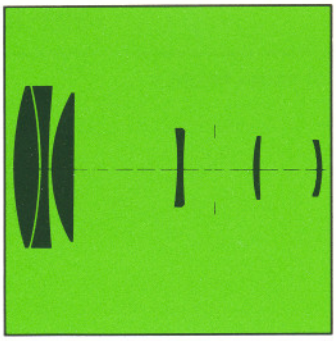
Tele-Tessar T*
f/3.5–200 mm
Cat.-No. 10 45 21

CONTAX
YASHICA mount

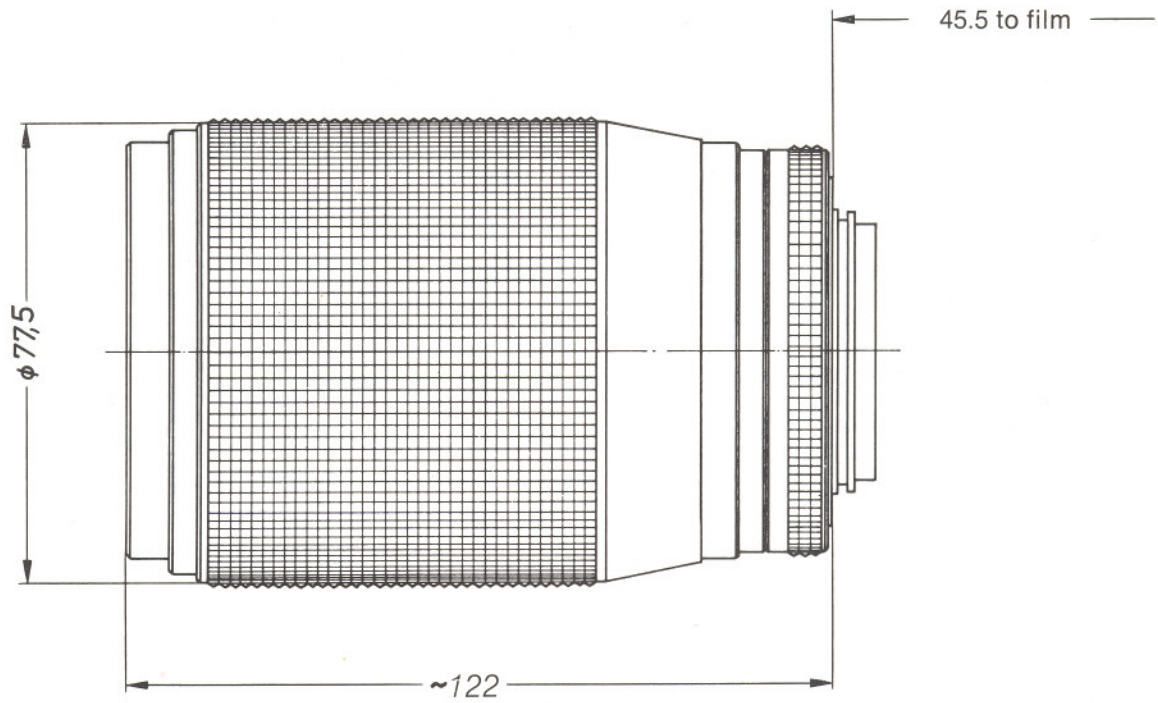


ZEISS

Carl Zeiss
D-7082 Oberkochen
West Germany

The Tele-Tessar f/3.5 - 200 mm has all the advantages of a tele type lens, without the disadvantages of the classical tele design. The tele lens type is characterized by a distance between front lens vertex and focal point which is about 30 mm shorter than the focal length. This ensures the compact design of the lens. Since the distance between exit pupil and film plane with ∞ setting is only 75 mm, the finder image is brightly and uniformly illuminated.

Owing to its focal length of 200 mm, this Tele-Tessar ranges between the medium size tele lenses (85 and 135 mm) and those with extremely long focal lengths, and is the ideal choice for long-range work, in sports (motor and horse races, football, soccer and baseball games) and press photography, and also for landscape photography.



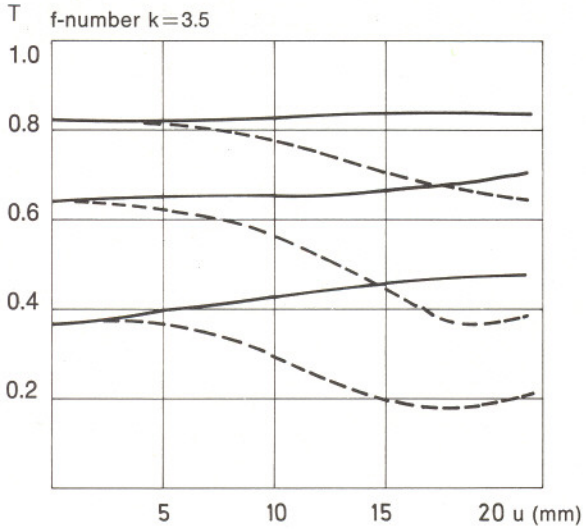
Number of lens elements:	6
Number of components:	5
f-number:	3.5
Focal length:	194.0 mm
Negative size:	24 x 36 mm
Angular field 2w:	12° 40′ diagonal
Lens mount:	focusing mount with bayonet; coupling system for automatic diaphragm function; through-the-lens measurement either at full aperture or in stop-down position
f-stop scale:	Built-in lens hood
Filter mounting:	3.5 - 5.6 - 8 - 11 - 16 - 22 slip-on mount, 70 mm dia. screw thread M 67 x 0.75
Weight:	approx. 780 g

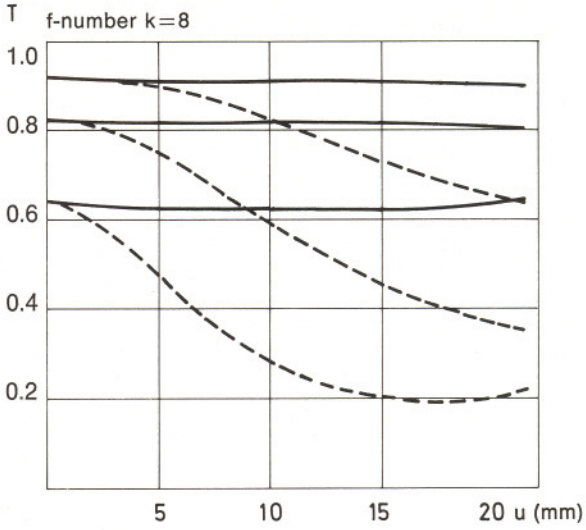
Distance range:	∞ to 1.8 m (6′)
Position of entrance pupil:	168.4 mm behind the first lens vertex
Diameter of entrance pupil:	54.0 mm
Position of exit pupil:	33.1 mm in front of the last lens vertex
Diameter of exit pupil:	20.9 mm
Position of principal plane H:	145.0 mm in front of the first lens vertex
Position of principal plane H′:	31.0 mm in front of the first lens vertex
Distance between first and last lens vertex:	121.9 mm

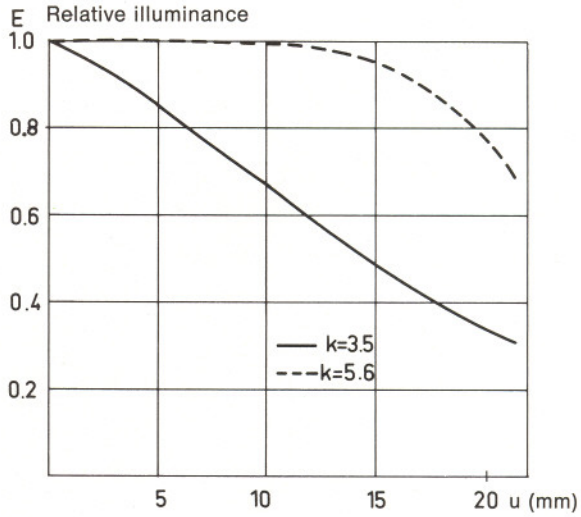
Performance data: Tele-Tessar T* f/3.5 – 200 mm Cat. No. 104521

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





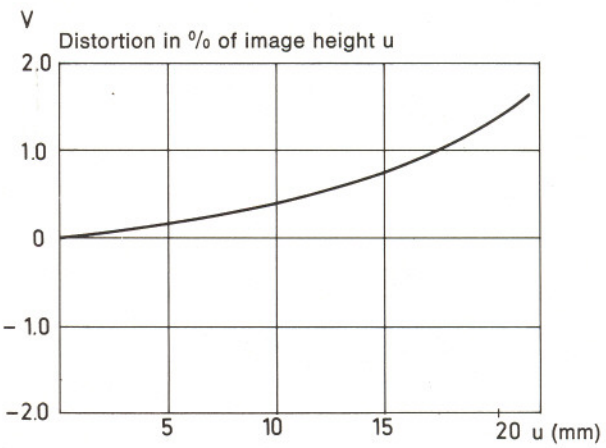


1. MTF Diagrams
The image height u – reckoned from the image center – is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = **M**odulation **T**ransfer **F**actor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the top right hand above the diagrams. 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.



Subject to technical amendment