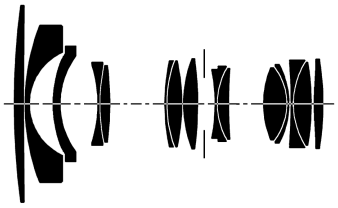
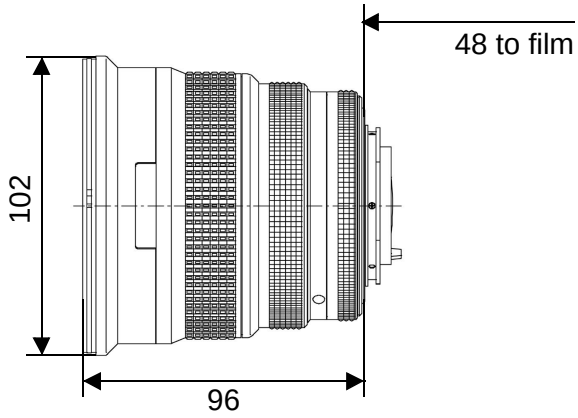
Vario-Sonnar® T* 2.8/17-35





CONTAX® N

Extreme wide-angle, fast f/2.8 zoom lenses are among the preferred optics of today's photojournalists and travel photographers.
For the Contax N SLR system, Carl Zeiss has designed an all new Vario-Sonnar® T* 2,8/17-35 lens. With this zoom lens Carl Zeiss has incorporated 3 aspheric surfaces along with lens elements from special types of optical glass to achieve an image quality comparable to very good fixed focal length lenses, especially at the super wide end. This is particularly beneficial since extreme wide-angle photos should be blown up large, like a double spread, to really deliver that special impression of super wide vistas. For this purpose of high enlargements convincing sharpness is mandatory. The Vario-Sonnar® T* 2,8/17-35 lens utilizes the full potential of modern color films and delivers images of impressive brilliance and sharpness.

To enable the use of special effect filters without any vignetting, the Vario-Sonnar® T* 2,8/17-35 lens is equipped with a very wide filter mount. This lens with its large amount of optical glass, and attendant mass provides high stabilization during the exposure. Thus, significantly longer exposure times can be obtained handheld with good results, a special benefit for photojournalism. Equally beneficial is the fast speed of f/2.8, ensuring a bright viewfinder image thus easing the image composition.

Preferred use: spectacular super-wide vistas, advertising, images that depict sheer expanse, dynamic landscapes, travel and tourism, photojournalism, photos to be taken in crammed spaces

Cat. No. of lens	**10 47 68**
Number of elements	15
Number of groups	10
Max. aperture	f/2.8
Focal length	W = 17.4 mm, T = 34.0 mm
Negative size	24 x 36 mm
Angular field 2w*	W = width 92°, height 69°, diagonal 102° T = width 11°, height 7.1°, diagonal 65°
Min. aperture	22
Camera mount	Contax N
Filter connection	M 95 x 0.75
Focusing range	infinity to 0.5 m
Working distance (between mechanical front end of lens and subject)	W = 0.38 m, T = 0.38 m
Close limit field size	W = 545 mm x 831 mm T = 268 mm x 400 mm
Max. scale	W = 1 : 22 T = 1 : 11.2

Entrance pupil*	
Position	W = 24.4 mm behind the first lens vertex T = 25.2 mm behind the first lens vertex
Diameter	W = 6.1 mm T = 11.8 mm
Exit pupil*	
Position	W = 59.6 mm in front of the last lens vertex T = 27.6 mm in front of the last lens vertex
Diameter	W = 35.0 mm T = 29.7 mm
Position of principal planes*	
H	W = 38.8 mm behind the first lens vertex T = 45.4 mm behind the first lens vertex
H'	W = 21.1 mm behind the last lens vertex T = 22.3 mm behind the last lens vertex
Back focal distance	W = 38.5 mm T = 56.3 mm
Distance between first and last lens vertex*	W = 103.7 mm T = 87.8 mm
Weight	900 g

*at infinity

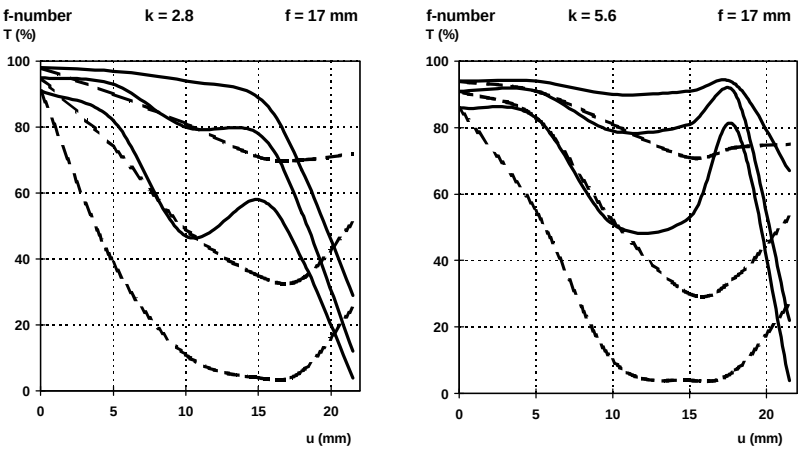
ZEISS

Performance data:
Vario-Sonnar® T* 2.8/17-35
Cat. No. 10 47 68

1. MTF Diagrams

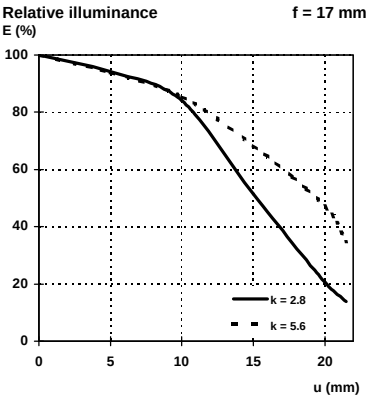
The image height u - calculated from the image center - is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = Modulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the 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:** —— sag – – tan
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.

Performance data:

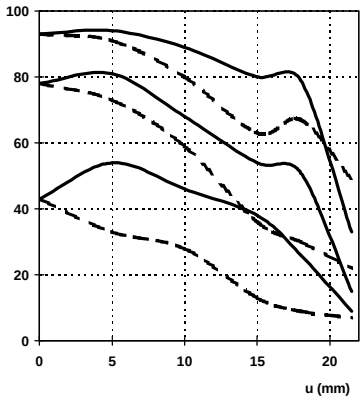
Vario-Sonnar® T* 2.8/17-35

Cat. No. 10 47 68

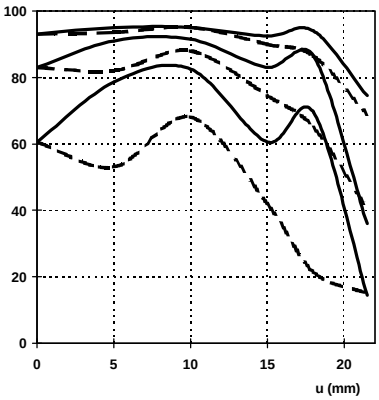
Modulation transfer T as a function of image height u. **Slit orientation:** —— **sag** – – **tan**

White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

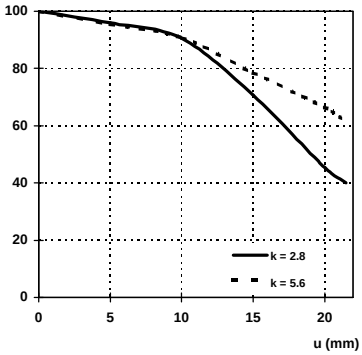
f-number **k = 2,8** **f = 24 mm**



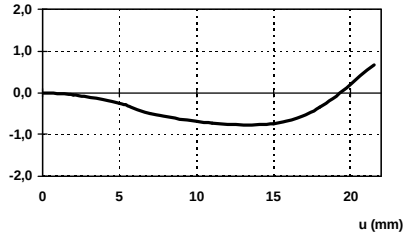
f-number **k = 5,6** **f = 24 mm**



Relative illuminance **f = 24 mm**



Distortion in % of image height u **f = 24 mm**



Performance data:

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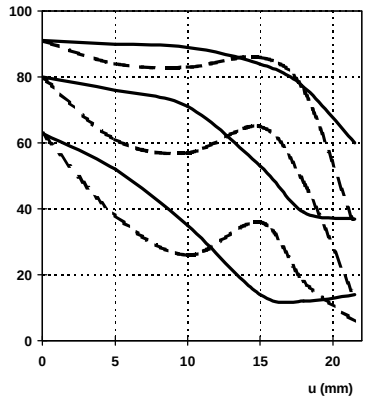
Cat. No. 10 47 68

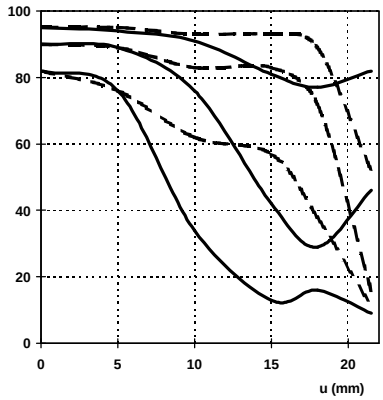
Modulation transfer T as a function of image height u. **Slit orientation:** —— **sag** – – **tan**

White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

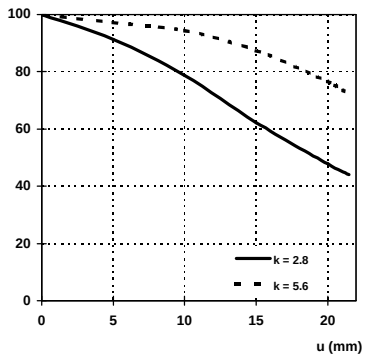
f-number **k = 2.8** **f = 35 mm**



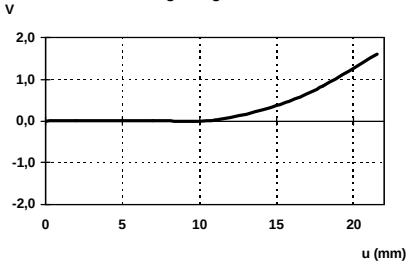
f-number **k = 5.6** **f = 35 mm**



Relative illuminance **f = 35 mm**



Distortion in % of image height u **f = 35 mm**



Subject to change.

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