V-Mount Macro Lens

Componon-S 4.0/80-0022

Unlike conventional camera 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.

Apo-Componon 4.0/60

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
- Continuous aperture adjustment, 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	4.0
Focal length	80.3 mm
Image circle	80.6 mm
Magnification	1:20 to 1:1, optimized for -0.17
Transmission	400 - 700 nm
Interface	V38-Mount
Weight	115 gr.
Filter tread	M37 x 0.75
Code no.	14780

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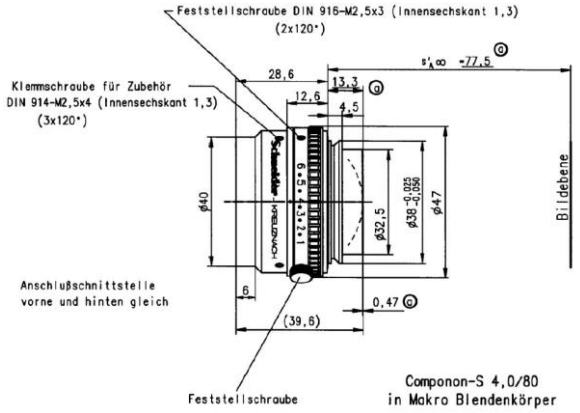
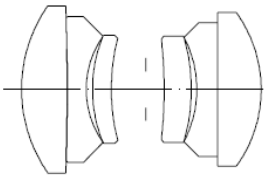




COMPONON-S 4.0/80

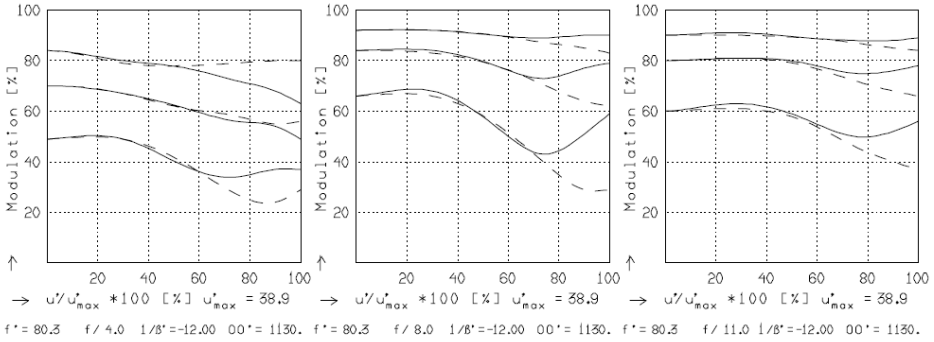
f' = 80.3 mm		β'_P = 1.027	
s_F = -57.9 mm		s_{EP} = 20.3 mm	
$s'_{F'}$ = 64.7 mm		s'_{AP} = -17.9 mm	
HH' = -1.8 mm		Σ d = 36.3 mm	

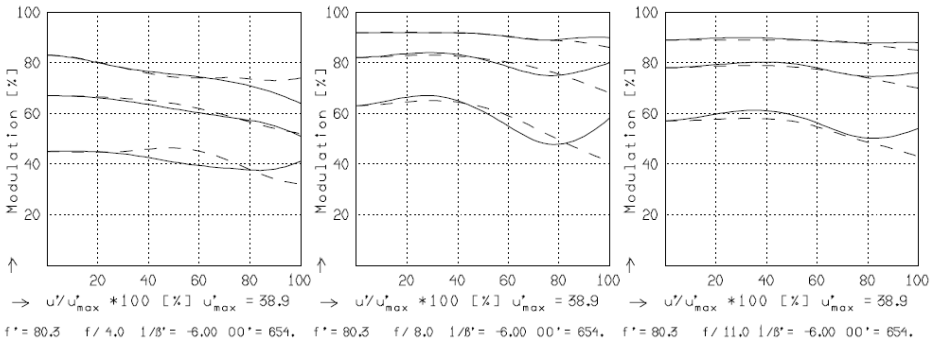
COMPONON-S 4.0/80

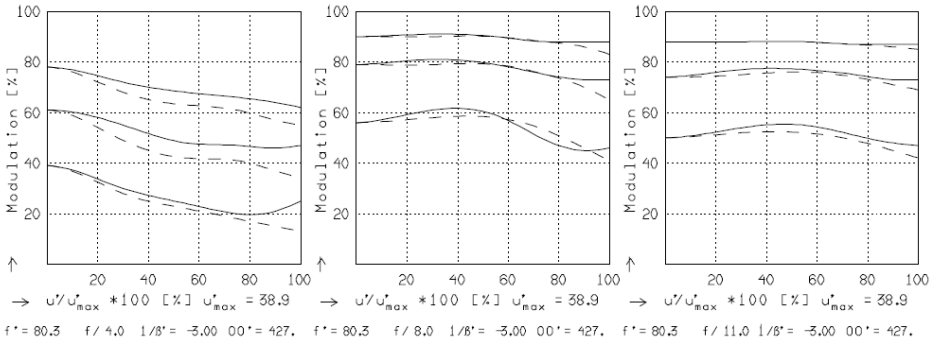
MODULATION with reference to the relative image height

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] :	55.0 X 55.0					
Diagonal 2u'		[mm] :	77.8					

radial ——
tangential – –

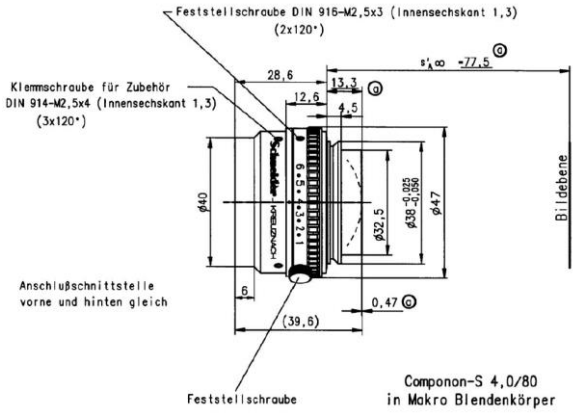


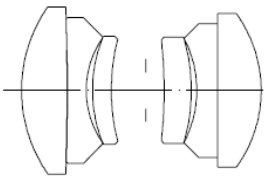




Focusing : MTF_{max} at f / 4.0 , R = 20 1/mm, u'/u'_{max} = 0

Componon-S 4.0/80





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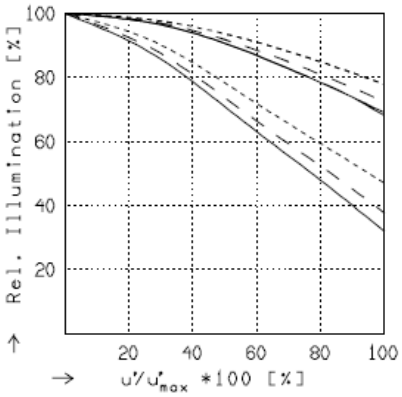
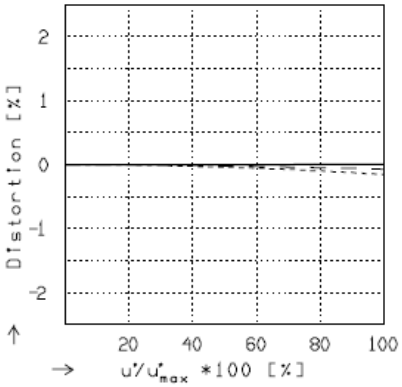


RELATIVE ILLUMINATION

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

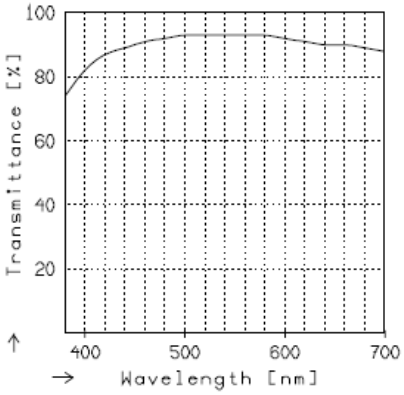
	f / 4.0	f / 8.0	f / 11.0
——	β' = -0.0833	u'_{max} = 38.9	00' = 1130.
— —	β' = -0.1667	u'_{max} = 38.9	00' = 654.
-----	β' = -0.3333	u'_{max} = 38.8	00' = 427.



DISTORTION

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

——	β' = -0.0833	u'_{max} = 38.8	00' = 1130.
— —	β' = -0.1667	u'_{max} = 38.8	00' = 654.
-----	β' = -0.3333	u'_{max} = 38.8	00' = 427.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.