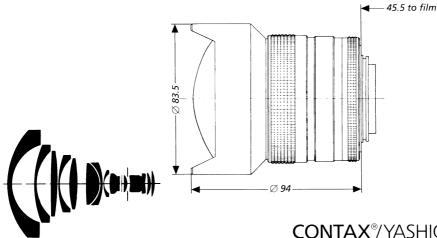
Distagon[®] T* f/3.5 - 15 mm



CONTAX®/YASHICA® mount

The 15 mm **Distagon**[®] f/3.5 lens incorporates the latest advances in the design of high speed lenses with an extremely large angular field and - owing to the free movement of the mirror - an extremely long back focal distance compared with the focal length.

For the demanding amateur and the professional photographer, the 110° **Distagon**[®] therefore is a tool which opens up new possibilities in the true sense of the word. Just think of the problem of lighting when taking photographs of interiors with lenses with large angular fields. Here, the speed is of great advantage.

Or consider the extreme wide-angle perspective which is of great importance for picture composition, and not only for advertising photography. We should perhaps mention the possibility of model pictures which sometimes convey a better spatial impression of the construction project than the model itself. The high speed provides a bright viewfinder image and therefore ensures convenient focusing. In landscape and architectural photography, and when stopped down only moderately, the 110°

Distagon[®] lens also permits full-view pictures, even the corners of which are superbly illuminated.

| Cat. No. of lens: | 10 48 41 | Focusing range: | ∞ to 0.16 m |
|---------------------|--------------------------------------|---|--|
| Number of elements: | 13 | Aberration correction for close range by floating element | |
| Number of groups: | 12 | Entrance pupil*: | |
| Max. aperture*: | f/3.5 | Position: | 34.6 mm behind the first lens vertex |
| Focal length*: | 15.4 mm | Diameter: | 4.3 mm |
| Negative size: | 24 x 36 mm | Exit pupil*: | |
| Angular field 2w*: | 110° diagonal | Position: | 19.4 mm in front of the last lens vertex |
| Mount: | focusing mount with bayonet; | Diameter: | 15.5 mm |
| | TTL metering either at full aperture | Position of principal planes*: | |
| | or in stopped-down position. | H: | 45.7 mm behind the first lens vertex |
| Aperture scale: | 3.5 - 5.6 - 8 - 11 - 16 - 22 | H': | 20.9 mm behind the last lens vertex |
| Filter connection: | built-in filter turret | Back focal distance*: | 36.3 mm |
| | (UV; Or 57; Y 50; B 11) | Distance between first and | |
| Weight: | approx. 875 g | last lens vertex*: | 102.0 mm |
| | | | |



Performance data: **Distagon**[®] T* f/3.5 - 15 mm Cat. No. 10 48 41

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

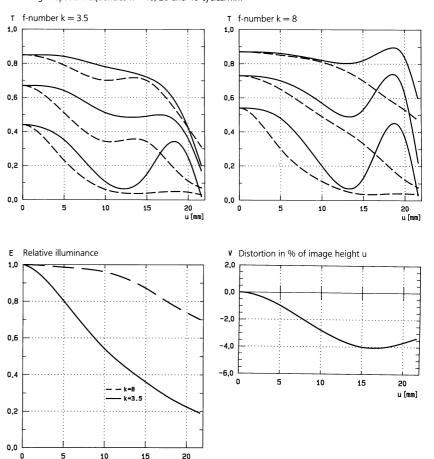
Here again the image height u is entered on the horizontal axis in mm. The vertical axis gives the distortion V in % of the relevant image height. A positive value for V means that the actual image point is further from the image center than with perfectly distortion-free imaging (pincushion distortion); a negative V indicates barrel distortion.

> Carl Zeiss Photoobjektive

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Subject to change.

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



10

0

15

20

u [mm]