Lens for image circle 16 mm

Tele-Xenar 2.2/70

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

Tele-Xenar 2.2/70

Key Features

- High-resolution optics
- Highest optical imaging performance even with small 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	2.2
Focal length	70.5 mm
Image circle	16 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	200 g
Filter Thread	M40.5 x 0.5
Code no	1014593

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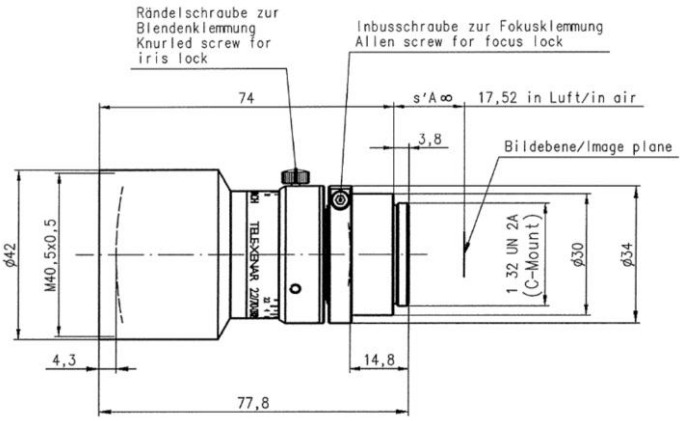
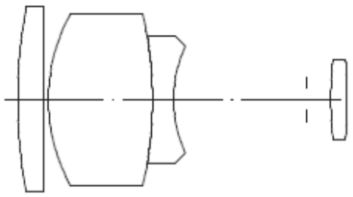
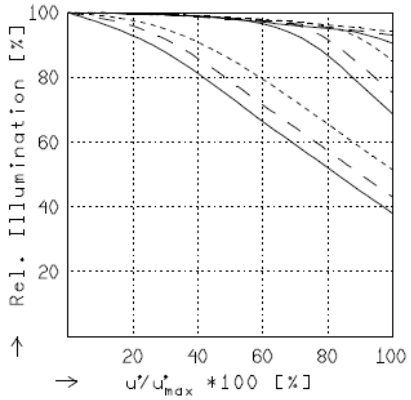




TXR 2.2/70

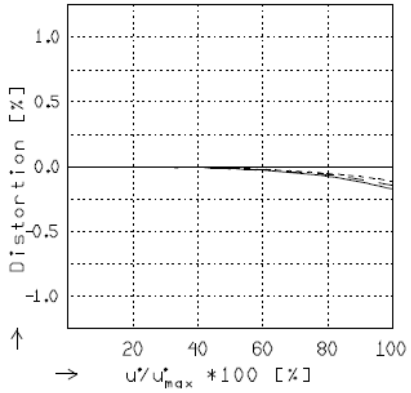
f' = 70.5 mm	β'_p = 0.494		
s_F = -27.8 mm	s_{EP} = 115.0 mm		
s'_F = 28.5 mm	s'_{AP} = -6.3 mm		
HH' = -26.0 mm	Σd = 58.8 mm		



RELATIVE ILLUMINATION

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

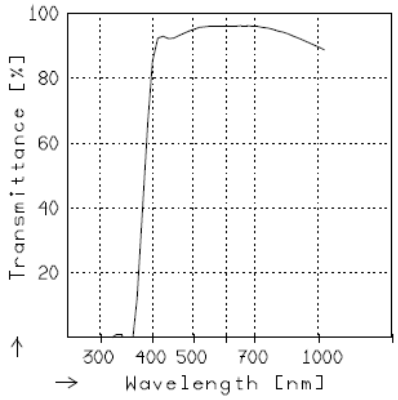
	f / 2.2	f / 4.0	f / 8.0
——	β' = -0.0200	u'_{max} = 8.0	ω' = 3643.
— —	β' = -0.0500	u'_{max} = 8.0	ω' = 1529.
-----	β' = -0.1000	u'_{max} = 8.0	ω' = 828.



DISTORTION

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

——	β' = -0.0200	u'_{max} = 8.0	ω' = 3643.
— —	β' = -0.0500	u'_{max} = 8.0	ω' = 1529.
-----	β' = -0.1000	u'_{max} = 8.0	ω' = 828.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

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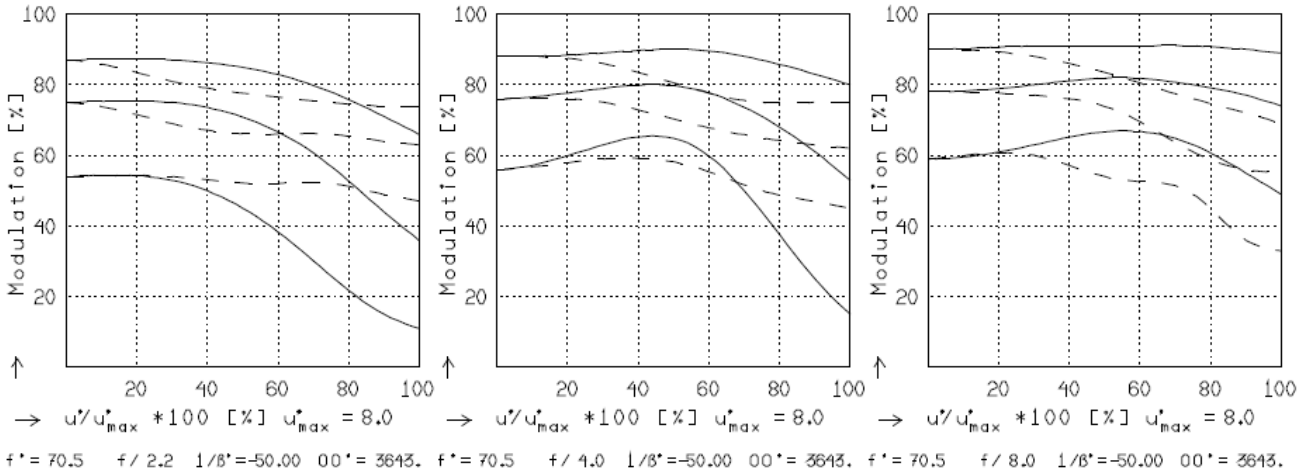
MODULATION with reference to the relative image height

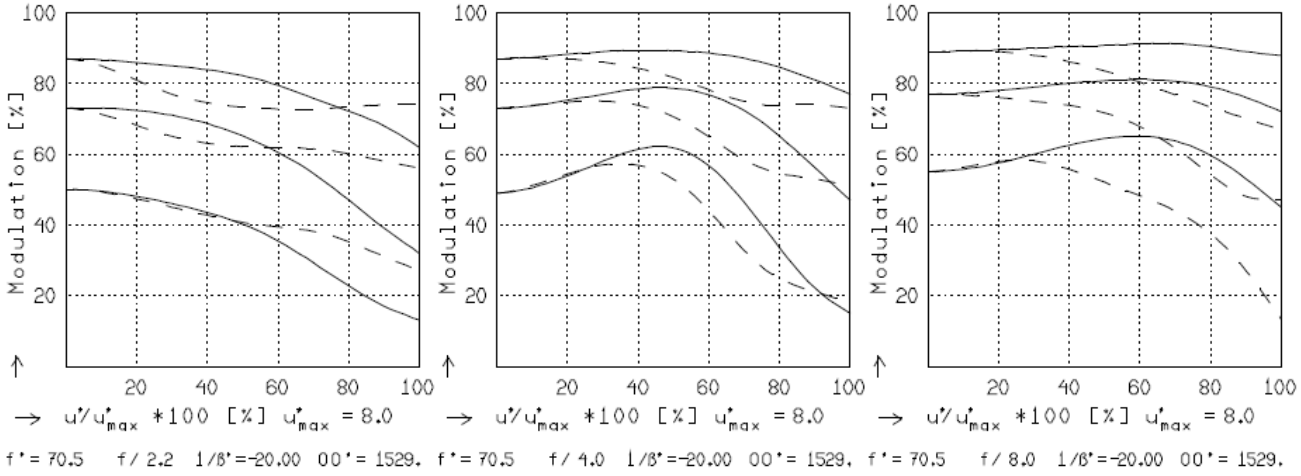
Wavelength λ [nm] :	555	655	605	505	455	405
Spectral weighting [%] :	19.6	23.7	22.2	15.7	12.1	6.7
Spatial frequency R [1/mm] :	10	20	40			
Format [mm X mm] :	9.6	12.8				
Diagonal 2u' [mm] :	16.0					

radial ——

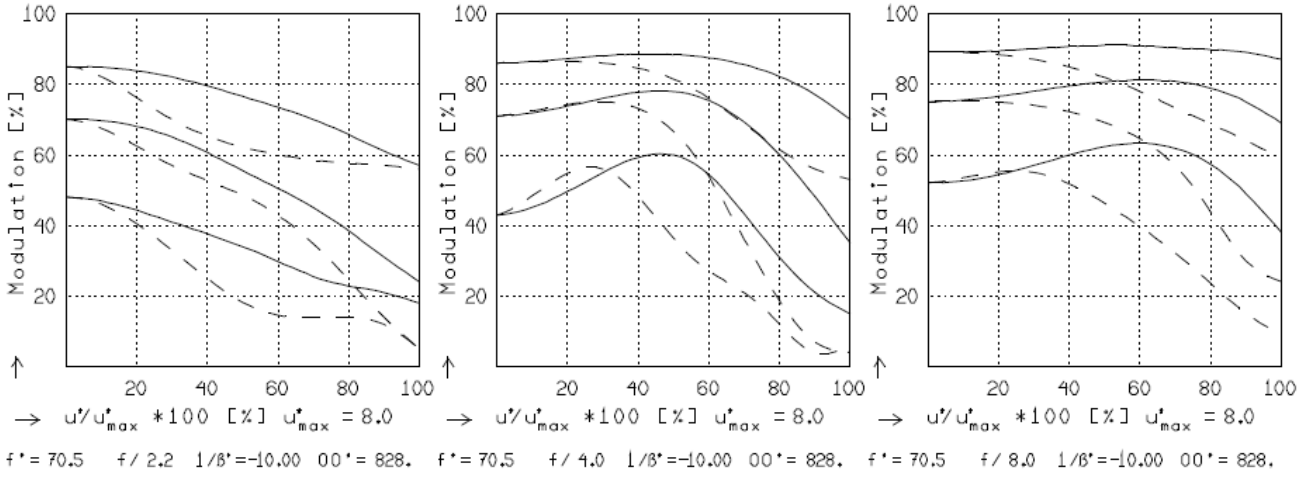
tangential — —



f' = 70.5 f/ 2.2 l/β' =-50.00 OO' = 3643. f' = 70.5 f/ 4.0 l/β' =-50.00 OO' = 3643. f' = 70.5 f/ 8.0 l/β' =-50.00 OO' = 3643.



f' = 70.5 f/ 2.2 l/β' =-20.00 OO' = 1529. f' = 70.5 f/ 4.0 l/β' =-20.00 OO' = 1529. f' = 70.5 f/ 8.0 l/β' =-20.00 OO' = 1529.



f' = 70.5 f/ 2.2 l/β' =-10.00 OO' = 828. f' = 70.5 f/ 4.0 l/β' =-10.00 OO' = 828. f' = 70.5 f/ 8.0 l/β' =-10.00 OO' = 828.

Focusing : MTF_{max} at f / 2.2 , R = 40 1/mm, u'/u'_{max} = 0