

## Mega Pixel lens for image circle 16 mm

### Cinegon 1.8/16

In accordance with the sensitivity of modern 1" CCD and CMOS sensors, the 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.



Cinegon 1.8/16

### Key Features

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

### Applications

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

### Technical Specifications

F-number	1.8
Focal length	16.4 mm
Image circle	16 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	102 gr.
Filter Thread	M30.5 x 0.5
Order No.	1001482

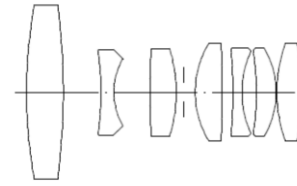
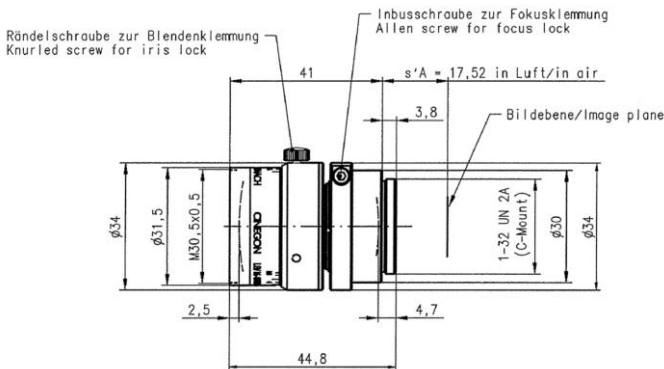
### Contact

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 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

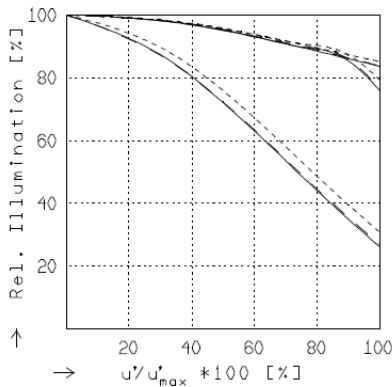
Schneider Optics Inc.  
285 Oser Ave.  
Hauppauge, NY 11788  
USA  
Phone +1 631 761-5000  
Fax +1 631 761-5090  
www.schneideroptics.com/industrial  
industrial@schneideroptics.com

# Cinegon 1.8/16



## CINEGON 1.8/16

$f'$	= 16.4 mm	$\beta'_p$	= 2.591
$s_F$	= 11.1 mm	$s_{EP}$	= 17.4 mm
$s'_F$	= 18.5 mm	$s'_{AP}$	= -24.1 mm
$HH'$	= 12.0 mm	$\Sigma d$	= 37.5 mm

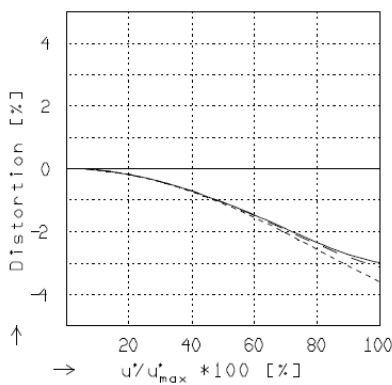


## RELATIVE ILLUMINATION

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

$f / 1.8$        $f / 4.0$        $f / 8.0$

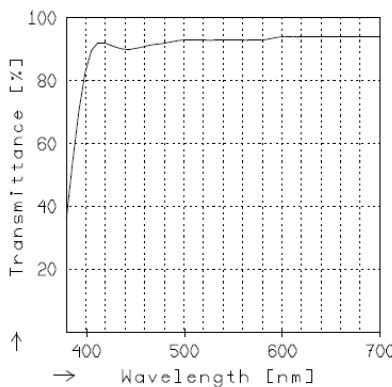
— $\beta' = 0.0000$	$u'_{max} = 8.0$	$00' = \infty$
- - $\beta' = -0.0200$	$u'_{max} = 8.0$	$00' = 867.$
... $\beta' = -0.1000$	$u'_{max} = 8.0$	$00' = 211.$



## DISTORTION

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

— $\beta' = 0.0000$	$u'_{max} = 8.0$	$00' = \infty$
- - $\beta' = -0.0200$	$u'_{max} = 8.0$	$00' = 867.$
... $\beta' = -0.1000$	$u'_{max} = 8.0$	$00' = 211.$



## TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.



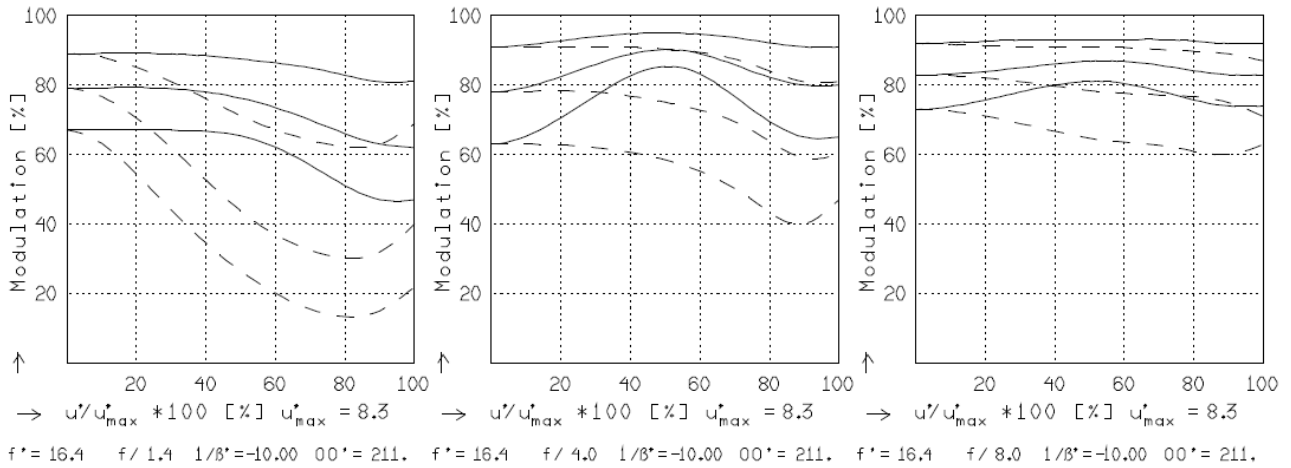
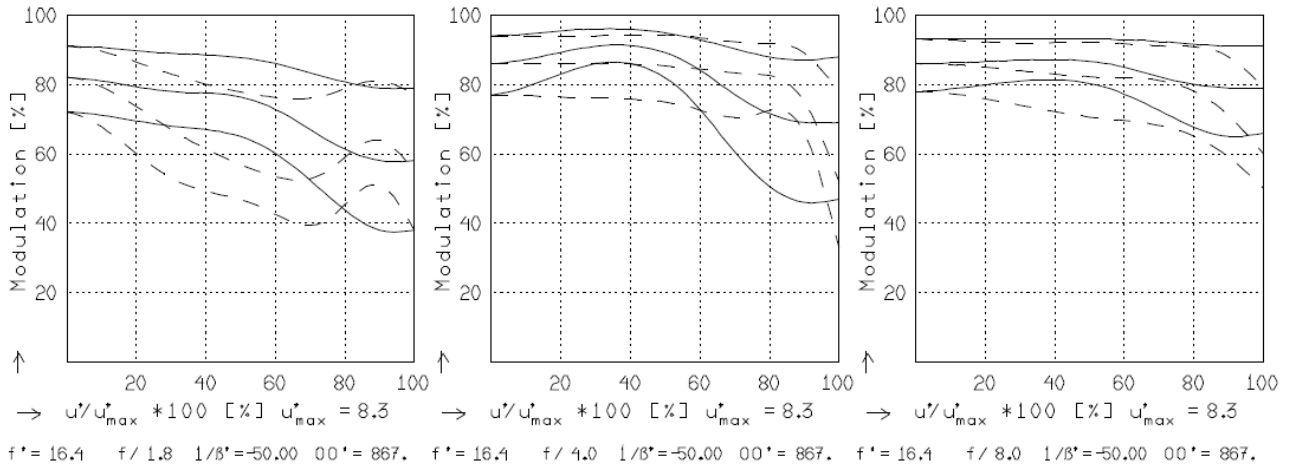
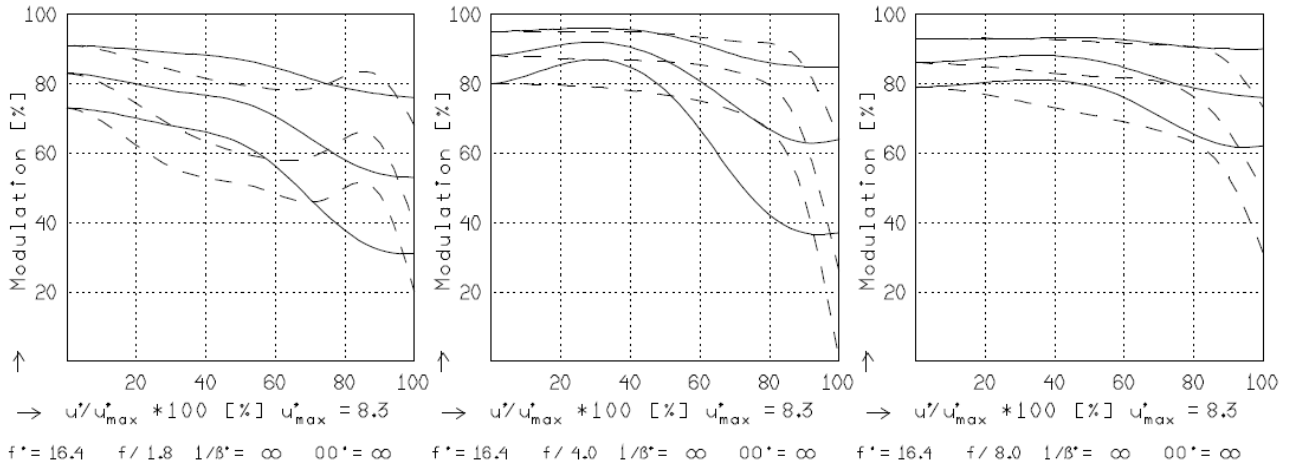
# Cinegon 1.8/16 Pyramid Imaging

## CINEGON 1.8/16

MODULATION with reference to the relative image height

Wavelength $\lambda$	[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]	9.6	X	12.8			
Diagonal $2u'$	[mm]	16.0					

radial —  
tangential - -



Focusing :  $MTF_{max}$  at  $f / 1.8$  ,  $R = 30$  1/mm,  $u'/u'_{max} = 0$