Anti-Shading lenses

Apo-Xenoplan 2.0/20

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 special optical design prevents unwanted shading on the sensor. This makes it much easier to combine a homogeneous luminance distribution with high imaging performance. 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.

Apo-Xenoplan 2.0/20

Key Features

- Anti-shading for sensor sizes up to 1.3"(image circle 24 mm)
- Designed for 4 and 8 Mpix sensors with micro-lenses
- High resolution optics 400 - 700 nm (VIS) / 700 - 1000 nm (NIR)
- Very high MTF across the entire sensor
- Robust mechanics for industrial environment
- Compact and low weight
- Focus and iris setting lockable

Applications

- Machine Vision and other imaging applications
- 3D measurement
- Traffic
- Etc.

Technical Specifications

F-number	2.0
Focal length	20.5 mm
Image circle	24 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	450 gr.
Option	Optical filter

Contact

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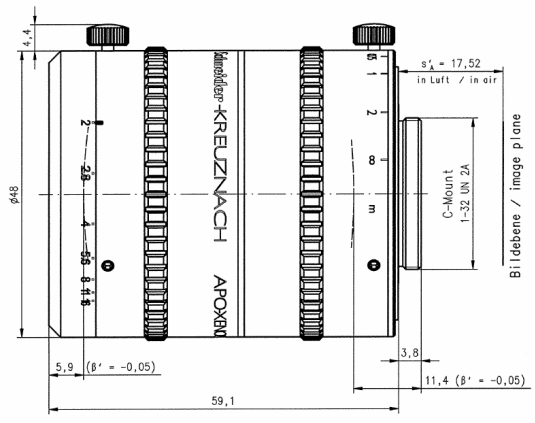
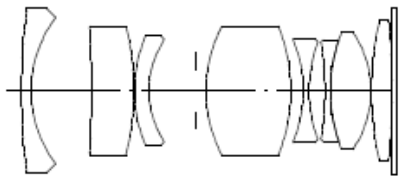
Apo-Xenoplan 2.0/20





APO-XENOPLAN 2/20

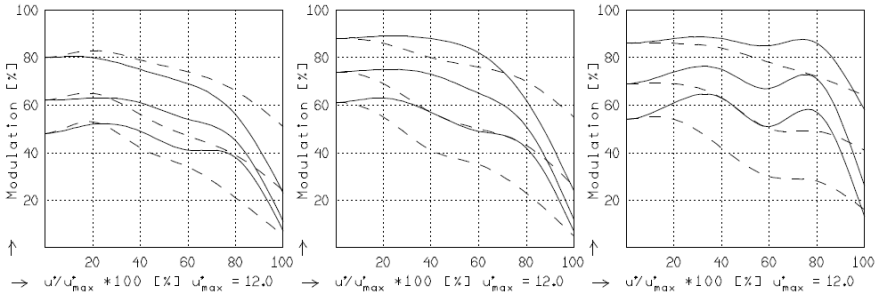
f' = 20.5 mm	β_p' = 2.964		
s_F = 5.6 mm	s_{EP} = 12.5 mm		
$s_{F'}$ = 23.8 mm	s_{AP}' = -37.1 mm		
HH' = 23.4 mm	Σ d = 46.3 mm		

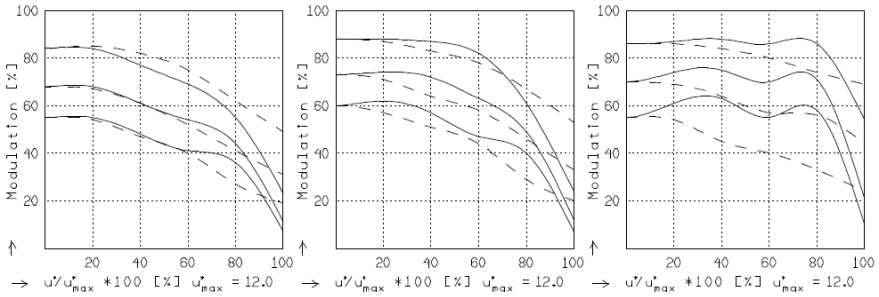
APO-XENOPLAN 2/20

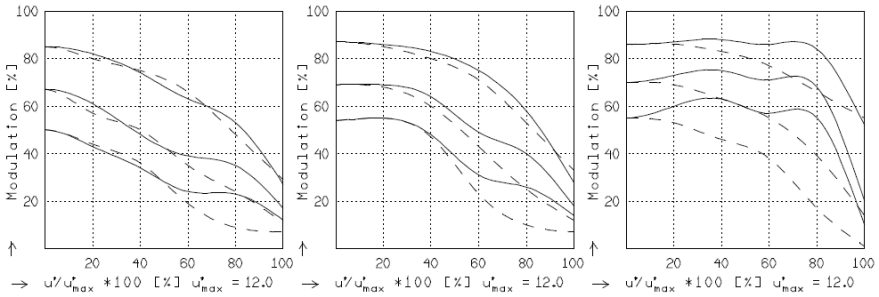
MODULATION als Funktion der relativen Bildgröße

Wellenlänge	λ	[nm] :	555	655	605	505	455	405
Spektrale Gewichtung		[%] :	19.6	23.7	22.2	15.7	12.1	6.7
Ortsfrequenz	R	[1/mm] :	25	50	75			
Bild-Ø k = 2.0		[mm] :	24.0					
Bild-Ø k = 5.6		[mm] :	24.0					

radial ——
tangential — —

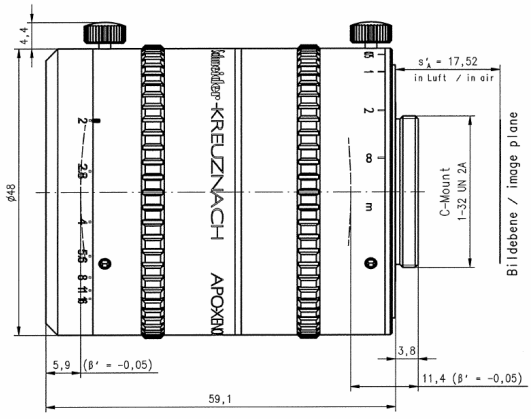


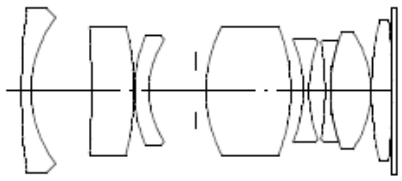




Fokussierung MTF_{max} bei k = 2.0 , R = 50 1/mm. u'/u'_{max} = 0

Apo-Xenoplan 2.0/20





APO-XENOPLAN 2/20

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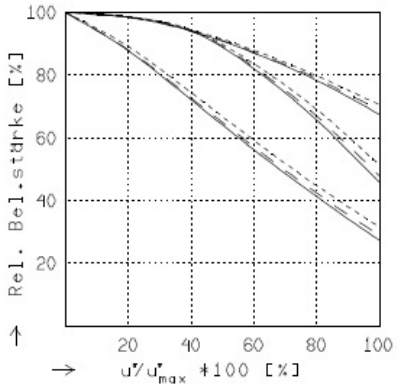
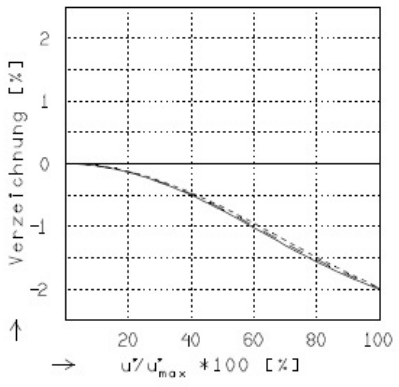


RELATIVE BELEUCHTUNGSSTÄRKE

Die relative Beleuchtungsstärke ist für die angegebenen Brennweiten oder Abbildungsmaßstäbe für die folgenden Blendenzahlen dargestellt.

k = 2.0 k = 2.8 k = 5.6

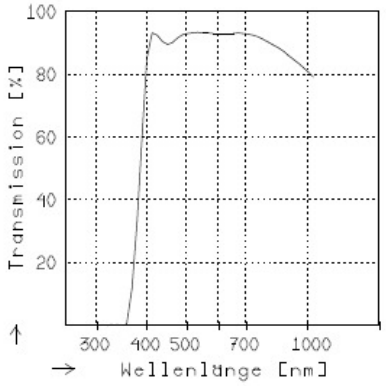
—— ß' = -0.0200 u'_{max} = 11.8 00' = 1092.
— — ß' = -0.0500 u'_{max} = 11.8 00' = 476.
----- ß' = -0.1000 u'_{max} = 11.8 00' = 272.



VERZEICHNUNG

Die Verzeichnung ist für die angegebenen Brennweiten oder Abbildungsmaßstäbe dargestellt.
Pos. Werte : Kissenförm. Verzeichnung
Neg. Werte : Tonnenförm. Verzeichnung

—— ß' = -0.0200 u'_{max} = 11.8 00' = 1092.
— — ß' = -0.0500 u'_{max} = 11.8 00' = 476.
----- ß' = -0.1000 u'_{max} = 11.8 00' = 272.



TRANSMISSION

Die relative spektrale Transmission ist als Funktion der Wellenlänge dargestellt.