Macro lens

Pyramid Imaging

Componon 2.8/28-0001

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.

Componon 2.8/35

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	29.3 mm
Image circle	30 mm
Magnification	-0,12
Transmission	400 - 700 nm
Interface	V-Mount
Weight	105 gr.
Option	Optical filter

Contact

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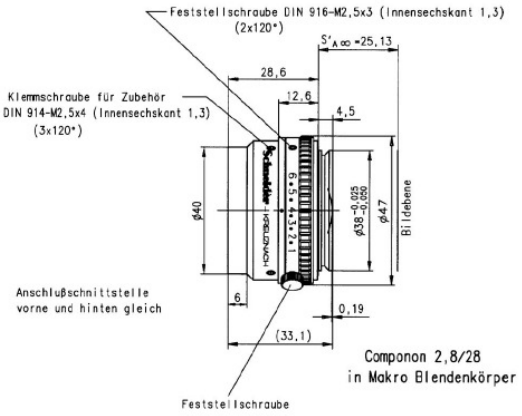
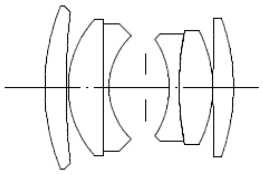
Pyramid Imaging





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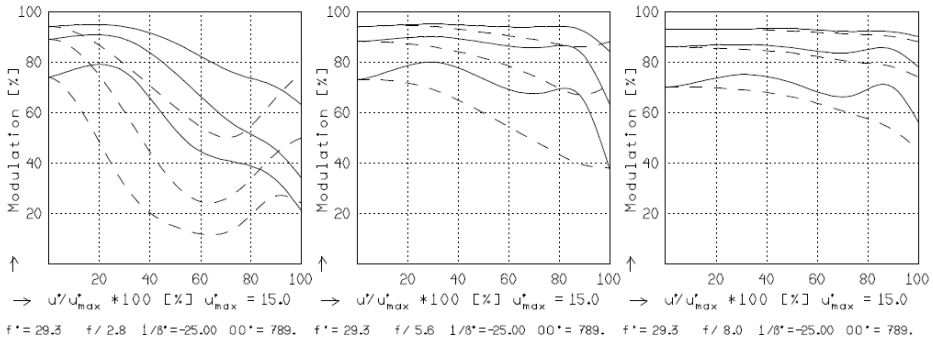
f' = 29.3 mm		β'_P = 1.041	
s_F = -16.3 mm		s_{EP} = 11.8 mm	
s'_F = 20.8 mm		s'_{AP} = -9.7 mm	
HH' = -2.9 mm		Σ d = 18.5 mm	

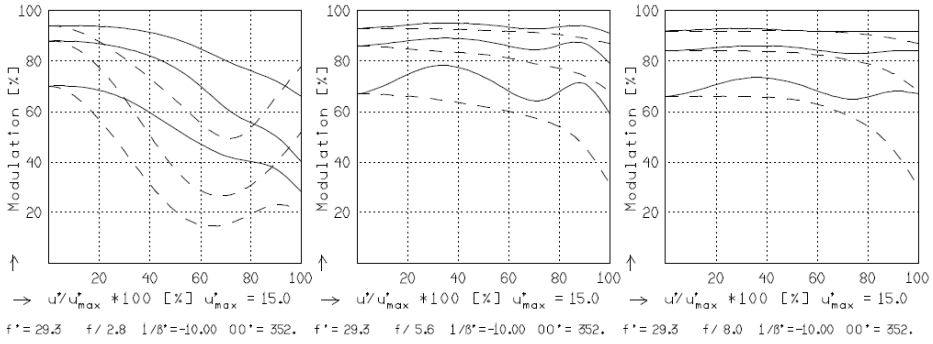
CPN 2.8/28

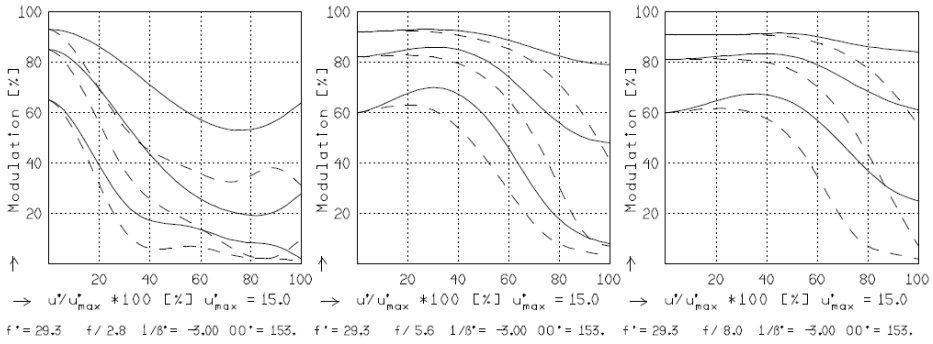
MODULATION with reference to the relative image height

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] :	23.0 X 23.0					
Diagonal 2u' [mm] :	30.0					

radial ——
tangential — —







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

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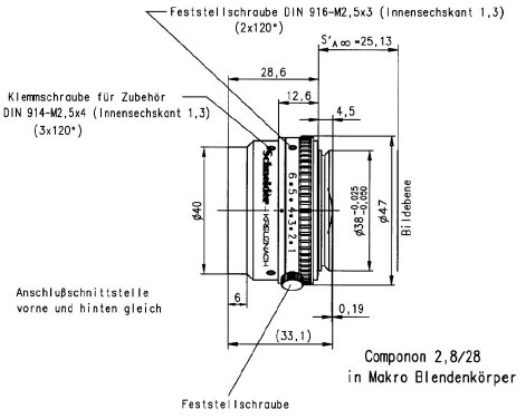

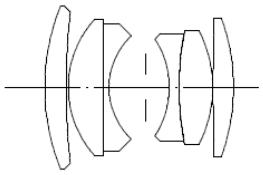

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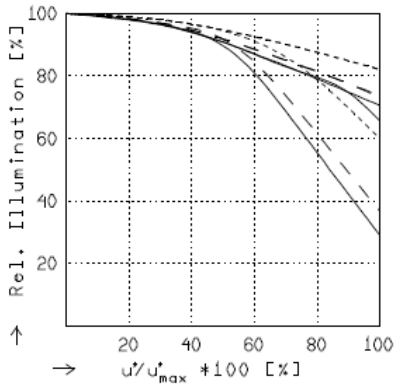
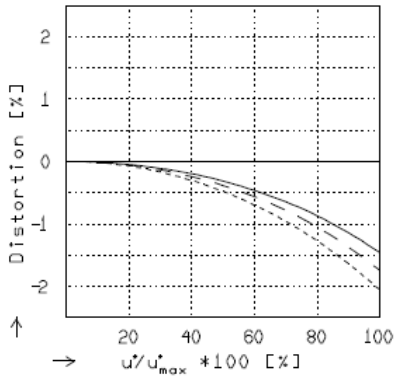


RELATIVE ILLUMINATION

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

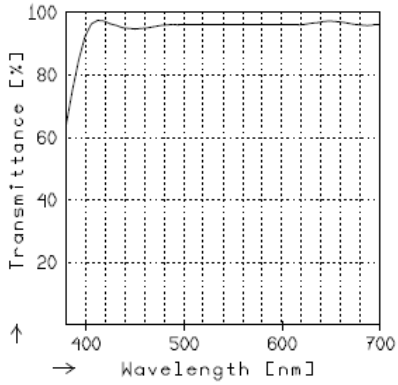
	f / 2.8	f / 5.6	f / 8.0
——	β' = -0.0400	u'_{max} = 14.8	00' = 789.
— —	β' = -0.1000	u'_{max} = 14.7	00' = 352.
-----	β' = -0.3333	u'_{max} = 14.7	00' = 153.



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} = 14.7	00' = 789.
— —	β' = -0.1000	u'_{max} = 14.7	00' = 352.
-----	β' = -0.3333	u'_{max} = 14.7	00' = 153.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

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