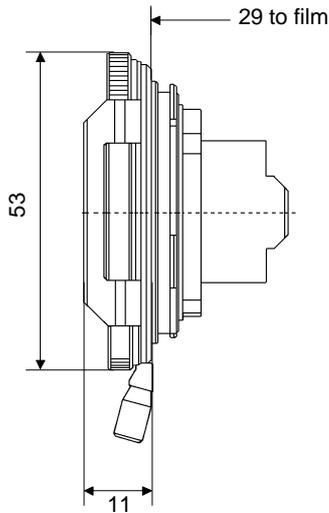
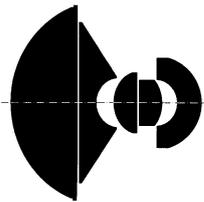


# Hologon® T\* 8/16



## CONTAX® G mount

Using the traditional **Hologon**® ultra-wide-angle lens as a basis, Carl Zeiss has designed a 16 mm **Hologon**® f/8 lens for the Contax G compact cameras. This interchangeable wide-angle lens is virtually distortion-free and provides superior image quality. In view of the extreme field angle, a loss in brightness towards the image edges is inevitable. For this reason, a Contax gradation filter 4x is available to eliminate this effect.

The short focal length of 16 mm and the fixed aperture of f/8 of the **Hologon**® T\* lens often allow photography using the fix-focus setting. The wide field angle of this lens opens up interesting perspectives to the Contax G photographer: whether it is architectural, advertising, fashion or landscape photography, pictures taken with this lens will always capture the viewer's attention.

<b>Cat. No. of lens</b>	<b>10 49 27</b>		
Number of elements	5	Close limit field size	675 mm x 1012 mm
Number of groups	3	Max. scale	1 : 28.1
Max. aperture	f/8	Entrance pupil*	
Focal length	16.5 mm	Position	20.8 mm behind the first lens vertex
Negative size	24 x 36 mm	Diameter	2.1 mm
Angular field*	width 95°, height 72°, diagonal 2w 105°	Exit pupil*	
Min. aperture	8 (fixed)	Position	9.5 mm in front of the last lens vertex
Camera mount	Contax G	Diameter	2.0 mm
Filter connection	special bayonett for Contax gradation filter	Position of principal planes*	
Focusing range	infinity to 0,3 m	H	20.6 mm behind the first lens vertex
Working distance (between lens and subject)	mechanical front end of 0.26 m	H'	9.7 mm in front of the last lens vertex
		Back focal distance	6.8 mm
		Distance between first and last lens vertex	31.7 mm
		Weight	120 g

\* at infinity



Performance data:

**Hologon® T\* 8/16**

Cat. No. 10 49 27

### 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.

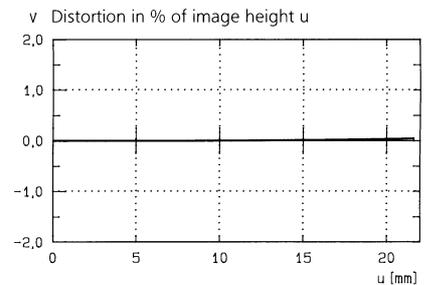
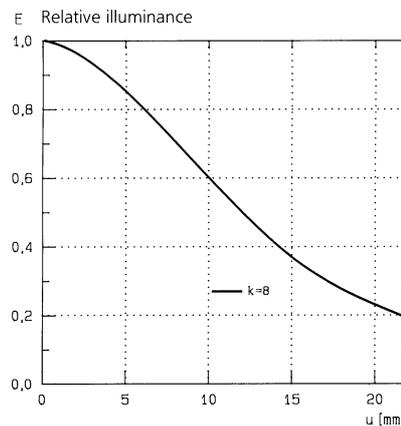
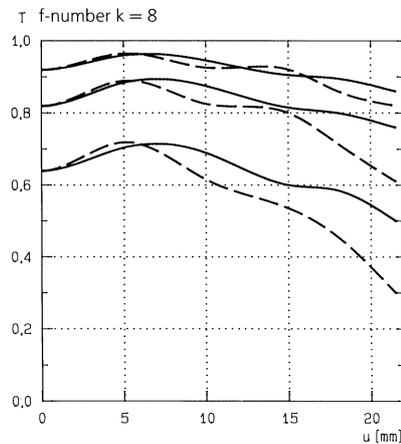
### 2. Relative illuminance

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



Subject to change.

Printed in Germany 31.07.2000



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