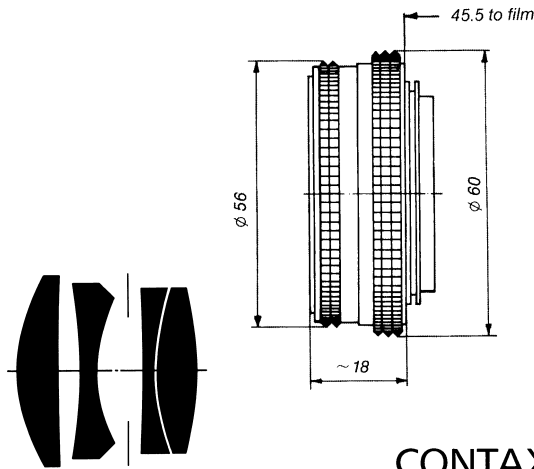


# Tessar® T\* f/2.8 - 45 mm



CONTAX®/YASHICA® mount

Since its introduction 80 years ago, the **Tessar®** lens has constantly been undergoing improvements. As the "eagle eye of your camera" it already enjoyed a legendary reputation decades ago.

With approx. 90 g, the 45 mm **Tessar®** T\* f/2.8 lens is the lightweight among the standard lenses for the **Contax®** camera system. A standard lens with excellent image quality, also particularly suitable for photography at celebrations and sports events.

<b>Cat. No.:</b>	<b>10 03 46</b>	Focusing range:	∞ to 0.6 m
Number of elements:	4	Position of entrance pupil:	10.5 mm behind the first lens vertex
Number of groups:	3	Diameter of entrance pupil:	16.3 mm
Max. aperture:	f/2.8	Position of exit pupil:	5.7 mm in front of the last lens vertex
Focal length:	46.5 mm	Diameter of exit pupil:	15.4 mm
Negative size:	24 x 36 mm	Position of principal plane H:	6.9 mm behind the first lens vertex
Angular field 2w*:	diagonal 51°	Position of principal plane H':	9.1 mm in front of the last lens vertex
Aperture scale:	2.8 - 4 - 5.6 - 8 - 11 - 16 - 22	Back focal distance*:	36.9 mm
Mount:	focusing mount with bayonet; TTL metering either at full aperture or in stopped-down position. Aperture priority/Shutter priority/ Automatic programs	Distance between first and last lens vertex:	16.9 mm
Filter connection:	screw-in type, thread M 49 x 0.75	Weight:	approx. 90 g

\* at ∞



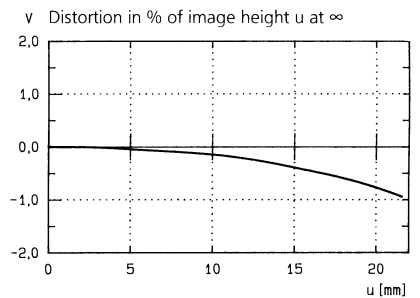
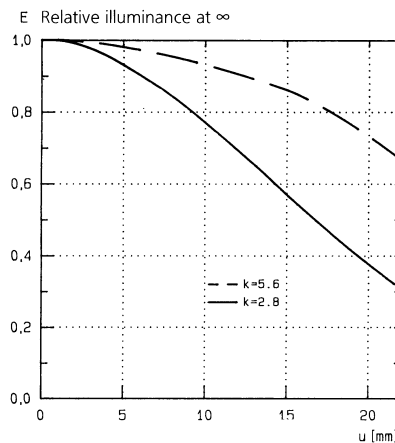
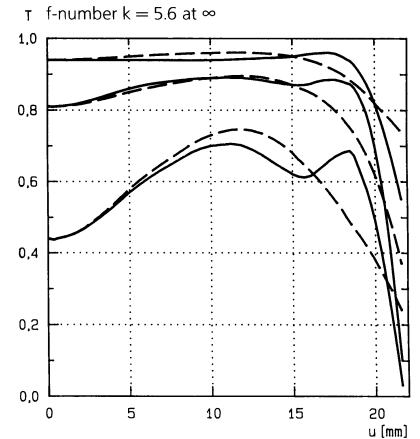
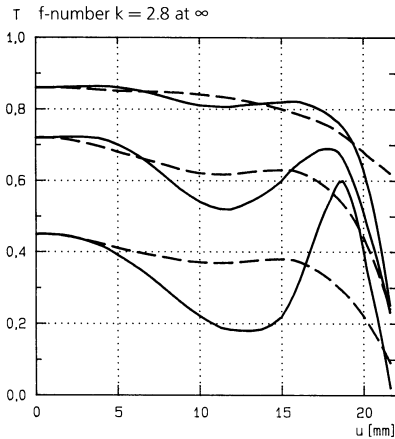
Performance data:

**Tessar**® T\* f/2.8 - 45 mm  
Cat. No. 10 03 46

### 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  $u$ . Slit orientation: tangential ——— sagittal ———  
White light. Spatial frequencies  $R = 10, 20$  and  $40$  cycles/mm



### 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.



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Subject to change.