



# ZEISS Interlock 1.4/85



## Features

- Very fast f/1.4 aperture
- Precise manual focusing
- Robust full-metal construction
- Continuous aperture setting or click stop
- For industrial cameras up to sensor sizes of 24x36 mm or 41 mm line sensors
- High optical performance both at infinity and at 8.3 scale
- Features special screws to fix focus and aperture settings even in rough situations

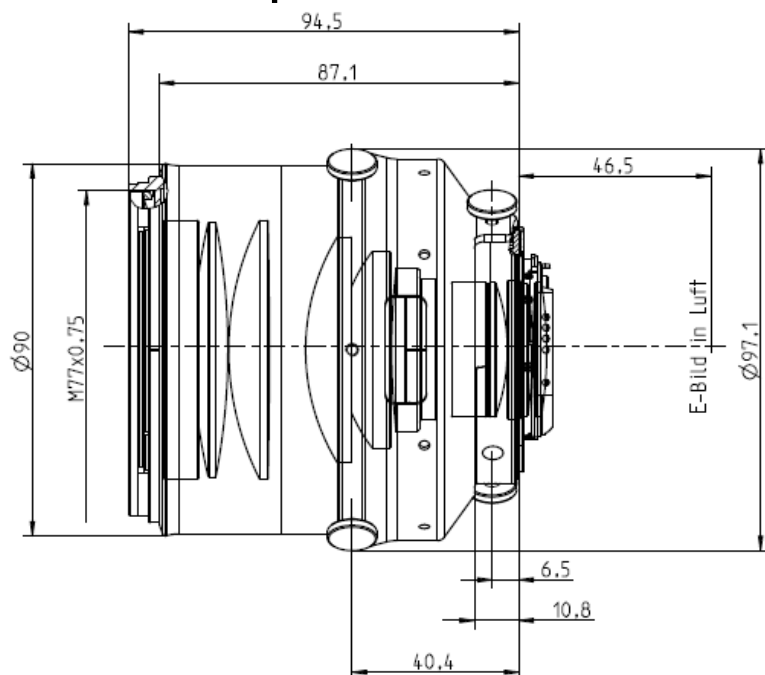
## Camera Mounts

Available with F mount or M42 screw mount



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## Technical Specifications



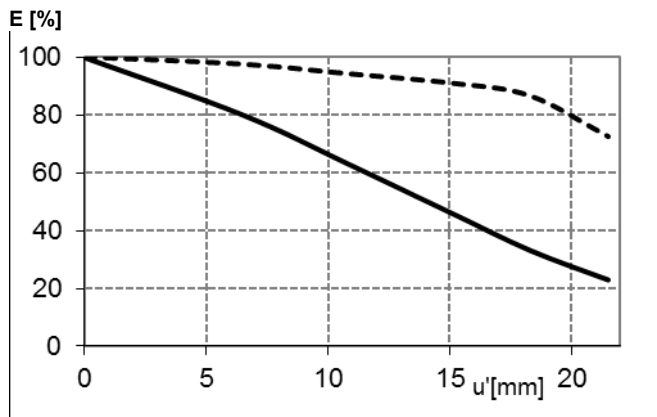
<b>Focal length</b>	85 mm
<b>Aperture range</b>	f/1.4 – f/16 (1/2 stop intervals or continuous)
<b>Number of elements / groups</b>	11 / 9
<b>Min. working distance (object to sensor)</b>	800 mm (2.62 ft.) – ∞
<b>Min. free working distance</b>	650 mm (2.13 ft.) – ∞
<b>Angular field* (diag. / horiz. / vert.)</b>	29 / 24 / 16°
<b>Max. diameter of image field</b>	43 mm (1.7")
<b>Flange focal length</b>	F-Mount: 46,5 mm (1.8"); M42-Mount: 45,5 mm
<b>Coverage at close range*</b>	area: 298 x 208 mm (11.7 x 8.2") line: 356 mm (14,0")
<b>Image ratio at close range</b>	1:8.3
<b>Filter-thread</b>	M77 x 0.75
<b>Weight</b>	1.277 g (2.8 lbs.)
<b>Camera mount</b>	F bayonet, M42

\* referring to 35 mm format



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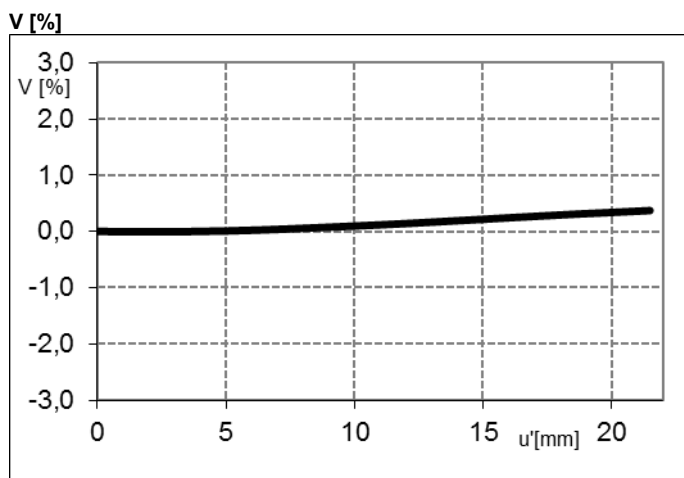
## Relative Illuminance\*



The relative illumination shows the decrease in image brightness from the image center to the edge in percent.

— f-number 1.4  
--- f-number 4

## Relative Distortion\*



The relative distortion shows the deviation of the actual image height from the ideal one in percent.

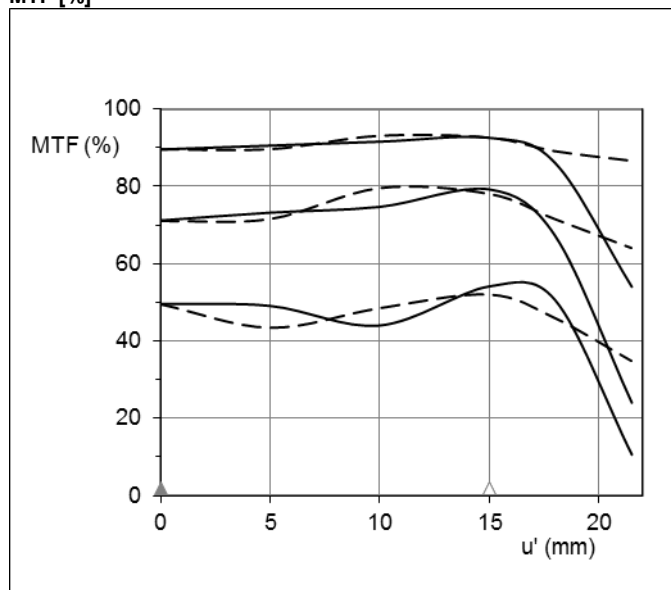
\*Data for infinite focus setting



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## MTF Charts\*

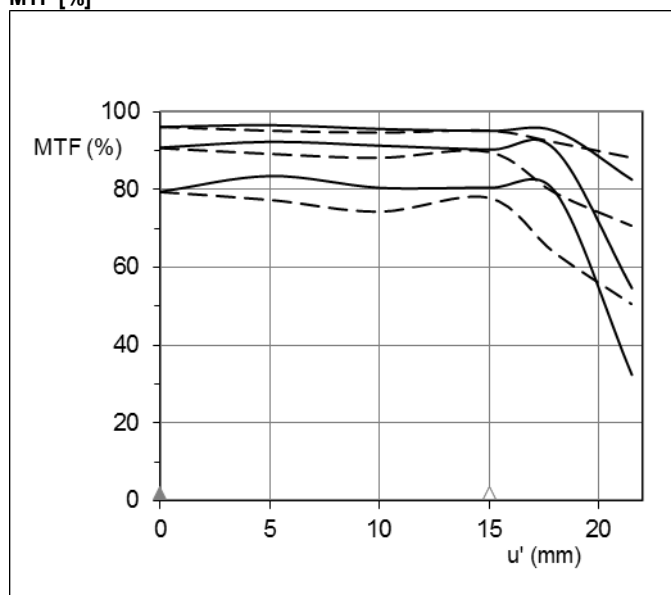
MTF [%]



The Modulation Transfer (MTF) as a function of image height ( $u$ ) and slit orientation (sagittal, tangential) has been measured with white light at spatial frequencies of  $R = 10, 20$  and  $40$  cycles/mm.

f-number 1.4  
— Sagittal  
... Tangential

MTF [%]



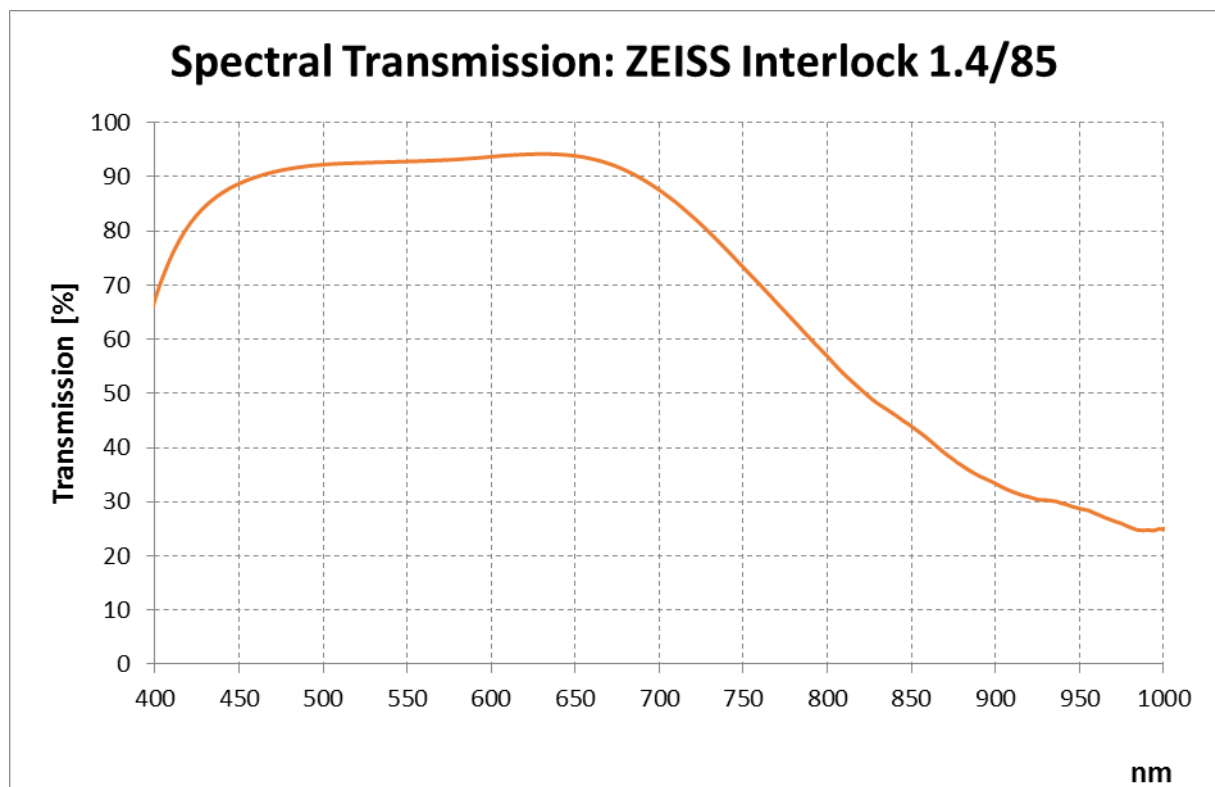
f-number 4  
— Sagittal  
... Tangential

\*Data for infinite focus setting



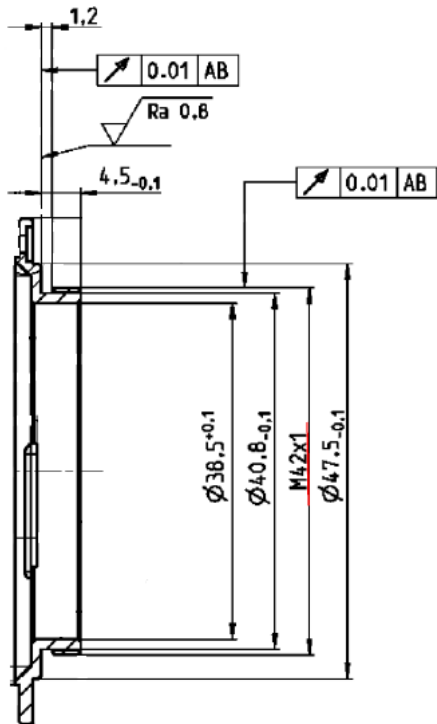
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## Spectral Transmission





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M42 Mount for 45,5 mm Flange Focal Distance

The diameter of the camera/lens adapter must not exceed 55 mm at the lens side!