	Position	20.3 mm in front of the last lens vertex
Camera mount	Contax 645	Diameter	24.3 mm
Filter connection	M 77 x 0.75 mm	Position of principal planes*	
Focussing range	infinity to 0.45 m	H	48.3 mm behind the first lens vertex
Working distance (between mechanical front end of lens and subject)	0.31 m	H'	10.0 mm behind the last lens vertex
		Back focal distance	65.0 mm
		Distance between first and last lens vertex*	66.4 mm
		Weight	500 g

\*at infinity



Performance data:

**Distagon® T\* 3.5/55**

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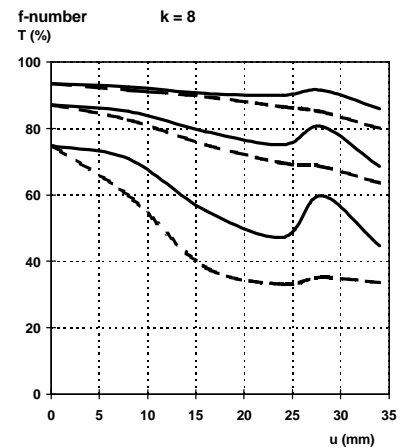
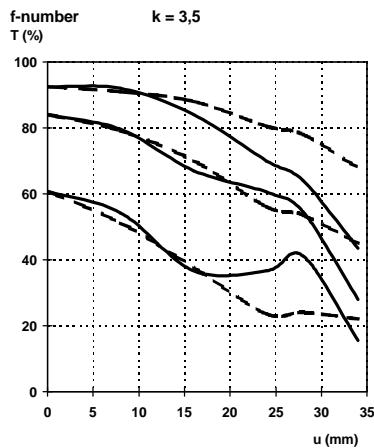
### 1. MTF Diagrams

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.

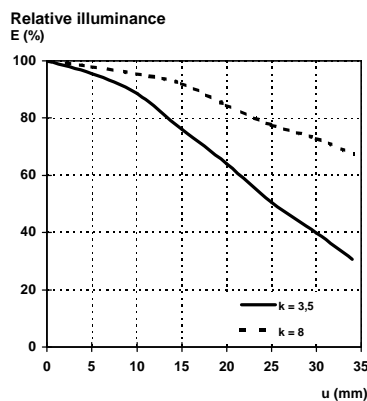
Modulation transfer  $T$  as a function of image height  $u$ .  
White light. Spatial frequencies  $R = 10, 20$  and  $40$  cycles/mm

Slit orientation: — sag  
- - - tan



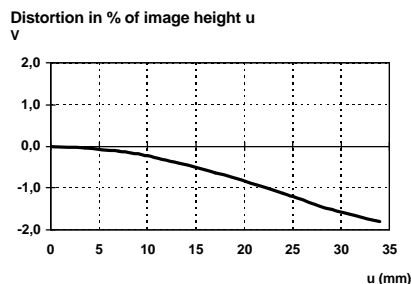
### 2. Relative illuminance

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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