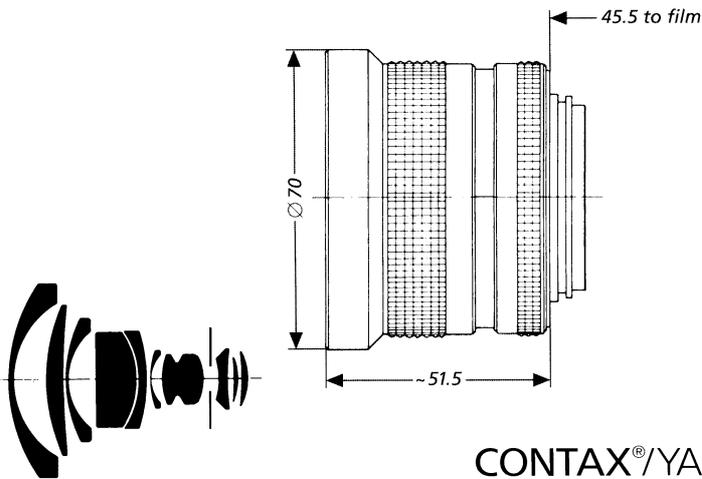


# Distagon® T\* f/4 - 18 mm



CONTAX®/YASHICA® mount

This **Distagon**® lens with an angular field of 100° has a time-honoured design.

Its special features are excellent image quality, a good distortion correction unexpected in this type of lens and an exceptionally compact design.

The new version of this lens provides the same image quality as the well-known and time-tried

design when photographing subjects at a long-distance. New, however, is the design of the focusing system. When the lens is focused to short distances, the positions of the lens groups change in relation to each other. This counteracts the loss in image quality in the outer zones of the image and extends the useful range of the lens to 0.3 m.

<b>Cat. No. of lens:</b>	<b>10 48 42</b>	Focusing range:	∞ to 0.3 m
Number of elements:	10	Aberration correction for close range by floating element	
Number of groups:	9	Entrance pupil:	
Max. aperture:	f/4	Position:	23.3 mm behind the first lens vertex
Focal length:	18.6 mm	Diameter:	4.5 mm
Negative size:	24 x 36 mm	Exit pupil:	
Angular field 2w:	diagonal 100°	Position:	11.9 mm in front of the last lens vertex
Mount:	focusing mount with bayonet; TTL metering either at full aperture or in stopped-down position. Aperture priority/Shutter priority/ Automatic programs (Multi-Mode Operation)	Diameter:	11.7 mm
Aperture scale:	4 - 5.6 - 8 - 11 - 16 - 22	Position of principal planes:	
Filter connection:	clip-on filter, diameter 70 mm	H:	34.7 mm behind the first lens vertex
Weight:	approx. 350 g	H':	17.7 mm behind the last lens vertex
		Back focal distance:	36.3 mm
		Distance between first and last lens vertex:	60.1 mm



Performance data:

**Distagon**® T\* f/4 - 18 mm  
Cat. No. 10 48 42

### 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.

### 2. Relative illuminance

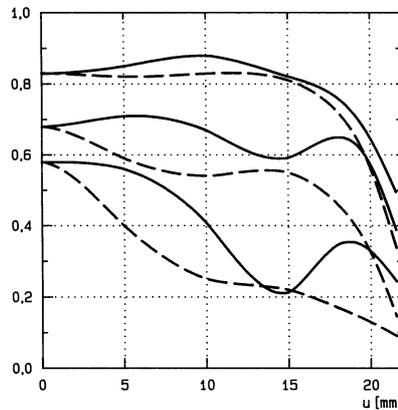
In this diagram the horizontal axis gives the image height  $u$  in mm and the vertical axis the relative illuminance  $E$ , both for full aperture and a moderately stopped-down lens. The values for  $E$  are determined taking into account vignetting and natural light decrease.

### 3. Distortion

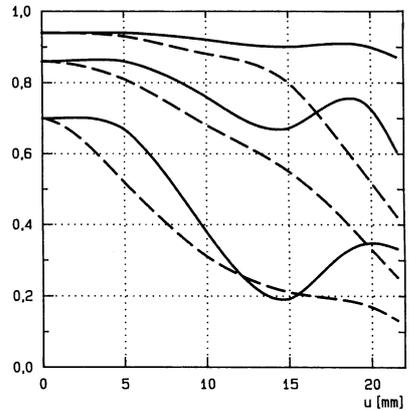
Here again the image height  $u$  is entered on the horizontal axis in mm. The vertical axis gives the distortion  $V$  in % of the relevant image height. A positive value for  $V$  means that the actual image point is further from the image center than with perfectly distortion-free imaging (pincushion 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

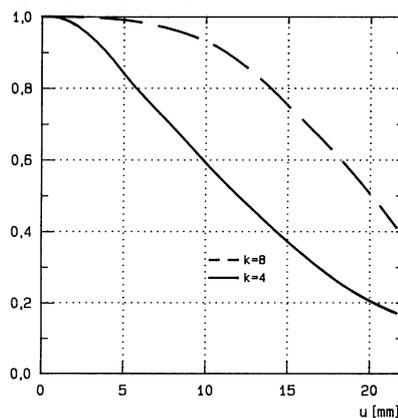
T f-number  $k = 4$



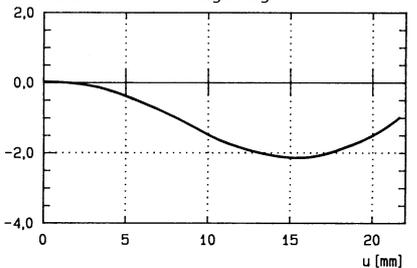
T f-number  $k = 8$



E Relative illuminance



V Distortion in % of image height  $u$



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Subject to change.