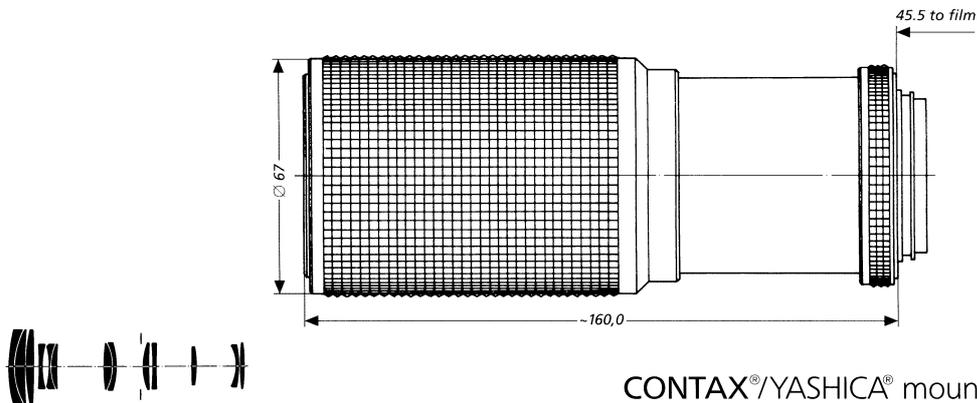


Vario-Sonnar[®] T* f/4 80 - 200 mm



CONTAX[®]/YASHICA[®] mount

The 80-200 mm Vario-Sonnar[®] T* f/4 lens from Carl Zeiss is a light, one-touch zoom lens which provides very good image quality over the entire focal length range. As with the 35-70 mm Vario-Sonnar[®] T* f/3.4 lens, the same ring is used for zooming and focusing.

The relative aperture set and the image position remain constant over the entire focal length range. The lens displays very low distortion over the entire focal length range.

The 80-200 mm Vario-Sonnar[®] T* f/4 lens is suited for a wide variety of work in the close and medium telephoto ranges.

Cat. No. of lens:	10 47 35	Entrance pupil*:	
Number of elements:	13	Position:	a) 56.5 mm behind first lens vertex b) 148.2 mm behind first lens vertex
Number of groups:	10	Diameter:	a) 19.9 mm b) 48.2 mm
Max. aperture*:	f/4	Exit pupil*:	
Focal length*:	81.5-198.0 mm	Position:	a) 46.5 mm in front of last lens vertex b) 46.5 mm in front of last lens vertex
Negative format:	24 x 36 mm	Diameter:	a) 23.4 mm b) 23.4 mm
Angular field 2w*:	30°-12°	Position of principal planes*:	
Spectral region:	visible spectrum	H:	a) 68.2 mm behind first lens vertex b) 65.9 mm behind first lens vertex
Aperture scale:	4 - 5.6 - 8 - 11 - 16 - 22	H':	a) 32.9 mm in front of last lens vertex b) 149.4 mm behind last lens vertex
Mount:	focusing helicoid with bayonet; Aperture priority/Shutter priority/ Automatic programs (Multi-Mode Operation).	Back focal distance:	48.6 mm
Filter connection:	thread M 55 x 0.75 mm, screw-in type clip-on type, diameter 58 mm	Distance between first and last lens vertex*:	153.4 mm
Weight:	approx. 680 g		
Focusing range:	∞ to 1 m		

a) f = 80 mm b) f = 200 mm, * at ∞



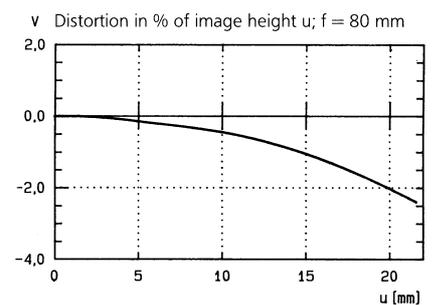
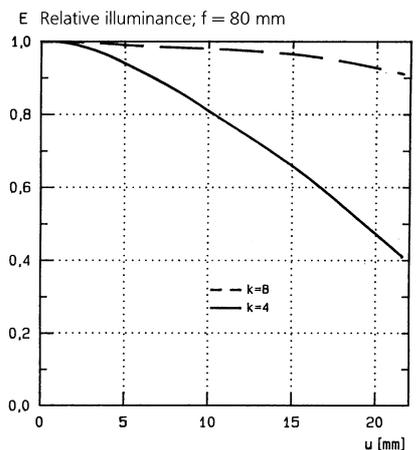
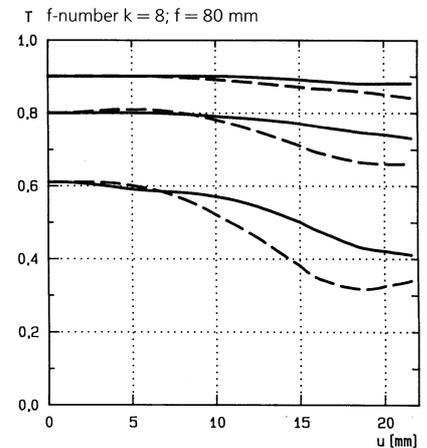
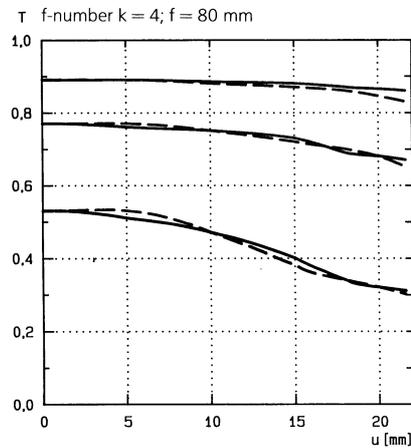
Performance data:

Vario-Sonnar® T* f/4 80 - 200 mm
 Cat. No. 10 47 35

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

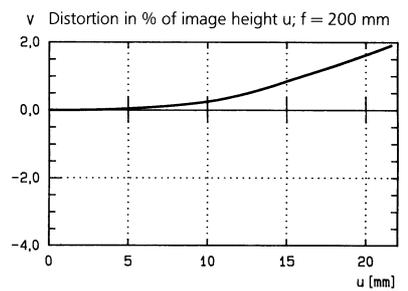
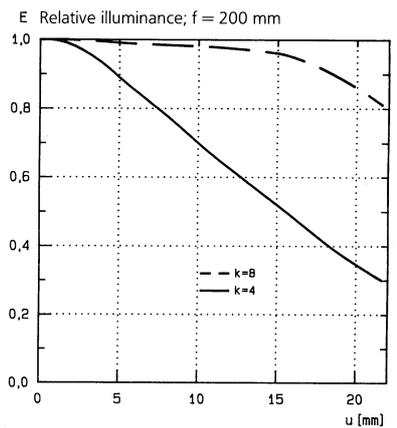
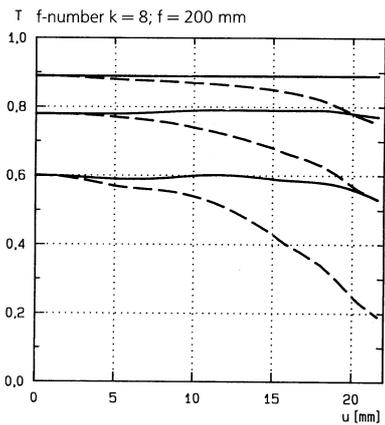
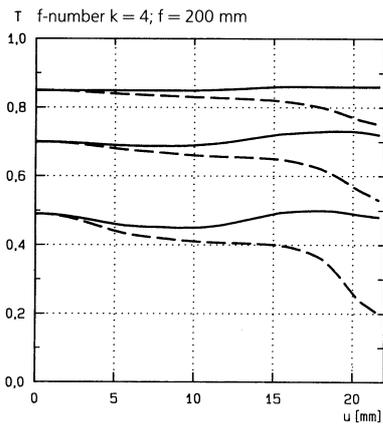
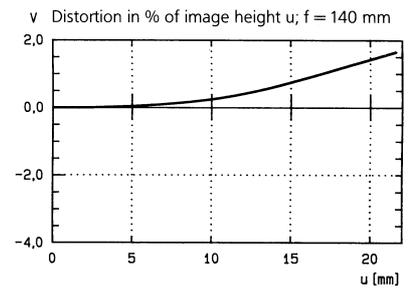
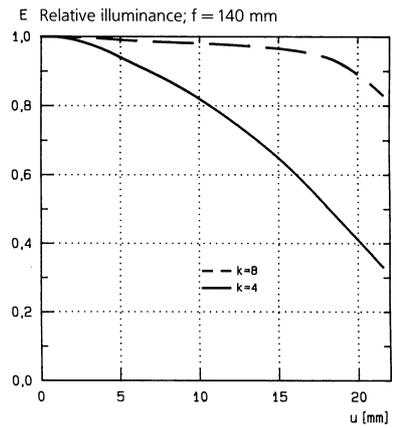
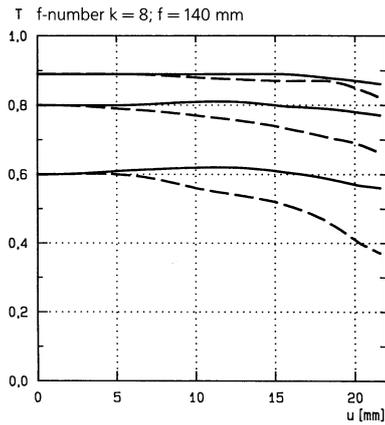
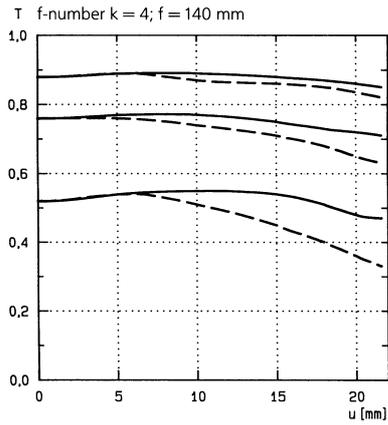


2. Relative illuminance

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.