ZEISS Ventum 2.8/21

Features

- excellent image quality, leading to highest data precision over the complete image field
- fixed infinity focus setting
- lightweight mechanical design with reduced moving parts
- robust full-metal alloy housing
- 50% weight reduction to comparable lens ZEISS Interlock Compact 2.8/21
- splash-water and dust-resistant lens housing
- covers line scan sensors up to 43 mm or are scan up to 24x36 mm²

Camera Mount
Available with
E mount

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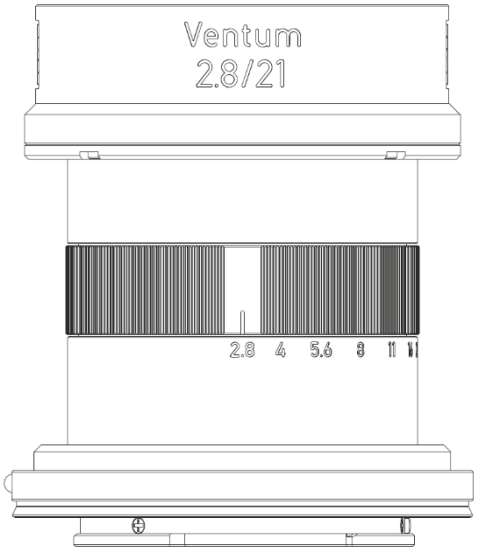
Technical Specifications



Focal length	21 mm
Aperture range	f/2.8 – f/22
Number of elements / groups	11 / 9
Focus range (object to sensor)	Fixed: set to ∞
Angular field* (diag. / horiz. / vert.)	91° / 81° / 59°
Max. diameter of image field	43.3 mm (1.7")
Flange focal length (in air)	18.0 mm (0.7”), E mount
Position of entrance pupil (relative to image sensor)	66.91 mm (2.63”)
Position of exit pupil (relative to image sensor)	39.28 mm (1.55”)
Filter-thread	M 52 x 0.75
Length (without caps)	67.8 mm (2.67”)
Diameter (max.)	62.0 mm (2.44”)
Diameter (aperture ring)	47.4 mm (1.87”)
Weight (without caps)	227 g (0.5 lbs)
Camera mount	E mount

** referring to 24 x 36 mm format resp. 43 mm line*

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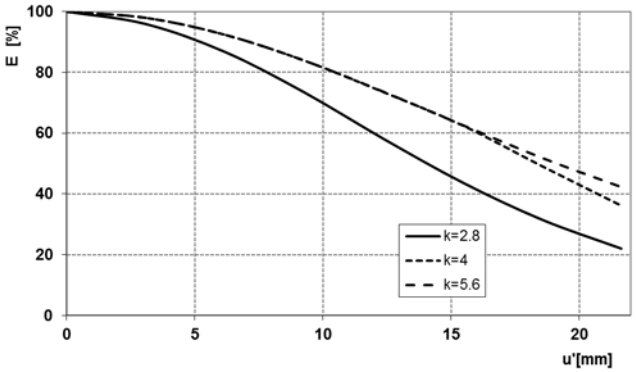
Relative Illuminance

E [%]

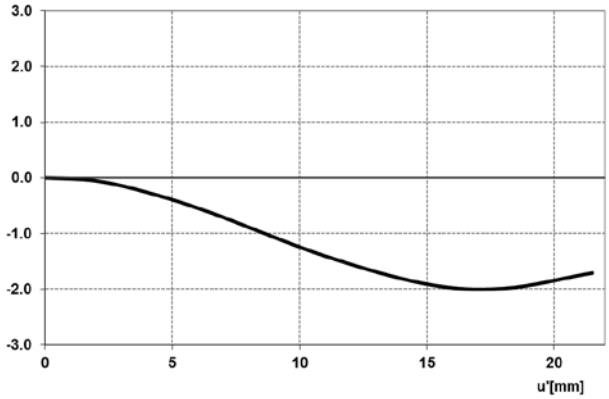


The relative illuminance shows the image brightness over the image height u' in relation to the image center.

— f-number = 2.8
- - - f-number = 4
– – f-number = 5.6

Relative Distortion

V [%]



The relative distortion shows the deviation of the image height from the expected image height u' in percent.

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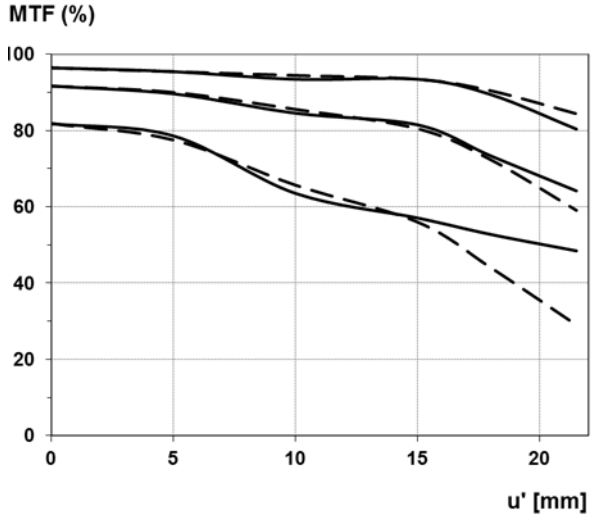
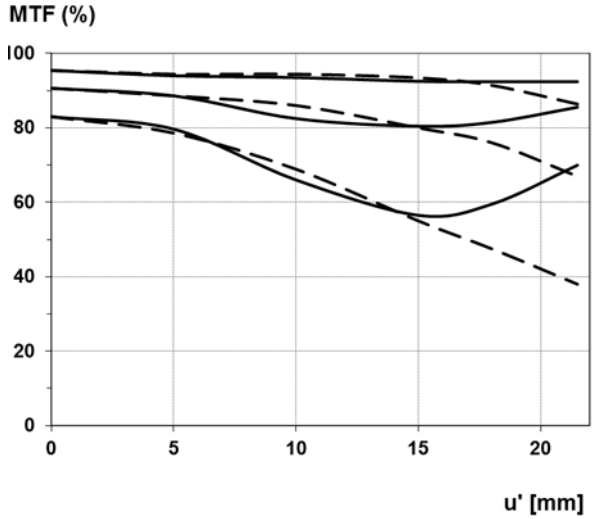
MTF Charts



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 2.8
__ Sagittal
… Tangential



F-Number 5.6
__ Sagittal
… Tangential

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Depth of Field (DOF)*

	f/2.8		f/4		f/5.6		f/8		f/11		f/16		f/22	
	from	to	from	to	from	to	from	to	from	to	from	to	from	to
[m]	6.38	INF	5.13	INF	4.07	INF	3.11	INF	2.40	INF	1.66	INF	1.05	INF

* Depth of field table for sensor format 24x36mm, circle of confusion 0.015mm (D/3000), rounded to 0.01m