





www.pyramidimaging.com 813-786-3785



#### **Features**

- Fast f/1.4 aperture
- Precise manual focusing •
- Robust full-metal construction •
- Fixation for focus and aperture
- Identical color reproduction of all models
- For industrial cameras with F-Mount • up to sensor sizes of 24x36 mm or 43mm line sensors.

#### **ZF-I: Industrial Edition**

Features special screws to fix focus and aperture settings even in rough situations.

#### **ZF-IR: Infrared Edition**

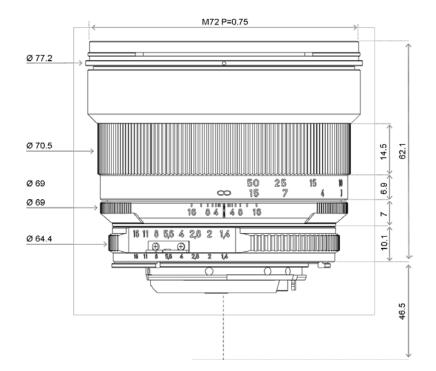
Features special coating for optimized performance in near-infrared applications.

#### **Camera Mounts**

Available with ZF.2, EF and M42 mount.



### **Technical Specifications**

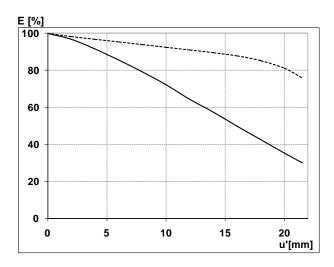


Focal length	85 mm
Aperture range	f/1.4 – f/16 (1/ 2 stop intervals)
Number of elements / groups	6 / 5
Min. working distance (object to sensor)	1000 mm (3.28 ft.) – ∞
Min. free working distance	883 mm (2.90 ft.) – ∞
Angular field* (diag. / horiz. / vert.)	29 / 24 / 16°
Max. diameter of image field	43 mm (1.7")
Flange focal length	F-Mount: 46.5 mm (1.8"); M42-Mount: 45,5 mm
Coverage at close range	240 x 360 mm (9.4 x 14"), line 430 mm (16.5")
Image ratio at close range	1:10
Filter-thread	M 72 x 0.75
Weight	600 g (1.2 lbs.)
Camera mount	F bayonet, M42, EF

\* referring to 35 mm format



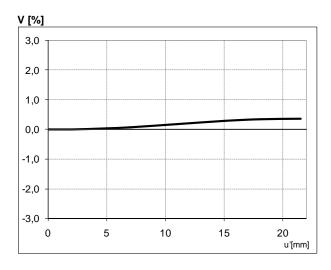
### **Relative Illuminance\***



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

\_\_\_ f-number 1.4 ... f-number 2.8

### **Relative Distortion\***

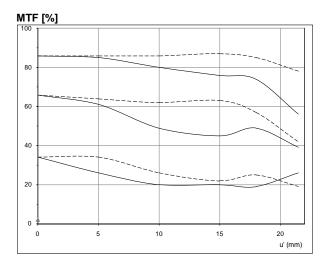


\*Data for infinite focus setting

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

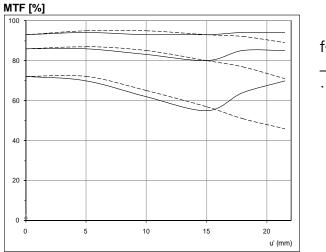


#### **MTF Charts\***



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. The MTF charts are valid for the ZF, ZF-I version and for white light.

f-number 1.4 \_\_\_ Sagittal ... Tangential



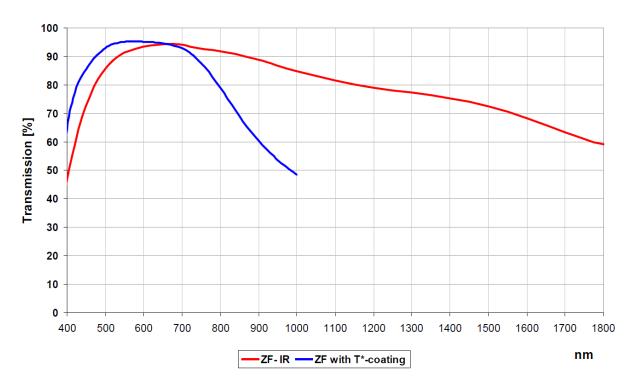
\*Data for infinite focus setting / Not for IR version



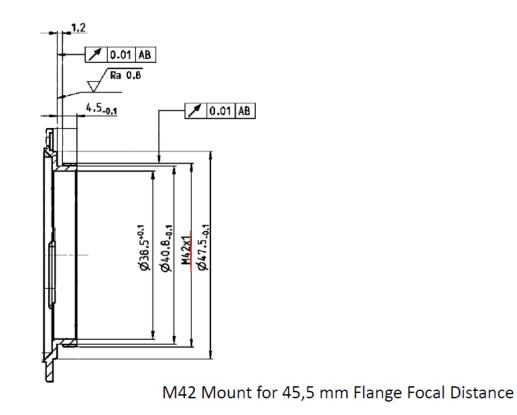


### Spectral Transmission ZF vs. ZF-IR

Planar 1.4/85 ZF- IR







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