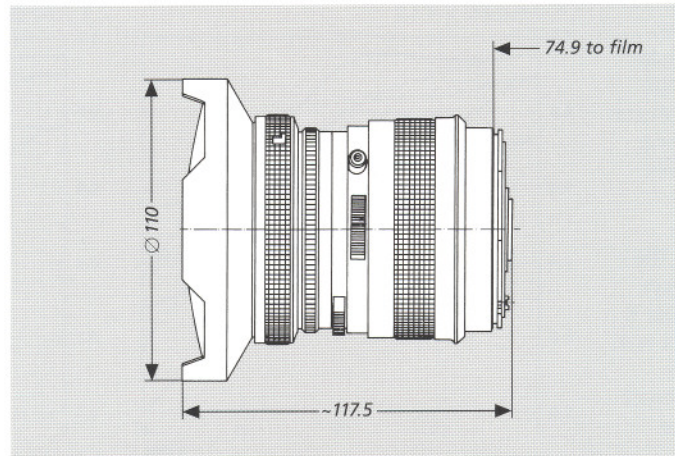
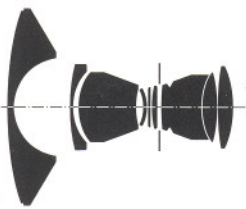


# F Distagon® T\* f/3.5 – 30 mm



H A S S E L B L A D



With its angular field of 180° across the image field diagonal, this fisheye lens covers the entire 6 x 6 cm format.

Owing to the extremely large angular field, photographs taken with this lens supply ample information even of narrow interiors. Its outstanding image quality offers the creative photographer new possibilities. The excellent correction of this lens results in outstanding sharpness, even at initial aperture.

Four special filters (neutral glass and three color filters) are supplied with each lens. These filters are built into the lens and fixed to the front component, as even the largest attachment filter would occlude the 180° angular field. The filter is part of the optical system. Either the neutral glass or one of the color filters must always be mounted in the lens. To exchange filters, the front component held in a bayonet mount is removed.

<b>Cat. No. of lens:</b>	<b>104877</b>	<b>Weight:</b>	approx. 1365 g
Number of elements:	8	Focusing range:	∞ to 0.3 m
Number of groups:	7	Entrance pupil:	28.5 mm behind the first lens vertex
Max. aperture:	f/3.5	Diameter:	8.5 mm
Focal length:	30.6 mm	Exit pupil:	35.9 mm in front of the last lens vertex
Negative size:	56.5 x 56.5 mm	Position:	29.9 mm
Angular field 2w:	diagonal 180°, side 112°	Diameter:	50.4 mm behind the first lens vertex
Spectral range:	visible spectrum	H':	40.2 mm behind the last lens vertex
Aperture scale:	3.5 – 4 – 5.6 – 8 – 11 – 16 – 22	Back focal distance:	70,7 mm
Mount:	focusing mount with bayonet; coupling system for automatic diaphragm function	Distance between first and last lens vertex:	113.8 mm
Shutter:	Prontor CF		
Filter connection:	screw-in filter, M 24 x 0.5 mm, replaceable after removal of front component		

**Planar**  
100 Years



# Performance data: F Distagon® T\* f/3.5 – 30 mm No. 104877

## 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.

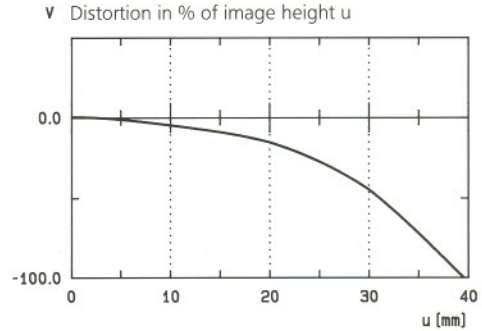
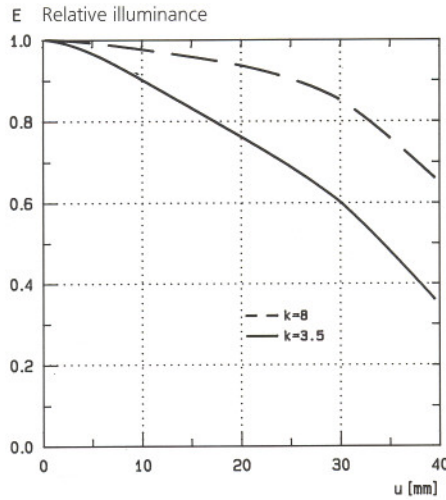
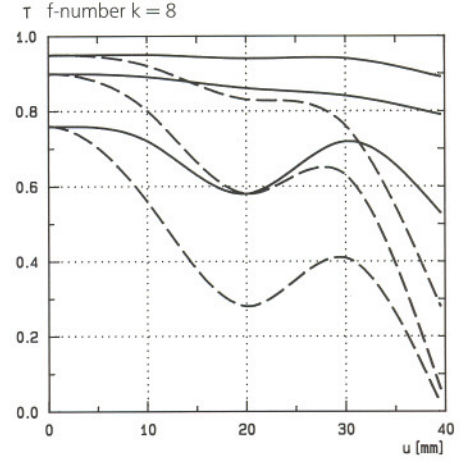
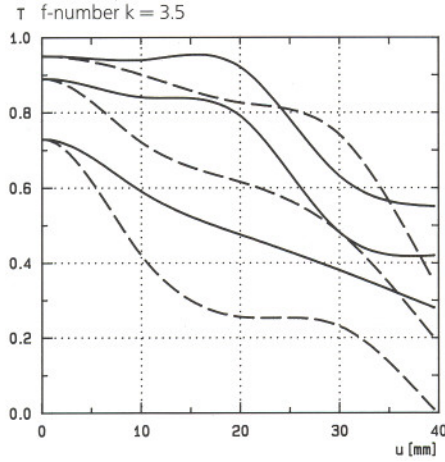
The lowest spatial frequency corresponds to the upper pair of curves, the highest spatial frequency to the lower pair. Above each graph, the f-number  $k$  is given for which the measurement was made. "White" light means that the measurement was made with a subject illumination having the approximate 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.

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



## 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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