

V-Mount Macro Lens

Componon 2.8/28-0001

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.



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
- 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	2.8
Focal length	29.3 mm
Image circle	30 mm
Magnification	1:20 to 1:1, optimized for -0.12
Transmission	400 - 700 nm
Interface	V38-Mount
Weight	105 gr.
Filter tread	M37 x 0.75
Code no.	14794

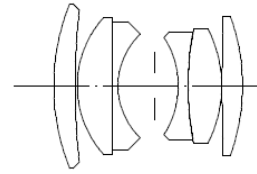
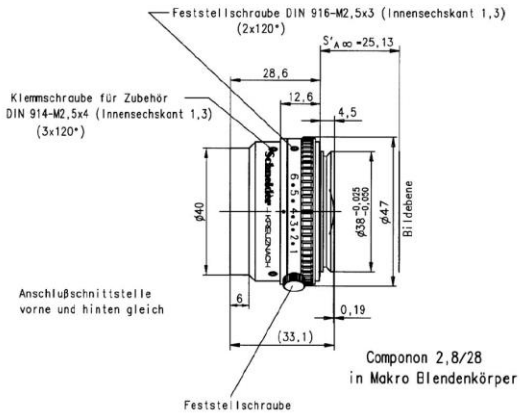
Contact

Jos. Schneider Optische Werke GmbH
 Ringstraße 132
 55543 Bad Kreuznach
 Germany
 Phone +49 671 601-205
 Fax +49 671 601-286
www.schneiderkreuznach.com
industrie@schneiderkreuznach.com

Schneider Optical Technologies Co., Ltd.
 Rm. A505 Yingdali Science Park, Hongmian Rd.,
 Futian Free Trade Zone, Shenzhen 518038,
 P.R. China
 Phone: +86 755 88 32 11 70
 Fax: +86 755 88 32 11 75
www.schneiderkreuznach.com
info@schneider-asiapacific.com

Schneider Optics Inc.
 285 Oser Ave.
 Hauppauge, NY 11788
 USA
 Phone +1 631 761-5000
 Fax +1 631 761-5090
www.schneideroptics.com/industrial
industrial@schneideroptics.com

Componon 2.8/28



CPN 2.8/28

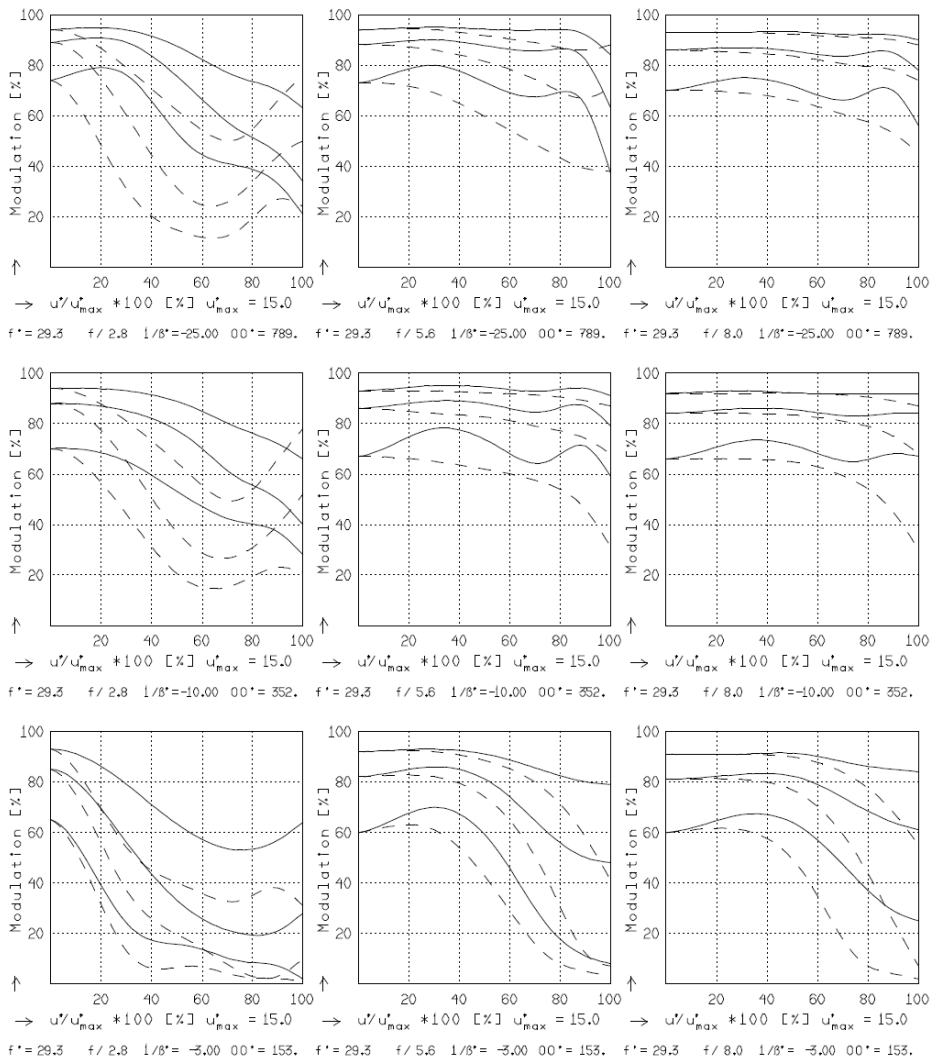
f^* = 29.3 mm	β_p^* = 1.041
s_F = -16.3 mm	s_{EP} = 11.8 mm
s_F^* = 20.8 mm	s_{AP}^* = -9.7 mm
HH^* = -2.9 mm	Σd = 18.5 mm

CPN 2.8/28

MODULATION with reference to the relative image height

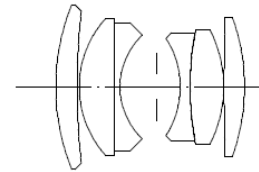
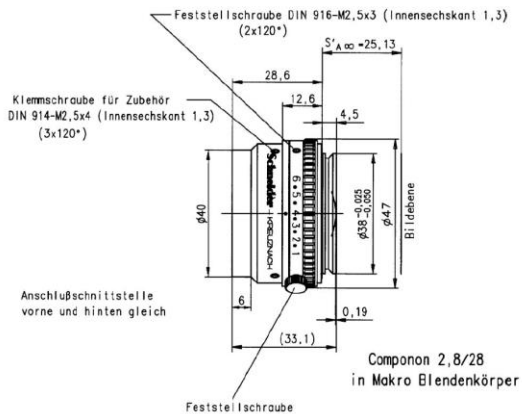
Wavelength λ [nm] :	546	706	644	480	436	405
Spectral weighting [%] :	27.4	12.4	24.1	18.3	12.6	5.2
Spatial frequency R [1/mm] :	10	20	40			
Format [mm X mm] :	23.0	X 23.0				
Diagonal $2u'$ [mm] :	30.0					

radial —
tangential - -



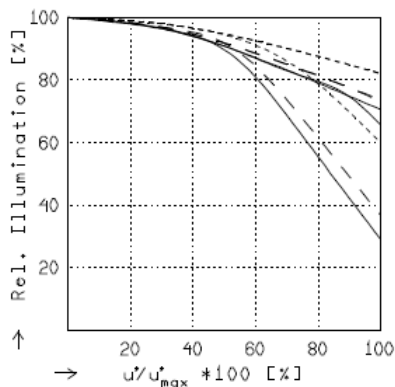
Focusing : MTF_{max} at f / 2.8 . R = 20 1/mm. $u'/u'_{max} = 0$

Componon 2.8/28



CPN 2.8/28

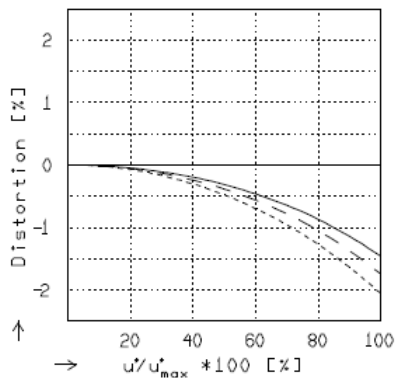
$f^* = 29.3 \text{ mm}$	$\beta_p^* = 1.041$
$\varpi_F = -16.3 \text{ mm}$	$\varpi_{EP} = 11.8 \text{ mm}$
$\varpi_{F'}^* = 20.8 \text{ mm}$	$\varpi_{A'P}^* = -9.7 \text{ mm}$
$HH^* = -2.9 \text{ mm}$	$\Sigma d = 18.5 \text{ mm}$



RELATIVE ILLUMINATION

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

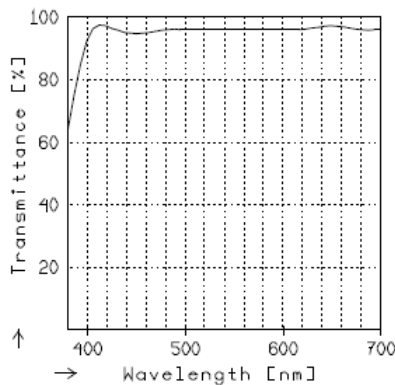
	$f / 2.8$	$f / 5.6$	$f / 8.0$
— $\beta^* = -0.0400$	$u_{max}^* = 14.8$	$00^* = 789.$	
- - $\beta^* = -0.1000$	$u_{max}^* = 14.7$	$00^* = 352.$	
.... $\beta^* = -0.3333$	$u_{max}^* = 14.7$	$00^* = 153.$	



DISTORTION

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

— $\beta^* = -0.0400$	$u_{max}^* = 14.7$	$00^* = 789.$
- - $\beta^* = -0.1000$	$u_{max}^* = 14.7$	$00^* = 352.$
.... $\beta^* = -0.3333$	$u_{max}^* = 14.7$	$00^* = 153.$



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.