Anti-Shading Lens

Apo-Xenoplan 2.0/28-0004

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	27.6 mm
Image circle	24 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	215 gr.
Filter tread	M39 x 0.5
Code no.	1054732

Contact

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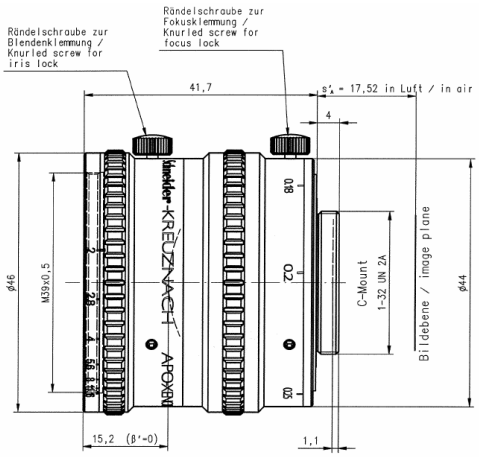

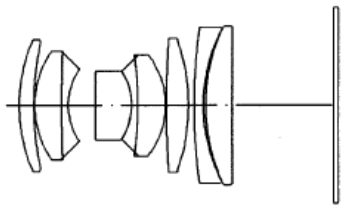

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f'	=	27.6 mm	β'_p	=	1.553
s_F	=	-5.5 mm	s_{EP}	=	12.2 mm
s'_F	=	-0.3 mm	s'_{AP}	=	-43.2 mm
HH'	=	-6.0 mm	Σ d	=	44.0 mm

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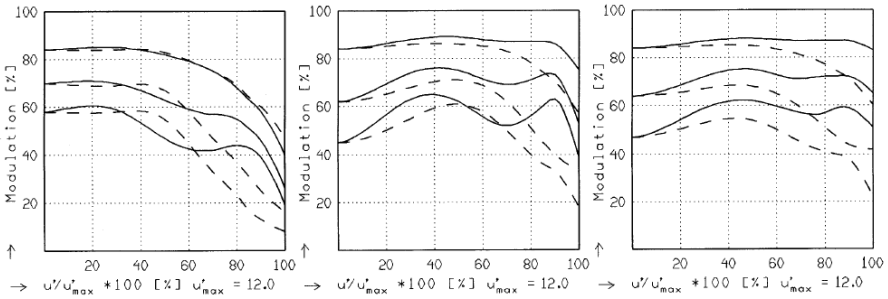
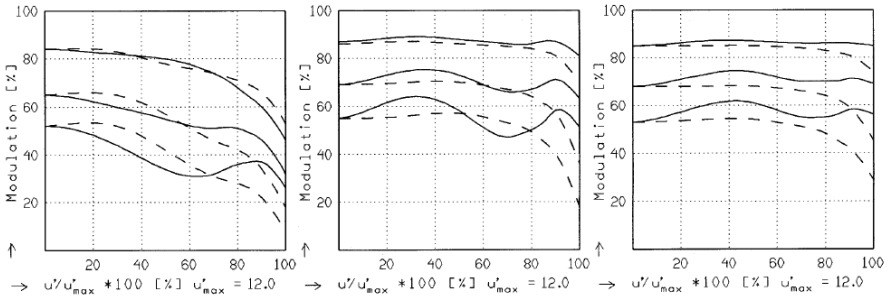
MODULATION als Funktion der relativen Bildgröße

Wellenlänge λ [nm] :	575	675	625	525	475	425
Spektrale Gewichtung [%] :	19.2	17.8	18.6	18.4	15.3	10.6
Ortsfrequenz R [1/mm] :	25	50	75			
Bild-Ø k = 2.0 [mm X mm] :	24.0					
Bild-Ø k = 5.6 [mm] :	24.0					

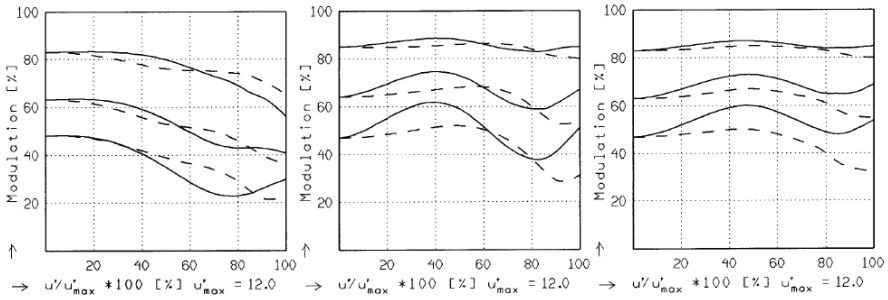
radial ——
tangential – –



f' = 27.6 k = 2.0 1/β' = -50.00 00' = 1430. f' = 27.6 k = 4.0 1/β' = -50.00 00' = 1430. f' = 27.6 k = 5.6 1/β' = -50.00 00' = 1430.



f' = 28.4 k = 2.0 1/β' = -10.00 00' = 336. f' = 28.4 k = 4.0 1/β' = -10.00 00' = 336. f' = 28.4 k = 5.6 1/β' = -10.00 00' = 336.



f' = 29.4 k = 2.0 1/β' = -5.00 00' = 203. f' = 29.4 k = 4.0 1/β' = -5.00 00' = 203. f' = 29.4 k = 5.6 1/β' = -5.00 00' = 203.

Fokussierung MTF_{max} bei k = 2.0 , R = 80 1/mm, u'/u'_{max} = 0

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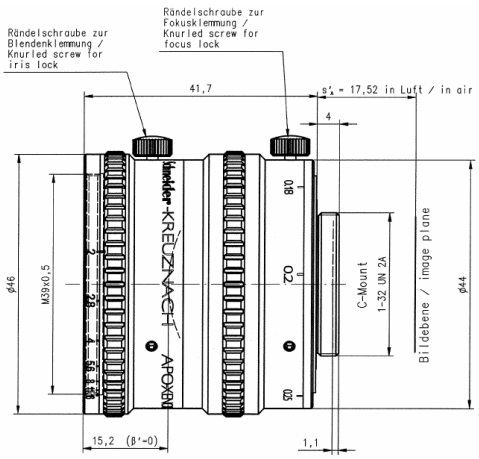
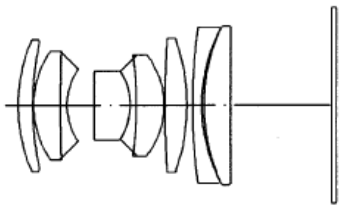
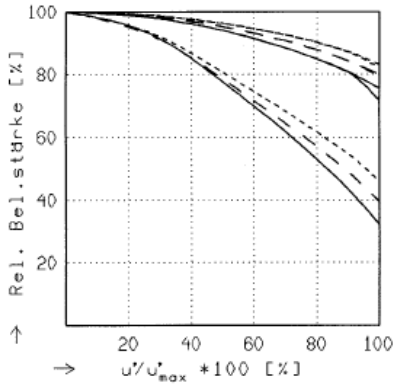




R4917.0 APO-XNP 2/28

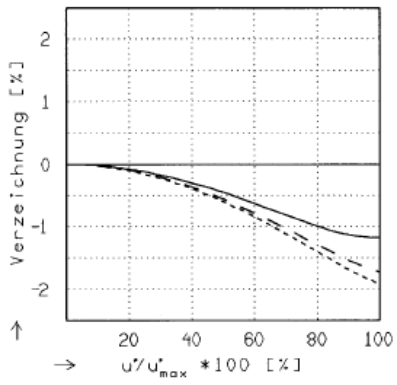
f'	=	27.6 mm	$ß'_P$	=	1.553
s_F	=	-5.5 mm	s_{EP}	=	12.2 mm
s'_F	=	-0.3 mm	s'_{AP}	=	-43.2 mm
HH'	=	-6.0 mm	Σ d	=	44.0 mm



RELATIVE BELEUCHTUNGSSTÄRKE

Die relative Beleuchtungsstärke ist für die angegebenen Brennweiten oder Abbildungsmaßstäbe für die folgenden Blendenzahlen dargestellt.
k = 2.0 k = 4.0 k = 5.6

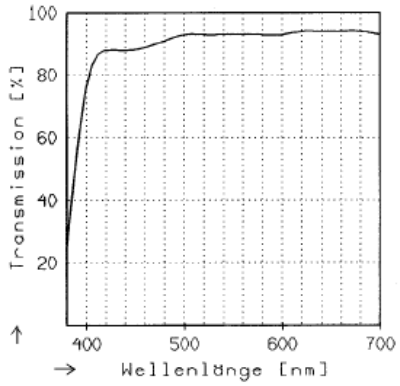
——	ß' = -0.0200	u'_{max} = 11.9	OO' = 1430.
— —	ß' = -0.1000	u'_{max} = 11.8	OO' = 336.
-----	ß' = -0.2000	u'_{max} = 11.8	OO' = 203.



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	OO' = 1430.
— —	ß' = -0.1000	u'_{max} = 11.8	OO' = 336.
-----	ß' = -0.2000	u'_{max} = 11.8	OO' = 203.



TRANSMISSION

Die relative spektrale Transmission ist als Funktion der Wellenlänge dargestellt.