

Ruggedized Lens

Xenoplan 1.9/35 - Ruggedized

In accordance with the sensitivity of modern 2 / 3" CCD and CMOS sensors, the 3 megapixel lenses are corrected and broadband-coated for the spectral range of 400 – 1000 nm (VIS + NIR). Even under production and / or extreme conditions, the robust mechanical design with lockable focus and iris setting mechanism guarantees reliable continuous use in which the set optical parameters remain in place.



Xenoplan 1.9/35

Key Features

- High-resolution optics
- Stabilized mechanism
- Highest optical imaging performance even with smallest pixel sizes
- Broadband coating (400 - 1000 nm)
- Compact and low weight
- Vibration insensitivity for stable imaging performance, secured ring
- Focus and iris setting lockable

Applications

- 3D measurement
- Machine Vision and other imaging applications
- Traffic
- Medical
- Robot vision
- Food processing

Technical Specifications

F-number	1.9
Focal length	34.9 mm
Image circle	11 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	92 gr.
Option	Optical filter

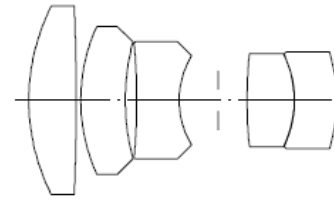
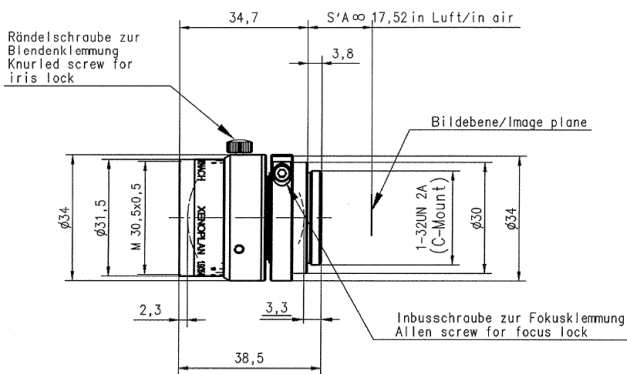
Contact

Jos. Schneider Optische Werke GmbH
 Ringstraße 132
 55543 Bad Kreuznach
 Germany
 Phone +49 671 601-387
 Fax +49 671 601-286
www.schneiderkreuznach.com/industrialoptics
industrie@schneiderkreuznach.com

Schneider Asia Pacific Ltd.
 20/F Central Tower, 28 Queen's Road
 Central, Hong Kong
 China
 Phone +852 8302 0301
 Fax +852 8302 4722
www.schneider-asiapacific.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

Xenoplan 1.9/35 Ruggedized Lens



XENOPLAN 1.9/35MM

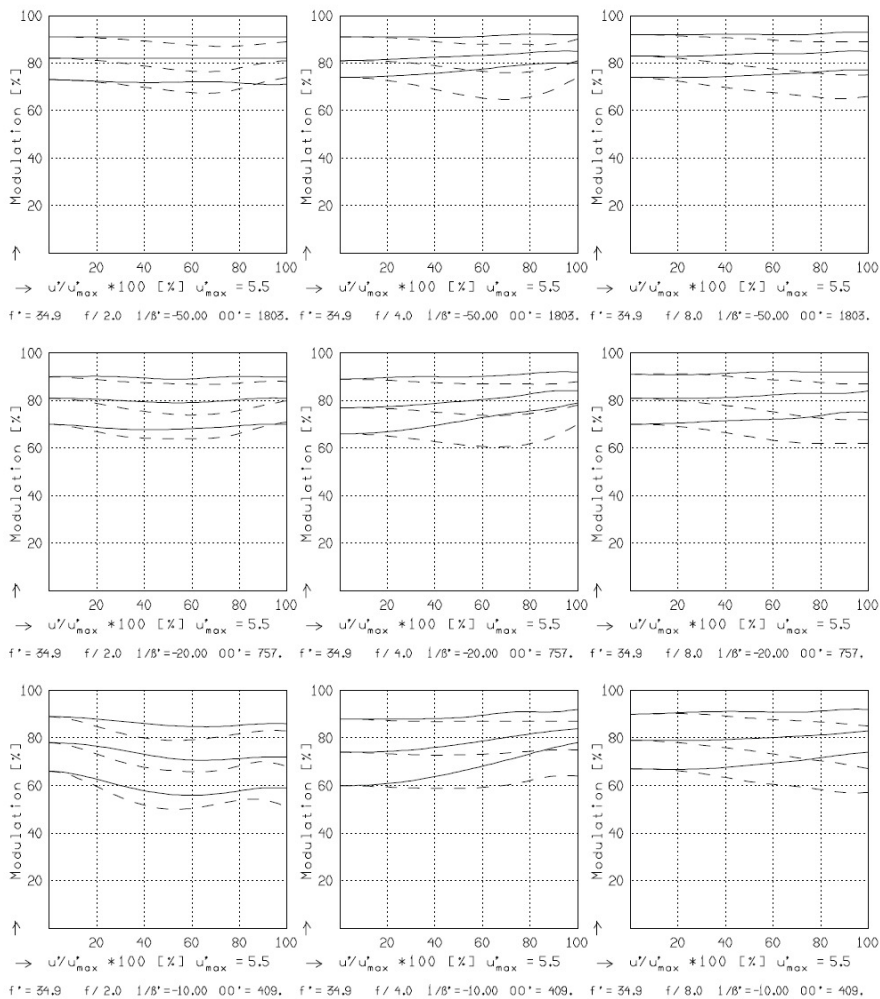
f^*	= 34.9 mm	β_p^*	= 0.879
s_F	= -6.5 mm	s_{EP}	= 33.3 mm
s_{F^*}	= 17.0 mm	s_{AP}^*	= -13.7 mm
HH^*	= -13.8 mm	Σd	= 32.6 mm

XENOPLAN 1.9/35MM

MODULATION with reference to the relative image height

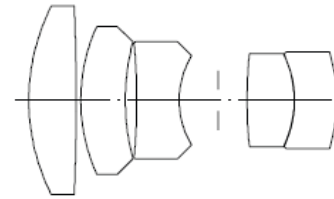
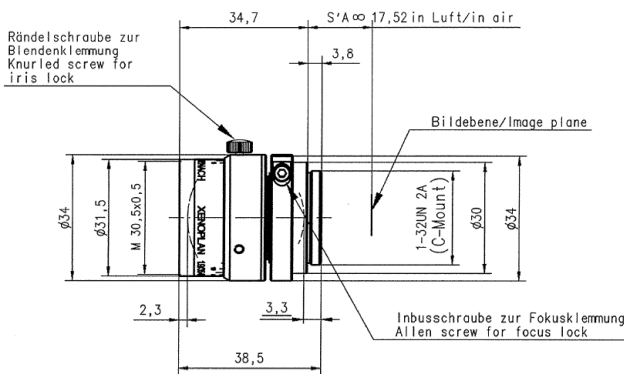
Wavelength λ	[nm]	555	655	605	505	455	405
Spectral weighting	[%]	19.6	23.7	22.2	15.7	12.1	6.7
Spatial frequency R	[1/mm]	10	20	30			
Format	[mm X mm]	6.6	X	8.8			
Diagonal $2u'$	[mm]	11.0					

radial —
tangential - -



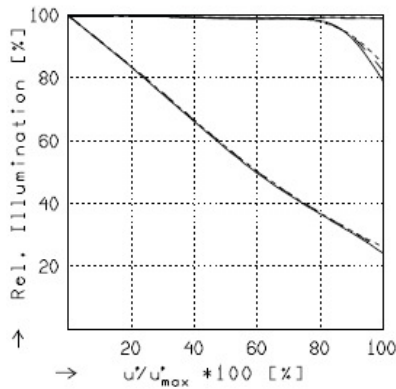
Focusing : MTF_{max} at f / 1.9 . R = 30 1/mm. $u'/u'_{max} = 0$

Xenoplan 1.9/35 Ruggedized Lens



XENOPLAN 1.9/35MM

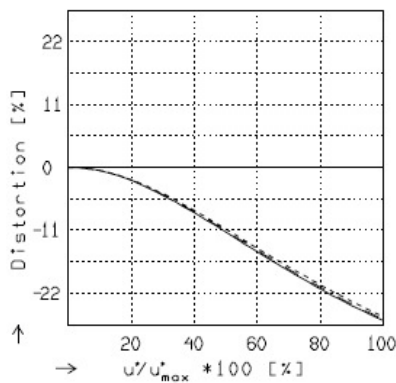
$f' = 34.9 \text{ mm}$	$\beta'_p = 0.879$
$s_F = -6.5 \text{ mm}$	$s_{EP} = 33.3 \text{ mm}$
$s_{F'} = 17.0 \text{ mm}$	$s_{AP} = -13.7 \text{ mm}$
$HH' = -13.8 \text{ mm}$	$\Sigma d = 32.6 \text{ mm}$



RELATIVE ILLUMINATION

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

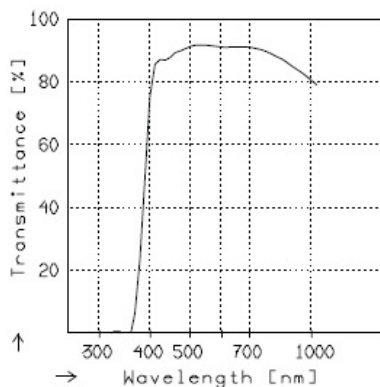
	$f / 1.9$	$f / 4.0$	$f / 8.0$
—	$\beta' = -0.0200$	$u'_{max} = 5.5$	$00' = 294.$
- -	$\beta' = -0.0333$	$u'_{max} = 5.5$	$00' = 195.$
----	$\beta' = -0.0500$	$u'_{max} = 5.5$	$00' = 145.$



DISTORTION

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

—	$\beta' = -0.0200$	$u'_{max} = 5.5$	$00' = 294.$
- -	$\beta' = -0.0333$	$u'_{max} = 5.5$	$00' = 195.$
----	$\beta' = -0.0500$	$u'_{max} = 5.5$	$00' = 145.$



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.