



ZEISS Interlock 1.4/50



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 1:6.7 scale
- Features special screws to fix focus and aperture settings even in rough situations

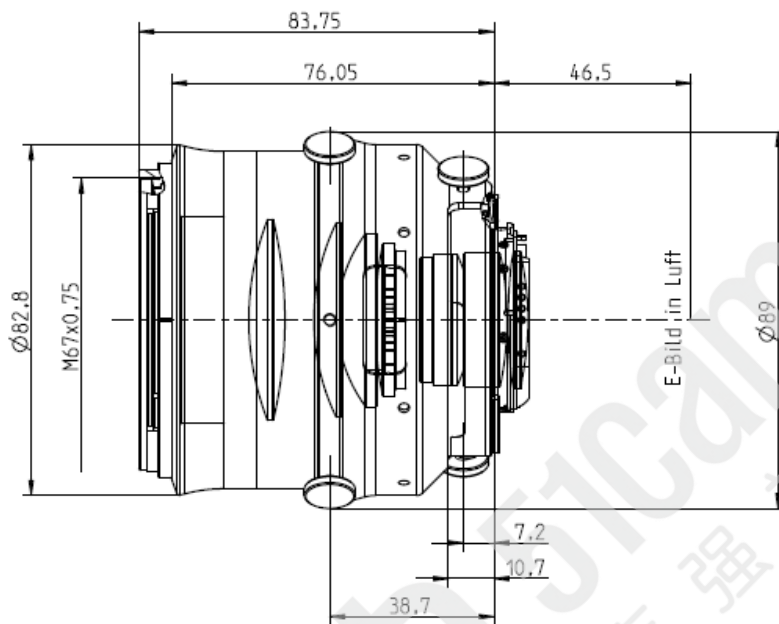
Camera Mounts

Available with F mount or M42 screw mount



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Technical Specifications



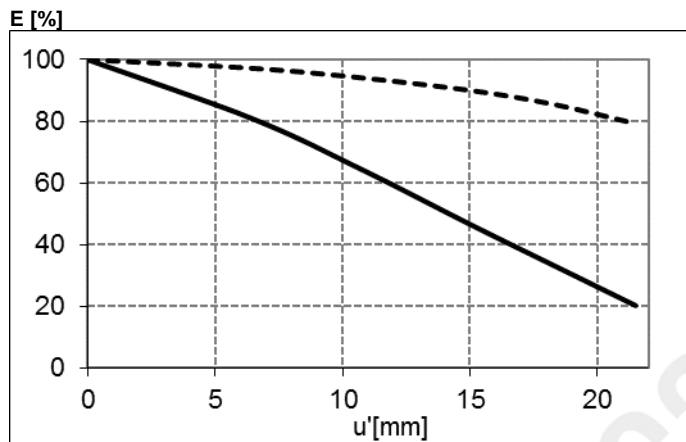
| | |
|---|---|
| Focal length | 50 mm |
| Aperture range | f/1.4 – f/16 (1/ 2 stop intervals or continuous) |
| Number of elements / groups | 10 / 8 |
| Min. working distance (object to sensor) | 450 mm (1.48 ft.) – ∞ |
| Min. free working distance | 340 mm (1.12 ft.) – ∞ |
| Angular field* (diag. / horiz. / vert.) | 46 / 39 / 26° |
| Max. diameter of image field | 43 mm (1.7") |
| Flange focal length | F-Mount: 46,5 mm (1.8"); M42-Mount: 45,5 mm |
| Coverage at close range* | area: 241 x 160 mm (9.5 x 6.3") line: 274 mm (10,8") |
| Image ratio at close range | 1:6.7 |
| Filter-thread | M 67 x 0.75 |
| Weight | 942 g (2.1 lbs.) |
| Camera mount | F bayonet, M42 |

* referring to 35 mm format



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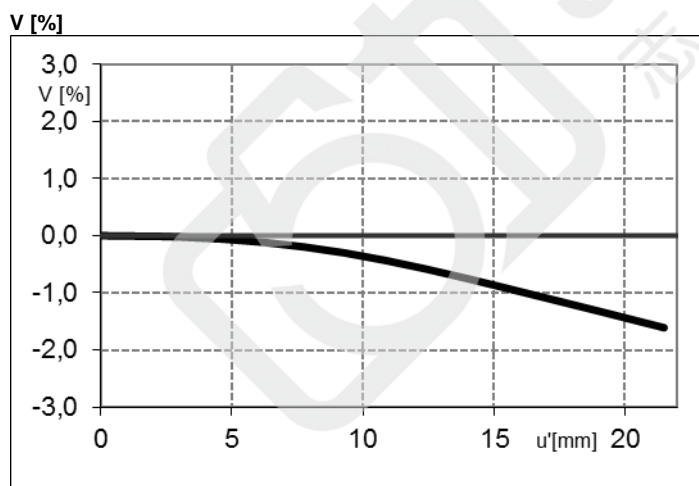
Relative Illuminance*



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.

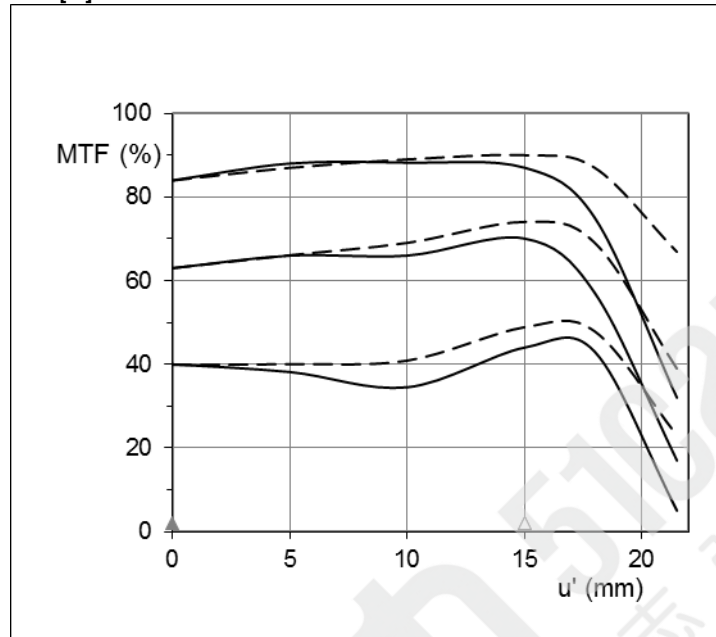
**Data for infinite focus setting*



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MTF Charts*

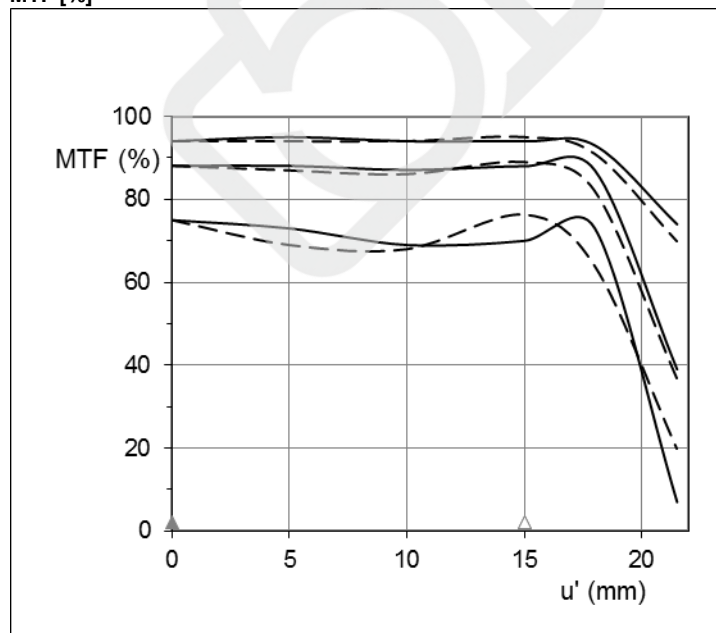
MTF [%]



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 [%]



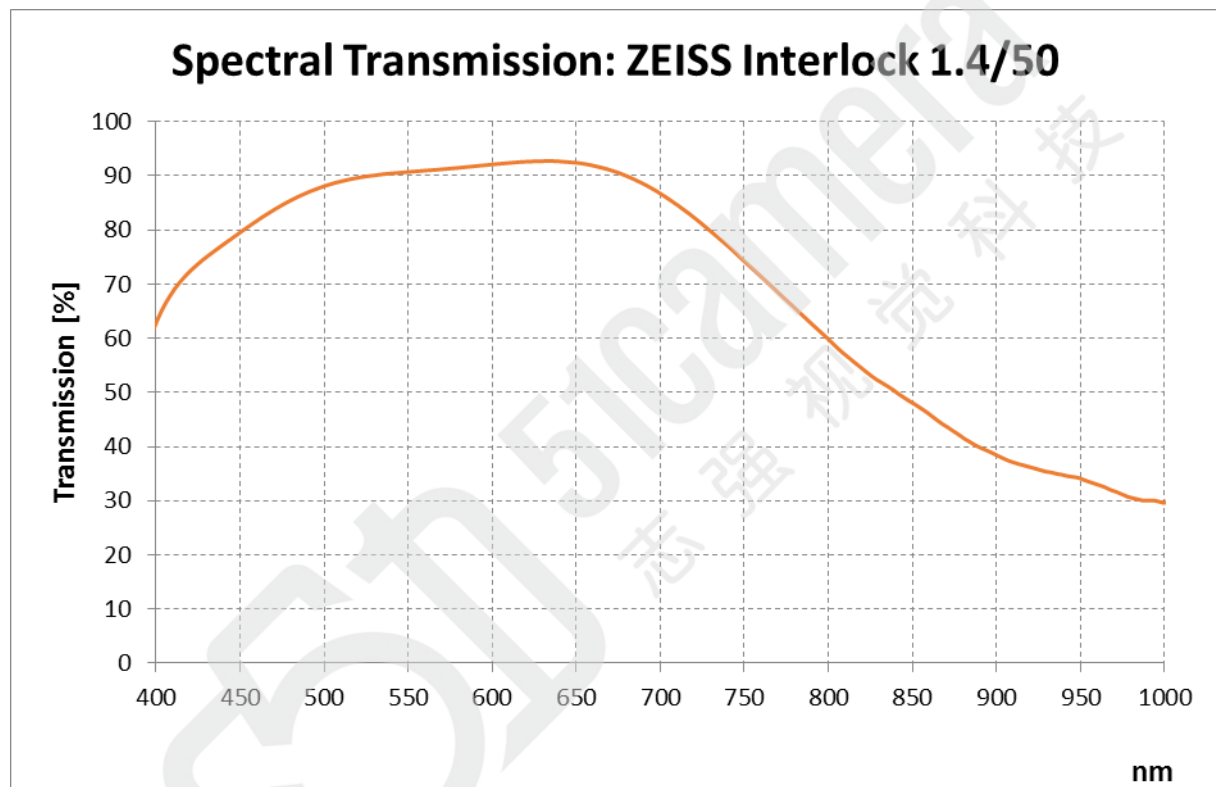
f-number 4
— Sagittal
... Tangential

*Data for infinite focus setting



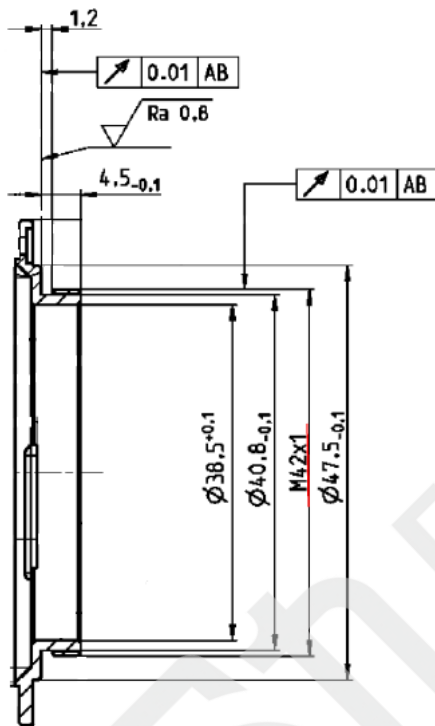
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Spectral Transmission





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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!