Macro lens

Pyramid Imaging

Apo-Componon 2.8/40-0007

Unlike conventional cameras lenses where the optical performance decreases as the magnification increases, Schneider-Kreuznach macro lenses have been developed and corrected exclusively for the close-up range of 1:20 to 1:1. Due to its mechanical stability and the robust V-mount interface enabling simpler adjustment of the best azimuth position, the system is exceptionally well suited to demanding, continuous industrial use.

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Key Features

- Excellent optical imaging performance when using large sensors
- Vibration-insensitive for stable optical performance
- Industry-compatible V-mount interface
- Lockable distance and aperture settings
- Infinitely adjustable aperture, guaranteed long-term stability
- 100% quality control guarantees reliability and constant quality
- Low maintenance requirements, therefore high system reliability

Applications

- Machine Vision and other imaging applications
- PCB inspection
- LCD inspection
- OLED inspection
- Solar inspection

Technical Specifications

F-number	2.8
Focal length	41.5 mm
Image circle	43,2 mm
Magnification	-0,10
Transmission	400 - 700 nm
Interface	V-Mount
Weight	108 gr.
Option	Optical filter

Contact

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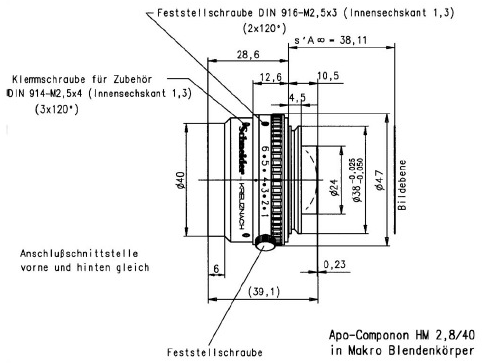
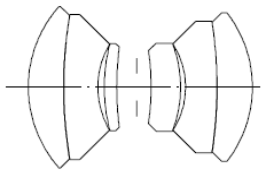




APO-COMPONON 2.8/40

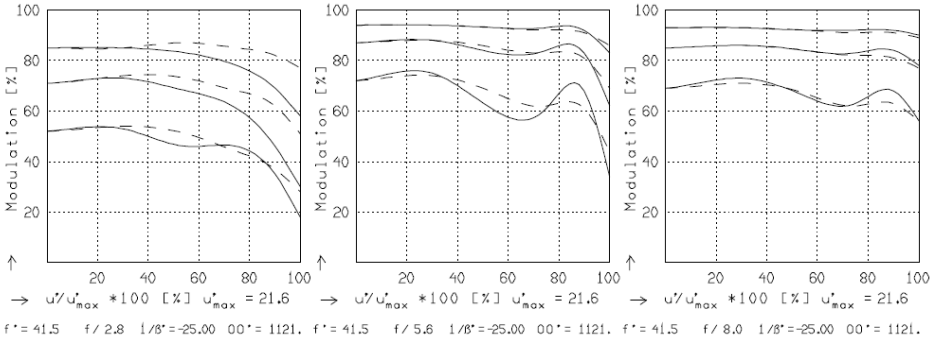
f' = 41.5 mm		β'_P = 1.049	
s_F = -24.5 mm		s_{EP} = 15.0 mm	
$s'_{F'}$ = 27.8 mm		s'_{AP} = -15.7 mm	
HH' = -2.2 mm		Σ d = 28.5 mm	

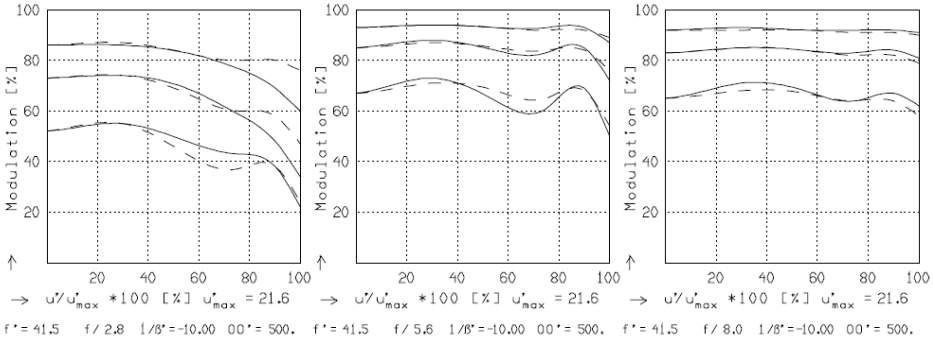
APO-COMPONON 2.8/40

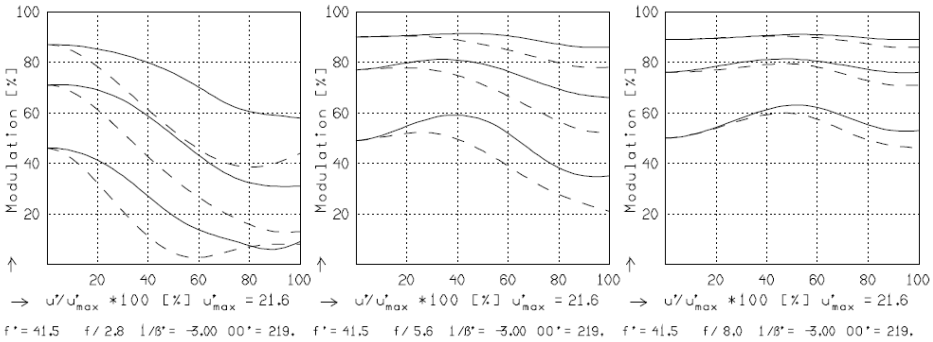
MODULATION with reference to the relative image height

Wavelength λ [nm] :	546	706	644	480	436	405
Spectral weighting [%] :	27.4	12.4	24.1	18.3	12.6	5.2
Spatial frequency R [1/mm] :	10	20	40			
Format [mm X mm] :	24.0 X 36.0					
Diagonal 2u' [mm] :	43.2					

radial ——
tangential — —

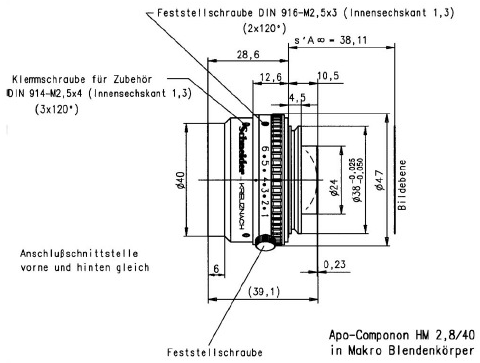


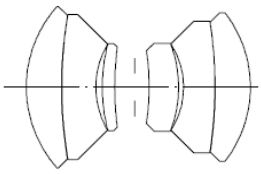




Focusing : MTF_{max} at f / 2.8 , R = 20 1/mm. u'/u'_{max} = 0

Apo-Componon 2.8/40





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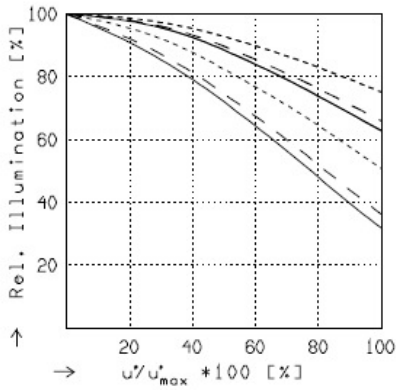
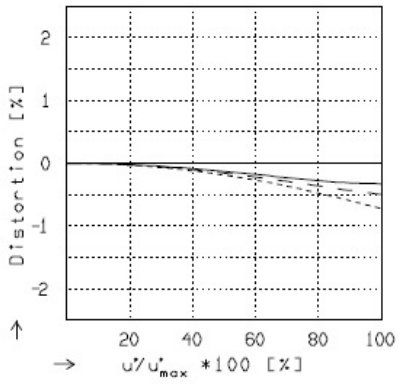


RELATIVE ILLUMINATION

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

f / 2.8 f / 5.6 f / 8.0

—— β' = -0.0400 u'_{max} = 21.6 OO' = 1121.
— — β' = -0.1000 u'_{max} = 21.6 OO' = 500.
----- β' = -0.3333 u'_{max} = 21.6 OO' = 219.



DISTORTION

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

—— β' = -0.0400 u'_{max} = 21.6 OO' = 1121.
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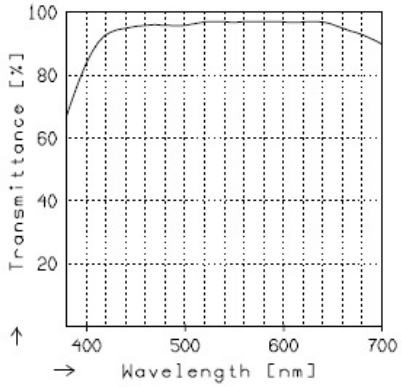
----- β' = -0.3333 u'_{max} = 21.6 OO' = 219.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.