



Features

Camera Mount Available with C mount

- 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



Technical Specifications



Optical data:	
Focal length	12 mm
Aperture range	f/2 – f/22 (continuous)
Number of elements / groups	13 / 9
Focus range (object to sensor)	180,4 mm (0.59 ft.) – ∞
Min. free working distance	101,0 mm (0.33 ft.)
Angular field (diag. / horiz. / vert.)	1'': 65.94°/56.73°/39.55°
	4/3'': 82.53°/70.51°/56.00°
Max. diameter of image field	1'': 16 mm (0.63''); 4/3'': 21.64 mm (0.83'')
Flange focal length (in air)	17,526 mm (0.69''), C mount
Coverage at close range	1'': 133,9 mm x 88,7 mm (5,27 x 3,49'')
	4/3'': 176,5 mm x 131,8 mm (6,95 x 5,19'')
Image ratio at close range	1:10
Position of entrance pupil (relative to image senso	r) 63,8 mm (2.51")
Position of exit pupil (relative to image sensor)	38,9 mm (1.53")
<u>Physical data:</u>	
Length (front to mount contact surface at inf.)	60,0 mm (2.36")
Length (front to mount contact surface at MOD)	60,0 mm (2.36″)
Diameter (lens only)	57,0 mm (2.24")
Diameter (with fixation screws)	64,0 mm (2.52")
Filter-thread	M43 x 0.75
Weight	264 g (0.58 lbs)
Camera mount	C mount



Relative Illuminance*

E [%]



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

Relative Distortion*



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



MTF Charts*

MTF [%] 100 80 60 40 cycles/mm. 40 f-number 2 ____ Sagittal 20 _ Tangential 0 0 2 6 8 10 4 u' [mm]

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 4 ___ Sagittal _ _ Tangential

*Data for infinite focus setting



Spectral Transmission

Transmission [%]

