Lenses for image circle 22 mm

Xenoplan 2.0/35-0903

These high-resolution, high-speed lenses are optimized for the use of 4 and 8 megapixel 1.3" sensors with micro-lenses on the sensor surface. The image circles are very large for C-Mount lenses. With a 1.3" sensor, the relatively short focal lengths allow a large coverage range at a short working distance. The lenses are also broadband coated and can be used in the visible range 400 – 700 nm or the near infrared range 700 – 1000 nm.

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Key Features

- High-resolution optics
- Highest optical imaging performance even with smallest pixel sizes
- Broadband coating (400 - 1000 nm)
- Compact and low weight
- Vibration insensitivity for stable imaging performance
- Focus and iris setting lockable

Applications

- Machine Vision and other imaging applications
- 3D measurement
- Traffic
- Medical
- Robot vision
- Food processing

Technical Specifications

F-number	2.0 - 16
Focal length	35.1 mm
Image circle	22 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	90 g
Filter Thread	M30.5 x 0.5
Code no.	1075451

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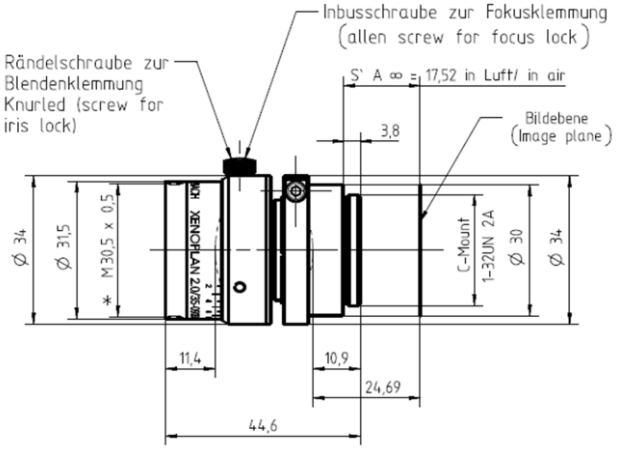

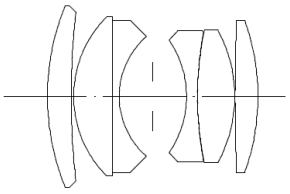

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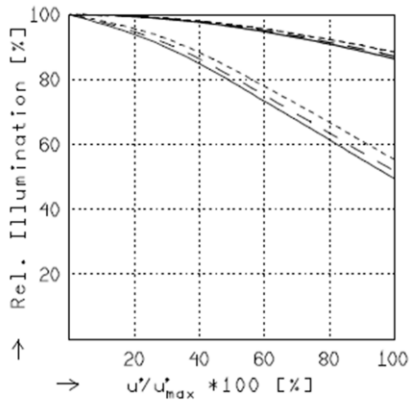
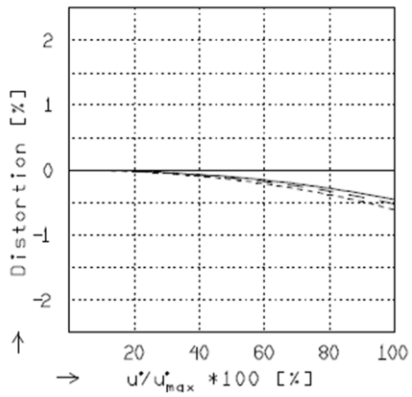
f'	=	35.0 mm	β'_P	=	1.094
s_F	=	-19.5 mm	s_{EP}	=	12.5 mm
$s'_{F'}$	=	24.8 mm	s'_{AP}	=	-13.4 mm
HH'	=	-3.5 mm	Σ d	=	22.1 mm



RELATIVE ILLUMINATION

The relativ illumination is shown for the given focal distances or magnifications.

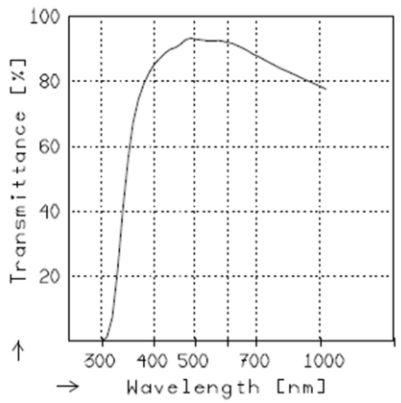
	f / 2.0	f / 4.0	f / 8.0
——	β' = -0.0200	u'_{max} = 11.0	00' = 1816.
— —	β' = -0.0500	u'_{max} = 10.9	00' = 768.
-----	β' = -0.1000	u'_{max} = 10.9	00' = 420.



DISTORTION

Distortion is shown for the given focal distances or magnifications. Positive values indicate pincushion distortion and negative values barrel distortion.

——	β' = -0.0200	u'_{max} = 10.9	00' = 1816.
— —	β' = -0.0500	u'_{max} = 10.9	00' = 768.
-----	β' = -0.1000	u'_{max} = 10.9	00' = 420.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

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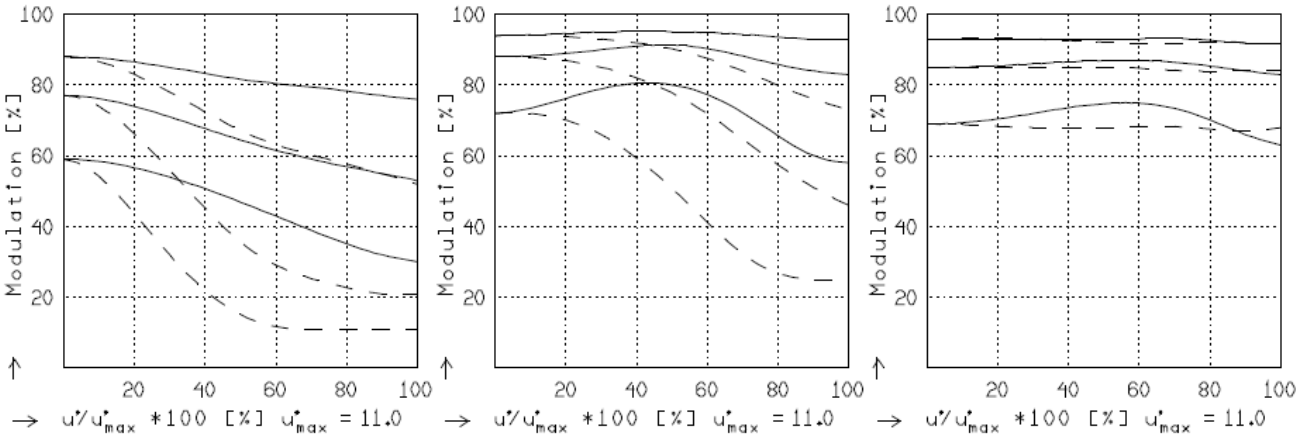
MODULATION with reference to the relative image height

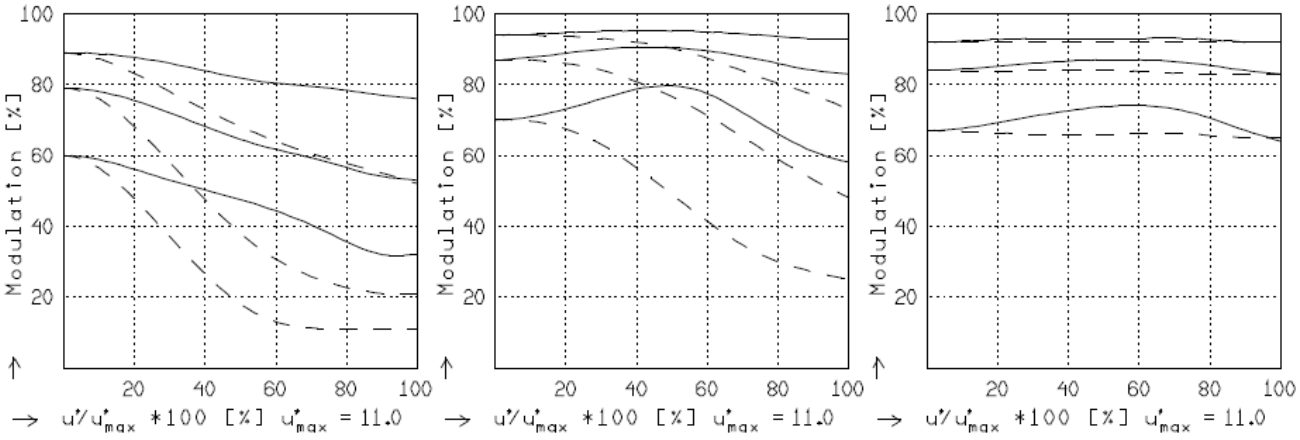
Wavelength λ [nm] :	546	655	605	505	455	405
Spectral weighting [%] :	19.6	23.7	22.2	15.7	12.1	6.7
Spatial frequency R [1/mm] :	10	20	40			
Format [mm X mm] :	0.0	22.0				
Diagonal 2u' [mm] :	22.0					

radial ——

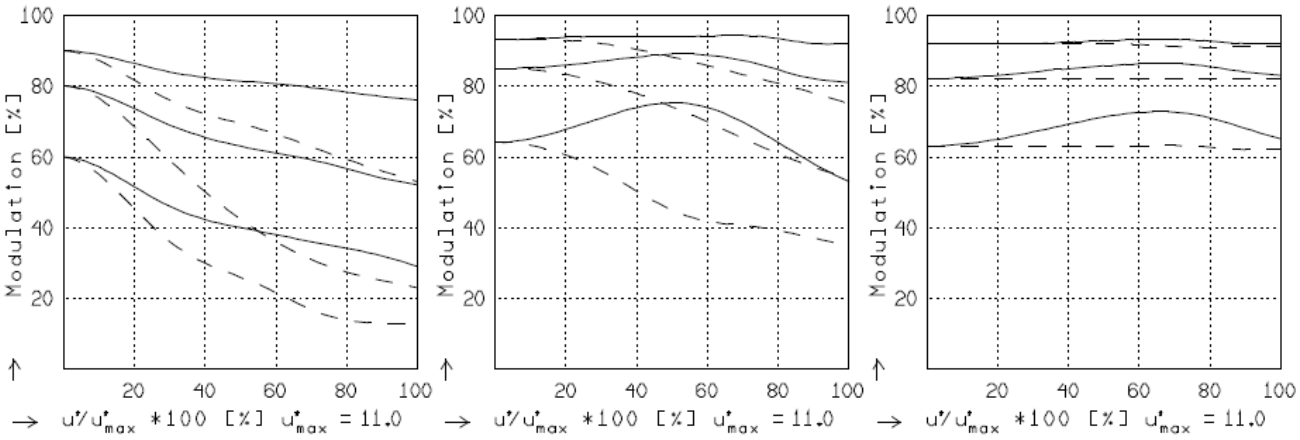
tangential — —



f'= 35.0 f/ 2.0 1/β'=-50.00 OO'= 1816. f'= 35.0 f/ 4.0 1/β'=-50.00 OO'= 1816. f'= 35.0 f/ 8.0 1/β'=-50.00 OO'= 1816.



f'= 35.0 f/ 2.0 1/β'=-20.00 OO'= 768. f'= 35.0 f/ 4.0 1/β'=-20.00 OO'= 768. f'= 35.0 f/ 8.0 1/β'=-20.00 OO'= 768.



f'= 35.0 f/ 2.0 1/β'=-10.00 OO'= 420. f'= 35.0 f/ 4.0 1/β'=-10.00 OO'= 420. f'= 35.0 f/ 8.0 1/β'=-10.00 OO'= 420.

Focusing : MTF_{max} at f / 2.0 , R = 40 1/mm, u'/u'_{max} = 0