



Features

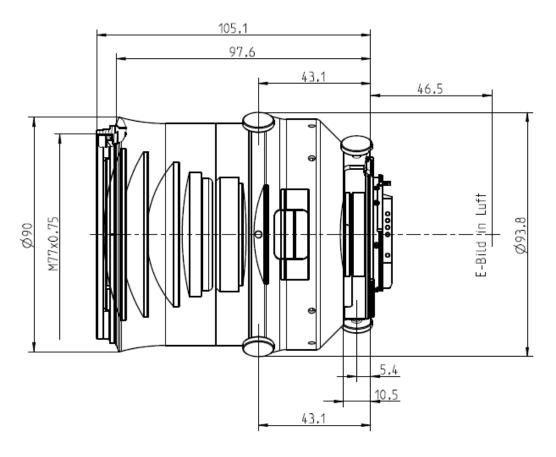
- Fast f/2.0 aperture
- Extraordinary high resolution and contrast
- Low distortion
- Precise manual focusing
- Robust full-metal construction
- Continuous aperture setting or click stop
- For industrial cameras up to sensor sizes of 24x36 mm or 41mm line sensors
- High optical performance both at infinity and at 1:2 scale
- Features special screws to fix focus and aperture settings even in rough situations

Camera Mounts

Available with F mount or M42 screw mount



Technical Specifications

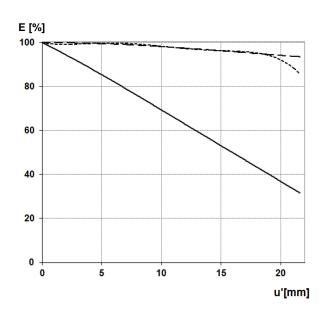


Focal length	135 mm
Aperture range	f/2 – f/22 (1/2 stop intervals or continuous)
Number of elements / groups	11 / 8
Min. working distance (object to sensor)	800 mm (2.62 ft.) — ∞
Min. free working distance	620 mm (1.37 ft.) — ∞
Angular field* (diag. / horiz. / vert.)	18,7 / 15,6 / 10,5 °
Max. diameter 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	145 x 96 mm (5.7 x 3.8") line 172 mm (6.8")
Image ratio at MOD	1:4
Filter-thread	M 77 x 0.75
Weight	1.126 g (2.48 lbs.)
Camera mount	F bayonet, M42

^{*} referring to 35 mm format



Relative Illuminance*

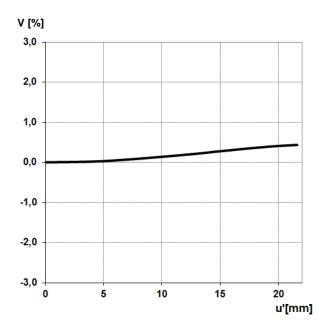


The relative illumination shows the decrease in image brightness from the image center to the edge in percent.

 $_{-}$ f-number = 2.0

 \dots f-number = 5.6

Relative Distortion*

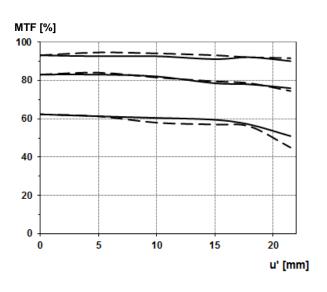


The relative distortion shows the deviation of the actual image height from the ideal one in percent.

^{*}Data for infinite focus setting

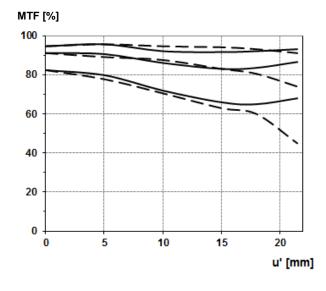


MTF Charts*



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 2 __ Sagittal ... Tangential

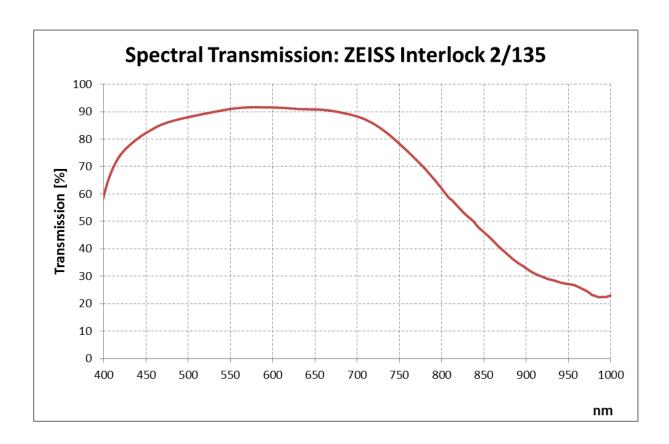


f-number 4 __ Sagittal ... Tangential

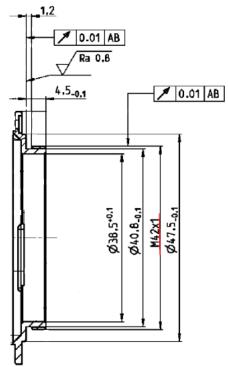
^{*}Data for infinite focus setting



Spectral Transmission







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!