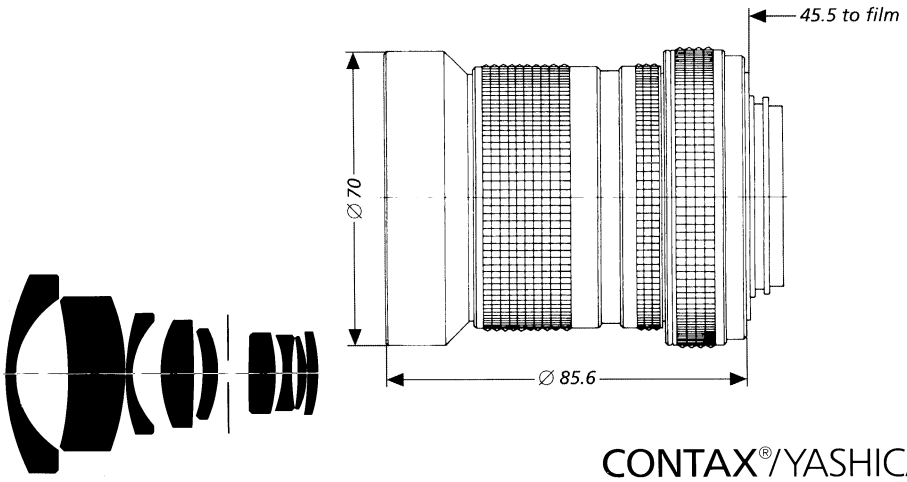
PC-**Distagon**® T* f/2.8 - 35 mm



CONTAX®/YASHICA® mount

The 35 mm PC-**Distagon**® f/2.8 lens is a wide-angle lens, the 63 mm field diameter of which is considerably larger than needed for the 24 x 36 mm format. This reserve permits the perspective to be checked and corrected by shifting the lens before shooting. In this way distorted perspective such as converging lines can be prevented or an interfering foreground suppressed.

The lens can be displaced by 10 mm upwards and downwards by simply pressing it with a finger. After the ring with the degree scale has been pulled back, the lens can also be rotated at 15º intervals, allowing lens shift in parallel with either the long or the short side of the format.

Special scales permit the position set to be readjusted at any time.

High image quality is a matter of course in the wide-angle, retro-focus lenses featuring the trademark **Distagon**®. To compensate for aberrations in close-ups, the position of individual optical elements is automatically changed via a cam when focusing (floating element). When shifting the lens, it is inevitable that the exit pupil will also be shifted laterally from the focusing screen. The rays emerging from the pupil therefore strike the metering field of the camera's exposure sensor at a different angle. The exact shutter speed must therefore be set on the camera while the lens is still in its "normal position".

Cat. No. of lens:	**10 48 61**
Number of elements:	9
Number of groups:	9
Max. aperture*:	f/2.8
Focal length*:	35.2 mm
Negative size:	24 x 36 mm
Angular field 2w*:	63/83º diagonal
Mount:	focusing mount with bayonet; Possibility of correcting distorted perspective: max. 10 mm displacement. TTL metering in stopped-down position.
Aperture scale:	2.8 - 4 - 5.6 - 8 - 11 - 16 - 22
Filter connection:	clip-on filter, diameter 70 mm
Weight:	approx. 740 g

Focusing range:	∞ to 0.3 m
Aberration correction for close range by floating element	
Entrance pupil*:	
Position:	28.6 mm behind the first lens vertex
Diameter*:	12.6 mm
Exit pupil*:	
Position:	19.0 mm in front of the last lens vertex
Diameter*:	24.2 mm
Position of principal planes:	
H:	45.1 mm behind the first lens vertex
H':	12.4 mm behind the last lens vertex
Back focal distance*:	47.6 mm
Distance between first and last lens vertex:	82.5 mm

* at ∞

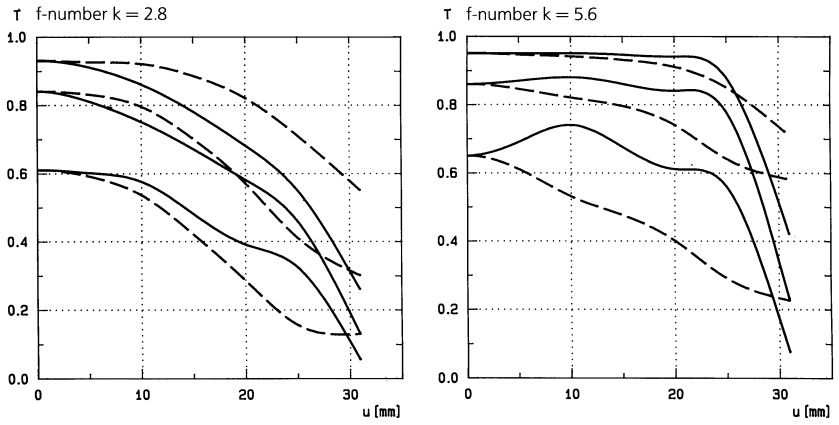
ZEISS

Performance data:
PC-**Distagon**® T* f/2.8 - 35 mm
Cat. No. 10 48 61

1. MTF Diagrams

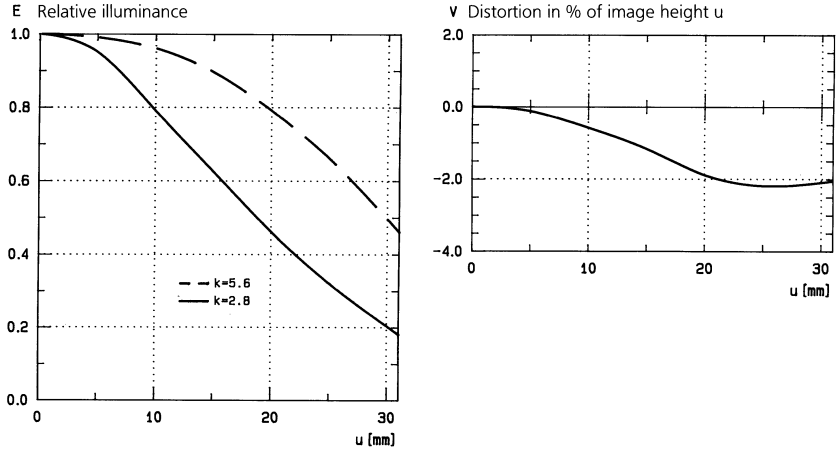
The image height u - calculated from the image center - is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = Modulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the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

Carl Zeiss
Photoobjektive
D-73446 Oberkochen
Telephone (07364) 20-6175
Fax (07364) 20-4045
eMail: photo@zeiss.de
http://www.zeiss.de

Subject to change.