



# ZEISS Dimension 2/18



## Features

- fast f/2 aperture
- excellent image quality, leading to highest data precision over the complete image field
- for industrial cameras up to sensor sizes of 4/3"
- robust full-metal construction made of aluminium
- small and compact
- possibility to adjust the back focal distance to compensate for tolerances of camera bayonets
- possibility for azimuthal adjustment ensures best possible readability of scales
- fixable focus and aperture settings
- optimized spectral transmission in VIS and near IR range through ZEISS T\* coating

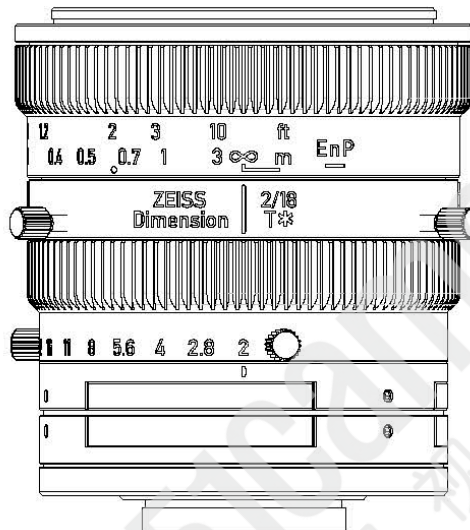
## Camera Mount

Available with  
C mount



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## Technical Specifications



### Optical data:

<b>Focal length</b>	18 mm
<b>Aperture range</b>	f/2 – f/22 (continuous)
<b>Number of elements / groups</b>	13 / 9
<b>Focus range (object to sensor)</b>	170,5mm (0.56 ft)- $\infty$
<b>Min. free working distance</b>	91,1mm (0.30 ft)
<b>Angular field (diag. / horiz. / vert.)</b>	<b>1"':</b> 47.38° / 39.99° / 27.13° <b>4/3"':</b> 62.12° / 51.22° / 39.42°
<b>Max. diameter of image field</b>	<b>1"':</b> 16mm (0.63"); <b>4/3"':</b> 21,64mm (0.83")
<b>Flange focal distance (in air)</b>	17,526mm (0.69"), C mount
<b>Coverage at close range</b>	<b>1"':</b> 73,8mm x 49,1mm (2.91" x 1.93") <b>4/3"':</b> 97,0mm x 72,7mm (3.82" x 2.86")
<b>Image ratio at close range</b>	1:5.6
<b>Position of entrance pupil (relative to image sensor)</b>	60,4 mm (2.38")
<b>Position of exit pupil (relative to image sensor)</b>	39,2 mm (1.54")

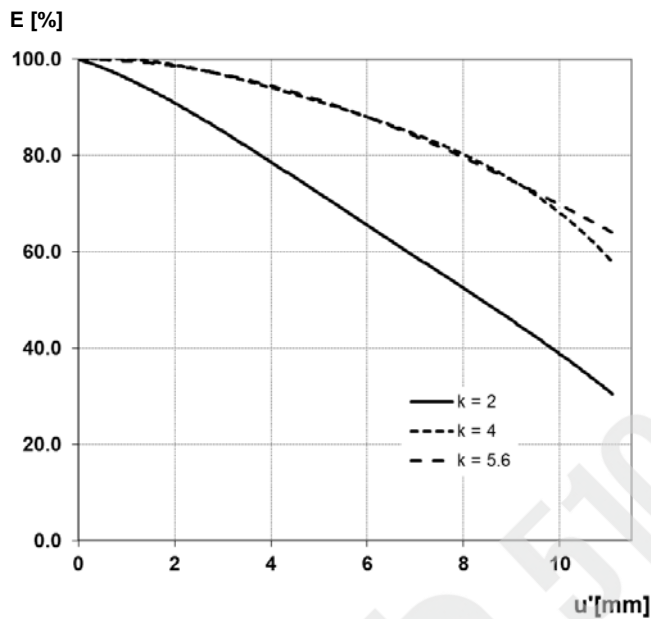
### Physical data:

<b>Length (front to mount contact surface) (at inf.)</b>	61,2 mm (2.41")
<b>Length (front to mount contact surface) (at MOD)</b>	61,2 mm (2.41")
<b>Diameter (lens only)</b>	57,0 mm (2.24")
<b>Diameter (with fixation screws)</b>	63,0 mm (2.48")
<b>Filter-thread</b>	M43 x 0.75
<b>Weight</b>	291 g (0.64 lbs)
<b>Camera mount</b>	C mount

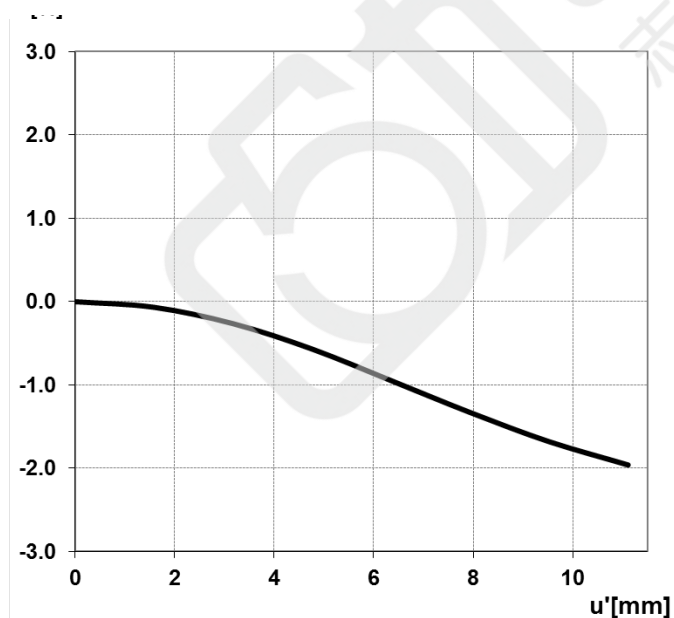


# ZEISS Dimension 2/18

## Relative Illuminance\*



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

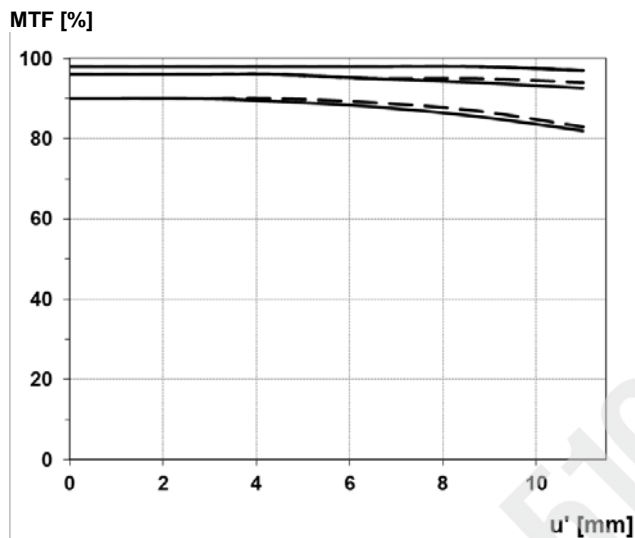


The relative distortion shows the deviation of the actual image height from the ideal one in percent.



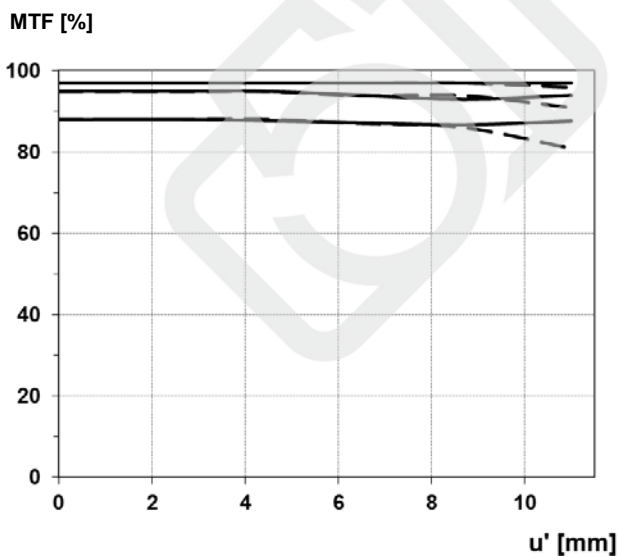
# ZEISS Dimension 2/18

## 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



# ZEISS Dimension 2/18

## Spectral Transmission

